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SYSTEMA BRACHYURORUM: PART I. AN ANNOTATED CHECKLIST OF EXTANT BRACHYURAN CRABS OF THE WORLD

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ABSTRACT. **–** An annotated checklist of the extant brachyuran crabs of the world is presented for the first time. Over 10,500 names are treated including 6,793 valid species and subspecies (with 1,907 primary synonyms), 1,271 genera and subgenera (with 393 primary synonyms), 93 families and 38 superfamilies. Nomenclatural and taxonomic problems are reviewed in detail, and many resolved. Detailed notes and references are provided where necessary. The constitution of a large number of families and superfamilies is discussed in detail, with the positions of some taxa rearranged in an attempt to form a stable base for future taxonomic studies. This is the first time the nomenclature of any large group of decapod crustaceans has been examined in such detail.

KEY WORDS. **–** Annotated checklist, crabs of the world, Brachyura, systematics, nomenclature.

CONTENTS

PREAMBLE

There are few things more useful than a catalogue! For any student of the Brachyura it is a basic starting point to understanding this group. Not only is a checklist a resource for checking identifications, but it also reflects the whole history of the science. For the first and last authors at least, Serène's (1968) checklist of the Indo-West Pacific crabs was indispensible. Balss' (1957) compilation of genera and families has also been extremely important in our work. These were our windows into the literature, and the springboard for discovering just what the crabs looked like that belonged to all those names! However, the period from the 1960s through to the present, has become one of the golden eras of crab taxonomy — in particular, the decade from 1991 to 2000 saw the description of around 810 new species, the highest of any period since Linnaeus started classifying them. Not only new species, but large numbers of new genera, and significant splitting and rearranging of genera, subfamilies and families. The crab taxonomic landscape has changed dramatically in the last 30 years, and it is more difficult than ever to keep abreast — at least without a new catalogue that summarises and documents these changes.

Also, never before has the taxonomic community had a greater responsibility to make its science available to the broader community. Without a name, an animal may as well not exist to humans. Without a name, we have no framework with which to study the organism, and no way to understand its unique ecological role. It is only through a full appreciation of morphological and genetic diversity, and why this has come about, that we can hope to succesfully manage, maintain and conserve healthy ecosystems. Catalogues such as this one, are an important step in the mapping of the life on our planet.

This idea for a catalogue of crabs has been close to the hearts of all three authors. Peter Ng began compiling names from major regional works, revisions, and taxonomic papers, during the late 1980s. Complementing and adding to this, was the extensive card catalogue of brachyuran species built by Danièle Guinot over the course of her career, and other lists being compiled by Peter Davie, particularly for the Australian region. The classification system used was based primarily on the seminal work of Balss (1957), and the landmark papers by Guinot (1977a, b, 1978, 1979). As the list grew, it became apparent that many of the old names posed major nomenclatural and taxonomic challenges, notably those from the mid-1700s to the early 1800s. Even the species of the founding father of modern taxonomy, Linnaeus (1758, 1763, 1764, 1767) were not well understood. Many Linnaeus species were named from specimens passed to him by his students and associates, those he had observed or seen from other collections, or based merely on the figures of naturalists, notably Rumphius. In the early and mid-1990s, Peter Ng and his students started to capture the primary data for the collections of Linnaeus (mainly 1758, 1763, 1764), Forskål (1775), Fabricius (1775, 1793, 1798), Herbst (1782–1804), and MacLeay (1838).

In 1999, Peter Ng visited Leiden to consult Lipke Holthuis on some problematic Linnaean names, and was shown an unpublished list of the problems associated with Linnaeus' and Forskål's species. This was a project that Lipke Holthuis, Jacques Forest, the late Isabella Gordon and Ricardo Zariquey-Alvarez, had embarked on in the 1950s, but never finished. Lipke gave Peter a copy of these valuable documents, and also discussed with him what issues he had been able to resolve, likely answers to others, and remaining nomenclatural problems. Many of the most difficult problems are in regard to Forskål's names, because almost all his crustacean specimens have been lost. Wolff (1999: 70) wrote: "The only surviving crustacean is the type of the amphipod *Phronima sedentaria* in alcohol".

It was clear that personal examination of the surviving Linnaeus, Fabricius, Herbst and MacLeay material would be necessary. In 1992, through the courtesy of Hans Gruner, Peter Ng was able to examine the collections of the Museum für Naturkunde of the Humboldt-University in Berlin, and in particular, Herbst's material. A catalogue of Herbst's specimens was subsequently published by Sakai (1999), although not all Sakai's taxonomic and/or nomenclatural actions are valid (e.g. see Castro et al., 2003). In 1999, under Peter Ng's direction, Tan Swee Hee (S. H. Tan) visited the Zoological Museum of Uppsala University in Sweden to examine the remaining Linnaean specimens. He brought back to Singapore many notes, and photographs of the still extant types, as well as other specimens (see also Holm, 1957; Wallin, 1992). In 1999, together with S. H. Tan, the first author also checked the Fabricius material in the Zoological Museum of the University of Copenhagen, matching specimens against those reported in his papers, as well as against the catalogue entries of Zimsen (1964). The specimens in the museum had been stored dried for many years, but were rehydrated in the 1980s at the instigation of the curator, Torben Wolff. Wolff (1999: 64) commented: "The specimens were originally dry and mounted on cardboard. Since shipment of specimens on loan proved hazardous, and a slow decomposition was in progress, in the mid 1980s it was decided to transfer the entire collection (including the 177 types) to alcohol after careful photographing and rehydration to methods outlined by Jeppesen (1988)". Torben was kind enough to give Peter Ng a set of photographs of the dried Fabricius specimens, together with Jeppesen's notes on the material. To complement this, we rephotographed the rehydrated specimens, sometimes from multiple angles, and in some cases, key features were drawn. Some of these have already been used in a variety of taxonomic papers (e.g. Ng & Tay, 2001). Finally, on a visit to the Australian Museum in Sydney, Peter Ng was able to work with Shane Ahyong to sort and catalogue the surviving material of Macleay (1838) (see Ng & Ahyong, 2001).

As our simple cataloguing progressed, it became obvious from our discussions that the brachyuran classification system also needed a serious overhaul. By the mid-1990s, many new developments were taking place. With regard to adult morphology, Danièle Guinot and others were

exploring the implications of many new character states, and extending the use of characters they had proposed the 1970s and 1980s. This was providing substantial new information on the way crabs should be classified. Larval morphology was also increasingly being used to provide insights into phylogenetic relationships. It was also the beginning of the increased use of molecular and DNA techniques to elucidate phylogenetic patterns. We realised that the use of DNA markers, a very powerful tool, would have major implications for brachyuran classification, but also that it should not be used in isolation by workers with little insight into the relationships being increasingly revealed by the modern use of traditional morphological techniques. More than ever, a new brachyuran classification was needed. The key paper of Guinot (1978) had become a major reference by the mid-1990s, but many of her ideas needed further development and refinement, and a number of problems remained to be resolved. Our simple list thus evolved into the backbone of a revised classification of the Brachyura — one that we hope, 50 years on, will be a worthy successor to the milestone synopsis of Balss (1957). Our work, when all the parts are finished, is also to go beyond its predecessor, and will include not only diagnoses of families and genera, but also species type allocations, and keys to all suprageneric taxa.

As the list grew in length (and complexity), we were constantly distracted by emerging nomenclatural and taxonomic problems. At the same time, we began preparing synopses of all subfamilies, families and superfamilies; as well as critically re-examining the characters that have been used in brachyuran classification. Along the way, the project assumed a life of its own, leading Danièle Guinot to dub it our "*Grand Projet*". Through the more than 10 years this project has so far taken, the data and synopses have been used to help us with several key publications (Guinot & Bouchard, 1998; Ng, 1998; Ng et al., 2001; Davie, 2002; Guinot & Tavares, 2003). It has also been used to help colleagues in their revision of genera and higher level classifications (e.g. Martin & Davis, 2001; Castro, 2000, 2005, 2007; Castro et al., 2003, 2004). As we were nearing the final stage of Part I of our *Systema Brachyurorum*, Števčić (2005) published his controversial re-appraisal of brachyuran classification including both fossil and extant taxa (see Notes later).

It was always our intention to publish our *Systema Brachyurorum* in its entirety as a single work, with full justifications of our rearrangements, and of the changes in status of suprageneric taxa, together with a full bibliography. However, we have decided to publish this in three parts for several reasons. Firstly, we are not finished! Although the fundamental decisions have been made, and the framework of diagnoses is in place, there are still a number of character-states to check and compare between higher taxa. This is time consuming work that would impede early publication. Secondly, and more importantly, there is a demand for the checklist now. A number of our colleagues have already been given parts of the list, and are exerting growing pressure to have the final product available – it is, after all, the most useful part to help move forward with alpha taxonomic studies. Also we have had a number of requests to make our list available to various public web-based databases intent on providing full species inventories of the animal kingdom. Some of these threaten to prepare their own lists if we will not provide the data – a duplication of effort leading to a waste of time, money and resources. Another advantage of publishing the checklist now, is that it should stimulate our colleagues to pick up mistakes, and to highlight what we have missed. Such positive criticism is welcomed, and corrections and additions will be incorporated into the forthcoming work. Parts 2 and 3 will include the detailed diagnoses and descriptions of the superfamilies and families, keys, and a complete bibliography.

Something that we have not included, is distribution information. We do intend, in the next iteration of the list, to provide basic biogeographic province data, such as whether a species is found in the Indo-West Pacific, East Pacific, West Atlantic, East Atlantic, or Southern Ocean. This will enable some interesting analyses of relative levels of biodiversity, and of endemism at both species and generic levels. Unfortunately we ran out of time to finish this aspect for the current publication.

We also plan, within the next year or so, to place the list into our own searchable web-based database, thus making it freely available to all. This will, we hope, be the basis of an evergrowing and evolving information system, that will eventually include full species citations to the primary literature, as well as regional and country distribution data. Perhaps, eventually, even links to pdf copies of original literature, original figures, and photographs will be possible. The future is soon!

While all rational biologists realise that molecular techniques are powerful tools to be used to better understand brachyuran phylogeny and classification, there are a good number of molecular biologists that seem to suggest DNA datasets are somehow "better" or "stronger" than even the best morphological data (see Meier et al., 2006, for a discussion). This is especially so for those who believe molecular barcoding, using the COI gene, is the panacea for all species and systematic problems. Molecular datasets generate interesting hypotheses for morphologists to test, and morphologists in turn pose questions that benefit enormously from DNA analyses. Morphologists must take into account molecular data as additional information to be assessed; and molecular biologists must not dismiss morphological hypotheses to dogmatically present conclusions based on only one or two DNA sequences – for either group to ignore the other is to do our science a great disservice. The way to eventual truth must be through an integrative approach using all available knowledge – this can come from adult and larval morphology, genetics, palaeontology, and even ecology, behaviour and physiology.

We end this preamble with a comment made over dinner by a good friend Maurice Kottelat, one of the brightest ichthyologists of his generation. In a moment of candour while discussing systematics, cladistics and molecular

biology, he sardonically remarked "It seems a parsimonious lie is much better than a complex truth". This resonated strongly with us, and it is our sincere hope that truth will prevail, no matter how complex.

CAVEATS AND ACKNOWLEDGEMENTS

While we have tried our very best to ensure that the contents are accurate, the scale of this work means that mistakes and omissions are inevitable. We encourage everyone to verify the names in the *Systema Brachyurorum* whenever possible, preferably with the original literature, and to let us know of any mistakes, errors, and other problems they may encounter. This compilation represents a first attempt, and we hope to continue improving and updating it as we can.

We have been helped by a huge number of colleagues over the years, too many to name individually, so we hope that we will be forgiven if we do not name every one. We are most grateful to Lipke Holthuis, the doyen of carcinology, zoological nomenclature and crustacean history. Lipke helped us on many occasions through his hospitality in Leiden, checking old literature, and discussing complex nomenclatural problems. He also spent many weeks meticulously reviewing this work, and offering 30 pages of suggestions, recommendations and criticisms, which have very substantially improved the quality of this work. For him to have undertaken such a huge task with good spirit and enthusiasm, is a mark of this man's dedication to the discipline. He regards this work as a landmark for carcinological research, and therefore deserving of his utmost attention. We are grateful and extremely honoured.

We have also been helped on a wide variety of issues by Peter Castro, Paul Clark, Alain Crosnier, Marcos Tavares, Bertrand Richer de Forges, Shane Ahyong, Roy Kropp, Lu Eldredge, Masatsune Takeda, Neil Cumberlidge, Tan Swee Hee, Darren Yeo, Ng Ngan Kee, Christoph Schubart, Torben Wolff, Hans Gruner, Colin McLay, Jody Martin, Tohru Naruse, Bella Galil, Michael Türkay, Cheryl Tan, Diana Chia, Hironori Komatsu, Rodney Feldman, Carrie Schweitzer, as well as the late Raymond Manning, Dai Ai Yun, Chen Hui Lian and Austin Williams. We thank them for their kindness and support.

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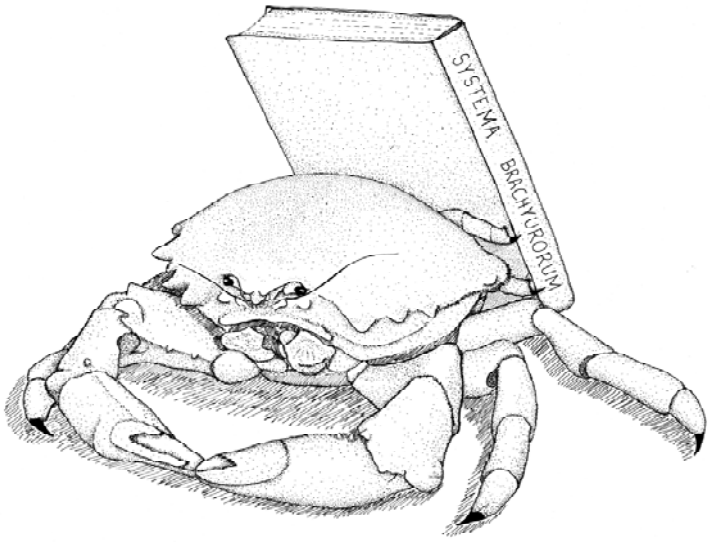

INTRODUCTION

Of all the Crustacea, one of the best known and most intensely studied groups is the true crabs of the infraorder Brachyura. Brachyuran crabs belong to the Order Decapoda, the most diverse group of crustaceans alive today. The measure of their success is reflected in their colonisation of almost every marine and terrestrial habitat. They have been found at abyssal ocean depths down to 6,000 metres, and up to 2,000 metres above sea level on mountains; and are dominant in many estuarine habitats where salinity and temperatures can fluctuate dramatically daily. Many species have evolved terrestrial habits, needing to return to water only occasionally, or just to release their larvae. Numerous species have become wholly freshwater, and some of these have even evolved to survive on transient water sources such as small phytotelms (temporary bodies of water in tree holes and between leaf axials), dew, and even water inside empty snail shells. Some have even been found along the fringes of deserts. These desert dwellers have been known to aestivate in clay-plugged burrows for up to six years, while waiting for rain.

The basic crab design consists of an expanded carapace (formed by a fusion of the head and some thoracic somites), and a strongly reduced abdomen that is tightly tucked underneath the thorax. In addition, the first pereiopods of brachyurans are fully chelate, and the walking legs are placed at the sides of the body. This evolutionary trend is termed carcinisation, and it has clearly been very successful. There are now more brachyuran crab species than any other major clade of decapods! True brachyuran crabs are often confused with hermit and porcelain crabs belonging to the infraorder Anomura. In general, most anomuran crabs have only three pairs of walking legs clearly visible, with the last pair being very small and normally positioned under the abdomen and not visible externally. However appearances can sometimes be deceptive — some true crabs have their last pair of legs greatly reduced or even absent; while some anomurans have become so carcinised, with their abdomens reduced and tucked under their body, that only the presence of a telson with uropods makes their true identity obvious.

THE HIGHER CLASSIFICATION OF THE BRACHYURA

The classification used here tries to integrate and parsimonise what has been published with work we have done over the years, as well as research we are still conducting, independently, together, and with our many colleagues. It is not always easy. What comprise the "Sections" has been the most contentious area in Brachyuran phylogenetic research over recent years, and in particular the monophyly of the Podotremata Guinot, 1977. Strong evidence is emerging that suggests this taxon is paraphyletic. However, for the purposes of this list, which is primarily intended as a practical laboratory document, we continue to recognise the Podotremata. Alternative emerging classifications are further discussed below; and we will take a firmer view with the publication of Part 2 of the *Systema Brachyurorum*, when diagnoses will be given for all higher taxa. Otherwise we have tried to make a natural system that groups monophyletic taxa as a reflection of phylogenetic history. This will sometimes be contentious, and even we have differences of opinion. For instance, the second author would have preferred to wait until Part 2 of this project, before using (and justifing) the recognition of the superfamilies. This is to be expected from such a large-scale joint project, and in some cases, what is presented is the best compromise. Surprisingly, such "compromise" solutions are very few, and we have agreed on the majority of issues.

Authorship of Infraorder Brachyura has been attributed to different authors, notably Latreille. The correct author is Linnaeus (1758). After diagnosing the genus *Cancer*, Linnaeus (1758: 625) headed the first section with "*a* BRACHYURI *Thorace leave lateribus integerrimo*". This is a valid description, and the infraorder Brachyura can be regarded as available from this date. The same is true for the infraorder Macrura, which Linnaeus (1758: 631) wrote as "*f* MACROURI".

The Brachyura can be characterised as follows:

Carapace prominently enlarged relative to reduced abdomen, usually widened laterally; fused to epistome; carapace with 5 cephalic and 3 thoracic (with maxillipeds) somites; thorax with 5 somites. Front usually prominent, sometimes narrow, triangular. Carapace usually with well marked lateral linea homolica or linea brachyura (usually lateral, subventral or dorsal in position) which may reach most of carapace length or interrupted posteriorly; occasionally not clearly marked or absent; in Homolodromiidae, there is a large linea, the whole branchiostegite is perhaps poorly calcified zone. Eyes stalked, compound; sometimes reduced; usually in well formed orbits; eyestalk with 2 articles, first usually reduced. Antennules with 3-articled peduncle; flagella usually short. Antennal peduncles usually with 1 or 2 free articles; usually without exopod; flagella usually short but distinct, occasionally very long (e.g. Corystidae). Mandibles with or without palp; molar and incisor processes of more or less developed. Maxilla 1 biramous; usually with bilobed endites. Maxilla 2 usually with endopodal palp. Maxillipeds with flagella often reduced, sometimes absent; maxilliped 3 with ischium and merus prominent, usually flattened, carpus, propodus and dactylus (palp) usually distinct. Pereiopod 1 always prominently chelate (chelipeds), with fingers (dactylus and propodal finger) distinctly formed, chela may be distinctly heterochelous with pronounced cutting or crushing teeth; fingers may be also heterodontous. Pereiopods 2–5 usually well formed, usually positioned laterally, coxa fitting into lateral arthrodial cavities, posterior cavities sometimes subdorsal in position; pereiopod 4 and/or pereiopod 5 sometimes reduced in size relative to first 3 pairs, mobile, may be positioned subdorsally, subchelate to chelate, modified for carrying objects; pereiopod 5 rarely markedly reduced (e.g. some Cymonomidae, Retroplumidae, Palicidae), poorly developed (Dynomenidae) or just restricted to coxa (Hexapodidae). Thoracic sternum either with paired spermathecae (i.e. internalized structures derived from sternal modifications of segments 7 and 8, basically a split between 2 plates of intersegmental phragma, one derived from sternite 8 and the other from sternite 7; spermathecal apertures small or large, rounded to elliptical in shape), or with a pair of vulvae on somite 6. Thoracic sternal plate with sternal sutures

complete or medially interrupted to various degrees and combinations; sterno-abdominal cavity usually present in males (in basal podotremes, e.g. Dromiacea, Homolidea, male abdomen completely filling space between legs or so-named sterno-abdominal depression; but in Cyclodorippoidea, sternal plate wide as in Eubrachyura, forming true sterno-abdominal cavity; for Raninoidea, short abdomen lies in posterior depression). Two halves of phragma of endophragmal skeleton joining interdigitally (Homolodromiidae, Homolidae, Latreillliidae, Poupiniidae) or fused medially (Dromiacea, Cyclodorippoidea, Eubrachyura); sella turcica present, except in podotremes. Abdomen generally folded against ventral surface (rarely first segments remaining visible from dorsal view), dorsoventrally flattened, often plate-like, sometimes prominently domed in females, tergites and pleurites not clearly demarcated (except in some Homolodromiidae), somites articulating dorsoventrally, no lateral or oblique motion possible; almost always with 6 somites and telson (or a pleotelson, i.e. sixth somite fused to telson, in Hymenosomatidae, some Cyclodorippidae, Majidae and Pinnotheridae), somites may be fused to varying degrees; in males and juvenile females (rarely adult females), presence of diverse devices for abdominal locking mechanism, the most usual being "press-button". Telson usually small relative to remainder of abdomen. Uropods in both sexes always uniramous, never forming tail fan with abdomen's telson; unreduced (as a small ventral lobe, Homolodromiidae, some Dromiidae) or plate-like (dorsal in position, Dromiidae, Dynomenidae and a few Hymenosomatidae); pleopods of somite 6 usually present, in form of small ventral lobes, dorsal plates or as sockets (for locking of the abdomen), very rarely absent. Sexes always separate; male gonopore on coxa of pereiopod 5, coxosternal (but still coxal) or thoracic sternite 8; female gonopore on coxa of pereiopod 5 or thoracic sternite 8. Presence of a penis (i.e. external projection of the ejaculatory duct) which is an intermediate organ to deliver sperm inside G1, varying from short to very long. Male pleopods 1 and 2 uniramous, modified into gonopods (G1 and G2, respectively); G1 longitudinally folded incompletely or completely, always forming tube (cylindrical to very slender and sinuous), structure for sperm deposition or intromitent organ; G2 whip-like to rod-like or sigmoidal, inserted into G1 during mating to pump sperm through; pleopods 3–5 generally absent. Pleopods 2–5 in females usually biramous, well developed, prominently setose, oviferous (egg bearing), pleopod 5 occasionally reduced and not oviferous (Phyllotymolinidae); first pair reduced, uniramous or absent.

Not all carcinologists, however, have necessarily agreed that the Brachyura is a monophyletic group. For example, it has been suggested that some of the primitive crabs, such as dromioids and their kin, should be referred to the Anomura (e.g. Spears et al., 1992), but the adult morphology does not support this contention. Spears et al. (1992) queried the monophyly of the Brachyuran when they reported that the DNA of the dromiid, *Hypoconcha*, was clearly anomuran; but subsequent studies have confirmed that this supposition was incorrect (see Ahyong et al., 2007). Many of the similarities due to shared larval features between dromiids and anomurans (e.g. Rice, 1980, 1983) are invalid because the considered characters are all symplesiomorphies (see McLay et al., 2001). Studies by Jamieson et al. (1995) based on sperm morphology have also recognised a monophyletic Brachyura. The true Brachyura is diagnosed by a robust suite of synapomorphies, with perhaps the most notable relating to the reproductive system: all male crabs have the first two pairs of pleopods modified into tubular gonopods that serve a copulatory or sperm-deposition role acting in conjunction with the penes; all females either have paired spermathecae or vulvae on the thoracic sternum. The male reproductive combination of G1+G2+penis does not exist elsewhere in the Decapoda. In addition, most male Brachyura have some form of abdominal locking mechanism, sometimes remaining efficient in mature females.

As earlier noted, we have been pragmatic with regards to the Sections we recognise, and how they are constituted. Thus, we here continue to use two sections, Podotremata Guinot, 1977, and Eubrachyura Saint Laurent, 1980 (see Guinot, 1977a, b, 1978, 1979; Saint Laurent, 1980a); and within the Eubrachyura, two subsections, the Heterotremata Guinot, 1977, and Thoracotremata Guinot, 1977 (see Guinot, 1977a, b, 1978, 1979; Saint Laurent, 1980b). We know that this classification is likely to change, and that there have been some major new developments over the last 15 years that cannot be ignored (discussed below), even if perhaps, as a brachyuran community, we are yet to reach consensus over a meaningful synthesis.

Most of the contentious issues relate to the concept of the Podotremata Guinot, 1977. Using spermatozoal ultra-structure, Jamieson (1994) and Jamieson et al. (2005) supported the idea of a monophyletic Podotremata. In contrast, a study by Brösing et al. (2002, 2006), using structural patterns of foregut ossicles, argued against podotreme monophyly, did not recognise the Archaeobrachyura, and noted that some of the podotreme families (e.g. Cyclodorippidae) should be transferred to the Eubrachyura. In general, many studies on podotreme monophyly or paraphyly have been severely hampered because they have used too few representatives (e.g. Jamieson, 1991, 1994; Jamieson et al. 1995; Guinot et al., 1994; Schram, 2001; Dixon et. al., 2003; Ahyong & O'Meally, 2003; Brösing et. al., 2002, 2006).

Guinot & Bouchard (1998) and Guinot & Tavares (2001) recognised three subsections in the Podotremata: the Dromiacea, Homolidea, and Archaeobrachyura (containing the Cyclodorippoidea and Raninoidea). Recently, Guinot & Quenette (2005) continue to support it as a monophyletic group, arguing that it is united by a major synapomorphy that is found in fossil and extant crabs – females have a strongly modified sternum at the level of sutures 7/8, and have developed a paired spermatheca that is intersegmental, internalised, and independent of the female gonopores on the coxae of the third pereiopods. Furthermore, using this character, they recognised two major basal clades, the Dromiacea and Homolidea, within the Podotremata, based on the fact, among many others (such as abdominal, gonopodal features), that they differ in the pattern of the paired spermatheca. They argue that the "Dromiacea" thus cannot be used to refer to both the dromiacean and homolid clades, and should include only the Dromioidea and Homolodromioidea.

A somewhat contrary view of the Podotremata, however,

was put forward by Ahyong et al. (2007). Using the 18S gene, their analysis of a large number of taxa concluded that the "… pattern of podotreme paraphyly recovered herein is not fully compatible with any of the existing classifications proposed for Brachyura. Non-monophyly of the 'primitive crabs' renders Guinot's Podotremata untenable as a formal taxonomic category. Similarly, the classification of Števčić (2005), also with a monophyletic Podotremata (as Dromiacea), cannot be accepted … For taxonomic consistency, we propose that the three major podotreme clades be each recognised as separate sections, Dromiacea, Raninoida and Cyclodorippoida, alongside section Eubrachyura." (Ahyong et al., 2007: 584). Certainly, the more "crab-like" features of the Cyclodorippoida have long being noticed (see review in Ahyong et al., 2007), and the Archaeobrachyura were in fact placed within the Eubrachyura by Martin & Davis (2001). If the concept of Ahyong et al. (2007) is to be accepted, it suggests that the podotrematous condition is just a symplesiomorphy. Nevertheless it is interesting that this molecular analysis clearly supported the three subsections already defined by the foregoing morphological work of Guinot and others.

While the monophyly of the Eubrachyura is generally not in question, internal relationships are far from settled. The heterotreme-thoracotreme distinction is produced by two different patterns of the vas deferens and its ejaculatory duct, either via the coxa of the fifth pereiopod coxa (Heterotremata) or through the sternum (Thoracotremata). The coxo-sternal disposition, which occurs in some heterotreme families, actually, is only a variant of the coxal condition since the penis still originates from the coxa. The coxosternal condition varies considerably: the penis may be almost completely enclosed by sternites 7 and 8 (e.g. part of Dorippidae, Ethusidae, Palicidae); may be sometimes covered by accessory plates (e.g. Chasmocarcinidae); may be exposed but calcified along most of its length (e.g. Scalopidiidae); or mostly exposed with episternal plates protecting it (e.g. Vultocinidae). The heterotrematous condition is the dominant one in the Eubrachyura, with the most speciose xanthoids, pilumnoids, and all the true freshwater crabs of this type. However, evidence suggests that the heterotremes are not monophyletic (e.g., Brösing et al., 2007, Ahyong et al., 2007). The thoracotreme crabs are also a challenge – if this grouping is restricted to the Grapsoidea and Ocypodoidea, then the available data suggests it may well be monophyletic. In an interesting study using foregut ossicles, Brösing et al. (2006) established the Neobrachyura for some families of the Heterotremata and Thoractotremata (Grapsidae sensu lato, Ocypodidae sensu lato, Gecarcinidae, Mictyridae, Retroplumidae, Potamonautidae, Pinnotheridae, Palicidae) and recognised the classical grouping of the Oxystomata, including the Raninidae. This classification, however, goes against almost every scheme that has been proposed, and contradicts a substantial body of adult and larval morphology, as well as DNA evidence. In an upcoming study, Guinot et al. (in prep.) show that the male sternal gonopore being unambiguously present on sternite 8, is a synapomorphy of the Thoracotremata.

Numerous dissections in most groups, notably by Guinot et al. (in prep.) have demonstrated the sternal condition of the male gonopores in all the thoracotreme families, confirming the results previously obtained for *Ocypode cursor* (Linnaeus, 1758) (Guinot, 1979: fig. 56-B) and for *Ucides occidentalis* (Ortmann, 1897) (von Sternberg & Cumberlidge, 2001: fig. 3B). One family whose condition is still difficult to interpret is the Hymenosomatidae (see discussion under this family). The Pinnotheroidea is also supposedly thoracotreme, but this grouping itself is polyphyletic, and because of their small adult size, this character will need to be very carefully re-examined. The classification within the Eubrachyura is likely to change substantially in the years ahead.

At our present state of knowledge, it is perhaps premature to try to recognise meaningful superfamilies. However there has been such a strong tendency in recent years to elevate subfamilies, and recognise new families, that we felt the practical need for groupings that linked like-families, and that at least tried to reflect phylogenetic relationships. Some superfamilies, notably the Goneplacoidea, are groupings based more on convenience than on knowledge of their affinities. Similarly, superfamilies like Pseudothelphusoidea and Trichodactyloidea are a reflection of what we do **not** know about their relationships – they almost certainly need to be transferred to other superfamilies when detailed research is undertaken. The same is true of some other families. We had considered placing taxa whose relationships were uncertain, or doubtful, into a broad category of "incertae sedis". However, we felt that this would have been conterproductive as it would have involved too many suprageneric taxa.

In sharp contrast to Števčić (2005), we have not used tribes in this study. From what is published, and from what we know, many subfamilies are themselves still poorly defined, so recognising tribes within them does not seem useful. In particular, it is for the most speciose taxa that the largest number of tribes have been proposed (e.g. for the Majoidea and Xanthoidea), but these superfamilies are precisely those for which the internal relationships are the least understood. We believe that the elevation and validation of suprageneric groupings should only arise out of thorough taxonomic revisionary studies, and then be a device for better understanding phylogenetic relationships.

FOSSIL FAUNA

The present compilation deals only with the extant fauna and intentionally excludes the fossil taxa. This is not because they are less important, but because it is often very difficult to compare living and fossil taxa without good fossils, and a holistic understanding of the Brachyura. This is particularly so when fossils are fragmentary or poorly preserved, especially when the sternum, abdomen and gonopods are absent or poorly preserved. While the condition of fossil material is a major constraint on paleontologists, a heavy reliance on the available preserved parts to help determine actual

phylogenies is questionable. Schweitzer (2003) argued for the use of what she called 'proxy characters' (mainly external carapace features) because they help track the more fundamental anatomical features of the crabs which are not preserved (see Schweitzer & Feldmann, 2000a; Karasawa & Schweitzer, 2006). However, the study of extant crabs has demonstrated on many occasions the inherent danger of relying on proxy characters, with convergence rampant in many taxa (see discussions in Xanthoidea, Pilumnoidea, Trapezoidea, Grapsoidea etc.). The extensive studies of "ventral" characters by Guinot (1977a, b, 1978, 1979) "… has initiated a dramatic revision of our picture of crab systematics and evolution" (Bishop, 1993). For palaeontologists, these characters are only available when the fossils are more intact and/or when it is possible to separate the fossil from the matrix it is embedded in.

Ng (1999b: 237) commented that "Paleontologists working on recent brachyuran fossils and carcinologists studying the extant fauna do not always work hand in hand. As a result, one often wonders how many of the new species described on the basis of recent fossils are in fact conspecific with new species described from fresh specimens. Carcinologists studying living species on the other hand, rarely consult palaeontological papers. Comparisons in any case between crab fossils, which are often represented only by broken and incomplete pieces, and fresh specimens with their full suite of characters, are often impossible." However, many older and most modern papers have provided precious information which has been key in a better understanding the phylogeny of the Brachyura. When fossils are well preserved, and/or the study is accompanied by a solid understanding of extant taxa, significant progress has been made (e.g. Guinot & Tavares, 2001; Guinot & Breton, 2006). A major work, such as the Treatise of Glaessner (1969), has been and still is a very important tool in helping carcinologists reconstruct crustacean phylogeny. Clearly, a greater synergy needs to be established between students of the living fauna with palaeontologists so that some of the problems can be overcome (e.g. Schweitzer et al., 2003).

HOW MANY CRAB SPECIES ARE THERE?

Until now, most workers have quoted the key paper of Chace (1951) which cited 4,428 species distributed in 635 genera. These numbers had been based on the extensive card catalogues, meticulously maintained throughout the century, in the Smithsonian Institution. It appears Chace was very close, as according to our present list, by 1950 there had been 4,120 species described. This small difference could perhaps be largely accounted for by species now in synonymy. Since then, no one has attempted to provide an accurate update. Published estimates range from 5,000 to 10,000 (Ng, 1998; Martin & Davis, 2001; von Sternberg & Cumberlidge, 2001; Yeo et al., 2008). Boschi (2000) and Hendrickx (1995a, 1999) prepared major species lists for the Americas, but because the center of brachyuran diversity is in the Indo-West Pacific, a great many species were not covered.

We here recognise 6,793 named species and subspecies. For these species, we also recognise 1,907 synonyms. These species are in 1,271 valid genera and subgenera (with 393 synonyms), 93 families and 38 superfamilies. By no means have carcinologists reached a "plateau" in the discovery of new species. There are still many new species of freshwater crabs in the Potamoidea, Gecarcinucoidea and Pseudothelphusoidea that await description in the work bins of colleagues, and even more that have yet to be even discovered. Yeo & Ng (1998) estimated that one-third of the Indochinese fauna still awaits discovery, a similar ratio to that estimated by Cumberlidge & von Sternberg (2002) for the Madagascan fauna. In a recent global analysis, Yeo et al. (2008) estimates that the number of new freshwater crab species awaiting discovery ranges between 128 and 846. Most of the world's tropical mangrove systems are still not well explored, and many grapsoids and ocypodoids still await formal naming or discovery. The marine habitats are also still poorly surveyed, with the deep sea proving to be a far richer habitat than previously believed. New habitats continue to be discovered, with rubble beds, deep reefs and hydrothermal vents proving to be very diverse. New methods such as the now widespread use of colour photography of fresh specimens, and an expanding range of new morphological characters being used, are helping to resolve many species-complexes. These, coupled with the use of increasingly powerful molecular tools, have enabled us to identify many cryptic and sibling species in recent years (e.g. Ng et al., 2002; Lai et al., 2006), even for commercial species like *Portunus pelagicus* (see Lai et al., in prep.) and *Scylla serrata* (see Keenan et al., 1998)!

With regards to fossil taxa, almost 1,600 species are known at present (R. Feldmann, C. Schweitzer, pers. comm.).

DESCRIPTIVE TERMS

Carapace. The carapace is a cover, a shield of variable extension, and sometimes lateral expansion. It probably does not correspond to the tergum. It is effectively one continuous plate, but the surface may be covered by grooves of various depths demarcating associated regions. We follow Guinot (1979) in using the term to mean only the dorsal plate. Some authors use the term "cephalo-thorax" in place of carapace (e.g. Števčić, 2005), but this term actually refers to the entire structure of the fused cephalic and thoracic somites, and not just the dorsal shield. The regions usually correspond to the positions of various internal organs and structures, and thus they have corresponding names. The gastric region (including the epi-, meso-, meta- and urogastric regions) corresponds to the oesophagus and part of the foregut; the cardiac region, the cardiac portion of the stomach; intestinal region, the intestines; branchial region, the gill chamber; and so on. Some major grooves have names, though most do not. The so-called cervical grooves separate the branchial and gastric regions; the inter-epigastric groove separates the two epigastric regions; and the gastro-cardiac groove (often called the H-shaped groove) is deep and prominent

in many crabs. In most crabs, there is a pair of prominent transverse submedian pits (gastric pits) between the meta- and urogastric regions, corresponding to the endophragma on which the stomach muscles are attached.

There are various systems for recognising carapace regions, and these have been developed for the taxonomy of particular groups. For example, Dana (1852a: 74) developed a system, still used today, to denote each of the many complex regions and subregions on the carapace of xanthids. As far as possible we have tried to use a commonly understood generic terminology.

The shape of the carapace is typically described, and commonly used in keys. In many cases however, especially in large diverse groups, carapace shape can vary dramatically, and in these cases it is not useful in helping to define the group. However, sometimes the shapes can be distinctive and therefore we continue to use it. Unfortunately, until recently most of the descriptive terms used to describe shape have not been standardised. We here follow Ng (1998) in defining the various carapace shapes encountered, even though some of the categories can be subjective.

The suborbital, subhepatic, pterygostomial and sub-branchial regions are usually clearly defined, often separated by distinct grooves or rows of granules. In some, the subhepatic regions may be deeply excavated.

Front. The front is the anterior region of the carapace lying between the inner orbital angles; it is marked anteriorly by a frontal margin, which in most crabs, is obvious and prominent. The frontal margin may be deflexed or straight, and variously shaped, from multi- to bilobed or dentate, lamelliform, sharp and narrow to very broad and occupying most of the carapace width. It is most often clearly demarcated from the orbits. The so-called "rostrum" in "horned" crabs like some homolids and many majids is an anterior extension of the frontal margin. We do not formally use the term "rostrum" as it may suggest an affinity to the rostrum of Macrura and prawns, and we remain unsure if they are homologous structures. In some homolids, the front (or part of it) is formed by elongated accessory and postfrontal spines, and for these crabs the term "pseudorostrum" has been coined, and we here use that term as required. In some crabs, the ventral margin of the front may have a longitudinal ridge or carina which can be lamelliform distally (some Hymenosomatidae). In some freshwater Parathelphusidae, the frontal margin takes the shape of a median triangle formed by the median part of the cristate front being sharply bent downwards, and with a new transverse cristate margin forming across the top; in some species particularly, this triangle may be very prominent.

Orbits. In most crabs the orbits are well defined, formed by a prominent supraorbital margin (which may be cristate) which curves inwards to meet the front (sometimes smoothly or by an inner supraorbital lobe or tooth), and curves outwards to meet the infraorbital margin beneath. Where the supra- and infraorbital margins meet, a tooth or lobe is usually present, this is the external orbital tooth (also called exo-orbital or exorbital tooth or angle). The inner edge of the infraorbital margin usually stops well before the base of the eye or antennules, leaving a distinct orbital hiatus (gap). As such, the supra- and infraorbital margins demarcate an ovate, often deep depression in which the eyestalk lies, and is at least partially protected when it is retracted. These are what is defined as complete orbits. In some crabs, the supra- and infraorbital margins do not fuse or meet along their outer edges (e.g. some Gecarcinidae), these can be regarded as incomplete orbits although most of the eye is still protected. Orbits can be quite shallow in some crabs (e.g. *Lambrachaeus ramifer*), and one group, the Hymenosomatidae, do not have orbits and the short eyes are completely exposed. The form of the orbit in the Majidae is highly variable, and often poorly defined and incomplete. In some majids, the various supraorbital, subhepatic and suborbital spines and lobes effectively form a protective hood around the eyes, but this is different from the true orbit of other crabs. Homolids are also unusual; while the eyes superficially appear to be sitting in an orbit, there is actually no clear structure serving to protect the retracted.

It is not certain if the orbital structures in all families are truly homologous. For example, the elongated orbits of the Ocypodidae may actually be ontogenetically formed from the original short true orbit combined with a lateral transverse depression of the carapace.

Carapace margins. The anterolateral margins of some crabs are not well marked (e.g. Homolodromiidae) but generally are distinctly defined, and convex (sometimes referred to as arcuate); and may be entire, dentate, spinate, rounded and/or cristiform. If teeth and lobes are clearly defined, they are almost always counted from anterior to posterior. The external orbital tooth is often counted as the first anterolateral tooth (as we do here), but many also treat it as a separate orbital tooth. The last anterolateral tooth is usually, but not always, the most prominent, and the one that demarcates the beginning of the posterolateral margin. In some groups such as the Potamidae, Parathelphusidae, Grapsidae and Gecarcinidae which typically have only one or two teeth close behind the external orbital tooth, the term epibranchial tooth or teeth is often used instead of anterolateral tooth. This is because they are placed at the edge of the epibranchial region which is the anterior part of the branchial region. Some authors also refer to the last anterolateral tooth in Portunids as an epibranchial tooth, but this is not accurate as it is placed too far posteriorly.

The posterolateral margins in most crabs converge toward the posterior carapace margin, and varies from from convex, straight to concave. In some (notably some euxanthines and actaeines, Xanthidae), the posterolateral margin is deeply concave to receive the ambulatory legs.

In a few groups of crabs the antero- and posterolateral margins cannot be easily distinguished, with one gradually curving to another. In the Corystidae the lateral margins

form a single evenly convex margin, and may even bear teeth posteriorly. In others, particularly the Grapsidae and Ocypodidae, the margins are straight with no anterior-posterior separation, and therefore they are simply referred to as the lateral margins.

Proepistome and epistome. The proepistome (also known as the inter-antennular septum) is the sternite of the cephalic somite which bears the antennules. The epistome itself is the sternite of the cephalic somite which bears the antennae. The epistome in most crabs is clearly marked, although in some, it may be depressed and sunken. The epistome is often divided into two parts, with the posterior part larger. The anterior part is usually narrow, but in some (Homolodromiidae, Homolidae), it is relatively prominent. The posterior margin of the epistome is often crenulated and the lateral margins may be semicircular. Usually there is a median protuberance (tooth or lobe) but it is sometimes entire.

Buccal cavern. The buccal cavern (where the mouthparts are located), is bordered by the pterygostomial regions laterally, and the epistome above, and is usually demarcated by cristate to semicristate margins. The calcareous plate at the inside bottom of the buccal cavern (at the base of the mouthparts), is known as the endostome. Usually, only the anterior part of the endostome is visible, even if the mouthparts are moved aside. The endostome sometimes has obliquely longitudinal endostomial ridges which vary in strength and extent (may reach anterior and/or posterior parts, and thus are said to be complete or incomplete). These ridges direct the efferent branchial water current.

Eyes. The eye has two articles, the basal (basophthalmite) and ocular (podophthalmite), with the latter usually the longer and more prominent. The tip of the eye usually has a pigmented and rounded cornea. However the eye can be substantially reduced in many cavernicolous, hydrothermal (e.g. in the Bythograeidae, as *Austinograea*, see Guinot, 1990) and deep water species, and even some living in silty mud. In these cases it is fixed in the orbit, and although the eyestalk is reduced and the cornea almost lost, it is always discernible. In smaller individuals of the hymenosomatid *Cancrocaeca xenomorpha* where the eye seems completely absent (Ng, 1989), larger individuals do have discernible structures which represent the remnants of the eyes (see Naruse et al., in press).

Antennules and Antennae. The chemosensory antennules (sometimes called “second antennae”) are usually lodged in fossae, with the basal article often large, and the rest of the articles forming a flagellum which folds against the basal article. The flagellae are always short, and are rarely much longer than the maximum length or width of the basal article. The distal segments are invariably shortened, and are distally biramous and appear hook-like. The distal segments usually fold transversely, obliquely or sometimes vertically into the fossae, although in some cases, they are only partially folded, and in some gonoplacoids (e.g. the Chasmocarcinidae) the fossae are lost, and the flagella are always exposed.

The antenna (or “first antenna”) is uniramous, and usually has numerous articles; with the first and second articles often confusingly named. The first antennal article, lodged in the epistome, contains the osmoregulatory Green Gland, which has a urinary function and an external opening (“article urinaire” in French). This article is often small and less strongly calcified compared to others. The most prominent article basally is actually the fused second and third articles (hence its size); and most workers refer to this (somewhat erroneously but conveniently) as the "basal article" or “basal segment”. We follow convention in using basal article for this structure. The basal article, is usually the largest antennal "article", can be lodged in the orbital hiatus, and may be fused with the epistome to varying degrees. Following the basal article is usually a series of smaller and/or more slender articles which develop into, an often long, sensory flagellum.

The older nomenclature for the antennae and antennules can get confusing. The antenna is often called the "first antenna" and the antennules the "second antenna" because earlier workers have counted in from the eye, and perhaps because the “first antenna” is typically more prominent, with its long flagellum, than the second which is tucked into a fossa under the front. However, as noted earlier, the antennule is actually from the proepistome while the antenna is from the epistome, i.e. the antennule is derived from a somite anterior to the antenna. Thus, from a development point of view, the numbering is incorrect and not in the order of the somites they are derived from.

Mandibles, maxillae and maxillipeds. The mandibles are crushing or cutting structures and are always calcified, even in symbiotic species. Carnivorous species tend to have sharp cutting edges while herbivorous ones have more molariform structures. In parasitic species, the mandibles are rather weak. The mandibular palp usually is well developed and in life, normally covers the outer surface. It has either two or three articles, with the distal one usually large. In many crabs, the base of the distal article has a dense row of setae; and in a few freshwater families (Parathelphusidae, Gecarcinucidae and Pseudothelphusidae), the base of the distal article has a strongly produced accessory structure which is as long as, or slightly shorter, than the actual article, thus forming a bilobed structure. The morphological or adaptive significance of this structure is not known.

The first and second maxillae are smaller than the maxillipeds, flattened and biramous, and are rarely used in taxonomy. They have, however, proved useful in some groups such as the Cryptochiridae, Trapeziidae, Pilumnidae and Ocypodidae. In filter and detrital feeding crabs, the maxillae (as well as the first and second maxillipeds) have numerous long setae to help sift and sieve the sand/mud particles for organic matter.

Of the three pairs of maxillipeds, the third maxillipeds are the anteriormost structures most frequently (and easily) used for taxonomy. In some crabs like dotillids (Ocypodioidea) and mictyrids, the third maxillipeds are large and almost foliose, covering most of the buccal

cavern to form a chamber. This perhaps assists the other mouthparts in sieving the sand and mud for food. This is also the case for filter feeders like *Baruna* (Camptandriidae). In suspension and detrital feeding crabs, the first and second maxillipeds have numerous very long setae on the inner margins. Detritivores use these setae for sieving sand and mud. Suspension feeders on the other hand, extend these setae beyond the open third maxillipeds when feeding, actively filtering the water for plankton. In the varunid genus *Gaetice*, the third maxillipeds themselves have elongated palps bearing long setae that are similarly used for suspension feeding.

The forms of the merus and ischium of the third maxillipeds are perhaps the most often used characters in taxonomy. The merus can have the anteroexternal angle strongly expanded to form a prominent auriculiform structure, or it may be quadrate, or even effaced. The merus and ischium are usually free, but in a few (e.g. *Camptandrium* [Camptandriidae] and some Pinnotheridae), they may be fused and the suture completely absent. The ischium usually has a median or submedian sulcus (depression). In some Brachyura, the inner lateral margin of the ischium has a straight and entire low crest, and may have in addition, a submarginal low crest (inner surface) which is weakly or strongly serrated. Whether this serrated submargin (and perhaps the entire marginal crest) is homologous to the so-called "crista dentata" (which consists of a double row of serrated crests) of the Reptantia of Richters & Scholtz (1995) remains to be seen. The ischium is usually not fused with the basis, and the suture between them is clearly discernible (though sometimes medially interrupted). Even so, in most cases the two articles are not really mobile. An exopod is usually present in most crabs, but is often reduced and rarely absent in some freshwater and terrestrial crabs (e.g. Pseudothelphusidae and fully terrestrial crabs). When present, the exopod usually bears a long flagellum which tends to be reduced or even lost in some freshwater crabs. The first maxilliped is occasionally used taxonomically, especially whether the endite is distinctly notched and a lobe is present, the so-called "portunid lobe" (e.g. most Portunidae).

Appendages and pereiopods. Standardising names for the various appendages is not easy. We here refer to limb and pereiopod segments as articles, to differentiate them from the body segments, referred to as somites (except in the case of some fused abdominal somites, see below under Abdomen). It is important to do so, as the "segments" of appendages have a different derivation from those of the thorax and abdomen. The eyes, antennules, antennae, the calcified jaw-like mandibles (with a mandibular palp), and the first and second maxillae (sometimes termed maxillules) are all cephalic appendages. Although the eye, antennules and antennae are anterior and sensory in function, the mandibles and maxillae are always associated with the mouthparts.

The next five pairs of appendages, all thoracic, are for locomotion or manipulation, and are usually referred to as pereiopods (abbreviated as P1–P5). The first pereiopod is always a well developed cheliped (or pincer), and is here referred to as such rather than P1. The cheliped consists of a freely articulating coxa, a basis and ischium which are usually fused, an elongate merus, typically short and rounded carpus, and a propodus which is developed into a prominent manus (or palm) and pollex (or fixed finger). The last article, the dactylus, is recurved and articulates with the pollex to form a strong pincer. The manus, pollex and dactylus are together usually referred to as the chela. The cutting edges of the two fingers are usually dentiform to varying degrees, and in some species, the bases have large molariform teeth for crushing, or strongly recurved teeth for cutting. Sometimes the major cheliped may act as a "crusher", while the minor cheliped is the "cutter". Occasionally, the fingers may even be cultriform (blade-like). The tips of the fingers are usually sharp, but many groups have evolved spoon-tipped fingers to varying degrees for scraping. In some, the distal parts of the fingers are scalloped, with one side convex or flat and the other side excavated.

The form and function of crab chelae has received a good deal of study. Invariably, they are associated with feeding, but also for defence, and in some groups for social behaviour such as intraspecific aggression or courtship. Prominent molariform and cutting teeth are associated with feeding on molluscs. It has also been shown that crabs which use a special cutting (or sometimes called "peeling") tooth almost always have this structure on the right cheliped as an adaptation to deal with more commnonly found right-apertured gastropods! Such crabs (e.g. Calappidae, see Ng & L. W. H. Tan, 1984a) also have the fingers of the left chela elongate and forceps-like to aid in extracting the "peeled" gastropod. Invariably, powerful crushing and cutting teeth are associated with a massive, often swollen manus. Not much is known about the function of spoon-tipped fingers, but they seem to be generally used for feeding on detritus, scooping up mucus from corals, scraping off encrusting algae, more effective gripping of filamentous algae, scraping of coral rock, or picking up very soft foods. Scalloped fingers are primarily for scraping, be it encrusting algae off rocks and bark, or thin layers of leaf epithelia; although they also make quite effective cutters.

In some crabs, the base of the fingers and/or base of the chela has part of the cuticle weakly calcified, forming "windows" or "tympana" (e.g. *Benthochascon*, Portunidae). The function of these structures is not known but may be associated with pressure detection or sexual selection. Similarly, some homolids have darkened and somewhat decalcified patches on their chela that are believed to be photophores (Williams, 1976a).

The next four pairs of pereiopods are mostly used for walking and are often referred to as walking or ambulatory legs. However, many crabs have some or all of these legs modified for other functions like swimming, burrowing, grasping objects etc., and one or more pairs, principally the last pair, may even be vestigial (the Hexapodidae have a vestigial coxa). We refer to them as P2 to P5, with P2

being the first walking or ambulatory leg.

Many podotremes have the last one or two pairs of legs modified for carrying objects. In these cases, the dactylus and propodus form a subchelate to chelate structure, often with associated spines, setae and teeth, to aid in carrying objects. In some latreilliids, the dactylus is neither chelate or subchelate but hinges enough to appress tightly on the margin of the propodus so as to still hold objects. This is believed to be also the case for poupiniids, because the leg is also positioned subdorsally and extremely mobile, suggesting the P5 may have a carrying role (see Guinot et al., 1995). Among the podotremes, only the dynomenids (which have P5 strongly reduced and obliquely positioned) and raninids (which use the legs for burrowing) definitely do not carry objects. Among eubrachyurans, the carrying behaviour is much rarer. In fact, only the dorripids and ethusids practice this, with their P4 and P5 modified like those of the podotremes. Some majids (e.g. *Oncinopus* and *Achaeus*, Inachidae) have their P4 and/or P5 modified very much like those of carrying crabs, with the dactylus and propodus subchelate to chelate. From what is known, they do not use these structures for carrying, but instead, for clinging tightly on to branch-like substrates in areas with strong currents; with their carapaces, chelipeds and other legs dangling in the current to gather food.

There are various modifications of the pereiopods for swimming. The Portunidae have the dactylus and/or propodus of P5 distinctly dorsoventrally flattened and paddle-like, while in Matutidae, P2–P5 are all thus modified. In some dorippids and cyclodorippids, the dactyli and propodi, while flattened, are still relatively narrow, but have rows of long dense setae on each margin to increase the surface area. Paddle-like legs are not only associated with swimming, but can also be effective for digging; large *Scylla* (Portunidae) are unable to swim but use the same paddle-like last legs for digging into mud. Burying and burrowing crabs often have the same features as swimmers, but in many (e.g. Raninidae), their dactyli and/or propodi are generally less bilaterally symmetrical and are spatuliform to subspatuliform in structure. Also, some crabs (Matutidae, Orithyiidae) are both swimmers and burrowers, so their legs have features intermediate between the two. In many luteophilous crabs (mud-dwellers), the dactylus of P5 is relatively slender but distinctly upcurved; the spatuliform structure helping them burrow into soft sediments.

Crabs which live in rocky areas or reefs usually have P5 smaller than the rest, and the leg positioned slightly subdorsally; this helps them anchor themsleves in cavities, especially when resisting predators. Many slower crabs which live on such substrates and those which are obligate associates with corals have a special dactylo-propodal articulation on P2–P5, formed by a rounded prolongation of the lateral margin of the propodus which slides against and beneath a projecting button situated proximally on the lateral margin of the dactylus. When the dactylus is positioned at about 90° to the propodus and the muscles contracted, the two articles are effectively locked and cannot move. This helps the crab grip very tightly onto the substrate. Only when the muscles are relaxed can the dactylus be released. Many such crabs also have strong hook-like dactylus. In some coral crabs (e.g. Trapeziidae), the tip of the dactylus has rows of setae and/or transverse ridges which help scrape off coral mucus for food. Some semiterrestrial crabs (Dotillidae, Ocypodoidea) have an unusual "window" on the meri of some or most of P2–P5. This decalcified patch is often incorrectly called a tympanum but is now believed to aid respiration by absorbing atmospheric oxygen to prolong time away from water.

Thoracic sternites. The thoracic sternites have a number of important taxonomic characters, and are increasingly being used. These usually relate to the shape, and the pattern and degree of fusion between the somites. Although the cephalon and abdomen also have sternites, these are so reduced or modified that they are not taxonomically useful. For convenience, we will just refer to the thoracic sternites as sternites. The presence/absence and/or extent of the sutures between somites is important. The suture between sternites 7 and 8 is abbreviated as S7/8, and this pattern is similarly used to refer to other sutures. Sutures between sternites are not always complete and are often medially interrupted. In basal podotremes (Homolodromiidae, Dromiidae, Dynomenidae), only the lateral parts of the sutures are visible.

Many podotremes also have sternocoxal depressions on the outer edges of the sternum into which the inner edges of the coxae of the pereiopods fit. They are deep in the Dromiidae, Dynomenidae and Homolodromiidae, shallow in the Poupiniidae and Homolidae, and absent in the others. Almost all members of these families use the coxa of their legs in one manner or another to hold or "lock" their abdomen to the sternum; and it seems likely that this depression helps guide the pereiopodal coxae into position. For the coxa to function as an abdominal lock as well as aid in locomotion clearly necessitates slow and precise movements of the periopods. Homolids and poupiniids, which also use an homolid press-button and the base of the third maxillipeds to help lock the abdomen, have correspondingly shallow sternocoxal depressions. By relying less on the pereiopodal coxae for this purpose, they allow the pereiopods more flexibility. Latreilliids are interesting as they do not use their pereiopodal coxae at all to hold their abdomens. Other podotremes, with a wider thoracic sternum, and which have special abdominal locking mechanisms (e.g. Cyclodorippidae), do not use their pereiopodal coxae at all for this purpose, and are generally more agile crabs.

In a few crabs, notably species of *Trichopeltarion* and *Podocatactes* (provisionally in the Atelecyclidae), the sternum becomes markedly asymmetrical. We believe this is due to the possession of an exceptionally large cheliped in these species, requiring a large muscle block, in an expanded sternal compartment, to support and move it. The wider part of the sternum is always at the base of the enlarged cheliped. We have observed this phenomenon only in crabs with a narrow sternum. Presumably, crabs

with a broad sternum have sufficient space inside the sternites for the enlarged muscles. Certainly, such asymmetry is not known in *Uca*.

Endophragmal skeleton. The internal endophragmal skeleton of crabs is an important character and will be valuable in future systematic studies. What is known now, from the study of selected examples, suggests some broad patterns. How the endosternites from each half of the skeleton join medially is important. For most modern crabs, the endopleurites coming down from the pleural roof are fused to the endosternites, forming a more or less single structure. In some families (Homolodromiidae, Homolidae, Latreilliidae and Poupiniidae), the two halves of endosternites join interdigitally (or interlaced). Also very important is whether a sella turcica is present. This term is used to denote a special part of the endosternal phragma which links the tagma/thorax to the tagma/abdomen (intertagmal phragma) and is fused, in the Eubrachyura, to both endopleural and endosternal phragmae. Such a sella turcica, which plays the role of transversely joining between the two separate half endophragmal structures, is not present in the podotreme crabs, nor in other Decapoda, and is closely associated with how the thorax and abdomen are connected. Modern crabs have a well defined sella turcica, but not podotrematous ones.

Abdomen. Most crabs have six abdominal somites (or pleomeres) and a telson. The telson is frequently referred to as "segment 7" or even "somite 7" by many workers, but as it never has any associated appendages, it is now not regarded as a true metamere. For nomenclatural convenience, however, we find it convenient to refer to all the somites as well as the telson as "segments" in a broad non-specific sense. Segment 7 (or telson) is present in all crabs and is usually free, but in a few groups (e.g. in the Cyclodorippidae, Hymenosomatidae, Pinnotheridae, Majidae), it may be fused with segment 6, and is then referred to as the pleotelson. Almost all crabs have 7 segments (although some may be fused, see later), but in the Hymenosomatidae, there are only 6 segments and it is likely that this is associated with the absence of a megalopal stage (another unique feature of the family). In crabs, the number of abdominal segments increase through ontogenesis, and the loss of the megalopa is probably associated with hymenosomatids lacking a segment. Also, in many species of Cyclodorippidae and some Hymenosomatidae and Majidae, it is almost impossible to discern the individual segments, and it is only an assumption that they have the normal number of segments for the family. For most crabs with 7 abdominal segments, segments 1–6 are usually free but in many groups, it may be fused to varying degrees. Some authors count fused segments as one, but this is inaccurate and often confusing. In most cases, even when segments are completely fused and the sutures between them absent, traces of individual segments can still be discerned. Nevertheless, for the present purposes, we count all segments and indicate which are fused. There is also often confusion as to what constitutes fusion. Many authors just look for the presence or absence of sutures between the segments, but this can be misleading. Segments may have their sutures still distinct externally but may be ankylosed to varying degrees underneath, rendering the segments effectively immobile (e.g. Geryonidae). We here regard fusion as segments which are immobile and cannot articulate with each other, regardless of whether the sutures are visible. It is also important to note that the depth of the sutures may be affected by age and growth, and in very young crabs, the sutures may be deep and the fusion between segments may not have occurred.

Although the number of segments in male and female abdomens is the same, there can be sexual dimorphism in regard to segmental fusion. Male xanthids, carpiliids and parthenopids for example, have segments 3–5 fused but their females have all segments free. Male leucosiids usually have segments 3–5 fused but in some females (e.g. *Leucosia*), most of the abdominal segments are completely fused and form an immobile cover. Male latreilliids have all segments free but females have some of them fused. These female crabs have the abdomen highly domed and modified into a brood pouch to varying degrees, with the eggs completely protected when the abdomen is closed. In such cases, at least two (usually more) of the segments are fused. For nomenclatural convenience, the segments are here abbreviated as A1 to A7.

The role and significance of fusion has yet to be determined, but presumably, it helps hold the abdomen against the sternum more easily, or makes flexing easier, especially during mating. A large number of crabs have A3–5 fused, but whether this is phylogenetically significant or mere convergence is not known. Certainly in many groups, this is a very diagnostic feature. In some groups like Cyclodorippidae, Majidae and Hymenosomatidae, there is a great diversity of combinations!

The anus, which is normally on segment 6 (A6) in Decapoda, extends more posteriorly into A7 (telson) in Brachyura. This means that most crabs can defecate by just slightly flexing segment 7 and with the rest of the abdomen closed and locked either by the legs (basal podotremes) or by a press button (Eubrachyura).

The abdomen of males and juvenile females (i.e. females before the puberty moult) of most crabs are able to "lock" onto the sternum using a variety of structures, enabling it to be tightly appressed (see earlier under remarks for the sternum). The male abdomen may be held using prominences, spines, angles and/or small structures on the base of the coxae of the legs, chelipeds or even third maxillipeds; or by means of a tubercle on the sternum (on sternite 5) which fits into a depression (the socket) on the ventrum of the abdomen (on the distal edge of segment 6). This special mechanism is called a press-button system ("bouton-pression" in the original French terminology). Some species lack any locking mechanism whatsoever (notably the Mictyridae and some Ocypodidae), but some may still be able to hold the abdomen more or less tightly against the sternum using specialised musculature or abdominal design. Some of course have fully "free" abdomens (e.g. some Raninidae [except Lyreidinae] and

Corystidae). While adult female crabs generally do not have any special mechanism to hold their wide abdomen tightly against the sternum (effectively "free"), some have the segments so strongly convex and extensively fused that the abdomen is effectively one large domed plate which completely covers the sternum like the lid of a box! The press-button can remain functional in females of some families (e.g. Dorippidae), but generally it is represented only by non-functional corneous scars in ovigerous females or is completely absent. For example, female aethrids have a weak but functional press-button system, while that of female parthenopids is as strong as that of males. In homolids, there is a similar structure, the outer edge of sternite 4 of both males and females possessing a low serrated crest which fits into a slit-like socket on the outer edge of abdominal segment 6. This structure (which has been called the homolid press button) functions exactly like the press-button system of other crabs. The acquisition of a retaining/locking mechanism may be regarded as a synapomorphy for the Brachyura.

Why do most male and some female crabs need to lock their abdomens against the sternum? It may be simply that it is metabolically expedient not to have to maintain closure using constantly tensed muscles — the whole point of carcinisation is to reduce the abdomen and close it against a sternal cavity, thus making the crab more mobile. Logically the simplest way to maintain this, when access to the gonopods is not needed, is to have some form of simple locking mechanism. Female abdomens are typically broadly expanded for their egg-carrying role, and tend to lie over the sternum rather than sink into a sternal cavity, and therefore the practicality of a locking mechanism is challenged. However, there is no doubt that in male crabs at least, the tightly closed abdomen serves to protect the vulnerable gonopods from abrasion or other damage, protecting the male crab's ability to mate. Wholly marine crabs without a locking mechanism, like corystids and most raninids, are almost always burrowing crabs, living in soft substrates like mud, silt or fine sand. Such soft substrates are unlikely to damage their chitinised gonopods, and so the absence of a locking mechanism is not serious. Even terrestrial intertidal crabs which have no locking mechanism like mictyrids and some ocypodids also live on soft substrates. Similarly, cryptochirids, which spend all their time protected inside coral galls, have no need for a locking mechanism. Interestingly, male pinnotherids, have to move from host to host to fertilise the females and often across hard and rough substrates, have a press-button lock. All land and freshwater crabs have well developed press-button locks as they often move across rough substrates. Why some female crabs need a locking mechanism is more puzzling. Many crabs have such large egg masses that it is not possible to hold the abdomen against the sternum. This is also the case for parthenopids, so their possession of a well developed press-button system is curious. It makes sense for some species which have well developed brood pouches to have locking mechanisms, but again it is not universal, Latreilliidae have it, but hymenosomatids and leucosiids (sensu stricto) lack a lock. Leucosiids (but not the iphiculids), have their own unique locking system where the whole margin of the brood pouch is a solid structure, fused with the lateral edges of the sternum. In preserved material, we sometimes even need to break the abdomen to lift it.

The shape of the male abdomen can vary appreciably. Most male crabs have segments 3–7 forming a triangular shape, with segments 1 and 2 smaller and narrower longitudinally. Some, however, have segments 4 or 5–7 markedly narrow transversely, making the distal part very acute and the abdomen T-shaped (e.g. some Parathelphusidae and Portunidae). In some, segment 6 may be laterally constricted such that part of the sterno-abdominal cavity and even the gonopods are exposed.

Moult lines. All crabs moult, but the "splitting" of the exoskeleton to enable the new body to extract itself is achieved in different ways. Most crabs have a lateral moult line (sometimes called suture) which runs along the side of the carapace In the Dromiidae, Dynomenidae and most Eubrachyura the moult suture runs along the lateral and/or ventral edges of the carapace to the pterygostomial region and orbits. There have been various descriptive terms proposed (often "pleural line"), but for convenience, we here suggest the use of "linea brachyura" for this feature. In homolids, the lateral moult suture, called "linea homolica", is dorsal in position on each side of the carapace and extends longitudinally across the entire carapace. These lines are distinct because this is the area where the carapace is only weakly calcified, appearing thinner and more translucent than neighbouring areas. It is not known if these lines/sutures are homologous although both serve the same function. This is especially the case with the linea brachyura of podotremes and sternitremes. Whether these linea are homologous with those in the Anomura and Thalassinoidea is another question. Latreilliids have only a partial lateral linea on the anterior part of the carapace while a few crabs like hymenosomatids apparently do not have any trace of a suture. In some hymenosomatids, there are pronounced grooves on the dorsal surface of the carapace which may well correspond to the moult suture or "linea" of other crabs; but we are uncertain how these crabs moult. In the Homolodromiidae, there is no clear linea, and it is replaced by a large poorly calcified—area on the branchiostegite. How these crabs moult is not known.

Sexual dimorphism and sexual characters. Many species of crabs show sexual dimorphism, with males being larger, smaller, or possessing special or enlarged structures. In some species the females are the larger. Most commonly, males have proportionately much larger chelipeds or chelae. In some heterochelous crabs, males have one of their chelipeds extremely enlarged to be used for courtship.

Males always have only two pairs of gonopods (uniramous swimmerets or pleopods) which are specially modified for copulation (most crabs practice internal fertilisation). The first gonopod (G1) is basically a highly modified pleopod

which has been folded or rolled longitudinally to form a cylindrical tube. The degree of this folding varies; from incomplete, leaving a prominent longitudinal gap between the two margins, to having the folds overlapping several times. The channel thus formed can vary from very wide to extremely narrow and almost capillary-like. The form of the G1 varies from broad to very slender, straight to sinuous, and even strongly recurved. In camptandriids, the tip curves backwards almost 180°. The tip of the G1 varies from acute to truncate, and in many terrestrial or semiterrestrial crabs (Grapsidae, Ocypodidae and Gecarcinidae), the tip is distinctly pectinated and densely surrounded by long stiff setae. The distal and subdistal margins can be lined with spines, various types and lengths of setae, lobes, folds, special processes, and can even be dilated. The function of these structures is not known, but it is presumably to help hold the G1 in position during copulation. In some freshwater crabs (notably Potamidae and Pseudothelphusidae), the tip or subdistal part of the G1 is so bizarre, large or swollen that it is impossible for it to be completely inserted into the vulvae – in these, presumably only the narrow tip (which may be subdistal) enters. This is also probably the case with the G1 of ocypodids, grapsids and gecarcinids. In the camptandriids, some species (e.g. in *Paracleistostoma*) have the distal part somewhat swollen, but as this structure is relatively weakly chitinised, and there are longitudinal folds, it is probably dilatable, and it may be expanded during copulation, as is done by many insects. Since the G1 is formed by folds, it is not rare to find spines and short setae on the inner surface (channel). Most marine crabs have chitinised G1s but these are rarely heavily calcified as well, so they remain soft and still somewhat flexible. This is not the case with terrestrial and semiterrestrial crabs (e.g. Ocypodidae, Grapsidae, Gecarcinidae, and many terrestrial Potamidae, Potamonautidae, Pseudothelphusidae). Their G1s are very stiff, well calcified or heavily chitinised. Most crabs have the G1 as a single piece, but in all potamids, potamonautids and some parathelphusids, it appears effectively "2-segmented". Strictly speaking, the G1 does not consist of two segments, as the basal portion is probably formed by one part of the G1 twisting sharply and forming a transverse or oblique fold. However, the term "2-segmented" is convenient and is retained here. In podotremes, the basal part of the G1 has only one large opening (a single "foramen") into which both the penis and G2 are inserted. This is usually not problematic as the G1 is usually large and the folding incomplete, leaving a distinct gap between the folds. In the modern crabs (thoracotremes), the folding is usually more complex, and the base of the G1 has a separate opening each for the penis and G2 (two foramina). In some crabs (e.g. some Portunidae), the opening for the penis is surrounded by a small but prominent transversely grooved lamelliform plate which apparently helps guide the penis into the basal G1 opening.

The second gonopod (G2) also varies a great deal in form, from whip-like to sigmoidal (very small, comma-shaped). The G2 can be much shorter than the G1, or indeed longer. Often, the G2 is divided into two parts, with a stouter basal "segment", and a slender and elongate distal part (usually referred to as the flagellum). The tip of the flagellum can be sharp, truncate, bifid, spatulate (some Potamidae and Potamonautidae) or hooked (some Eriphioidea). Both segments can be of various lengths. At the junction of the two segments, there is usually a small flap which can be cup-like. Sometimes, the flagellum is absent, and the tip is flattened or concave. In all crabs, the G2 fits into the internal channel formed by the folds of the G1; and serves one of two functions, either to guide the sperm along the G1, or as a piston pump to push the sperm up the channel into the vulva. Crabs which have very slender G1s (and very narrow channels) (e.g. Xanthidae and Pilumnidae) invariably have very short G2s with cup-like tips. Presumably, the sperm moves up the channel by capillary action, and the small G2 serves merely to help move it along. How very long whip-like G2s (e.g. some Eriphioidea) function is not known. They can enter the vulvae as fragments of G2s have been found stuck in the vulva; but it is also possible this is anomalous, with the elongated G2 staying mostly curled or coiled up inside the G1 and helping to move the sperm along simply through increasing the overall surface area when pumping. In the case of potamids, the study of Brandis et al. (1999) suggests that it enters the vulva.

What is referred to as spermatheca in the podotrematous crabs is an internalized structure derived from sternal modifications of two adjacent segments in females, and is basically a split between the two plates of the intersegmental phragma 7/8, i.e. one derived from sternite 7 and the other one from sternite 8. This intersegmental or intertagmal, internal, and paired spermatheca, as a secondary specialization of the phragma 7/8, is unique to the Podotremata (see Tavares & Secretan, 1992; Guinot & Tavares, 2001; 2003; Guinot & Quenette, 2005).

The pleopods of females are branched, setose and carry the eggs. The fertilised eggs are exuded, and thence attached to the female's setose pleopods, where she broods them for several weeks before hatching to release the planktonic larvae (zoeae).

Development in almost all crabs is via zoeae. The eggs hatch into first zoeae which typically go through 1–6 instars before becoming a megalopa. Some species have larger eggs and fewer zoeal stages. Majids in particular, typically have only two zoeal stages. Some groups have species in which the typical number of zoeal stages is reduced, with their zoeae more advanced in form, and having fewer stages. This is termed semi-abbreviated development. In extreme cases, there may only be one zoeal stage that may not even need to feed, relying entirely on stored yolk inside the body. In a few species, the larval development is even more truncated, with no free swimming zoeal stages, and the eggs hatch directly into megalopae, or even the first crab stage. This is abbreviated development. Few marine crabs practice abbreviated development, notable being some species of pilumnids, dromiids, homolodromiids, freshwater sesarmids and all true freshwater crab families. Except for the true freshwater crabs, some freshwater sesarmids, and the Trogloplacinae (Chasmocarcinidae) in which the eggs hatch into first crabs (i.e. direct development); all other

crabs have at least a short megalopal stage, even if the megalopa are not planktonic and cling to the mother. Only in one family, the Hymenosomatidae, are megalopa not known, with the zoeae metamorphosing directly into first crab. This is believed to have affected their number of abdominal segments (they only have six and not the usual seven). In crabs, segments are usually added as the larval instars grow, with the final segment added at the megalopa-first crab moult.

In some crabs, the endophragmal skeleton is rather unusual in that the constituent endosternal and endopleural plates are all displaced laterally, leaving the central parts of the crab effectively empty. In the Hymenosomatidae in particular, this median space is rather large, and this has apparently allowed some species (e.g. *Neorhynchoplax mangalis*) to evolve the habit of ovoviviparity, in which the fertilised eggs develop inside the large "empty" median body cavity and are extruded not through the vulvae but via a tear on the sternal membrane, hatching into zoeae in the process (Ng & Chuang, 1996).

Setal covering. Many species of crabs have differing degrees of pubescence on their bodies and appendages. The “hair” (more accurately called setae) may be soft or stiff, simple or plumose, or so short that it appears like pile. The setae may sometimes be so stiff as to be spine-like, especially on the propodus and dactylus of the legs. Majids often have hook-like setae which are used for the attachment of sponges, algae and debris (similar in action to velcro). This helps in the crab's camouflage. In other crabs, the longer and/or plumose setae usually gather dirt and mud which helps obscure the animal's outline. Softer setae on the legs and chelae have a sensory purpose.

METHODS

One of the major uses for the present list is that it gives an overview of the members of any given group, and this hopefully should facilitate and catalyse systematic revisions and taxonomic studies. While we have taken care to be as complete and accurate as possible, primary literature sources should always be checked and verified. We have used a multitude of literature sources to compile this list, some original, some secondary, although in most cases we have tried to verify the accuracy of all entries.

The present compilation is more than a simple list. Whenever possible we have added comments and discussion to the different taxa when we are aware of changes and problems. This is done with the primary aim to inform the reader as to changes which may have taken place recently, problems that still exist, and challenges ahead. It identifies numerous nomenclatural and taxonomic problems that future workers can pursue and hopefully help resolve. This we hope will help the reader better understand the complexities involved in brachyuran systematics, and perhaps help them formulate hypotheses to test. We have also added points derived from our own unpublished studies in some instances so that the reader is aware of what work is still ongoing. In instances when the authors have manuscripts which will be published soon, we have cited them as papers in preparation. In some cases, the comments set out hypotheses for future testing, perhaps using larval, molecular and/or other methods.

Each family and subfamily has all its synonyms listed. This is to facilitate cross-referencing. We have not done this for superfamilies as this will make the work far too repetitive. Our systematic framework is from superfamilies down to subfamilies. The format of presentation for each genus and species is straightforward. For taxa in which the International Commission of Zoological Nomenclature has made a ruling (in the form of a Direction or Opinion), this is indicated. These rulings are important as they help fix type species and/or spellings, gender, authorships and dates of publication. If we have taxonomic or other notes about the genus and/or species, we have indicated this with a number in parentheses; and these are listed at the end of each family. For each genus, the type species and gender are always specified. In cases when the classification of a particular species in a genus is tentative or uncertain, we have placed the genus name in inverted commas. We also use “?” when we are unsure of the placement or status of a particular species (e.g. which genus it belongs to, is it a synonym of another name, etc.). Primary synonyms are listed, and if a name is pre-occupied by a senior homonym, this is stated. For each species, the current generic allocation is used for the spelling and gender. The genus (and subgenus) the taxon was originally described in, is then placed at the end of the name in square parentheses. We have corrected the suffix of the species name in each case to match the gender of the genus name. This, however, is only done for species (and subspecies) we recognise as valid, and not when the name is invalid or regarded as a junior synonym. In such cases, we have used the original spelling. The index prepared here is not comprehensive as it lists only the recognised supraspecific taxa. In any case, the pdf document is fully searchable.

We have not normally considered fossil genera in our synopsis. Only in a few cases where the synonymy is for well known extant taxa have we added in the names as well, for example *Palaeopinnixa* Via Boada, 1966 (with *Pinnixa*) and *Carcinoplacoides* Kesling, 1958 (with *Libystes*), and in such cases, we note that these are names for fossil genera. We emphasise that the synonymy concerning fossil taxa is not exhaustive.

We have envisaged the present exercise to be in three parts. The first part is the present checklist. The second part, which we hope can be ready in several years, is a detailed synopsis of all superfamilies, families and subfamilies, with keys and figures. The third part, which will hopefully will also be ready at the same time, will be a complete bibliography of all the literature for author and date citations. While we regret that this bibliography cannot be ready in time together with the first part (which would have enhanced its value), practical and logistical issues pose major constraints. The present list (Part 1) has already taken us over 10 years to assemble.

The following abbreviations are used: ICZN = International Commission for Zoological Nomenclature; Code = International Code for Zoological Nomenclature (1999); P2–P5 = first to fourth ambulatory legs respectively; G1 = male first gonopod; and G2 = male second gonopod. Most of the nomenclatural terms used in this catalogue (e.g., nomen protectum, nomen oblitum, nomen nudum, etc.) are explained in detail in the Glossary of the Code (ICZN, 1999: 99–122) and are not elaborated on here.

We have added colour photographs of interesting species to fill up the spaces between major groups; partly for "eye relief" and partly to share with the readers how spectacular some of these taxa are when freshly collected. When the photographs were by T. Y. Chan or P. K. L. Ng, there are always preserved voucher specimens in the Raffles Museum of Biodiversity in Singapore or Muséum national d'Histoire naturelle in Paris.

NOTES ON GENERAL NOMENCLATURE

On ICZN rulings. In many cases, the ICZN has made specific rulings with regard to type species, incorrect spellings, and availability of names. These rulings have been published as a series of Directions and Opinions, and the revised names and decisions are placed into the Official Lists. These decisions are binding on all users of zoological nomenclature, and override normal procedures as layed out in the formal ICZN Code. Changes will then only be considered following a new direct application to the Commission. For example, Miers (1886) selected *Cancer gigas* Lamarck, 1818, as the type species of *Pseudocarcinus* H. Milne Edwards, 1834. The Commission (Opinion 85, Direction 37) ruled that this was correct. However, Desmarest (1858) had in fact earlier selected *Cancer rumphii* Fabricius, 1798, as the type species of *Pseudocarcinus*. Although the action of Desmarest (1858) had priority over Miers (1886), Miers' selection nevertheless stands because of Opinion 85. We have generally not given full references to ICZN rulings because they are already compiled by ICZN (1987, 2001).

A note on the 50-year rule of ICZN. The so-called 50 year rule for the reversal of precedence has been resurrected in a modified form in the recent (1999) Code as Article 23.9. It states: "In accordance with the purpose of the Principle of Priority [Art. 23.2], its application is moderated as follows: 23.9.1. prevailing usage must be maintained when the following conditions are met: 23.9.1.1. the senior synonym or homonym has not been used as a valid name after 1899, and 23.9.1.2. the junior synonym or homonym has been used for a particular taxon as its presumed valid name in at least 25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years. 23.9.2. An author who discovers that both the conditions of 23.9.1 are met should cite the two names together and state explicitly that the younger name is valid, and that the action is taken in accordance with this Article; at the same time the author must give evidence that the conditions of Article 23.9.2 are met, and also state that, to his or her knowledge, the condition in Article 23.9.1 applies. From the date of publication of that act the younger name has precedence over the older name. When cited, the younger but valid name may be qualified by the term "nomen protectum" and the invalid, but older, name by the term "nomen oblitum" (see Glossary). In the case of subjective synonymy, whenever the names are not regarded as synonyms the older name may be used as valid."

Uunder this provision, we have suppressed two names: *Cancer dodecos* Linnaeus, 1767 (= *Inachus dorsettensis* (Pennant, 1777)), and *Cancer pellitus* Forskål, 1775 (=*Liocarcinus corrugatus* (Pennant, 1777). These are both senior to the names currently used, but have not been used for at least five decades. It is unfortunate that the rule is open to subjectivity. There are no types for these species, but we believe that the descriptions provided by Linnaeus for them, leave little doubt as to their identities. It seems that the names were missed inadvertently by early workers, and the mistake then perpetuated. However, in the interests of stability, we have decided to maintain the names under which both have been commonly known.

Type species. Modern authors, when describing new genera, invariably specifically designate type species. In fact, under the 1999 Code, new genera (or subgenera) established without type species after 2000 are regarded as nomenclaturally invalid. When a genus (or subgenus) has only one species, we have used two terms, "by monotypy" and "by original designation". Although neither term affects nomenclature, we felt it was better to reflect what the original authors had done. "By monotypy" means that the original author did not specifically select a type species but since only one species was mentioned or listed, it becomes the type species by default. In most modern papers, authors specifically choose a species as the type, even when there is only one species, i.e the type species is "by designation". Article 68.1 which deals with the order of precedence in ways of fixation of a type species states that "If one (or more) species qualifies for fixation as the type species in more than one of the ways provided for in Articles 68.2–68.5, the valid fixation is that determined by reference to the following order of precedence: firstly, original designation [Art. 68.2], then monotypy [Art. 68.3], then absolute tautonymy [Art. 68.4], and lastly Linnaean tautonymy [Art. 68.5]".

A note on emended spellings. With regard to emendation of genus and species names, we follow the recommendations of Article 33.2: "Any demonstrably intentional change in the original spelling of a name other than a mandatory change is an "emendation", except as provided in Article 33.4." and "33.2.1. A change in the original spelling of a name is only to be interpreted as "demonstrably intentional" when in the work itself, or in an author's or publisher's corrigenda, there is an explicit statement of intention, or when both the original and the changed spelling are cited and the latter is adopted in place of the former, or when two or

more names in the same work are treated in a similar way." However, there are two caveats in the Code which allow some emendations to be used regardless. The two articles are: Article 33.2.3.1 – "when an unjustified emendation is in prevailing usage and is attributed to the original author and date it is deemed to be a justified emendation."; and Article 33.3.1 – "when an incorrect spelling is in prevailing usage and is attributed to the publication of the original spelling, the subsequent spelling and attribution are to be preserved and the spelling is deemed to be a correct spelling."

On the gender of generic and subgeneric names. There has often been confusion over the correct ending of some species names because of not knowing, or not caring, about the gender of the genus. The Code has clear guidelines for this (Article 30.1), though there are still enough exceptions to sometimes make things confusing. The Code also provides some strict rules that must be used to fix some spellings. For names ending in -ops, the gender must be masculine, regardless of the origins or the author's intent (Article 30.1.4.3). For names ending in -opsis, the gender must be feminine (Article 30.1.2). For names ending in -ites, -oides, -ides, -odes, -istes, the gender has to be masculine (Article 30.1.4.4). General guidelines (for crab names at least), are that names ending in -ceras, -mon, -nema, -odon, -soma, -stoma are neuter; names ending in -ella, -inus, -merus, -carpus, -somus, -stomus are masculine; and names ending in -anas, -caris, -gaster, -lepis, -ella, , -plax are feminine.

There are some "atypical" cases. *Cryptocoeloma* is neuter following a ruling by the Commission (Opinion 1554). *Gonioinfradens* is masculine, as the gender of "*dens*" (or tooth) is masculine. *Ocypode* and *Panope* are feminine; whilst *Sesarma* is neuter. Some authors derive their names from arbitrary combinations of letters, or from non Latin or Greek roots. In such cases, they can specify the gender. For example, while *Tanaoa* and *Urashima* are masculine, *Tokoyo* is feminine.

It is also useful to point out that in the case of a subgenus, its gender may be different from that of the genus. Consider the macrophthalmid subgenus, *Macrophthalmus* (*Chaenostoma*) Stimpson, 1858. The gender of *Macrophthalmus* Desmarest, 1823, is masculine, while *Chaenostoma* is feminine. In this synopsis, whenever a subgenus name is used together with the genus name, and the gender is specified, it is taken to be that of the subgenus. In the above case, the gender for *Macrophthalmus* (*Chaenostoma*) Stimpson, 1858, is cited here as feminine. However, when we use a species name as well, the gender of the species must agree with the genus. For example, *Macrophthalmus* (*Chaenostoma*) *dentatus* Stimpson, 1858.

A note on the suffix for some suprageneric names. The challenges of the Latin language are such that in establishing subfamilies or families, authors sometimes use the incorrent suffix for these taxa. This is primarily due to how the genus name on which the taxon is based is modified. For example, the raninid subfamily Notopinae Serène & Umali, 1972, should be spelt as "Notopodinae" instead, as the name was based on the genus *Notopus*. Similarly, the majoid taxon Oncinopidae Stimpson, 1858, should be "Oncinopodidae" as it was based on *Oncinopus*; Anomalopinae Stimpson, 1871, should be "Anomalopodinae" as it was based on *Anomalopus*; and Leptopinae Stimpson, 1871, should be "Leptopisinae" as it was based on *Leptopisa*.

A note on the retention of junior suprageneric names. The new Code has a useful provision for suprageneric names that helps maintain stability. Article 35.5 states that "Precedence for names in use at higher rank. If after 1999 a name in use for a family-group taxon (e.g. for a subfamily) is found to be older than a name in prevailing usage for a taxon at higher rank in the same family-group taxon (e.g. for the family within which the older name is the name of a subfamily) the older name is not to displace the younger name." This was done specifically to minimise confusion when family level taxa are raised to superfamilies, or subfamilies to families, and taxonomic compositions change. Two cases best demonstrate how this rule is to be used (and not to be used).

In the recent classifications (see Martin & Davis, 2001), the family Panopeidae Ortmann, 1893, is recognised for two subfamilies, Panopeinae Ortmann, 1893, and Eucratopsinae Stimpson, 1871. Before the new Code, the family would have to known as Eucratopsidae on the basis of precedence as it was published in 1871, 22 years before Panopeidae. But because Panopeidae is a much better known name, retaining this name for the family makes more sense than using Eucratopsidae. Martin & Davis (2001) rightly used this provision to keep Panopeidae.

The problem with Menippidae Ortmann, 1893, Eriphiidae MacLeay, 1838, and Oziidae Dana, 1851, is different. Citing Article 35.5 of the Code, Martin & Davis (2001: 53) argued that the name Menippidae must be used instead of Oziidae or Eriphiidae. However, they apparently did not realise that the articles in the 1999 cannot be applied retrospectively. The name Menippidae had been synonymised with Oziidae by Holthuis (1993: 619) who commented that "The present family is often indicated as Menippidae Ortmann, 1893, but as the family contains both the genera *Menippe* and *Ozius*, the correct name of the family name is Oziidae Dana, 1852 (sic)." Ng (1998: 1050) subsequently showed that Eriphiidae was an older name and had priority over both Oziidae and Menippidae. The ICZN (1999) Code (and Article 35.5), valid for actions from 2000, does not apply to both Holthuis' (1993) and Ng's (1998) decisions; and the arguments in the Article are not applicable in the manner argued by Martin & Davis (2001). Fortunately, in the present reappraisal of eriphioid classification, the Menippidae, Eriphiidae and Oziidae are regarded as separate families, diffusing any possible dispute over the use of these names.

A note on incertae sedis and non-brachyuran names. A good number of taxa cannot be determined with any accuracy and are here regarded as nomina dubia. They are valid taxa, but have been diagnosed so briefly that we really cannot be certain of their identity. In most cases, we have been able to attribute them to a family or sometimes, even subfamily; but we must emphasise that this should be regarded as provisional. Only a re-examination of the types will resolve these problems.

Two other names need mention. One is a Forskål name, *Cancer antennatus* Forskål, 1775. Forskål (1775) wrote: "CANCER ANTENNATUS; *brachyurus, thorace subovato, antennis triplo longioribus; chelis cunei-formibus*. DESCR. Ungue brevior: cinereus, nebulis nigris. *Antennae* seraceae, rufescentes, thorace triplo longiores: rarus in brachyuris character. *Frons* obtusa, repanda. *Oculi* breves, obtusi. *Thorax* planiusculus, ovatus, basi truncates. *Chelae* compressae, inermes, subtus rubentes punctis obscurioibus; pedes reliqui sine chelis. *Carpi* femoribus longiores, introrsum bidentati. *Cauda* ovata, inflexa, thoracis latutudine, utringue ciliato-dentata. *Sués*, habitans in foraminibus *Spongiae Offic. violaceae*. Quotquot vidi foemellae errant." Brief though this is, it leaves little doubt in our mind that *Cancer antennatus* Forskål, 1775, is in fact a species of porcellanid crab. Similarly, the species originally identified as *Parthenope dubia* Fabricius, 1798 (= *Parthenope dubia* Weber, 1795, nomen nudum), is also a porcellanid, probably a species of *Pisidia*. The type specimens in the Copenhagen Museum are in rather poor condition but are clearly porcellanids.

NOTES ON AUTHORSHIPS OF TAXA

Citation of authors. The correct author citation has sometimes been confusing, particularly in some older papers where the author cites others as the source of the name without clearly stating if they had contributed to the description (see Ng, 1994). When a purported author is clearly not a carcinologist or scientist, they can be easily disregarded. However it becomes more difficult when this is not the case. Ng (1994: 510) commented: "… citing just an authors's name after the new species name does not make clear that the description is the work of that author. Henri Milne Edwards (1834) in his "Histoire Naturelles des Crustacés" in several instances used the author's name "Lamarck" or "Latreille" after a new species name, usually with a footnote "coll. du Muséum". It proved later that in such cases, H. Milne Edwards had used names written on the labels of the type specimens or in manuscripts by Lamarck or Latreille, who, however, never published that name or the description of the species name H. Milne Edwards used. H. Milne Edwards used these old manuscript names and provided the descriptions himself. Many later authors cited the species name with Lamarck or Latreille as authors. The Code effectively did away with this practice. This is the origin for Article 50a. Similarly, De Haan (1841), in his Fauna Japonica published a new scyllarid lobster species "*Scyllarus Haani* v. Siebold". Von Siebold had suggested this name, and asked De Haan to use it. As the description was entirely by De Haan, carcinologists now cite the species as "*Scyllarides haani* (De Haan, 1841)". The Code (Article 50, Recommendation 50A) states that authorship should belong only to those directly responsible for the name, and for satisfying the criteria that make the name available. In a new work, the authorship should be explicitly stated, but for older works it still often remains unclear how to determine the individual responsibility of each putative author. In these cases (sometimes contentiously), we have used our best judgement to decide on authorship.

Another complex (and often emotional issue) involves crediting authorship to suprageneric taxa like families. The most unfortunate must surely be the case of H. Milne Edwards (1834, 1837) who developed a very comprehensive classification of the Brachyura, including names for many groups that carcinologists still recognise today, but used mostly French vernacular names. Under the Code, names are normally only valid when they are in Latin or latinised. As such, although H. Milne Edwards was the first to recognise and provide a diagnosis for most of the groups, his failure to use a Latin name means that many of his "families" are now credited to MacLeay (1838) — despite the fact that MacLeay himself attributed the names and concepts to H. Milne Edwards! To further complicate matters, some of H. Milne Edwards' ideas were actually derived from those of Desmarest and Latreille, who were often even more vague in recognising groups which they did not "formally name in Latin". There are exceptions however — Latreille (1802) used the terms "Cancérides" (as French vernacular, with an accent) as well as "Cancerides" (as a Latin name) in the same paper, so it is reasonable to deduce that he differentiated between the two, and in contrast to most publications, the authorship of Cancridae should be attributed to Latreille (1802) rather than, as is more common, to MacLeay (1838). To resolve some of these problems, and to ensure there is less confusion in the future, Article 11.7.2 of the Code states that "If a family-group name was published before 1900, in accordance with the above provisions of this article but not in latinized form, it is available with its original author and date only if it has been latinized by later authors and has been generally accepted as valid by authors interested in the group concerned and as dating from that first publication in vernacular form." While we follow this rule, we have kept in mind that the terms of this article are not retroactive. As such, for most taxa we maintain the current widely accepted authorships (unfortunately for H. Milne Edwards). Article 11.7.2 should only be applied when new cases are discovered.

Spelling of author's names. The names of a number of important carcinologists have been variously cited through time, and we here recognise the need to standardise usage and even spelling. For example, should one cite De Brito Capello or Brito Capello, Marion de Procé or De Procé, Saussure or De Saussure, De Lamarck or Lamarck, Forskål or Forsskål, MacLeay or Macleay? There is often no clear right or wrong answer. Our decisions have been based on common and/or widespread usage, and/or advice on individual language conventions.

For the father and son team of Henri and Alphonse Milne Edwards, we follow Forest (1996), Forest & Holthuis (1997) and Fransen et al. (1997) in using "Milne Edwards" for the father (Henri) and "Milne-Edwards" for the son (Alphonse). For French names, the honorific "De" is left out, because otherwise widely used names like Lamarck etc. would also be required to have this prefix. There is also a problem with the correct citation of the French name "Guérin-Méneville". As noted by Evenhuis (2003: 16, footnote), "Guérin took on the honorific suffix "-Méneville" to his surname in 1836, after his authorship of the EM [Encyclopédie Méthodique] was completed.". As such, for all species described by Guérin up to 1836, we simply cite Guérin as the author, whilst for all taxa described from 1836 onwards, we use Guérin-Méneville. With regards to some Dutch names, particularly well known carcinologists such as De Haan and De Man, Charles Fransen (in litt. to the second author) writes: "According to the Dutch grammar the official rules are the following: The preposition such as "van der" or "de" etc. is written with a capital if no first name or initials are used. J. G. de Man; Johannes Govertus de Man; but Mr. De Man, and *Phricothelphusa callianira* (De Man, 1887). In the references it should be: Man, J. G. de, 1900. In the Dutch speaking part of Belgium, the situation is different. Here they always use the original spelling of the name. So it will be Sammy De Grave and in references it will be: De Grave, S., 2000". In Fransen et al. (1997), the incorrect lower case "de" was used for these names. For the German equivalent "von", we follow their convention in using the term, i.e "von Hagen" or "von Sternberg". We use MacLeay instead of Macleay following Ng & Ahyong (2001). The name of the Swedish explorer, Peter Forskål is problematic. Wolff (1993) argues that as a Danish name, it should be spelt with two "s", i.e. as Forsskål, especially since he signs his name this way in his letters. However, all of Forskål's publications have his name written with only one "s", and we therefore follow this convention as it was obviously with Forskål's agreement. For workers of Chinese or Vietnamese descent, the family name is the first name, and it is used here regardless of intent or convenience. For example, a 1969 paper on sesarmid larvae by Soh Cheng Lam should be cited as "Soh, 1969" rather than the more often cited "Lam, 1969".

On authors with the same family names. There are several cases where different taxa have been described by different scientists with the same family name. The case for Henri Milne Edwards and Alphonse Milne-Edwards is perhaps best known. As both were responsible for describing many new taxa, their family name is always preceded by their first initial. In most cases, however, one researcher dominates. In the case of Sakai, the father, Tune, is responsible for the majority of the brachyuran crab species named, while his son, Katsushi, has named many fewer (at least so far). The same is true of the first author (P. K. L. Ng), whose student, N. K. Ng (unrelated), has also published a number of new taxa. In such cases, this study keeps the family name for the author who has described significantly more new taxa (e.g. *Medaeus serratus* Sakai, 1965, and *Parathelphusa reticulata* Ng, 1990a) and for the other author, his or her personal initials are added (e.g. *Pinnotheres taichungae* K. Sakai, 2000, and *Xenograpsus testudinatus* N. K. Ng, Huang & Ho, 2000). This makes for a less cumbersome citation. We do not, however, discriminate between authors that were not contemporaries – the decades separating them making this sufficiently obvious (e.g. H. Lucas of the 1800s versus the J. S. Lucas of the 1980s). Similarly, we do not use the term "Junior" or "Jr." when denoting a younger member of the family, especially since the older ones have no history with carcinology (e.g. no one cites "Chace Jr."). However, in cases where one family name is shared by several carcinologists, we have no choice but to cite them separately, e.g. S. H. Tan, C. G. S. Tan and L. W. H. Tan.

NOTES ON SOME PAPERS OF NOMENCLATURAL SIGNIFICANCE

A note on the names established by Weber (1795). In the 1790s the naturalist Daldorff collected many insects and crustaceans from India and Sumatra, and though he did not publish his own results, his specimens were deposited in the Kiel Museum (see Fransen et al., 1997). Weber (1795) and Fabricius (1798) published several similar generic names both using Daldorff's material and his manuscript notes. Typically the same names were used in both Weber's and Fabricius's works, in the same order, and generally with the same spelling. Weber's (1795) generic names cause some problems because, under the Code (Article 12.2.5), a genus name from that era can be regarded as valid if it lists the valid constituent species, even if there was no accompanying description for the genus. For example, *Ocypode* Weber, 1795, was listed with three species: *O. ceratophthalmus* (clearly the species of Pallas, 1772, described in *Cancer*), *O. quadratus* (clearly the species of Fabricius, 1787, also described in *Cancer*), and *O. rhombea* Weber, 1795, which was a nomen nudum (*Ocypode rhombea* was only validly described by Fabricius in 1798). *Cancer ceratophthalmus* Pallas, 1772, was subsequently selected as the type species. Thus, in accordance with the Principle of Priority, Weber's genus names should be regarded as the oldest available names applied to these taxa.

However, the Nomenclator Entomologicus of Weber (1795), termed a 'miserable little book' by Holthuis (1959), had been almost completely overlooked in Europe for more than 150 years, and for all that time Fabricius (1798) had been considered the author of the generic names in question. However, Sherborn (1902: 312) and Rathbun (1904) both drew attention to Weber, and this is the reason why genera such as *Dromia* and *Parthenope* were credited to Weber (1795) and not Fabricius (1798) in American publications. Mary Rathbun brough the matter to the attention of the ICZN who rendered an opinion in 1938 (ICZN, 1938, Opinion 17). In Opinion 17, aptly titled "Shall the genera of Weber, 1795, be accepted?" (p. 40), the ICZN voted "yes" (12 Commissioners agreeing, 1 disagreeing, and 2 not voting) with the following comments which are worth citing in verbatim "The question at issue is not whether this Nomenclator

represents a method of publication which is to be recommended as an example to be followed by other authors, nor does the question at issue involve any relations existing between Weber and Fabricius, nor the point as to whether Fabricius approved or disapproved of what Weber did. On the contrary, to take a concrete case, the question is whether, for instance, Weber's citation of *Symethis* with only one type species, namely, *Hippa variolosa* Fabricius as given in Fabricius' Entomologia systematica entitles this genus *Symethis* to be considered under Art. 25 from the 1795 date. This question, which is taken as an example, the Commission must answer in the affirmative, with, however, the caution to workers that since Weber used many nomina nuda, care should be exercised not to be misled into error in taking any of his 1795 specific names followed by the letter "S" as basis for work, but, on the contrary, all these names are to be ignored as far as this Nomenclator is concerned." (p. 42) (see also van Cleave, 1943).

Lipke Holthuis subsequently submitted a series of applications to the ICZN which effectively resolved most of the outstanding brachyuran problems, in favour either of Weber (1795) or Fabricius (1798). The only unsolved case was that of *Orithuja* Weber, 1795, versus *Orithyia* Fabricius, 1798. This problem will have to be resolved by the ICZN later (see under *Orithyia*).

A note on the type species designations by Latreille (1810). In a little known paper, Latreille (1810) selected what he called "genotypes" for many genera described up to that time. The names are listed in Latin after the vernacular name, and his designations are considered valid. While not all his designations are clear cut (not at least by modern standards), the ICZN made a ruling in 1938 that validates all the actions made in this paper (Opinion 11) (see also Mutchler, 1931).

A note on Latreille, in Milbert (1812). The publication of Milbert (1812) was an account of a trip to the Indian Ocean. In Chapter 5 of this book, "Crustacés et Insectes", Milbert comments (p. 270): "Voici quelques notes que m'a fournies le savant M. Latreille, sur le différents crustacés de l'Ile-de-France" (p. 272). This makes it clear that Milbert was reproducing the notes provided to him by Latreille, and as such, the authorship for the new species listed should be cited as "Latreille, in Milbert, 1812" (see Cleva et al., 2007).

For many of the names, Latreille, in Milbert (1812) indicated the taxon was from Linnaeus, Fabricius or Herbst. Some names, however, do not carry any such indication, and must be regarded as new. These are: *Cancer impressus*, *Cancer lividus*, *Cancer miliaris*, *Cancer cupulifer* (p. 273), *Cancer hispidus* (p. 274), *Grapse albo-lineatus*, *Grapse erytrhocheles*, *Grapse tuberculatus*, *Grapse tessellatus*, *Calappa lophos* (p. 275), *Calappa depressa*, *Dromia fallax* (p. 276), *Portunus tranquebaricus*, *Matuta lunaris* (p. 277), and *Parthenope spinimana* (p. 278). One name, *Calappa lophos*, is slightly problematic. Latreille did not indicate if it was the same as *Calappa lophos* (Herbst, 1782) and as such must be regarded as a new name. What his species actually is will require a re-examination of the specimen in question. In a recent revision of the species, Lai et al. (2006) showed that the Indian Ocean had three species which had been confused under *C. lophos*. Latreille's name is here placed under the synonymy of *Calappa lophos* (Herbst, 1782).

Latreille, in Milbert (1812: 275) described a group of crabs he noted were what Lamarck referred to as "*grapse*", and described their general colour and features. He then added "Ce sont le *grapse* de M. Lamarck. Je mentionnerai le grapse á pinces rouge (*grapse erytrhocheles*); le grapse rayé de blanc (*grapse albo-lineatus*); le grapse tuberculé (*grapse tuberculatus*), et une espèce qui, quoiqui petite, est néanmoins digne d'attention: c'est le grapse damier (*grapse tessellatus*)". Latreille's use of "*grapse*" is here regarded as a valid use of a genus name, although his spelling is incorrect. In this paper, Latreille usually makes it clear when he is using a French vernacular name or a scientific one, by always italicising the latter (as we do today). These scientific names are clearly used as a binominal combination as prescribed by the Code. Although Latreille used lower case when he named his genera, this is not a problem under the Code. As these four species are generally defined by their colour and shape, under Article 12.1 (for names published before 1931), they can all be regarded as available names. Article 12.3 has a list of items that it states do not qualify as a description, definition or indication, and colour is not among them. In any case, one of these names, *Grapse tessellatus*, is today recognised as a valid species of *Lybia*, and credited to Latreille (1812) [Direction 36]. There is thus no reason not to also recognise as valid the other three names in this paragraph. *Grapse albolineata* Latreille, in Milbert, 1812, is senior to *Grapsus albolineatus* Lamarck, 1818, but it does not change the understanding of the species. *Grapse tuberculatus* Latreille, in Milbert, 1812, is a senior synonym of *Plagusia tuberculata* Lamarck, 1818. The taxonomy of this species is also unaffected; in any case, this name has been synonymised with *Plagusia squamosa* (Herbst, 1790) (see Schubart & Ng, 2000). *Grapse erytrhocheles* Latreille, in Milbert, 1812, is a problem, as we are not sure which species he was referring to. It may be a *Geograpsus* species or even a species of gecarcinid. It is here regarded as incerta sedis in the Grapsidae.

A note on the type species designations by H. Milne Edwards (1836–1844). Although H. Milne Edwards did not indicate the type species for genera in his "*Histoire naturelle des Crustacés*", his subsequent work addressed many of these problems. In his contribution to Cuvier's "*Règne Animal*", H. Milne Edwards published a series of plates, with notes, that represent valid type indications of genera (as evident from his detailed title, see below). However, these plates were issued in different parts, starting in 1836 and ending in 1844, and are not necessarily in consecutive order. Cowan (1976: 60, Appendix 8) provided details for the precise date of issue of each of the crustacean plates.

On Latreille (1825) and Berthold (1827). In a poorly known paper, Latreille (1825) (not to be confused with his paper in Encyclopédie Méthodique, 1825–1828) published a key to groups of crabs, and used many names for the first time. However, most of the names used were clearly in the French vernacular, not only in the way they were written, but also in his use of accents for some names. The names he used and the pages they appeared in are as follow: "OCYPODE, GÉLASIME, MICTYRE, PINNOTHÈRE, GÉCARCIN, CARDISOME, UCA, PLAGUSIE, GRAPSE, MACROPHTHALME, RHOMBILLE, TRAPÉZIE, MELIE, TRICHODACTYLE, TELPHUSE, ERIPHIE (p. 269); PILUMNE, CRABE, TORTEAU, PIRIMÈLE, ATÉLÉCYCLE, PODOPHTHALME, LUPE, CHEIRAGONE, PORTUNE, THIA, PLATYONIQUE (p. 270); MATUTE, ORITHYIE, CORYSTE, LEUCOSIE, HÉPATIE, MURSIE, CALAPPE, AETHRA (p. 271); PARTHENOPE, EURYNOME, MITHRAX, HYMÉNOSOME, PISE, STÉNOCIONOPS, MICIPPE, MAÏA, STENOPS, HYAS, HALIME, CAMPOSCIE, INACHUS, STÉNORHYNQUE, LEPTOPODIE, PACTOLE, LITHODE (p. 272); DROMIE, DYNOMÈNE, HOMOLE, DORIPPE, RANINE (p. 273)". There is not always consistency, however. On page 269, he writes "RHOMBILLE (ou *Gonoplace*)", and on page 270, he writes "PLATYONIQUE (*portumnus*, Léach), *Polybie* (Léach)", suggesting he treats the names of Leach separately, but he nevertheless still uses "*Polybie*" instead of *Polybius*. Should the names *Gonoplace*, *Portumnus* and *Polybie* be regarded as properly latinised names? On the available evidence, they should not be available under the Code as they are not latinised (Article 11.2). Berthold (1827), on the other hand, made a German translation of Latreille (1825), but treated the names differently. The names he used, and the pages on which they appeared, are as follow: "Ocypode, Gelasima, Mictyris, Pinnotheres, Gecarcinus, Cardisoma, Uca, Plagusia, Grapsus, Macrophthalmus (p. 254), Gonoplax, Trapecia, Melia, Trichodactylus, Telphusa, Eriphia, Pilumnus, Cancer, Pagurus, Pirimela, Atelecyclus (p. 255), Podophthalmus, Lupa, Cheiragonus, Portunus, Thia, Platyonichus, Matuta, Orithyia, Corystus, Leucosia, Hepatus, Mursia (p. 256); Calappa, Aethra (p. 257); Parthenope, Eurynome, Mithrax, Hymenosoma, Pisa, Stenocionops, Micippa, Maia, Stenops, Hyas, Helimus, Camposcia, Inachus, Stenorhynchus, Leptopodia, Tactolus, Lithodus, Dromia, Dynomene (p. 258); Homola, Dorippe, Ranina (p. 259)". There is little doubt that Berthold has used scientifically correct latinised names, however most are still also not available as there is no diagnostic indication of any sort given, and no species were included (Article 12). Four names however require special comment: *Trichodactylus*, *Melia*, *Cardisoma* and *Trapecia*.

(1) In using the name *Trichodactylus*, Berthold (1827: 255, footnote) mentions "*Telphusa* ? *quadratus* Latreille" from the Paris Museum. This name, to our knowledge, has never been published. There is no description (other than it was from freshwater), and the name is thus a nomen nudum. As such, *Trichodactylus* Berthold, 1827, is not an available name under the Code. *Trichodactylus* is at present attributed to Latreille, 1828 (type species *Trichodactylus fluviatilis* Latreille, 1828).

(2) *Melia* is today attributed to Latreille, 1827. Authors note that since Berthold's work was a translation of Latreille (1825), the name should be attributed to Latreille. This is not correct (see comments on citations). As discussed above, Berthold changed Latreille's work in some places. *Melia* Berthold, 1827, is available as there was a reference to *Grapsus tesselatus* of Latreille's Encyclopédie Méthodique (Berthold, 1827: 255, footnote), which becomes the type species by monotypy. *Grapsus tesselatus* was actually validly published earlier by Latreille, in Milbert (1812) (genus incorrectly spelled as "*Grapse*"). In any case, *Melia* Berthold, 1827, is a junior homonym of *Melia* Bosc, 1813 (Crustacea). *Lybia* H. Milne Edwards, 1834 (type species *Grapse tessellatus* Latreille, in Milbert, 1812) is the valid available name.

(3) For *Cardisoma*, Berthold mentions two species: "von Cancer Guanhumi von Marcgrave, und Cancer carnifex von Herbst" (Berthold, 1827: 254, footnote). This makes the name available under Articles 11 and 12 of the Code. At present, *Cardisoma* is attributed to Latreille, 1828 (type species *Cardisoma guanhumi* Latreille, 1828, designation by H. Milne Edwards, 1838). *Cardisoma* Berthold, 1827, therefore has priority. Also, while the species *guanhumi* is today attributed to Latreille (1828) (as *Cardisoma*), since Berthold (1827) uses the name *Cancer guanhumi* and refers to Marcgrave, he was actually the first to validate the species name. Either *Cancer guanhumi* Berthold, 1827, or *Cancer carnifex* Herbst, 1796, can be the type species of *Cardisoma* Berthold, 1827.

(4) The genus *Trapezia* is at present attributed to Latreille, 1828 (type species *Trapezia dentifrons* Latreille, 1828, designation by Desmarest, 1858). Berthold (1827: 255, footnote) uses the name *Trapecia* and refers to pl. 47, fig. 6 and pl. 20, fig. 115 in Herbst. These figures are referred to in Herbst as *Cancer rufopunctatus* Herbst, 1799, and *Cancer glaberrimus* Herbst, 1790, respectively. *Cancer rufopunctatus* is today in the genus *Trapezia* (family Trapeziidae) while *Cancer glaberrimus* is in the genus *Tetralia* (family Tetraliidae). As such, *Trapecia* Berthold, 1827, is an available name under Articles 11 and 12 of the Code, and either *Cancer rufopunctatus* Herbst, 1799, or *Cancer glaberrimus* Herbst, 1790, can be the type species.

It makes little sense, however, for *Trapecia* Berthold, 1827, to replace *Trapezia* Latreille, 1828; *Cardisoma* Berthold, 1827, to replace *Cardisoma* Latreille, 1828; and *Cancer guanhumi* Berthold, 1827, to replace *Cardisoma guanhumi* Latreille, 1828. All these names have a long history of use since the mid-1800s. *Trapezia* Latreille, 1828, it is also the type genus of the Trapeziidae, so a change in spelling of the family name as well is undesirable. To our knowledge, no one has attributed these taxa to Berthold (1827). We therefore invoke Articles 23.9.1 and 23.9.2 of the Code to have these names suppressed. Article 23.9.1 requires that the name in question must have been used in "at least 25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a period of not less

than 10 years". This can easily be demonstrated as these taxa have been revised in recent years. For *Cardisoma* Latreille, 1828, and *Cardisoma guanhumi* Latreille, 1828, see Türkay (1970, 1974) and Ng & Guinot (2001). For *Trapezia* Latreille, 1828, see Castro et al. (2004).

One additional point is whether the names of Berthold should be regarded as his, or Latreille's. After all, it was translation. Still, Berthold did change the way the names were spelt and used, and also added new notes in some places. Following the Code strictly, the names should be attributed to Berthold alone (see Ng, 1994; Citations of Authors section above).

A note on the type species designations by Desmarest (1858). In a very poorly known paper, E. Desmarest (1858) listed and discussed the various brachyuran genera known to that time. This paper has been missed by almost all workers. As a brachyuran author E. Desmarest is himself not well known, and not to be confused with the better known A. G. Desmarest. In treating a genus, E. Desmarest would frequently give the number of species he regarded as belonging to it, or even list their names. In some cases, he would comment that a particular species is the type. This action is valid under current nomenclatural rules, except in cases where a species was not originally included in that genus. Unfortunately, because Desmarest (1858) has been missed by most authors, it creates problems for subsequent type designations, some of which have been generally accepted by modern carcinologists.

A note on the dates of taxa published from the "Voyage au Pôle Sud". The authors and dates of the new species described by J. B. Hombron, H. Jacquinot, H. Milne Edwards and H. Lucas from the important "Voyage au Pôle Sud" were detailed in an important paper by Clark & Crosnier (2000), and many of the uncertainties clarified. Holthuis (2002) added to their comments and made several amendments. The challenge has been that many of these species had been first validated in plates published over a number of years by Hombron & Jaquinot (1842–1854), with more detailed written accounts by Jacquinot & Lucas (1853). Some species had also been published by H. Milne Edwards & Lucas (1841). The problems were compounded by the fact that the "original" version of the paper of Jacquinot & Lucas (1853) had only had H. Lucas as the author (see Holthuis, 2002). Clark & Crosnier (2000) and Holthuis (2002) are followed for the authorship and dates of the taxa described in this important voyage. If there is conflict, we follow the interpretation of Holthuis (2002).

A note on Audouin (1826). The date of Audouin's important work on Egyptian crustaceans, has been variously cited as either 1826 or 1827. We here follow Guinot & Cleva (2008) in regarding it as 1826.

On the papers of William Stimpson on Asian crabs. The series of papers by Stimpson (1857, 1858a–d, 1859) on the Indo-West Pacific fauna has been extremely important to brachyuran systematics for the region, even though what were intended to be preliminary descriptions, are brief and without figures. Unfortunately, much of the material on which these papers were based was destroyed in the great Chicago fire (see Evans, 1967; Deiss & Manning, 1981; Manning, 1993a; Manning & Reed, 2006), and the detailed studies Stimpson had hoped to conduct never materialised. This has become a major obstacle in many studies. Fortunately, a good part of his manuscript was subsequently prepared for press by Mary Rathbun, culminating in the publication of Stimpson (1907). Recently, Vasile et al. (2005) did an excellent review of Stimpson's landmark explorations and reproduced his old papers. This important volume should be consulted by any scholar of Asian Brachyura.

A note on Rathbun (1893). Rathbun described six new genera (*Ericerus*, *Erileptus*, *Oediplax*, *Cryptophrys*, *Scleroplax* and *Opisthopus*) and 46 new species (*Ericerus latimanus*, *Podochela tenuipes*, *Podochela* (*Corhynchus*) *mexicana*, *Podochela* (*Corhynchus*) *lobifrons*, *Erileptus spinosus*, *Anasimus rostratus*, *Inachoides magdalenensis*, *Cyrtomaia smithi*, *Collodes tenuirostris*, *Euprognatha bifida*, *Sphenocarcinus agassizi*, *Pugettia dalli*, *Neorhynchus mexicanus*, *Lambrus* (*Parthenolambrus*) *exilipes*, *Mesorhoea gilli*, *Lophozozymus* (*Lophoxanthus*) *frontalis*, *Cycloxanthus californiensis*, *Xanthodes minutus*, *Micropanope polita*, *Menippe convexa*, *Pilodius flavus*, *Pilumnus gonzalensis*, *Neptunus* (*Hellenus*) *iridescens*, *Oediplax granulatus*, *Speocarcinus granulimanus*, *Carcinoplax dentatus*, *Gelasimus gracilis*, *Gelasimus latimanus*, *Gelasimus coloradensis*, *Pachygrapsus longipes*, *Brachynotus* (*Heterograpsus*) *jouyi*, *Pinnixa occidentalis*, *Pinnixa californiensis*, *Cryptophrys concharum*, *Scleroplax granulatus*, *Opisthopus transversus*, *Mursia hawaiiensis*, *Platymera californiensis*, *Ebalia americana*, *Myra townsendi*, *Myra subovata*, *Randallia distincta*, *Nursia tuberculata*, *Ethusa lata*, *Cymopolia fragilis* and *Cymopolia zonata*) in a major paper on American crabs in the *Proceedings of the United States National Museum*, and the date for this is generally given as 1893. However, the bound volumes make it clear that the publication was actually only released in 1894. Her publication should thus be dated as 1894 (Rathbun, 1894a). One species described by her, *Pinnixa californiensis*, has not been treated in most studies. It is listed here but its identity and generic affinities need to be re-examined.

A note on Lanchester (1901). During the early 1900s Lanchester described a number of new taxa from Malaya in a paper in the *Proceedings of the Zoological Society of London*: *Actites*, *Actites erythrus*, *Lambrus lippus*, *Potamon* (*Parathelphusa*) *improvisum*, and *Pinnotheres*

socius. Most authors attribute the year of this publication as "Lanchester (1901)", but this is incorrect. The December 1901 issue of the *Proceedings of the Zoological Society of London* was actually published only in 1902. The various new taxa that Lanchester described in this publication should thus be cited as 1902.

A note on Nobili (1905) and Nobili (1906a, b). Nobili published a number of papers on the fauna of the Middle East, and there is sometimes confusion over the dates. In his first paper published in May 1905, Nobili (1905) validated only nine names from the Persian Gulf, viz. Leucosiidae: *Leucosia hilaris* (now in *Urnalana*), *Philyra granigera*; Galenidae: *Halimede hendersoni*; Pilumnidae: *Actumnus bonnieri*, *Pilumnus propinquus*; Portunidae: *Neptunus* (*Hellenus*) *arabicus* (now in *Portunus* (*Xiphonectes*)), *Thalamita giardi*; and Pinnotheridae: *Ostracotheres spondyli*, *Pinnotheres perezi*. More species were described from the Red Sea in his preliminary paper of 1906a; which was elaborated upon in Nobili (1906b).

Notes on Števčić's (2005). While we respect the long years of endeavour that Zdravko Števčić spent working on his comprehensive suprageneric reclassification, we find ourselves rather critical of the resulting publication. Unlike most authors before him, Števčić has showed little restraint in reaching decisions regarding the formation and membership of new taxa. It seems that he did not hesitate to establish a new tribe, subfamily, family, or even superfamily, for any taxon he could find that has a suite of "unusual" characters. His justification for this approach, is that the slow pace of decision making in regard to higher level systematics, through much of the last century, has actually hampered the science of carcinology. In reviewing parts of what Števčić called his "magnus opus", the authors and other colleagues often strongly disagreed with his decisions, or urged a more cautionary approach. Nevertheless, Števčić's (2005) reclassification was finally published, close to its original form. This work has created immense challenges for us. In a single sweep, Števčić established 97 suprageneric taxa (tribes, subfamilies and families), four valid new genera and 17 invalid new genera – and these numbers do not include the many new superfamilies he recognised. It is true that Dana (1851a–f, 1852a, b) and Alcock (1895, 1896, 1898, 1899, 1900a, b, 1901, 1910) both established many new suprageneric taxa, but that was in a different, simpler age. Even so both Dana and Alcock usually discussed their decisions, and provided many excellent figures. While the taxon diagnoses given in Števčić (2005) are typically detailed, it is nowhere made clear how character information was derived – from original examination of material, or simply from published sources. Nor is there any indication of material examined. Furthermore, his suprageneric taxa are not accompanied by any specific discussion, justification, explanation, illustrations or photographs to show how his decisions were derived. This makes it impossible to understand why new ranks or new taxa are needed, and makes his work very vulnerable to criticism. To be fair, a good number of Števčić's taxa are for very "apomorphic" genera which have been difficult to classify, and in a number of cases we accept and recognise Števčić's new categories as valid. However, in many other cases his decisions were clearly based on a misinterpretation of character states, and we cannot accept them. We discuss this on a case by case basis within the body of the list.

While we accept that it is necessary to recognise new suprageneric categories as part of an evolving understanding of brachyuran relationships, we have reservations with how Števčić has done it. We prefer to take a more conservative approach, allowing these new taxa to be proposed by expert workers as a reflection of their own in-depth knowledge of their group. We believe that accurately understanding characters across a wide spectrum of species and genera is imperative before establishing a new suprageneric taxon.

Števčić's alternative liberal approach to taxa creation has consequences. Unlike other biological disciplines where information can be out-of-date and superfluous within 12 months, or a paper can be simply dismissed, taxonomists must take into account any publication that proposes a new name, from Linnaeus to the present (at least within the relatively liberal guidelines of the ICZN Code). In systematics all names correctly proposed are "available", whether they be considered valid, or a synonym of another. In systematics, names have a legacy that goes well beyond the quality of the original work. It is this concern that underpins our reluctance to create new names for groups that we have not sufficiently studied and compared with others. Števčić (2005) may well have opened a "Pandora's Box". With an increasing number of workers using cladistic and molecular tools to attempt to understand brachyuran phylogeny, more and more phylogenetic trees will be generated, and more "theoretical" systematic groupings identified. If they follow the example of Števčić, it will be very tempting to apply names to all the various clades and nodes they generate, regardless of cross-validation from other lines of investigation. Even when such suprageneric groupings are later shown to be wrong, the names remain, and will make our nomenclature all the more cumbersome.

One strength of Števčić's (2005) work is that it includes fossils, and thus should be very useful to palaeontologists. However, comparisons of fossil and extant crab material is not always easy, and can be fraught with misinterpretation. This is especially so where recent fossils are concerned, since some may still be extant. Nevertheless, it is also useful for workers on living crabs to have an overview of the fossil fauna, and in this Števčić (2005) should play a useful role.

LIST OF EXTANT BRACHYURAN SUPERFAMILIES, FAMILIES AND SUBFAMILIES

Infraorder Brachyura Linnaeus, 1758

Section Podotremata Guinot, 1977

CYCLODORIPPOIDEA Ortmann, 1892
Cyclodorippidae Ortmann, 1892
Cyclodorippinae Ortmann, 1892
= Cyclodorippidae Ortmann, 1892
= Tymolinae Alcock, 1896
Xeinostomatinae Tavares, 1992
= Xeinostomatinae Tavares, 1992 [recte Xeinostominae]
Cymonomidae Bouvier, 1898
= Cymonomae Bouvier, 1898
Phyllotymolinidae Tavares, 1998
= Phyllotymolinidae Tavares, 1998

DROMIOIDEA De Haan, 1833
Dromiidae De Haan, 1833
Dromiinae De Haan, 1833
= Dromiacea De Haan, 1833
= Conchoecetini Števčić, 2005
= Stebbingdromiini Števčić, 2005
Hypoconchinae Guinot & Tavares, 2003
= Hypoconchinae Guinot & Tavares, 2003
Sphaerodromiinae Guinot & Tavares, 2003
= Sphaerodromiinae Guinot & Tavares, 2003
= Frodromiini Števčić, 2005
Dynomenidae Ortmann, 1892
= Dynomenidae Ortmann, 1892

HOMOLODROMIOIDEA Alcock, 1899
Homolodromiidae Alcock, 1899
= Homolodromidae Alcock, 1899

HOMOLOIDEA De Haan, 1839
Homolidae De Haan, 1839
= Homolidea De Haan, 1839
= Thelxiopeidae Rathbun, 1937
Latreilliidae Stimpson, 1858
= Latreillidea Stimpson, 1858
Poupiniidae Guinot, 1993
= Poupiniidae Guinot, 1993

RANINOIDEA De Haan, 1839
Raninidae De Haan, 1839
Ranininae De Haan, 1839
= Raninoidea De Haan, 1839
Raninoidinae Lörenthey & Beurlen, 1929
= Raninoidinae Lörenthey & Beurlen, 1929
= Raninellidae Beurlen, 1930
Notopodinae Serène & Umali, 1972
= Notopodinae Serène & Umali, 1972 [recte Notopinae]
= Cosmonotini Števčić, 2005
Symethinae Goeke, 1981
= Symethinae Goeke, 1981
Cyrtorhininae Guinot, 1993
= Cyrtorhininae Guinot, 1993
Lyreidinae Guinot, 1993
= Lyreidinae Guinot, 1993

Section Eubrachyura Saint Laurent, 1980

Subsection Heterotremata Guinot, 1977

AETHROIDEA Dana, 1851
Aethridae Dana, 1851
= Oethrinae Dana, 1851
= Hepatinae Stimpson, 1871

BELLIOIDEA Dana, 1852
Belliidae Dana, 1852
Belliinae Dana, 1852
= Cyclinea Dana, 1851
= Belliidea Dana, 1852
= Acanthocyclidae Dana, 1852
= Corystoidini Števčić, 2005
Heteroziinae Števčić, 2005
= Heteroziidae Števčić, 2005

BYTHOGRAEIODEA Williams, 1980
Bythograeidae Williams, 1980
= Bythograeidae Williams, 1980

CALAPPOIDEA De Haan, 1833
Calappidae De Haan, 1833
= Calappidea De Haan, 1833
Matutidae De Haan, 1835
= Matutoidea De Haan, 1835

CANCROIDEA Latreille, 1802
Atelecyclidae Ortmann, 1893
= Chlorodinae Dana, 1851 (suppressed by ICZN, pending)
= Atelecyclidae Ortmann, 1893
Cancridae Latreille, 1802
= Cancridae Latreille, 1803
= Trichoceridae Dana, 1852
Pirimelidae Alcock, 1899
= Pirimelinae Alcock, 1899

CARPILIOIDEA Ortmann, 1893
Carpiliidae Ortmann, 1893
= Carpilidés A. Milne-Edwards, 1862 (not in Latin, unavailable name)
= Carpiliinae Ortmann, 1893

CHEIRAGONOIDEA Ortmann, 1893
Cheiragonidae Ortmann, 1893
= Cheiragonidae Ortmann, 1893
= Telmessidae Guinot, 1977

CORYSTOIDEA Samouelle, 1819
Corystidae Samouelle, 1819
= Corystidae Samouelle, 1819
= Euryalidae Rathbun, 1930

DAIROIDEA Serène, 1965
Dacryopilumnidae Serène, 1984
= Dacryopilumninae Serène, 1984
Dairidae Serène, 1965
= Dairoida Serène, 1965
= Dairidae Ng & Rodríguez, 1986

DORIPPOIDEA MacLeay, 1838
Dorippidae MacLeay, 1838
= Dorippina MacLeay, 1838

Ethusidae Guinot, 1977
= Ethusinae Guinot, 1977

ERIPHIOIDEA MacLeay, 1838
Dairoididae Števčić, 2005
= Dairoididae Števčić, 2005
Eriphiidae MacLeay, 1838
= Eriphidae MacLeay, 1838
Hypothalassiidae Karasawa & Schweitzer, 2006
= Hypothalassiidae Karasawa & Schweitzer, 2006
Oziidae Dana, 1851
= Oziinae Dana, 1851
Menippidae Ortmann, 1893
= Menippidae Ortmann, 1893
= Myomenippinae Ortmann, 1893
= Ruppellioida Alcock, 1898
Platyxanthidae Guinot, 1977
= Platyxanthidae Guinot, 1977

GECARCINUCOIDEA Rathbun, 1904
Gecarcinucidae Rathbun, 1904
= Gecarcinucinae Rathbun, 1904
= Liotelphusinae Bott, 1969
Parathelphusidae Alcock, 1910
= Parathelphusinae Alcock, 1910
= Spiralothelphusinae Bott, 1968
= Somanniathelphusinae Bott, 1968
= Ceylonthelphusinae Bott, 1969
= Sundathelphusidae Bott, 1969
= Nautilothelphusini Števčić, 2005

GONEPLACOIDEA MacLeay, 1838
Acidopsidae Števčić, 2005
= Acidopsidae Števčić, 2005 [recte Acidopidae]
= Parapilumnidae Števčić, 2005
Chasmocarcinidae Serène, 1964
Chasmocarcininae Serène, 1964
= Chasmocarcininae Serène, 1964
= Raouliidae Števčić, 2005
= Typhlocarcinodidae Števčić, 2005
Megaesthesiinae Števčić, 2005
= Megaesthesiinae Števčić, 2005
Trogloplacinae Guinot, 1986
= Trogloplacinae Guinot, 1986
Conleyidae Števčić, 2005
= Conleyidae Števčić, 2005
Goneplacidae MacLeay, 1838
Bathyplacinae Števčić, 2005
= Bathyplacinae Števčić, 2005
Gonoplacinae MacLeay, 1838 [sic]
= Goneplacidae MacLeay, 1838
= Carcinoplacinae H. Milne Edwards, 1852
= Psopheticini Števčić, 2005
= Notonycidae Števčić, 2005
Euryplacidae Stimpson, 1871
= Euryplacinae Stimpson, 1871
Litocheiridae Števčić, 2005
= Litocheiridae Števčić, 2005
Mathildellidae Karasawa & Kato, 2003
= Mathildellinae Karasawa & Kato, 2003
= Intesiini Števčić, 2005
= Platypilumninae Števčić, 2005
Progeryonidae Števčić, 2005
= Paragalenini Števčić, 2005
= Progeryonini Števčić, 2005
Scalopidiidae Števčić, 2005
= Scalopidiidae Števčić, 2005
Vultocinidae Ng & Manuel-Santos, 2007
= Vultocinidae Ng & Manuel-Santos, 2007
HEXAPODOIDEA Miers, 1886
Hexapodidae Miers, 1886
= Hexapodinae Miers, 1886

LEUCOSIOIDEA Samouelle, 1819
Iphiculidae Alcock, 1896
= Iphiculoida Alcock, 1896
Leucosiidae Samouelle, 1819
Leucosiinae Samouelle, 1819
= Leucosiadae Samouelle, 1819
Ebaliinae Stimpson, 1871
= Ebaliinae Stimpson, 1871
= Iliinae Stimpson, 1871
= Myrodinae Miers, 1886
= Oreophorinae Miers, 1886
= Myroida Alcock, 1896
= Nucioida Alcock, 1896
= Nursilioida Alcock, 1896
= Philyrinae Rathbun, 1937
= Arcaniini Števčić, 2005
= Ixini Števčić, 2005
= Pariliini Števčić, 2005
= Persephonini Števčić, 2005
= Randalliini Števčić, 2005
Cryptocneminae Stimpson, 1907
= Cryptocnemidae Stimpson, 1907
= Leuciscini Števčić, 2005
= Lissomorphini Števčić, 2005
= Onychomorphini Števčić, 2005

MAJOIDEA Samouelle, 1819
Epialtidae MacLeay, 1838
Epialtinae MacLeay, 1838
= Epialtidae MacLeay, 1838
= Huenidae MacLeay, 1838
= Menaethinae Dana, 1851
= Acanthonychinae Stimpson, 1871
= Alcockiini Števčić, 2005
Pisinae Dana, 1851
= Amathinae Dana, 1851
= Chorininae Dana, 1851
= Libiniinae Dana, 1851 [recte Libininae]
= Pisinae Dana, 1851
= Pyrinae Dana, 1851
= Lissoida Alcock, 1895
= Blastidae Stebbing, 1902
= Hyasteniinae Balss, 1929
Pliosomatinae Števčić, 1994
= Pliosomatinae Števčić, 1994 [recte Pliosominae]
Tychinae Dana, 1851
= Tychiidae Dana, 1851 [recte Tychidae]
= Criocarcininae Dana, 1851
= Othoninae Dana, 1851
= Picrocerinae Neumann, 1878
= Ophthalmiinae Balss, 1929
Hymenosomatidae MacLeay, 1838
= Hymenosomidae MacLeay, 1838
= Hymenicinae Dana, 1851
Inachidae MacLeay, 1838
= Macropodiadae Samouelle, 1819 (pre-occupied name)
= Eurypodiidae MacLeay, 1838 [recte Eurypodidae]
= Inachidae MacLeay, 1838
= Leptopodidae Bell, 1844 [recte Leptopodiadae]
= Achaeinae Dana, 1851
= Camposcinae Dana, 1851
= Macrocheirinae Dana, 1851
= Stenorhynchinae Dana, 1851

= Oncininea Dana, 1852
= Oncinopodidae Stimpson, 1858 [recte Oncinopidae]
= Anomalopodinae Stimpson, 1871 [recte Anomalopinae]
= Podochelinae Neumann, 1878
= Microrhynchinae Miers, 1879
= Chorinachini Števčić, 2005
= Encephaloidini Števčić, 2005
= Ephippiini Števčić, 2005
= Eucinetopini Števčić, 2005
= Grypachaeini Števčić, 2005
= Pleistacanthini Števčić, 2005
= Sunipeini Števčić, 2005
= Trichoplatini Števčić, 2005

Inachoididae Dana, 1851
= Inachoidinae Dana, 1851
= Salacinae Dana, 1851
= Collodinae Stimpson, 1871

Majidae Samouelle, 1819
Eurynolambrinae Števčić, 1994
= Eurynolambrinae Števčić, 1994
Majinae Samouelle, 1819
= Majinae Samouelle, 1819
= Maiadae Samouelle, 1819
= Cyclacinae Dana, 1851
= Prionorhynchinae Dana, 1851
= Naxiinae Stimpson, 1871
= Eurynominae Neumann, 1878
= Schizophrysinae Miers, 1879
= Mamaiidae Stebbing, 1905
Mithracinae MacLeay, 1838
= Mithracidae MacLeay, 1838
= Micippinae Dana, 1851
= Paramicippinae Dana, 1851
= Periceridae Dana, 1851
= Stenociopinae Dana, 1851
= Leptopisinae Stimpson, 1871 [recte Leptopinae]
= Cyphocarcininae Neumann, 1878
= Ixioninae Neumann, 1878
= Macrocoelominae Balss, 1929
= Thoini Števčić, 1994
= Coelocerini Števčić, 2005
Planoterginae Števčić, 1991
= Planoterginae Števčić, 1991

Oregoniidae Garth, 1958
= Oregoniinae Garth, 1958
= Macroregoniini Števčić, 2005

ORITHYIOIDEA Dana, 1852
Orithyiidae Dana, 1852
= Orithyiinae Dana, 1852

PALICOIDEA Bouvier, 1898
Crossotonotidae Moosa & Serène, 1981
= Crossotonotinae Moosa & Serène, 1981

Palicidae Bouvier, 1898
= Cymopoliidae Faxon, 1895 (pre-occupied name)
= Palicés Bouvier, 1897 (not in Latin, unavailable name)
= Palici Bouvier, 1898a
= Palicae Bouvier, 1898b
= Palicidae Rathbun, 1898

PARTHENOPOIDEA MacLeay, 1838
Parthenopidae MacLeay, 1838
Parthenopinae MacLeay, 1838
= Parthenopidae MacLeay, 1838
= Cryptopodiinae Stimpson, 1871
= Lambrinae Neumann, 1878
= Mimilambridae Williams, 1979
= Lambrachaeini Števčić, 1994
Daldorfiinae Ng & Rodríguez, 1986
= Daldorfiidae Ng & Rodríguez, 1986 [recte Daldorfidae]

PILUMNOIDEA Samouelle, 1819
Galenidae Alcock, 1898
Denthoxanthinae Števčić, 2005
= Denthoxanthinae Števčić, 2005
Galeninae Alcock, 1898
= Galenidés A. Milne-Edwards, 1862 (not in Latin, unavailable name)
= Galenoida Alcock, 1898
Halimedinae Alcock, 1898
= Halimedoida Alcock, 1898
Parapanopinae Števčić, 2005
= Parapanopini Števčić, 2005

Pilumnidae Samouelle, 1819
Calmaniinae Števčić, 1991
= Calmaniini Števčić, 1991
Eumedoninae Dana, 1852
= Eumedonidae Dana, 1852
= Ceratocarcininae Števčić, Gore & Castro, 1988
= Hapalonotinae Števčić, 2005
Pilumninae Samouelle, 1819
= Pilumnidae Samouelle, 1819
= Actumninae Dana, 1851
= Heteropanopioida Alcock, 1898
= Heteropilumninae Serène, 1984
= Bathypilumnini Števčić, 2005
= Danielini Števčić, 2005
= Garthopilumnidae Števčić, 2005 (nomen nudum)
= Priapilumnini Števčić, 2005
Rhizopinae Stimpson, 1858
= Rhizopidae Stimpson, 1858
= Typhlocarcinopsinae Rathbun, 1909
= Itampolinae Števčić, 2005
= Peleianinae Števčić, 2005
Xenophthalmodinae Števčić, 2005
= Xenophthalmodinae Števčić, 2005

Tanaocheleidae Ng & Clark, 2000
= Tanaocheleinae Ng & Clark, 2000

POTAMOIDEA Ortmann, 1896
Potamidae Ortmann, 1896
Potaminae Ortmann, 1896
= Thelphusidae MacLeay, 1838 (priority suppressed, ICZN ruling)
= Potamoninae Ortmann, 1896
= Potamidae Ortmann, 1896 (spelling changed, ICZN ruling)
Potamiscinae Bott, 1970
= Potamiscinae Bott, 1970
= Sinopotamidae Bott, 1970
= Isolapotamidae Bott, 1970

Potamonautidae Bott, 1970
= Platythelphusinae Colosi, 1920
= Hydrothelphusinae Bott, 1955
= Deckenini Ortmann, 1897
= Globonautinae Bott, 1969
= Hydrothelphusini Bott, 1955
= Seychellinae Števčić, 2005
= Potamonautinae Bott, 1970

PORTUNOIDEA Rafinesque, 1815
Geryonidae Colosi, 1923
= Geryonidae Colosi, 1923

Portunidae Rafinesque, 1815
Caphyrinae Paul'son, 1875

= Caphyrinae Paul'son, 1875
= Lissocarcinidae Ortmann, 1893
= Coelocarcinini Števčić, 2005
Carcininae MacLeay, 1838
= Carcinidae MacLeay, 1838
= Megalopidae Haworth, 1825
= Platyonychidae Dana, 1851
= Portumninae Ortmann, 1899
= Xaividae Berg, 1900
Carupinae Paul'son, 1875
= Carupinae Paul'son, 1875
= Catoptrinae Borradaile, 1900
= Goniocaphyrinae Borradaile, 1900
Podophthalminae Dana, 1851
= Podophthalmidae Dana, 1851
Polybiinae Ortmann, 1893
= Polybiinae Ortmann, 1893
= Liocarcininae Rathbun, 1930
= Macropipinae Stephenson & Campbell, 1960
= Brusiniini Števčić, 1991
Portuninae Rafinesque, 1815
= Portunidia Rafinesque, 1815
= Arenaeinae Dana, 1851
= Lupinae Dana, 1851
= Neptuniden Nauck, 1880 (not in Latin, unavailable name)
= Lupocycloida Alcock, 1899
= Atoportunini Števčić, 2005
Thalamitinae Paul'son, 1875
= Thalamitinae Paul'son, 1875

PSEUDOTHELPHUSOIDEA Ortmann, 1893
Pseudothelphusidae Ortmann, 1893
= Bosciacaea H. Milne Edwards, 1853 (name not available)
= Bosciadae Stimpson, 1858 (name not available)
= Pseudothelphusidae Ortmann, 1893
= Potamocarcinini Ortmann, 1897
= Epilobocerinae Smalley, 1964
= Kingsleyini Bott, 1970
= Guinotini Pretzmann, 1971
= Hypolobocerini Pretzmann, 1971
= Strengerianini Rodríguez, 1982

PSEUDOZIOIDEA Alcock, 1898
Pseudoziidae Alcock, 1898
Pseudoziinae Alcock, 1898
= Pseudozioida Alcock, 1898
= Flindersoplacidae Števčić, 2005
Planopilumnidae Serène, 1984
= Planopilumninae Serène, 1984
= Platycheloniini Števčić, 2005
Pilumnoididae Guinot & Macpherson, 1987
= Pilumnoidinae Guinot & Macpherson, 1987

RETROPLUMOIDEA Gill, 1894
Retroplumidae Gill, 1894
= Retroplumidae Gill, 1894
= Ptenoplacidae Alcock, 1899

THIOIDEA Dana, 1852
Thiidae Dana, 1852
Thiinae Dana, 1852
= Thiidae Dana, 1852
Nautilocorystinae Ortmann, 1893
= Nautilocorystidae Ortmann, 1893

TRAPEZIOIDEA Miers, 1886
Domeciidae Ortmann, 1893
= Domoeciinae Ortmann, 1893
Tetraliidae Castro, Ng & Ahyong, 2004
= Tetraliinae Števčić, 2005
Trapeziidae Miers, 1886
= Trapeziidae Miers, 1886
= Calocarcinini Števčić, 2005
= Quadrellini Števčić, 2005
= Sphaenomeridini Števčić, 2005 [sic]

TRICHODACTYLOIDEA H. Milne Edwards, 1853
Trichodactylidae H. Milne Edwards, 1853
= Trichodactylacea H. Milne Edwards, 1853
= Holthuisiini Pretzmann, 1978
= Dilocarcini Pretzmann, 1978
= Valdiviini Pretzmann, 1978

XANTHOIDEA MacLeay, 1838
Panopeidae Ortmann, 1893
Eucratopsinae Stimpson, 1871
= Eucratopsinae Stimpson, 1871
= Prionoplacidae Alcock, 1900
= Chasmophorinae Števčić, 2005
= Cycloplacinae Števčić, 2005
= Malacoplacini Števčić, 2005
= Robertsellini Števčić, 2005
= Thalassoplacini Števčić, 2005
Panopeinae Ortmann, 1893
= Panopaeinae Ortmann, 1893
= Lophoxanthini Števčić, 2005
= Tetraxanthinae Števčić, 2005
Pseudorhombilidae Alcock, 1900
= Pseudorhombilinae Alcock, 1900
= Euphrosynoplacini Števčić, 2005
= Chacellini Števčić, 2005
= Bathyrhombilini Števčić, 2005
= Perunorhombilini Števčić, 2005
= Trapezioplacinae Števčić, 2005
Xanthidae MacLeay, 1838
Actaeinae Alcock, 1898
= Actaeinae Alcock, 1898
Antrocarcininae Ng & Chia, 1994
= Antrocarcininae Ng & Chia, 1994
Chlorodiellinae Ng & Holthuis, 2007
= Chlorodiellinae Ng & Holthuis, 2007
Cymoinae Alcock, 1898
= Cymoida Alcock, 1898
Etisinae Ortmann, 1893
= Etisinae Ortmann, 1893
Euxanthinae Alcock, 1898
= Euxanthoida Alcock, 1898
= Ladomedaeidae Števčić, 2005
Kraussiinae Ng, 1993
= Kraussiinae Ng, 1993
Liomerinae Sakai, 1976
= Liomeroida Sakai, 1976
Polydectinae Dana, 1851
= Polydectinae Dana, 1851
= Melioida Alcock, 1898
= Lybioida Serène, 1965
Speocarcininae Števčić, 2005
= Speocarcinidae Števčić, 2005
Xanthinae MacLeay, 1838
= Xanthidae MacLeay, 1838
= Xanthodioida Alcock, 1898
= Liagoridés A. Milne-Edwards, 1862 (not in Latin, unavailable name)
= Liagorini Števčić, 2005
= Coralliopinae Števčić, 2005
= Eucratodinae Števčić, 2005

= Gonopanopeini Števčić, 2005
= Liagorini Števčić, 2005
= Linnaeoxanthinae Števčić, 2005
= Megametopinae Števčić, 2005
= Micropanopeini Števčić, 2005
= Paraxanthini Števčić, 2005
= Orphnoxanthini Števčić, 2005
Zalasiinae Serène, 1968
= Zalasiinae Serène, 1968
= Trichidea De Haan, 1839
= Banareiini Števčić, 2005
Zosiminae Alcock, 1898
= Zozymoida Alcock, 1898

Subsection Thoracotremata Guinot, 1977

CRYPTOCHIROIDEA Paul'son, 1875
Cryptochiridae Paul'son, 1875
= Cryptochiridae Paul'son, 1875
= Lithoscaptidae Richters, 1880
= Hapalocarcinidae Calman, 1900

GRAPSOIDEA MacLeay, 1838
Gecarcinidae MacLeay, 1838
= Gécarciniens H. Milne Edwards, 1837 (not in Latin, unavailable name)
= Gecarcinidae MacLeay, 1838
= Geocarcinidae Miers, 1886
= Cardisomaceen Nauck, 1880 (not in Latin, unavailable name)
= Cardisominae Ehrardt, 1968 (nomen nudum)
Glyptograpsidae Schubart, Cuesta & Felder, 2002
= Glyptograpsidae Schubart, Cuesta & Felder, in Martin & Davis, 2001 (nomen nudum)
= Glyptograpsidae Schubart, Cuesta & Felder, 2002
Grapsidae MacLeay, 1838
= Grapsidae MacLeay, 1838
= Goniopsinae Kossmann, 1877
= Leptograpsinae Kossmann, 1877
Plagusiidae Dana, 1851
Percninae Števčić, 2005
= Percnini Števčić, 2005
Plagusiinae Dana, 1851
= Plagusiinae Dana, 1851
= Euchirograpsini Števčić, 2005
Sesarmidae Dana, 1851
= Sesarminae Dana, 1851
= Aratini Števčić, 2005
Varunidae H. Milne Edwards, 1853
Asthenognathinae Stimpson, 1858
= Asthenognathidae Stimpson, 1858
Cyclograpsinae H. Milne Edwards, 1853
= Cyclograpsacea H. Milne Edwards, 1853
= Helicinae Kossmann, 1877 (pre-occupied name)
= Paragrapsini Števčić, 2005
= Heliceinae Sakai, Türkay & Yang, 2006

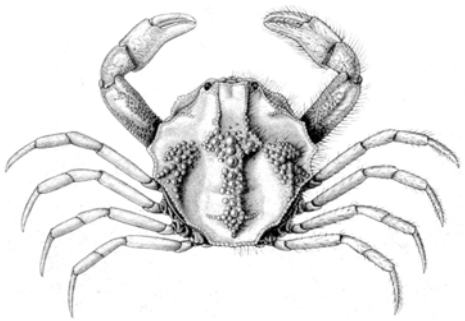

Fig. 1. *Philyra malefactrix*, India (after Kemp, 1915)

Gaeticinae Davie & Ng, 2007
= Gaeticinae Davie & Ng, 2007
Thalassograpsinae Davie & Ng, 2007
= Thalassograpsinae Davie & Ng, 2007
Varuninae H. Milne Edwards, 1853
= Varunacea H. Milne Edwards, 1853
= Pseudograpsinae Kossmann, 1877
= Varuninae Alcock, 1900
Xenograpsidae N. K. Ng, Davie, Schubart & Ng, 2007
= Xenograpsidae N. K. Ng, Davie, Schubart & Ng, 2007

OCYPODOIDEA Rafinesque, 1815
Camptandriidae Stimpson, 1858
= Camptandriidae Stimpson, 1858
= Cleistotomatini Pretzmann, 1977
Dotillidae Stimpson, 1858
= Dotinae Dana, 1851
= Scopimeridae Alcock, 1900
Heloeciidae H. Milne Edwards, 1852
= Heloeciacaea H. Milne Edwards, 1852
= Heloeciinae Türkay, 1983
Macrophthalmidae Dana, 1851
Macrophthalminae Dana, 1851
= Macrophthalmidae Dana, 1851
Ilyograpsinae Števčić, 2005
= Ilyograpsini Števčić, 2005
Tritodynamiinae Števčić, 2005
= Tritodynamiini Števčić, 2005
Mictyridae Dana, 1851
= Mictyridae Dana, 1851 [recte Myctiridae]
Ocypodidae Rafinesque, 1815
Ocypodinae Rafinesque, 1815
= Ocypodia Rafinesque, 1815
Ucinae Dana, 1851
= Ucainae Dana, 1851
= Gelasimiden Nauck, 1880 (not in Latin, unavailable name)
= Gelasimidae Miers, 1886
= Ucini Pretzmann, 1983
Ucididae Števčić, 2005
= Ucidinae Števčić, 2005
Xenophthalmidae Stimpson, 1858
= Xenophthalmidae Stimpson, 1858

PINNOTHEROIDEA De Haan, 1833
Pinnotheridae De Haan, 1833
Anomalifrontinae Rathbun, 1931
= Anomalifrontinae Rathbun, 1931
Pinnothereliinae Alcock, 1900
= Pinnothereliinae Alcock, 1900
= Alarconiini Števčić, 2005
= Glassellini Števčić, 2005
= Pinnixini Števčić, 2005
Pinnotherinae De Haan, 1833
= Pinnotheridea De Haan, 1833
= Dissodactylidae Smith, 1870
= Parapinnixini Števčić, 2005

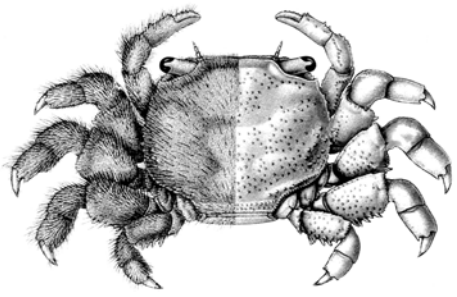

Fig. 2. *Baruna socialis*, India (after Kemp, 1915)

CHECKLIST

INFRAORDER BRACHYURA LINNAEUS, 1758

PODOTREMATA GUINOT, 1977

SUPERFAMILY CYCLODORIPPOIDEA ORTMANN, 1892

FAMILY CYCLODORIPPIDAE ORTMANN, 1892

Cyclodorippidae Ortmann, 1892
Tymolinae Alcock, 1896
Xeinostomatinae Tavares, 1992 [recte Xeinostominae]

Subfamily Cyclodorippinae Ortmann, 1892

Cyclodorippidae Ortmann, 1892
Tymolinae Alcock, 1896

Clythrocerus A. Milne-Edwards & Bouvier, 1899
= *Clythrocerus* A. Milne-Edwards & Bouvier, 1899 (type species *Cyclodorippe nitidus* A. Milne-Edwards, 1880, by monotypy; gender masculine)
Clythrocerus bidentatus Campos & Melo, 1999
Clythrocerus carinatus Coelho, 1973
Clythrocerus edentatus Garth, 1966
Clythrocerus granulatus (Rathbun, 1898) [*Cyclodorippe*]
Clythrocerus moreirai Tavares, 1993
Clythrocerus nitidus (A. Milne-Edwards, 1880) [*Cyclodorippe*]
Corycodus A. Milne-Edwards, 1880
= *Corycodus* A. Milne-Edwards, 1880 (type species *Corycodus bullatus* A. Milne-Edwards, 1880, by monotypy; gender masculine)
= *Nasinatalis* Stebbing, 1910 (type species *Nasinatalis disjunctipes* Stebbing, 1910, by monotypy; gender masculine)
Corycodus bullatus A. Milne-Edwards, 1880
Corycodus bouvieri Ihle, 1916
Corycodus decorus Tavares, 1993
Corycodus disjunctipes (Stebbing, 1910) [*Nasinatalis*]
Corycodus merweae Tavares, 1993

Cyclodorippe A. Milne-Edwards, 1880
= *Cyclodorippe* A. Milne-Edwards, 1880 (type species *Cyclodorippe agassizii* A. Milne-Edwards, 1880, subsequent designation by Rathbun, 1937; gender feminine)
Cyclodorippe agassizii A. Milne-Edwards, 1880
Cyclodorippe angulata Tavares, 1991
Cyclodorippe antennaria A. Milne-Edwards, 1880
Cyclodorippe bouvieri Rathbun, 1934
Cyclodorippe longifrons Campos & Melo, 1999
Cyclodorippe manningi Tavares, 1993
Cyclodorippe ornata Chace, 1940

Deilocerus Tavares, 1993
= *Deilocerus* Tavares, 1993 (type species *Clythrocerus perpusilus* Rathbun, 1901, by original designation; gender masculine)
Deilocerus analogus (Coelho, 1973) [*Clythrocerus*]
Deilocerus captabilis Tavares, 1999
Deilocerus coelhoi Campos & Melo, 1998
Deilocerus decorus (Rathbun, 1933) [*Clythrocerus*]
Deilocerus hendrickxi Tavares, 1993
Deilocerus laminatus (Rathbun, 1935) [*Clythrocerus*]
Deilocerus perpusillus (Rathbun, 1901) [*Clythrocerus*]
Deilocerus planus (Rathbun, 1900) [*Cyclodorippe*]

Neocorycodus Tavares, 1993
= *Neocorycodus* Tavares, 1993 (type species *Clythrocerus stimpsoni* Rathbun, 1937, by original designation; gender masculine)
Neocorycodus stimpsoni (Rathbun, 1937) [*Clythrocerus*]

Simodorippe Chace, 1940
= *Simodorippe* Chace, 1940 (type species *Simodorippe tylota* Chace, 1940, by monotypy; gender feminine)
Simodorippe tylota Chace, 1940

Tymolus Stimpson, 1858
= *Tymolus* Stimpson, 1858 (type species *Tymolus japonicus* Stimpson, 1858, by monotypy; gender masculine)
= *Cymonomops* Alcock, 1894 (type species *Cymonomops glaucomma* Alcock, 1894, by monotypy; gender masculine)
= *Cyclodorippe* (*Cyclortmannia*) Ihle, 1916 (type species *Cyclodorippe uncifera* Ortmann, 1892, subsequent designation by Tavares 1991; gender feminine)
Tymolus brucei Tavares, 1991
Tymolus daviei Tavares, 1997
Tymolus dromioides (Ortmann, 1892) [*Cyclodorippe*]
Tymolus glaucommus (Alcock, 1894) [*Cymonomops*]
Tymolus hirtipes S. H. Tan & Huang, 2000
Tymolus japonicus Stimpson, 1858
Tymolus similis (Grant, 1905) [*Cymonomops*]
Tymolus truncatus (Ihle, 1916) [*Cyclodorippe* (*Cyclortmannia*)]
Tymolus uncifer (Ortmann, 1892) [*Cyclodorippe*]
= *Cyclodorippe uncifera* forma *melanomma* Doflein, 1904

Subfamily Xeinostomatinae Tavares, 1992

Xeinostomatinae Tavares, 1992 [recte Xeinostominae]

Ketamia Tavares, 1992
= *Ketamia* Tavares, 1992 (type species *Cyclodorippe* (*Cyclodorippe*) *depressa* Ihle, 1916, by original designation; gender feminine)
Ketamia depressa (Ihle, 1916) [*Cyclodorippe* (*Cyclodorippe*)]
Ketamia handokoi Tavares, 1993
Ketamia limatula Tavares, 1993
Ketamia proxima Tavares, 1993

Krangalangia Tavares, 1992
= *Krangalangia* Tavares, 1992 (type species *Cyclodorippe* (*Cyclodorippe*) *rostrata* Ihle, 1916, by original designation; gender feminine)
Krangalangia orstom Tavares, 1993
Krangalangia rostrata (Ihle, 1916) [*Cyclodorippe* (*Cyclodorippe*)]
Krangalangia spinosa (Zarenkov, 1970) [*Cyclodorippe*]

Xeinostoma Stebbing, 1920
= *Xeinostoma* Stebbing, 1920 (type species *Xeinostoma eucheir* Stebbing, 1923, by subsequent monotypy; gender neuter)
Xeinostoma eucheir Stebbing, 1923
Xeinostoma inopinatum Tavares, 1994
Xeinostoma richeri Tavares, 1993
Xeinostoma sakaii Tavares, 1993

FAMILY CYMONOMIDAE BOUVIER, 1898

Cymonomae Bouvier, 1898

Curupironomus Tavares, 1993
= *Curupironomus* Tavares, 1993 (type species *Cymopolus agassizi* A. Milne-Edwards & Bouvier, 1899, by original designation; gender masculine)
Curupironomus agassizi (A. Milne-Edwards & Bouvier, 1899) [*Cymopolus*]

Cymopolus A. Milne-Edwards, 1880
= *Cymopolus* A. Milne-Edwards, 1880 (type species *Cymopolus asper* A. Milne-Edwards, 1880, by monotypy; gender masculine)
Cymopolus asper A. Milne-Edwards, 1880

Cymonomoides Tavares, 1993
= *Cymonomoides* Tavares, 1993 (type species *Cymonomus guinotae* Tavares, 1991, by original designation; gender masculine)
Cymonomoides cubensis (Chace, 1940) [*Cymonomus*]
Cymonomoides delli (Griffin & Brown, 1975) [*Cymonomus*]
Cymonomoides fitoi Lemaitre & Bermudez, 2000
Cymonomoides guinotae (Tavares, 1991) [*Cymonomus*]
Cymonomoides valdiviae (Lankester, 1903) [*Cymonomus*]

Cymonomus A. Milne-Edwards, 1880
= *Cymonomus* A. Milne-Edwards, 1880 (type species *Cymonomus quadratus* A. Milne-Edwards, 1880, by monotypy; gender masculine) [Opinion 712]
Cymonomus aequilonius Dell, 1971
Cymonomus andamanicus Alcock, 1905
Cymonomus bathamae Dell, 1971
Cymonomus caecus Chace, 1940
Cymonomus curvirostris Sakai, 1963
Cymonomus granulatus (Norman, in Wyville Thomson, 1873) [*Ethusa*]
= *Ethusa typicus* Norman, in Wyville Thomson, 1873
Cymonomus guillei Tavares, 1991
Cymonomus hakuhoae Takeda & Moosa, 1990
Cymonomus indicus Ihle, 1916
Cymonomus japonicus Balss, 1922
Cymonomus kapala Ahyong & Brown, 2003
Cymonomus leblondi Tavares, 1994
Cymonomus magnirostris Tavares, 1991
Cymonomus meloi Campos, 1997
Cymonomus menziesi Garth, in Garth & Haig, 1971
Cymonomus normani Lankester, 1903
Cymonomus oyakawai Campos, 1997
Cymonomus quadratus A. Milne-Edwards, 1880 [Opinion 712]
Cymonomus rostratus Chace, 1940
Cymonomus sagamiensis Sakai, 1983
Cymonomus soela Ahyong & Brown, 2003
Cymonomus tavaresi Campos, 1997
Cymonomus trifurcus Stebbing, 1920
Cymonomus umitakae Takeda, 1981

Elassopodus Tavares, 1993
= *Elassopodus* Tavares, 1993 (type species *Elassopodus stellatus* Tavares, 1993, by original designation; gender masculine)
Elassopodus stellatus Tavares, 1993

Fig. 3. *Cymonomoides* aff. *delli*, central Philippines, S. T. Ahyong & P. K. L. Ng, in prep. (photo: T. Y. Chan)

Fig. 4. *Cymonomus*, new species, central Philippines, S. T. Ahyong & P. K. L .Ng, in prep. (photo: P. Ng)

FAMILY PHYLLOTYMOLINIDAE TAVARES, 1998

Phyllotymolinidae Tavares, 1998

Genkaia Miyake & Takeda, 1970
= *Genkaia* Miyake & Takeda, 1970 (type species *Genkaia gordonae* Miyake & Takeda, 1970, by original designation; gender feminine)
Genkaia gordonae Miyake & Takeda, 1970
Genkaia keijii Tavares, 1993

Lonchodactylus Tavares & Lemaitre, 1996
= *Lonchodactylus* Tavares & Lemaitre, 1996 (type species *Lonchodactylus messingi* Tavares & Lemaitre, 1996, by original designation; gender masculine)
Lonchodactylus messingi Tavares & Lemaitre, 1996

Phyllotymolinum Tavares, 1993
= *Phyllotymolinum* Tavares, 1993 (type species *Phyllotymolinum crosnieri* Tavares, 1993, by original designation; gender neuter)
Phyllotymolinum crosnieri Tavares, 1993

SUPERFAMILY DROMIOIDEA DE HAAN, 1833

FAMILY DROMIIDAE DE HAAN, 1833 {1}

Dromiens H. Milne Edwards, 1837 (vernacular name) [Opinion 688]
Dromiacea De Haan, 1833 [Opinion 688]
Hypoconchinae Guinot & Tavares, 2003
Sphaerodromiinae Guinot & Tavares, 2003
Conchoecetini Števčić, 2005
Frodromiini Števčić, 2005
Stebbingdromiini Števčić, 2005

Subfamily Dromiinae De Haan, 1833

Dromiacea De Haan, 1833 [Opinion 688]
Stebbingdromiini Števčić, 2005
Conchoecetini Števčić, 2005

Alainodromia McLay, 1998
= *Alainodromia* McLay, 1998 (type species *Alainodromia timorensis* McLay, 1998, by original designation; gender feminine)
Alainodromia timorensis McLay, 1998

Ascidiophilus Richters, 1880
= *Ascidiophilus* Richters, 1880 (type species *Ascidiophilus caphyraeformis* Richters, 1880, by monotypy; gender masculine)
Ascidiophilus caphyraeformis Richters, 1880
= *Pseudodromia integrifrons* Henderson, 1888
= *Pseudodromia murrayi* Gordon, 1950

Austrodromidia McLay, 1993
= *Austrodromidia* McLay, 1993 (type species *Dromidia australis* Rathbun, 1923, by original designation; gender feminine)
?*Austrodromidia aegagropila* (Fabricius, 1787) [*Cancer*] {2}
= *Dromia australasiae* Weber, 1795 (unnecessary replacement name)
Austrodromidia australis (Rathbun, 1923) [*Dromidia*]
?*Austrodromidia incisa* (Henderson, 1888) [*Cryptodromia*] {3}
?*Austrodromidia insignis* (Rathbun, 1923) [*Dromidia*] {3}
?*Austrodromidia octodentata* (Haswell, 1882) [*Dromia*] {3}

Barnardromia McLay, 1993
= *Barnardromia* McLay, 1993 (type species *Cryptodromia hirsutimana* Kensley & Buxton, 1984, by original designation; gender feminine)
Barnardromia hirsutimana (Kensley & Buxton, 1984) [*Cryptodromia*]
Barnardromia bituberculata (Stebbing, 1920) [*Eudromia*]

Conchoecetes Stimpson, 1858
= *Conchoecetes* Stimpson, 1858 (type species *Dromia artificiosa* Fabricius, 1798, by original designation [Stimpson, 1858d: 226]; gender masculine)
= *Conchoeodromia* Chopra, 1934 (type species *Conchoeodromia alcocki* Chopra, 1934, by original designation; gender feminine)
Conchoecetes andamanicus Alcock, 1900
Conchoecetes artificiosus (Fabricius, 1798) [*Dromia*]
= *Dromia artificiosa* Weber, 1795 (nomen nudum)
= *Conchoeodromia alcocki* Chopra, 1934
Conchoecetes intermedius Lewinsohn, 1984
= *Conchoecetes canaliculatus* Yang & Dai, 1994

Cryptodromia Stimpson, 1858
= *Cryptodromia* Stimpson, 1858 (type species *Cryptodromia coronata* Stimpson, 1858, by original designation; gender feminine)
= *Dromides* Borradaile, 1903 (type species *Cryptodromia hilgendorfi* De Man, 1888, by monotypy; gender masculine)
Cryptodromia amboinensis De Man, 1888
= *Dromia* (*Cryptodromia*) *demanii* Alcock, 1900
Cryptodromia bispinosa Sakai, 1936
Cryptodromia bullifera (Alcock, 1900) [*Dromia* (*Cryptodromia*)]
Cryptodromia coronata Stimpson, 1858
Cryptodromia erioxylon McLay, 2001
Cryptodromia fukuii (Sakai, 1936) [*Petalomera*]
Cryptodromia fallax (Latreille, in Milbert, 1812) [*Dromia*]
= *Cryptodromia canaliculata* Stimpson, 1858
= *Dromia tomentosa* Heller, 1861
= *Cryptodromia hirsuta* Borradaile, 1903
= *Cryptodromia canaliculata* var. *sibogae* Ihle, 1913
= *Cryptodromia canaliculata* var. *obtusifrons* Ihle, 1913
= ?*Cryptodromia oktahedros* Stebbing, 1923
Cryptodromia hilgendorfi De Man, 1888
Cryptodromia incisa Henderson, 1888
Cryptodromia laevis Ihle, 1913
Cryptodromia longipes McLay, 1993
Cryptodromia mariae Ihle, 1913
Cryptodromia marquesas McLay, 2001
Cryptodromia nierstraszi Ihle, 1913
Cryptodromia pentagonalis (Hilgendorf, 1879) [*Dromia* (*Cryptodromia*)]
Cryptodromia pileifera Alcock, 1901
Cryptodromia pitiensis McLay, 2001
Cryptodromia protubera Dai, Yang, Song & Chen, 1981
Cryptodromia trispinosa Sakai, 1936
Cryptodromia trituberculata Buitendijk, 1939
Cryptodromia tuberculata Stimpson, 1858
Cryptodromia tumida Stimpson, 1858
= *Cryptodromia tumida typica* Sakai, 1936

Cryptodromiopsis Borradaile, 1903
= *Cryptodromiopsis* Borradaile, 1903 (type species *Cryptodromiopsis tridens* Borradaile, 1903, by monotypy; gender feminine)
?*Cryptodromiopsis dubia* (Dai, Yang, Song & Chen, 1981) [*Cryptodromia*] {3}
?*Cryptodromiopsis planaria* (Dai, Yang, Song & Chen, 1981) [*Cryptodromia*] {3}
Cryptodromiopsis tridens Borradaile, 1903
= *Dromidia fenestrata* Lewinsohn, 1979

Desmodromia McLay, 2001
= *Desmodromia* McLay, 2001 (type species *Desmodromia griffini* McLay, 2001, by original designation; gender feminine)
Desmodromia griffini McLay, 2001
Desmodromia tranterae McLay, 2001

Dromia Weber, 1795
= *Dromia* Weber, 1795 (type species *Cancer personatus* Linnaeus, 1758, subsequent designation by ICZN plenary powers; gender feminine) [Opinion 688] {4}
Dromia bollorei Forest, 1974
"*Dromia*" *dormia* (Linnaeus, 1763) [*Cancer*] {5}
= *Cancer dormitator* Herbst, 1790
= *Dromia rumphii* Weber, 1795 (nomen nudum)
= *Dromia hirsutissima* Dana, 1852
Dromia erythropus (George Edwards, 1771) [*Cancer*]
= *Dromia lator* H. Milne Edwards, 1837
Dromia gouveai Melo & Campos, 1999
Dromia marmorea Forest, 1974

Dromia nodosa A. Milne-Edwards & Bouvier, 1898
Dromia personata (Linnaeus, 1758) [*Cancer*] [Opinion 688]
= *Cancer caputmortuum* Linnaeus, 1767
= *Dromia vulgaris* H. Milne Edwards, 1837
= *Dromia communis* Lucas, 1840
= *Dromia mediterranea* Leach, 1875
"*Dromia*" *wilsoni* (Fulton & Grant, 1902) [*Cryptodromia*] {5}
= ?*Dromia pseudogibbosa* Parisi, 1915

Dromidia Stimpson, 1858
= *Dromidia* Stimpson, 1858 (type species *Dromia hirsutissima* Lamarck, 1818, by original designation [Stimpson, 1858d: 225]; gender feminine)
?*Dromidia aegibotus* Barnard, 1947 {3}
?*Dromidia cornuta* (Barnard, 1947) [*Dromidiopsis*] {3}
?*Dromidia dissothrix* Barnard, 1947 {3}
Dromidia hirsutissima (Lamarck, 1818) [*Dromia*]
?*Dromidia lepidota* (Barnard, 1947) [*Cryptodromidiopsis*] {3}
= *Cryptodromiopsis mortenseni* Kensley, 1978

Dromidiopsis Borradaile, 1900
= *Dromidiopsis* Borradaile, 1900 (type species *Dromia australiensis* Haswell, 1882, by monotypy; gender feminine) [Opinion 688]
Dromidiopsis australiensis (Haswell, 1882) [*Dromia*] [Opinion 688]
= *Dromidiopsis abrolhensis* Montgomery, 1931
= *Dromidiopsis australiensis bidens* Borradaile, 1903
= *Dromidiopsis australiensis unidens* Borradaile, 1903
Dromidiopsis edwardsi Rathbun, 1919
= *Dromia caputmortuum* H. Milne Edwards, 1837 (not *Cancer caputmortuum* Linnaeus, 1767)
Dromidiopsis indica (Gray, 1831) [*Dromia*] {6}
= *Dromia orientalis* Miers, 1880
= *Dromia cranioides* De Man, 1888
= *Dromia gibbosa* H. Milne Edwards, 1837
Dromidiopsis lethrinusae (Takeda & Kurata, 1976) [*Sphaerodromia*]
?*Dromidiopsis richeri* McLay, 2001 {3}
Dromidiopsis tridentata Borradaile, 1903

Epigodromia McLay, 1993
= *Epidromia* Kossmann, 1878 (type species *Epidromia granulata* Kossmann, 1878, subsequent designation by McLay, 1993; name pre-occupied by *Epidromia* Guenée, 1852 [Lepidoptera]; gender feminine)
= *Epigodromia* McLay, 1993 (replacement name for *Epidromia* Kossmann, 1878; gender feminine)
Epigodromia acutidens (Sakai 1983) [*Petalomera*]
Epigodromia areolata (Ihle, 1913) [*Cryptodromia*]
= *Cryptodromia ihlei* Balss, 1921
Epigodromia ebalioides (Alcock, 1899) [*Dromia* (*Cryptodromia*)]
Epigodromia gilesii (Alcock, 1899) [*Dromia* (*Cryptodromia*)]
Epigodromia globosa (Lewinsohn, 1977) [*Cryptodromia*]
Epigodromia granulata (Kossmann, 1878) [*Epidromia*]
Epigodromia nodosa Sakai, 1936
Epigodromia rotunda McLay, 1993
Epigodromia rugosa McLay, 1993
Epigodromia sculpta (Haswell, 1882) [*Dromia*]

Epipedodromia André, 1932
= *Platydromia* Fulton & Grant, 1902 (type species *Platydromia thomsoni* Fulton & Grant, 1902, by monotypy; name pre-occupied by *Platydromia* Brocchi, 1875 [Crustacea]; gender feminine)
= *Epipedodromia* André, 1932 (replacement name for *Platydromia* Fulton & Grant, 1902 Grant, 1902; gender feminine)
Epipedodromia thomsoni (Fulton & Grant, 1902) [*Platydromia*]

Eudromidia Barnard, 1947
= *Eudromia* Henderson, 1888 (type species *Eudromia frontalis* Henderson, 1888, by monotypy; name pre-occupied by *Eudromia* Geoffroy, 1832 [Aves]; gender feminine)
= *Eudromidia* Barnard, 1947 (replacement name for *Eudromia* Henderson, 1888; gender feminine)
= *Eudromiopsis* Balss, 1957 (unnecessary replacement name for *Eudromia* Henderson, 1888; gender feminine)
Eudromidia frontalis (Henderson, 1888) [*Eudromia*]
Eudromidia hendersoni (Stebbing, 1921) [*Eudromia*]

Exodromidia Stebbing, 1905
= *Exodromidia* Stebbing, 1905 (type species *Dromidia spinosa* Studer, 1883, by monotypy; gender feminine)
Exodromidia spinosa (Studer, 1883) [*Dromidia*]
?*Exodromidia spinosissima* (Kensley, 1977) [*Pseudodromia*] {7}
?*Exodromidia bicornis* (Studer, 1883) [*Dromidia*] {7}

Foredromia McLay, 2002
= *Foredromia* McLay, 2002 (type species *Foredromia rostrata* McLay, 2002, by original designation; gender feminine)
Foredromia rostrata McLay, 2002

Fultodromia McLay, 1993
= *Fultodromia* McLay, 1993 (type species *Dromia nodipes* Guérin, 1832, by original designation; gender feminine)
Fultodromia nodipes (Guérin, 1832) [*Dromia*]
= *Dromia nodipes* Lamarck, 1818 (nomen nudum) {2}
= *Dromidiopsis michaelseni* Balss, 1935
= *Cryptodromia depressa* Baker, 1907
Fultodromia spinifera (Montgomery, 1931) [*Cryptodromia*]

Haledromia McLay, 1993
= *Haledromia* McLay, 1993 (type species *Dromia bicavernosa* Zietz, 1887, by original designation; gender feminine)
Haledromia bicavernosa (Zietz, 1886) [*Dromia*]

Hemisphaerodromia Barnard, 1954
= *Hemisphaerodromia* Barnard, 1954 (type species *Cryptodromia monodus* Stebbing, 1918, by monotypy; gender feminine)
Hemisphaerodromia monodus (Stebbing, 1918) [*Cryptodromia*]
= *Hemisphaerodromia abellana* Barnard, 1954
= *Petalomera laevis* Kensley, 1970

Homalodromia Miers, 1884
= *Homalodromia* Miers, 1884 (type species *Homalodromia coppingeri* Miers, 1884, by monotypy; gender feminine)
= *Lasiodromia* Alcock, 1901 (unnecessary replacement name for *Homalodromia* Miers, 1884; gender feminine)
Homalodromia coppingeri Miers, 1884
= *Lasiodromia coppingeri* var. *unidentata* Ihle, 1913
= *Pseudodromia quadricornis* Alcock, 1899

Lamarckdromia Guinot & Tavares, 2003
= *Lamarckdromia* Guinot & Tavares, 2003 (type species *Dromia globosa* Lamarck, 1818, by original designation; gender feminine)
Lamarckdromia globosa (Lamarck, 1818) [*Dromia*]
= *Dromidia excavata* Stimpson, 1858

Lauridromia McLay, 1993
= *Lauridromia* McLay, 1993 (type species *Dromia intermedia* Laurie, 1906, by original designation; gender feminine)
Lauridromia intermedia (Laurie, 1906) [*Dromia*]
Lauridromia dehaani (Rathbun, 1923) [*Dromia*]

Lewindromia Guinot & Tavares, 2003
= *Lewindromia* Guinot & Tavares, 2003 (type species *Dromia unidentata* Rüppell, 1830, by original designation; gender feminine)
Lewindromia unidentata (Rüppell, 1830) [*Dromia*]
= *Dromidia unidentata hawaiiensis* Edmondson, 1922
= *Cryptodromia unilobata* Campbell & Stephenson, 1970
= ?*Cryptodromia incisa* Zarenkov, 1971

Mclaydromia Guinot & Tavares, 2003
= *Mclaydromia* Guinot & Tavares, 2003 (type species *Mclaydromia colini* Guinot & Tavares, 2003, by original designation; gender feminine)
Mclaydromia colini Guinot & Tavares, 2003
Mclaydromia dubia (Lewinsohn, 1984) [*Dromidiopsis*]

Moreiradromia Guinot & Tavares, 2003
= *Evius* Moreira, 1912 (type species *Evius ruber* Moreira, 1912, by monotypy; name pre-occupied by *Evius* Walker, 1855 [Lepidoptera]; gender masculine)
= *Moreiradromia* Guinot & Tavares, 2003 (type species *Dromidia antillensis* Stimpson, 1858, by original designation; gender feminine)
Moreiradromia antillensis (Stimpson, 1858) [*Dromidia*]
= *Evius ruber* Moreira, 1912
Moreiradromia sarraburei (Rathbun, 1910) [*Dromidia*]
= *Dromidia segnipes* Weymouth, 1910
= *Dromidia larraburei* Schmitt, 1921 (incorrect spelling)

Paradromia Balss, 1921
= *Paradromia* Balss, 1921 (type species *Cryptodromia japonica* Henderson, 1888, subsequent designation by McLay, 1993; gender feminine)
Paradromia japonica (Henderson, 1888) [*Cryptodromia*]
= *Cryptodromia stearnsi* Ives, 1891 {8}
= *Cryptodromia canaliculata ophryoessa* Ortmann, 1892
= *Cryptodromia asiatica* Parisi, 1915
Paradromia sheni (Dai, Yang, Song & Chen, 1981) [*Petalomera*]

Petalomera Stimpson, 1858
= *Petalomera* Stimpson, 1858 (type species *Petalomera granulata* Stimpson, 1858, by original designation [Stimpson, 1858d: 226]; gender feminine)
Petalomera granulata Stimpson, 1858
= *Petalomera granulata indica* Alcock, 1901
Petalomera longipes Ihle, 1913 {9}
Petalomera pulchra Miers, 1884

Pseudodromia Stimpson, 1858
= *Pseudodromia* Stimpson, 1858 (type species *Pseudodromia latens* Stimpson, 1858, by original designation [Stimpson, 1858d: 226]; gender feminine)
Pseudodromia latens Stimpson, 1858
Pseudodromia trepida Kensley, 1978
Pseudodromia rotunda (MacLeay, 1838) [*Dromia*]
?*Pseudodromia cacuminis* Kensley, 1980 {10}

Platydromia Brocchi, 1877
= *Platydromia* Brocchi, 1877 (type species *Platydromia depressa* Brocchi, 1877, by original designation; gender feminine)
= *Parasphaerodromia* Spiridonov, 1992) (type species *Parasphaerodromia subglobosa* Spiridonov, 1992, by original designation; gender feminine)
Platydromia spongiosa (Stimpson, 1858) [*Dromidia*]
= *Dromidia spongiosa* var. *stimpsonii* Miers, 1884
= *Pseudodromia inermis* Macpherson, 1988
= *Platydromia depressa* Brocchi, 1877
= *Cryptodromia micronyx* Stebbing, 1920
= *Cryptodromiopsis spongiosa* Barnard, 1947
= *Parasphaerodromia subglobosa* Spiridonov, 1992

Speodromia Barnard, 1947
= *Speodromia* Barnard, 1947 (type species *Dynomene platyarthrodes* Stebbing, 1905, by monotypy; gender feminine)
Speodromia platyarthrodes (Stebbing, 1905) [*Dynomene*]

Stebbingdromia Guinot & Tavares, 2003
= *Stebbingdromia* Guinot & Tavares, 2003 (type species *Dromidiopsis plumosa* Lewinsohn, 1984, by original designation; gender feminine)
Stebbingdromia plumosa (Lewinsohn, 1984) [*Dromidiopsis*]

Sternodromia Forest, 1974
= *Sternodromia* Forest, 1974 (type species *Dromia spinirostris* Miers, 1881, by monotypy; gender feminine)
Sternodromia monodi (Forest & Guinot, 1966) [*Dromia*]
Sternodromia spinirostris (Miers, 1881) [*Dromia*]
= *Dromia clypeata* Schonsboe, 1802
= *Dromia fulvohispida* Miers, 1881
= *Dromia atlantica* Doflein, 1904

Stimdromia McLay, 1993
= *Stimdromia* McLay, 1993 (type species *Dromia lateralis* Gray, 1831, by original designation; gender feminine)
Stimdromia lateralis (Gray, 1831) [*Dromia*]
= *Dromia verrucosipes* White, 1847 (nomen nudum)
Stimdromia angulata (Sakai, 1936) [*Petalomera*]
Stimdromia foresti (McLay, 1993) [Dromia] {3}
Stimdromia kosugei (Takeda & Miyake, 1972) [*Petalomera*]
Stimdromia lamellata (Ortmann, 1894) [*Cryptodromia*]
Stimdromia longipedalis (Dai, Yang, Song & Chen, 1986) [*Petalomera*]

Takedromia McLay, 1993
= *Takedromia* McLay, 1993 (type species *Cryptodromia cristatipes* Sakai, 1969, by original designation; gender feminine)
Takedromia cristatipes (Sakai, 1969) [*Cryptodromia*]
Takedromia longispina McLay, 1993
Takedromia nipponensis (Yokoya, 1933) [*Cryptodromia*]
Takedromia ornata (Rathbun, 1911) [*Cryptodromia*]
Takedromia yoshidai (Takeda & Kurata, 1976) [*Cryptodromia*]

Tunedromia McLay, 1993
= *Tunedromia* McLay, 1993 (type species *Petalomera yamashitai* Takeda & Miyake, 1970, by original designation; gender feminine)
Tunedromia yamashitai (Takeda & Miyake, 1970) [*Petalomera*]

Subfamily Hypoconchinae Guinot & Tavares, 2003

Hypoconchinae Guinot & Tavares, 2003

Hypoconcha Guérin-Méneville, 1854
= *Hypoconcha* Guérin-Méneville, 1854 (type species *Cancer sabulosus* Herbst, 1799, type species by monotypy; gender feminine)

Hypoconcha arcuata Stimpson, 1858
Hypoconcha californiensis Bouvier, 1898
Hypoconcha lowei Rathbun, 1933
Hypoconcha panamensis Smith, in Verrill, 1869
= *Hypoconcha digueti* Bouvier, 1898
= *Hypoconcha peruviana* Rathbun, 1910
Hypoconcha parasitica (Linnaeus, 1763) [*Cancer*]
= *Cancer sabulosus* Herbst, 1799
Hypoconcha spinosissima Rathbun, 1933

Subfamily Sphaerodromiinae Guinot & Tavares, 2003

Sphaerodromiinae Guinot & Tavares, 2003
?Frodromiini Števčić, 2005

Eodromia McLay, 1993
= *Eodromia* McLay, 1993 (type species *Eodromia denticulata* McLay, 1993, by monotypy; gender feminine)
Eodromia denticulata McLay, 1993

Frodromia McLay, 1993 {11}
= *Frodromia* McLay, 1993 (type species *Petalomera atypica* Sakai, 1936, by original designation; gender feminine)
Frodromia atypica (Sakai, 1936) [*Petalomera*]
Frodromia reticulata (Sakai, 1974) [*Petalomera*]

Sphaerodromia Alcock, 1899
= *Sphaerodromia* Alcock, 1899 (type species *Dromidia kendalli* Alcock & Anderson, 1894, by monotypy; gender feminine)
Sphaerodromia kendalli (Alcock & Anderson, 1894) [*Dromidia*]
Sphaerodromia brizops McLay & Crosnier, 1991
Sphaerodromia ducoussoi McLay, 1991
Sphaerodromia lamellata Crosnier, 1994
Sphaerodromia nux Alcock, 1899

Incertae sedis

Dromia pustulata White, 1847 (nomen nudum)
Dromia verrucosipes White, 1847 (nomen nudum) {12}

Notes

{1} To resolve the homonymy of the crab family Dromiidae De Haan, 1833, with a beetle family, Dromiidae Bonelli, 1810, an application was submitted by Deuve et al. (2004) and subsequently approved by the ICZN (Opinion 2149).

{2} The identity of *Dromia nodipes* Lamarck, 1818 (nomen nudum) is problematic. Lamarck (1818: 264) commented, "… le D. nodipes du mus. parait être le D. aegagropila de Fab.". However, the *D. aegagropila* of Fabricius was very briefly described and its identity is not known. According to Zimsen (1964), there are no extant types of *D. aegagropila* and a search of the extant collections of Fabricius in the Copenhagen Museum by P. K. L. Ng revealed nothing. *Dromia aegagropila*, was doubtfully placed in *Austrodromidia* McLay, 1993, by McLay (2001: 826). Further, it is a provisional synonym of *Dromia australasiae* Weber, 1795 (nomen nudum) (see Guinot & Tavares, 2003).

{3} Guinot & Tavares (2003) reviewed the morphology of the Dromiacea (Homolodromioidea and Dromioidea), and commented that the current classification of the Dromiidae did not reflect the wide variation of morphological patterns it contained. They divided the Dromiidae into three subfamilies: Dromiinae De Haan, 1833; Hypoconchinae Guinot & Tavares, 2003; and Sphaerodromiinae Guinot & Tavares, 2003. Several dromiine genera, however, were markedly restricted with only the type species remaining, and consequently a number of new genera were established. The new diagnoses took into account not only classical characters (as used by McLay, 1993), but also new ventral structures, such as the thoracic sternum (rarely before used in the dromiid systematics), the shape of sternal sutures 7/8, the structure of the spermathecal openings at their extremities, the uropods, and the male abdominal formula (presence or absence of vestigial male pleopods on abdominal somites 3–5 in combination with uropods, the latter showing either as dorsal plates or as ventral lobes). All characters both old and new are in concordance. The presence or absence of a differentiated mobile penial tube on the male P5 coxa (with consequent modification to the coxa) was also studied, although not all species could be examined and thus some generic assignments must be regarded as tentative (hence the "?"). Guinot & Quenette (2005) remarked that the morphology of the spermatheca in the Dromiacea (Homolodromioidea and Dromioidea) follows a similar basic pattern with family subfamily variation. A long spermathecal tube is a synapomorphy of the Dromiinae; a short tube is present in the Hypoconchinae and Homolodromiidae; while it is practically absent in the Sphaerodromiinae and the Dynomenidae. This suggests that the Sphaerodromiinae are basal or sister to the Hypoconchinae + Dromiinae, and that the Dynomenidae are sister to the remaining dromiacean families. In a recent catalogue, Cleva et al. (2007) have reappraised the generic position of some species. In a separate study in progress by D. Guinot, *Dromia foresti* will be transferred to *Stimdromia* (see also Cleva et al., 2007: 241).

{4} The type species of *Dromia* Weber, 1795, was designated by the ICZN as *Cancer personatus* Linnaeus, 1758, as interpreted by the neotype (Opinion 688) (see also Holthuis, 1962a, c). However, the poorly known paper by Latreille (1810: 422) had, in fact, already selected *Dromia rumphii* Weber, 1795, as the type species. As the Commission has made a ruling on this, any earlier type designation is invalid. It is, however, useful to note that "*Dromia Rumphii*" was listed by Weber (1795) as a synonym of "*Cancer Dromia*" [erroneus spelling for *Dormia*] of Fabricius, so that *Cancer dromia* became the type species by tautonymy. *Dromia rumphii* Weber, 1795, is thus an objective synonym of *D. dromia* (Linnaeus, 1763). In any case, *Dromia rumphii* Weber, 1795, is a nomen nudum as it was not accompanied by any description or indication.

{5} D. Guinot is currently revising the generic positions of *Dromia dormia* and *D. wilsoni*. Both species had been placed in *Dromia* sensu lato by McLay (1993). Recently, McLay et al. (2001) cited larval and adult characters suggesting that *D. wilsoni* is not a *Dromia* species.

{6} *Dromia indica* Gray, 1831, referred to *Lauridromia* by McLay (1993), is better placed in *Dromidiopsis* (D. Guinot, unpublished data).

{7} Several reports (Guinot, 1995; Guinot & Bouchard, 1998; Bouchard, 2000; Guinot & Tavares, 2003) have questioned the status and validities of *E. spinosissima* and *E. bicornis*.

{8} *Pectinura stearnsi* Ives, 1891, has been cited as a synonym of *Paradromia japonica* (Henderson, 1888), but the correct name should be *Cryptodromia stearnsi*. *Pectinura stearnsi* Ives, 1891, is actually an ophiuroid echinoderm. In the same paper, Ives (1891) described a new species of crab from Japan which he named *Cryptodromia stearnsi* — the identity of the two specific names probably led to the confusion. There is no genus of crab with the name *Pectinura*.

{9} McLay (1993) synonymised *Petalomera longipes* Ihle, 1913, with *P. pulchra* Miers, 1884, but McLay & Ng (2007) showed that *P. longipes* is valid.

{10} The generic assignment of *Pseudodromia cacuminis* Kensley, 1980, will need to be re-examined as we consider it unlikely to be a *Pseudodromia*.

{11} The subfamilial position of *Frodromia* McLay, 1993, remains uncertain. Guinot & Tavares (2003) suggested it might be a sphaerodromiine, but this is unconfirmed. Despite it also having many dromiine features, we tentatively place it in the Sphaerodromiinae pending further investigations. We do not feel there is sufficient cause to recognise the tribe Frodromiini Števčić, 2005, at this time.

{12} *Dromia verrucosipes* White, 1847, is a nomen nudum, but McLay (2001) commented that it was a valid species of *Stimdromia*. Unfortunately he did not diagnose it and it therefore remains formally unnamed. This matter remains unresolved.

Fig. 5. *Petalomera granulata*, central Philippines (photo: P. Ng)

FAMILY DYNOMENIDAE ORTMANN, 1892

Dynomenidae Ortmann, 1892

Acanthodromia A. Milne-Edwards, 1880
  = *Acanthodromia* A. Milne-Edwards, 1880 (type species *Acanthodromia erinacea* A. Milne-Edwards, 1880, by monotypy; gender feminine)
Acanthodromia erinacea A. Milne-Edwards, 1880
Acanthodromia margarita (Alcock, 1899) [*Dynomene*]

Dynomene Desmarest, 1823
  = *Dynomene* Desmarest, 1823 (type species *Cancer hispida* Latreille, in Milbert, 1812, subsequent selection of type species by monotypy by H. Milne Edwards, 1837; gender feminine) {1}
  = *Maxillothrix* Stebbing, 1921 (type species *Maxillothrix actaeiformis* Stebbing, 1921, by monotypy; gender feminine)
Dynomene filholi Bouvier, 1894
Dynomene guamensis McLay, 2001
Dynomene hispida (Latreille, in Milbert, 1812) [*Cancer*] {1}
  = *Dynomena latreillii* Eydoux & Souleyet, 1842
  = *Dynomene granulobata* Dai, Yang & Lan, 1981
Dynomene kroppi McLay, 2001
Dynomene pilumnoides Alcock, 1900
  = *Maxillothrix actaeiformis* Stebbing, 1921
Dynomene praedator A. Milne-Edwards, 1879
  = *Dynomene sinensis* Chen, 1979
  = *Dynomene tenuilobata* Dai, Yang & Lan, 1981
  = *Dynomene huangluensis* Dai, Cai & Yang, 1996
Dynomene pugnatrix De Man, 1889
  = *Dynomene pugnatrix brevimana* Rathbun, 1911

Hirsutodynomene McLay, 1999
  = *Hirsutodynomene* McLay, 1999 (type species *Dynomene spinosa* Rathbun, 1911, by original designation; gender feminine)
Hirsutodynomene spinosa (Rathbun, 1911) [*Dynomene*]
Hirsutodynomene ursula (Stimpson, 1860) [*Dynomene*]
Hirsutodynomene vespertilio McLay & Ng, 2005

Metadynomene McLay, 1999
  = *Metadynomene* McLay, 1999 (type species *Dynomene devaneyi* Takeda, 1977, by original designation; gender feminine)
Metadynomene devaneyi (Takeda, 1977) [*Dynomene*]
Metadynomene tanensis (Yokoya, 1933) [*Dynomene*]
Metadynomene crosnieri McLay, 1999

Paradynomene Sakai, 1963
  = *Paradynomene* Sakai, 1963 (type species *Paradynomene tuberculata* Sakai, 1963, by monotypy; gender feminine)
Paradynomene demon McLay & Ng, 2004
Paradynomene diablos McLay & Ng, 2004
Paradynomene quasimodo McLay & Ng, 2004
Paradynomene rotunda McLay & Ng, 2004
Paradynomene teufel McLay & Ng, 2004
Paradynomene tuberculata Sakai, 1963

Notes

{1} A nomenclatural comment is needed with regard to *Dynomene*. Desmarest (1823) initially used the an invalid vernacular name “Dynomène” (Desmarest, 1823: 219), as shown by the use of a grave accent. However, on page 422,

in his complete list of genera of Crustacea, Desmarest (1823: 422) wrote "*Dynomene*, Latr., 249, *note*", without a grave accent, and in italics like all other scientific names in his list. His vernacular names like Chevrolle, Ecrevisse, Crevette, etc., all are writen in normal type. *Dynomene* Desmarest, 1823, is thus correct, but the citation must refer to page 422, not the earlier 219. No species was originally mentioned, but Henri Milne Edwards (1837: 180) listed a single species, *Dynomene hispida*. As he was the first author after Desmarest (1823) to explicitly include a species in the genus, following Article 67.2.2 of the Code, H. Milne Edwards (1837) thus designated the type species by monotypy.

The authorship of *Dynomene hispida*, is usually credited to Guérin (1832) but this is incorrect. Guérin-Méneville's "Iconographie" was published over a period of 15 years (1829–1844), and the date for the Crustacea volume is 1844, with 48 pages and 35 plates (see Cowan, 1971). As such, Guérin-Méneville's use of the name "*Dynomene hispida*" was actually in 1844. However, the first author to describe this species was actually Latreille, in Milbert (1812) (see Notes in **INTRODUCTION**; Cleva et al., 2007), who named it *Cancer hispida*. Latreille's (1812: 274) short description leaves no doubt that his *Cancer hispida* is the *Dynomene hispida* of other authors (not to be confused with *Domecia hispida* Eydoux & Souleyet, 1842, presently in Domeciidae).

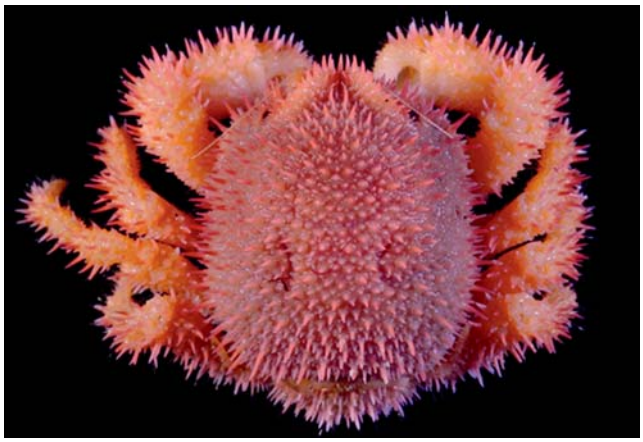

Fig. 6. *Acanthodromia margarita*, central Philippines (photo: P. Ng)

Fig. 7. *Dynomene guamensis*, Guam (photo: B. Henke)

Fig. 8. *Hirsutodynomene vespertilio*, Philippines; freshly preserved colours (photo: P. Ng)

Fig. 9. *Paradynomene tuberculata*, central Philippines (photo P. Ng)

Fig. 10. *Metadynomene tanensis*, central Philippines (photo P. Ng)

SUPERFAMILY HOMOLODROMIOIDEA ALCOCK, 1899

FAMILY HOMOLODROMIIDAE ALCOCK, 1899

Homolodromidae Alcock, 1899

Dicranodromia A. Milne-Edwards, 1880
= *Dicranodromia* A. Milne-Edwards, 1880 (type species *Dicranodromia ovata* A. Milne-Edwards, 1880, by monotypy; gender feminine)
= *Arachnodromia* Alcock & Anderson, 1899 (type species *Arachnodromia baffini* Alcock & Anderson, 1899, by monotypy; gender feminine)
Dicranodromia alphonsei Martin & Guinot, in Guinot, 1995
Dicranodromia baffini (Alcock & Anderson, 1899) [*Arachnodromia*]
Dicranodromia chacei Guinot, 1995
Dicranodromia chenae Ng & Naruse, 2007
Dicranodromia crosnieri Guinot, 1995
Dicranodromia danielae Ng & McLay, 2005
Dicranodromia doederleini Ortmann, 1892
Dicranodromia felderi Martin, 1990
Dicranodromia foersteri Guinot, 1993
Dicranodromia karubar Guinot, 1993
Dicranodromia mahieuxii A. Milne-Edwards, 1883
Dicranodromia martini Guinot, 1995
Dicranodromia nagaii Guinot, 1995
Dicranodromia ovata A. Milne-Edwards, 1880
Dicranodromia pequegnati Guinot, 1995
Dicranodromia simplicia Guinot & Martin, in Guinot, 1995
Dicranodromia spinulata Guinot, 1995
Dicranodromia spinosa Martin, 1994

Homolodromia A. Milne-Edwards, 1880
= *Homolodromia* A. Milne-Edwards, 1880 (type species *Homolodromia paradoxa* A. Milne-Edwards, 1880, by monotypy; gender feminine)
Homolodromia bouvieri Doflein, 1904
Homolodromia kai Guinot, 1993
Homolodromia monstrosa Martin, Christiansen & Trautwein, 2001
Homolodromia paradoxa A. Milne-Edwards, 1880
Homolodromia robertsi Garth, 1973

Fig. 11. *Dicranodromia martini*, central Philippines (photo: T. Y. Chan)

Fig. 12. *Dicranodromia chenae*, central Philippines (photo: T. Y. Chan)

SUPERFAMILY HOMOLOIDEA DE HAAN, 1839

FAMILY HOMOLIDAE DE HAAN, 1839

Homolidea De Haan, 1839 [Opinion 522]
Thelxiopeidae Rathbun, 1937

Dagnaudus Guinot & Richer de Forges, 1995
= *Dagnaudus* Guinot & Richer de Forges, 1995 (type species *Latreillopsis petterdi* Grant, 1905, by original designation; gender masculine)
Dagnaudus petterdi (Grant, 1905) [*Latreillopsis*]

Gordonopsis Guinot & Richer de Forges, 1995
= *Gordonopsis* Guinot & Richer de Forges, 1995 (type species *Homola* (*Paromola*) *profundorum* Alcock & Anderson, 1899, by original designation; gender feminine)
Gordonopsis profundorum (Alcock & Anderson, 1899) [*Homola* (*Paromola*)]

Homola Leach, 1815
= *Thelxiope* Rafinesque, 1814 (type species *Thelxiope palpigera* Rafinesque, 1814, by monotypy; gender feminine; name suppressed by ICZN) [Opinion 522]
= *Homola* Leach, 1815 (type species *Homola spinifrons* Leach, 1815, by monotypy; gender feminine) [Opinion 522]
= *Homolus* Leach, 1821 (incorrect spelling)
Homola barbata (Fabricius, 1793) [*Cancer*] [Opinion 522]
= *Cancer cubicus* Forskål, 1775 (suppressed by ICZN) [Opinion 522] {1}
= *Cancer novemdecos* Sulzer, 1776 (suppressed by ICZN) [Opinion 522] {1}
= *Dorippe fronticornis* Lamarck, in White, 1847 (nomen nudum)
= *Thelxiope palpigera* Rafinesque, 1814
= *Homola spinifrons* Leach, 1815
= *Dorippe spinosus* Risso, 1816
Homola coriolisi Guinot & Richer de Forges, 1995
Homola dickinsoni Eldredge, 1980
Homola eldredgei Guinot & Richer de Forges, 1995
Homola ikedai Sakai, 1979
Homola mieensis Sakai, 1979
Homola minima Guinot & Richer de Forges, 1995
Homola orientalis Henderson, 1888
= *Homola andamanica* Alcock, 1899
Homola poupini Richer de Forges & Ng, 2007
Homola ranunculus Guinot & Richer de Forges, 1995
Homola vigil A. Milne-Edwards, 1880

Homolax Alcock, 1899
= *Homola* (*Homolax*) Alcock, 1899 (type species *Homola megalops* Alcock, 1894, by monotypy; gender feminine)
Homolax megalops (Alcock, 1894) [*Homola*]

Homolochunia Doflein, 1904
= *Homolochunia* Doflein, 1904 (type species *Homolochunia valdiviae* Doflein, 1904, by monotypy; gender feminine)
Homolochunia valdiviae Doflein, 1904
Homolochunia kullar Griffin & Brown, 1976
Homolochunia gadaletae Guinot & Richer de Forges, 1995

Homologenus A. Milne-Edwards, in Henderson, 1888
= *Homolopsis* A. Milne-Edwards, 1880 (type species *Homolopsis rostratus* A. Milne-Edwards, 1880, by monotypy; name pre-occupied by *Homolopsis* Bonaparte, 1831 [Reptilia]; gender feminine)
= *Homologenus* A. Milne-Edwards, in Henderson, 1888 (replacement name for *Homolopsis* A. Milne-Edwards, 1880; gender masculine)
Homologenus asper Zarenkov, in Zarenkov & Khodkina, 1983
Homologenus boucheti Guinot & Richer de Forges, 1995
Homologenus braueri Doflein, 1904
Homologenus broussei Guinot & Richer de Forges, 1981
Homologenus donghaiensis Chen, 1986
Homologenus levii Guinot & Richer de Forges, 1995
Homologenus malayensis Ihle, 1912
Homologenus orientalis Zarenkov, 1990
Homologenus rostratus (A. Milne-Edwards, 1880) [*Homolopsis*]
Homologenus wallis Guinot & Richer de Forges, 1995

Homolomannia Ihle, 1912
= *Homolomannia* Ihle, 1912 (type species *Homolomannia sibogae* Ihle, 1912, by monotypy; gender feminine)
Homolomannia sibogae Ihle, 1912
Homolomannia occlusa Guinot & Richer de Forges, 1981

Ihlopsis Guinot & Richer de Forges, 1995
= *Ihlopsis* Guinot & Richer de Forges, 1995 (type species *Ihlopsis tirardi* Guinot & Richer de Forges, 1995, by original designation; gender feminine)
Ihlopsis multispinosa (Ihle, 1912) [*Latreillopsis*]
Ihlopsis tirardi Guinot & Richer de Forges, 1995

Lamoha Ng, 1998
= *Hypsophrys* Wood-Mason & Alcock, 1891 (type species *Hypsophrys superciliosa* Wood-Mason & Alcock, 1891, by monotypy; name pre-occupied by Agassiz, 1858 [Pisces]; gender feminine)
= *Lamoha* Ng, 1998 (replacement name for *Hypsophrys* Wood-Mason & Alcock, 1891; gender feminine)
Lamoha hystrix Ng, 1998
Lamoha inflata (Guinot & Richer de Forges, 1981) [*Hypsophrys*]
Lamoha longipes (Alcock & Anderson, 1899) [*Hypsophrys*]
Lamoha longirostris (Chen, 1986) [*Hypsophrys*]
= *Hypsophrys futuna* Guinot & Richer de Forges, 1995
Lamoha murotoensis (Sakai, 1979) [*Hypsophrys*]
Lamoha noar (Williams, 1974) [*Hypsophrys*]
Lamoha personata (Guinot & Richer de Forges, 1981) [*Hypsophrys*]
Lamoha superciliosa (Wood-Mason & Alcock, 1891) [*Hypsophrys*]
Lamoha williamsi (Takeda, 1980) [*Hypsophrys*]

Latreillopsis Henderson, 1888
= *Latreillopsis* Henderson, 1888 (type species *Latreillopsis bispinosa* Henderson, 1888, by monotypy; gender feminine)
Latreillopsis antennata Guinot & Richer de Forges, 1995
Latreillopsis bispinosa Henderson, 1888
Latreillopsis cornuta Guinot & Richer de Forges, 1995
Latreillopsis daviei Guinot & Richer de Forges, 1995
Latreillopsis gracilipes Guinot & Richer de Forges, 1981
Latreillopsis laciniata Sakai, 1936
Latreillopsis mariveneae Richer de Forges & Ng, 2007
Latreillopsis tetraspinosa Dai & Chen, 1980
Latreillopsis trispinosa Guinot & Richer de Forges, 1995

Moloha Barnard, 1947
= *Thelxiope* (*Moloha*) Barnard, 1947 (type species *Latreillopsis alcocki* Stebbing, 1920, by monotypy; gender feminine)
Moloha acutispina (Sakai, 1961) [*Homola* (*Moloha*)]
Moloha alcocki (Stebbing, 1920) [*Latreillopsis*]
Moloha alisae Guinot & Richer de Forges, 1995

Moloha faxoni (Schmitt, 1921) [*Homola*]
Moloha grandperrini Guinot & Richer de Forges, 1995
Moloha majora (Kubo, 1936) [*Latreillopsis*]

Paromola Wood-Mason & Alcock, 1891
= *Paromola* Wood-Mason & Alcock, 1891 (type species *Dorippe cuvieri* Risso, 1816, by monotypy; gender feminine) [Opinion 712]
Paromola bathyalis Guinot & Richer de Forges, 1995
Paromola crosnieri Guinot & Richer de Forges, 1995
Paromola cuvieri (Risso, 1816) [*Dorippe*] [Opinion 712]
= *Maia dumerili* Risso, 1816
Paromola japonica Parisi, 1915
= *Latreillopsis hawaiiensis* Edmondson, 1932
Paromola macrochira Sakai, 1961
Paromola rathbunae Porter, 1908

Paromolopsis Wood-Mason & Alcock, 1891
= *Paromolopsis* Wood-Mason & Alcock, 1891 (type species *Paromolopsis boasi* Wood-Mason & Alcock, 1891, by monotypy; gender feminine)
Paromolopsis boasi Wood-Mason & Alcock, 1891

Yaldwynopsis Guinot & Richer de Forges, 1995
= *Yaldwynopsis* Guinot & Richer de Forges, 1995 (type species *Paromola spinimanus* Griffin, 1965, by original designation; gender feminine)
Yaldwynopsis guinotae Richer de Forges & Ng, 2007
Yaldwynopsis sagueli Richer de Forges & Ng, 2007
Yaldwynopsis spinimanus (Griffin, 1965) [*Paromola*]

Notes

{1} *Cancer cubicus* Forskål, 1775, and *Cancer novemdecos* Sulzer, 1776, are two names that have been ignored. On the basis of their descriptions, we have little doubt that both are synonymous with what is presently known as *Homola barbata* (Fabricius, 1793). We thus invoke Article 23.9.2 of the Code to conserve the junior but more widely used name.

Fig. 13. *Moloha alcocki*, South Africa (photo: S. Fennessy)

FAMILY LATREILLIIDAE STIMPSON, 1858

Latreillidea Stimpson, 1858 (incorrect spelling) [Opinion 712]
Latreilliidae Stimpson, 1858 (corrected spelling) [Opinion 712]

Eplumula Williams, 1982
= *Eplumula* Williams, 1982 (type species *Latreillia phalangium* De Haan, 1839, by original designation; gender feminine)
Eplumula australiensis (Henderson, 1888) [*Latreillia*]
Eplumula phalangium (De Haan, 1839) [*Latreillia*]

Latreillia Roux, 1830
= *Latreillia* Roux, 1830 (type species *Latreillia elegans* Roux, 1830, by monotypy; gender feminine) [Opinion 712]
= *Proctor* Gistel, 1848 (unnecessary replacement name for *Latreillia* Roux, 1830; gender masculine)
Latreillia elegans Roux, 1830 [Opinion 712]
= *Latreillia manningi* Williams, 1982
Latreillia metanesa Williams, 1982
Latreillia pennifera Alcock, 1900
Latreillia valida De Haan, 1839
Latreillia williamsi Melo, 1990

Fig. 14. *Latreillia metanesa*, Taiwan (photo: T. Y. Chan)

FAMILY POUPINIIDAE GUINOT, 1991

Poupiniidae Guinot, 1993

Poupinia Guinot, 1993
= *Poupinia* Guinot, 1993 (type species *Poupinia hirsuta* Guinot, 1993, by original designation; gender feminine)
Poupinia hirsuta Guinot, 1993

Fig. 15. *Poupinia hirsuta*, French Polynesia (photo: J. Poupin)

SUPERFAMILY RANINOIDEA DE HAAN, 1839

FAMILY RANINIDAE DE HAAN, 1839

Raninoidea De Haan, 1839
Raninoidinae Lörenthey & Beurlen, 1929
Raninellidae Beurlen, 1930
Notopodinae Serène & Umali, 1972 [recte Notopinae]
Symethinae Goeke, 1981
Cyrtorhininae Guinot, 1993
Lyreidinae Guinot, 1993
Cosmonotini Števčić, 2005

Subfamily Cyrtorhininae Guinot, 1993

Cyrtorhininae Guinot, 1993

Cyrtorhina Monod, 1956
= *Cyrtorhina* Monod, 1956 (type species *Cyrtorhina granulosa* Monod, 1956, by monotypy; gender feminine)
Cyrtorhina balabacensis Serène, 1971
Cyrtorhina granulosa Monod, 1956

Subfamily Lyreidinae Guinot, 1993

Lyreidinae Guinot, 1993

Lyreidus De Haan, 1841
= *Lyreidus* De Haan, 1841 (type species *Lyreidus tridentatus* De Haan, 1841, by monotypy; gender masculine)
Lyreidus brevifrons Sakai, 1937
Lyreidus stenops Wood-Mason, 1887
= *Lyreidus integra* Terazaki, 1902
= *Lyreidus politus* Parisi, 1914
Lyreidus tridentatus De Haan, 1841
= *Lyreidus australiensis* Ward, 1933
= *Lyreidus elongatus* Miers, 1879
= *Lyreidus fossor* Bennett, 1964

Lysirude Goeke, 1985
= *Lysirude* Goeke, 1985 (type species *Raninoides nitidus* A. Milne-Edwards, 1880, by original designation; gender masculine)
Lysirude channeri (Wood-Mason, 1885) [*Lyreidus*]
= *Lyreidus gracilis* Wood-Mason, 1885
Lysirude griffini Goeke, 1985
Lysirude nitidus (A. Milne-Edwards, 1880) [*Raninoides*]
= *Lyreidus bairdii* Smith, 1881

Subfamily Notopodinae Serène & Umali, 1972

Notopodinae Serène & Umali, 1972 [recte Notopinae]
Cosmonotini Števčić, 2005

Cosmonotus Adams & White, 1848
= *Cosmonotus* Adams & White, 1848 (type species *Cosmonotus grayii* Adams & White, 1848, by monotypy; gender masculine)
= *Engonionotus* Rathbun, 1897 (unnecessary replacement name for *Cosmonotus* Adams & White, 1848; gender neuter)
Cosmonotus genkaiae Takeda & Miyake, 1970
Cosmonotus grayii White, 1848
Cosmonotus mclaughlinae Tavares, 2006

Notopus De Haan, 1841
= *Notopus* De Haan, 1841 (type species *Cancer dorsipes* Linnaeus, 1758, by monotypy; gender masculine) [Opinion 688]
Notopus dorsipes (Linnaeus, 1758) [*Cancer*] [Opinion 712]
= *Notopus rumphii* Rathbun, 1897

Ranilia H. Milne Edwards, 1837
= *Ranilia* H. Milne Edwards, 1837 (type species *Ranilia muricata* H. Milne Edwards, 1837, by monotypy; gender feminine)
= *Raninops* A. Milne-Edwards, 1880 (type species *Raninops constrictus* A. Milne-Edwards, 1880, designated by Rathbun, 1937; gender masculine)
Ranilia angustata Stimpson, 1860
Ranilia constricta (A. Milne-Edwards, 1880) [*Raninops*]
= *Notopus* (*Raninoides*) *atlanticus* Studer, 1883
Ranilia fornicata (Faxon, 1893) [*Raninops*]
Ranilia guinotae Melo & Campos, 1994
Ranilia misakiensis (Sakai, 1937) [*Notopus*]
Ranilia muricata H. Milne Edwards, 1837
= *Raninops stimpsoni* A. Milne-Edwards, 1880
= *Ranilia saldanhai* Rodrigues da Costa, 1970
Ranilia ovalis (Henderson, 1888) [*Notopus*]

Umalia Guinot, 1993
= *Umalia* Guinot, 1993 (type species *Notopus misakiensis* Sakai, 1937, by original designation; gender feminine)
Umalia chinensis (Chen & Sun, 2002) [*Ranilia*]
Umalia horikoshii (Takeda, 1975) [*Ranilia*]
Umalia misakiensis (Sakai, 1937) [*Notopus*]
Umalia orientalis (Sakai, 1963) [*Ranilia*]
Umalia ovalis (Henderson, 1888) [*Notopus*]
Umalia tenuiocellus (Davie & Short, 1989) [*Ranilia*]
Umalia trirufomaculata (Davie & Short, 1989) [*Ranilia*]

Subfamily Raninoidinae De Haan, 1839

Raninoidea De Haan, 1839

Ranina Lamarck, 1801
= *Ranina* Lamarck, 1801 (type species *Cancer raninus* Linnaeus, 1758, subsequent designation by Latreille, 1810: 422; gender feminine) {1}
Ranina ranina (Linnaeus, 1758) [*Cancer*]
= *Ranina dentata* Latreille, 1825
= *Ranina serrata* Lamarck, 1801
= ?*Ranina cristata* Desjardins, 1835 {2}
= *Albunea scabra* Weber, 1795 (nomen nudum)

Subfamily Raninoidinae Lörenthey & Beurlen, 1929

Raninoidinae Lörenthey & Beurlen, 1929
Raninellidae Beurlen, 1930

Notopoides Henderson, 1888
= *Notopoides* Henderson, 1888 (type species *Notopoides latus* Henderson, 1888, by monotypy; gender masculine)
Notopoides latus Henderson, 1888

Notosceles Bourne, 1922
= *Notosceles* Bourne, 1922 (type species *Notosceles chimmonis* Bourne, 1922, by original designation; gender masculine)
Notosceles chimmonis Bourne, 1922
= *Raninoides fossor* A. Milne-Edwards & Bouvier, 1923 {3}
Notosceles ecuadorensis (Rathbun, 1935) [*Raninoides*]
Notosceles pepeke Dawson & Yaldwyn, 2000
Notosceles serratifrons (Henderson, 1893) [*Raninoides*]
Notosceles viaderi Ward, 1942

Raninoides H. Milne Edwards, 1837
= *Raninoides* H. Milne Edwards, 1837 (type species *Ranina laevis* Latreille, 1825, by monotypy; gender masculine)
Raninoides barnardi Sakai, 1974
Raninoides benedicti Rathbun, 1935
Raninoides bouvieri Capart, 1951
Raninoides crosnieri Ribes, 1989
Raninoides hendersoni Chopra, 1933
Raninoides intermedius Dai & Xu, 1991
Raninoides laevis (Latreille, 1825) [*Ranina*]
= *Raninoides schmitti* Sawaya, 1944 {4}
Raninoides lamarcki A. Milne-Edwards & Bouvier, 1923
Raninoides longifrons Chen & Türkay, 2001
Raninoides louisianensis Rathbun, 1933
Raninoides personatus Henderson, 1888 {5}

Subfamily Symethinae Goeke, 1981

Symethinae Goeke, 1981 {6}

Symethis Weber, 1795
= *Symethis* Weber, 1795 (type species *Hippa variolosa* Fabricius, 1793; by monotypy; gender feminine)
= *Zanclifer* Henderson, 1888 (type species *Eryon caribensis* Fréminville, 1832, by monotypy; gender masculine)
Symethis corallica Davie, 1989
Symethis garthi Goeke, 1981
Symethis variolosa (Fabricius, 1793) [*Cancer*]
= *Eryon caribensis* Fréminville, 1832

Notes

{1} *Ranina* Lamarck, 1801, was established for two species, *Cancer raninus* Linnaeus, 1758, and *Ranina serrata* Lamarck, 1801 (Lamarck, 1801: 156). Lamarck (1801) incorrectly attributed *Cancer raninus* to Fabricius. Latreille (1810: 422) identified the type species as *Cancer raninus*.

{2} Desjardins (1835: 10–12) described *Ranina cristata* with the note: "Ranine corne de daim", from Mauritius. The species is apparently close to *R. ranina* but may be distinct. Its status is uncertain.

{3} *Raninoides fossor* A. Milne-Edwards & Bouvier, 1923, is a junior subjective synonym of *Notosceles chimmonis* Bourne, 1922 (see Cleva et al., 2007).

{4} According to Goeke (1984), *Raninoides schmitti* Sawaya, 1944, is a junior synonym of *Raninoides laevis* (Latreille, 1825). We agree, the description and figures by Sawaya (1944) leave no doubt on this matter.

{5} Henderson (1888), in describing this species, attributed it to a White MS name. White, however, never used name in any of his publications (see Clark & Presswell, 2001).

{6} Goeke (1981) established a new subfamily, Symethinae, for the genus. Guinot (1993) conditionally recognised it as a distinct family in her review of the Raninidae (see also Tucker, 1998). Ahyong et al. (2007), however, argued that it should only be recognised as a separate subfamily.

Fig. 16. *Symethis corallica*, Philippines (photo: P. Ng)

Fig. 17. *Lysirude channeri*, Philippines (photo: T. Y. Chan)

SECTION EUBRACHYURA SAINT LAURENT, 1980

SUBSECTION HETEROTREMATA GUINOT, 1977

SUPERFAMILY AETHROIDEA DANA, 1851

Remarks. – Guinot (1966, 1967b) first suggested a relationship between *Hepatus* and *Aethra*. While at first, grouping such different genera may appear radical, the differences blur when intermediate genera are considered. Genera like *Hepatella*, *Osachila* and *Sakaila* show intermediate forms, in a number of characters, between *Hepatus* and *Aethra*, and in particular show the transition from the sharply triangular mouthparts (third maxillipeds) of *Hepatus* to the more quadrate form of *Aethra*. *Actaeomorpha*, long associated with the Leucosiidae, is also an aethrid — simply an apomorphic *Osachila* or *Sakaila*. The same is true for *Drachiella*.

FAMILY AETHRIDAE DANA, 1851

Oethrinae Dana, 1851 (incorrect spelling based on *Oethra* Latreille, in Cuvier, 1816 [incorrect spelling, corrected to Aethridae on basis of type genus, *Aethra* Latreille in Cuvier, 1816]
Hepatinae Stimpson, 1871

Actaeomorpha Miers, 1877
= *Actaeomorpha* Miers, 1877 (type species *Actaeomorpha erosa* Miers, 1877, by monotypy; gender feminine) [Opinion 73]
Actaeomorpha alvae Boone, 1934
Actaeomorpha erosa Miers, 1877 [Direction 36]
Actaeomorpha punctata Edmondson, 1935

Aethra Latreille in Cuvier, 1816
= *Aethra* Latreille in Cuvier, 1816 (type species *Cancer scruposus* Linnaeus, 1764, by monotypy; gender feminine)
= *Oethra* Latreille, in Cuvier, 1816 (incorrect spelling) {1}
Aethra edentata Edmondson, 1951
Aethra scruposa (Linnaeus, 1764) [*Cancer*]
= *Cancer polynome* Herbst, 1801
= *Calappa depressa* Latreille, in Milbert, 1812 {2}
Aethra scutata Smith, 1869
Aethra seychellensis Takeda, 1975

Drachiella Guinot, in Serène & Soh, 1976
= *Drachiella* Guinot, in Serène & Soh, 1976 (type species *Lithadia sculpta* Haswell, 1879, by original designation; gender feminine)
Drachiella aglypha (Laurie, 1906) [*Lithadia*]
Drachiella angulata (Ihle, 1918) [*Actaeomorpha*]
Drachiella caelata Takeda & Tachikawa, 1995
Drachiella lapillula (Alcock, 1896) [*Actaeomorpha*]
Drachiella morum (Alcock, 1896) [*Actaeomorpha*]
Drachiella sculpta (Haswell, 1879) [*Lithadia*]

Hepatella Smith, in Verrill, 1869
= *Hepatella* Smith, in Verrill, 1869 (type species *Hepatella amica* Smith, in Verrill, 1869, designation under Article 68.2.1; gender feminine) [Opinion 73, Direction, 37]
Hepatella amica Smith, 1869 [Direction 36]
Hepatella peruviana Rathbun, 1933

Hepatus Latreille, 1802
= *Hepatus* Latreille, 1802 (type species *Calappa angustata* Fabricius, 1798, by monotypy; gender masculine) {1}
= *Hepatulus* Fowler, 1912 (unnecessary replacement name for *Hepatus* Latreille, 1802; gender masculine)
= *Hepatoides* Balss, 1957 (unnecessary replacement name for *Hepatus* Latreille, 1802; gender feminine)
Hepatus chiliensis H. Milne Edwards, 1837
Hepatus epheliticus (Linnaeus, 1763) [*Cancer*]
= *Cancer decorus* Herbst, 1803
= *Cancer vanbenedenii* Herklots, 1852
Hepatus gronovii Holthuis, 1959
Hepatus kossmanni Neumann, 1878
Hepatus lineatus Rathbun, 1898
Hepatus pudibundus (Herbst, 1785) [*Cancer*]
= *Cancer princeps* Herbst, 1794
= *Calappa angustata* Fabricius, 1798 {3}
= *Hepatus fasciatus* Latreille, 1803
= *Hepatus calappoides* Lamarck, 1818
= *Hepatus tuberculatus* Saussure, 1858
Hepatus scaber Holthuis, 1959

Osachila Stimpson, 1871
= *Osachila* Stimpson, 1871 (type species *Osachila tuberosa* Stimpson, 1871, by original designation; gender feminine) [Opinion 73]
Osachila acuta Stimpson, 1871
Osachila antillensis Rathbun, 1916
Osachila expansa Takeda, 1977
Osachila galapagensis Rathbun, 1935
Osachila kaiserae Zimmerman & Martin, 1999
Osachila lata Faxon, 1893
Osachila levis Rathbun, 1898
Osachila semilevis Rathbun, 1916
Osachila sona Garth, 1940
Osachila stimpsonii Studer, 1883
Osachila tuberosa Stimpson, 1871 [Direction 36]

Sakaila Manning & Holthuis, 1981
= *Sakaila* Manning & Holthuis, 1981 (type species *Sakaila africana* Manning & Holthuis, 1981, by original designation; gender feminine)
Sakaila africana Manning & Holthuis, 1981
Sakaila imperialis (Sakai, 1963) [*Osachila*]
Sakaila japonica (Sakai, 1963) [*Osachila*]

Notes

{1} The complex history and confusion over the spelling, and authors, of the names *Aethra* Latreille in Cuvier, 1816, and *Oethra* Latreille in Cuvier, 1816, have been discussed in detail by Ng (1999a).

{2} Latreille, in Milbert (1812: 276) described *Calappa depressa* with the following comments: “Le calappe déprimé (*calappa depressa*) a la figure d'un ovale transversal et échancré postérieurement. Sa surface est très

inégale; les pattes sont trés dentées. Cette espèce est une des plus rares et des plus singulières." His description of a very rough carapace surface and dentate legs argues against the taxon as being a species of *Calappa* as defined today. In fact, it agrees well with what is currently called *Aethra scruposa* (Linnaeus, 1764). Unfortunately, *Calappa depressa* Latreille, in Milbert, 1812, is a senior primary homonym of a widely distributed calappid crab, *Calappa depressa* Miers, 1886 (see revision by Galil, 1997). Article 57.2 of the Code states that in the case of primary homonyms, the junior name is permanently invalid except when the conditions of Article 23.9.1 are met, i.e. when the senior homonym has not been used as a valid name since 1899 (Article 23.9.1.1); and the junior homonym has been used for a particular taxon as its presumed valid name in at least 25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years (Article 23.9.1.2). Article 23.9.1.1 is easily fulfilled as Latreille's name has been forgotten or not used as a valid name since 1899. However, Article 23.9.1.2 cannot be fulfilled because *Calappa depressa* Miers, 1886, although widely distributed, is not often reported; we could only obtain nine references (Tyndale-Biscoe & George, 1962; Guinot, 1967d; Serène, 1968; Galil, 1997; Davie, 2002; Ng, 2003a; Poore, 2004; Lai & Ng, 2006; Richer de Forges & Ng, 2006). As such, Article 57.2 prevails for the homonymy of these two names. The name *Calappa depressa* Miers, 1886, must thus be replaced by its next available synonym, *C. woodmasoni* Alcock, 1896.

{3} The Copenhagen Museum has a specimen labelled as a possible type of "*Calappa angustata* Fabricius" (male, 55.8 by 40.7 mm, ZMUC Cru 126). The specimen was in a box with a specimen of *C. gallioides* Stimpson, and both supposedly from Ghana. The original description and colour notes of Fabricius (1798) do not match any known Atlantic *Calappa* species, but seem closer to *Hepatus*. The putative type specimen also does not agree with Fabricius' description, and thus we do not regard it as a type, the tentative label being almost certainly wrong.

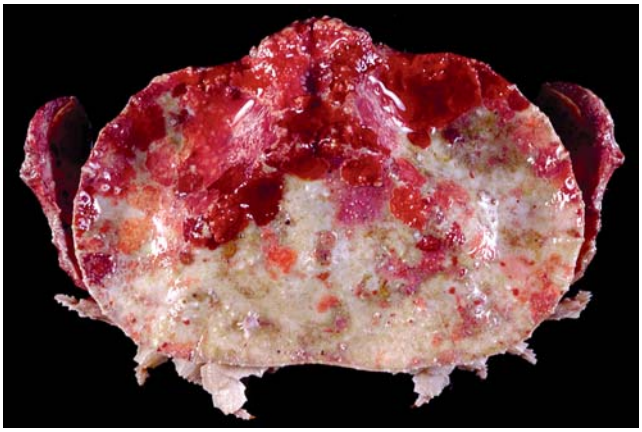

Fig. 18. *Aethra scruposa*, Philippines (photo: T. Y. Chan)

Fig. 19. *Hepatus pudibundus*, Panama (photo: A. Anker)

Fig. 20. *Hepatus* cf. *scaber*, Panama (photo: A. Anker)

Fig. 21. *Actaeomorpha* cf. *erosa*, Philippines (photo: P. Ng)

SUPERFAMILY BELLIOIDEA DANA, 1852

FAMILY BELLIIDAE DANA, 1852

Cyclinea Dana, 1851
Belliidea Dana, 1852
Acanthocyclidae Dana, 1852
Corystoidini Števčić, 2005
Heteroziidae Števčić, 2005

Remarks. – The relatively elongated species of *Bellia* and *Corystoides* superficially resemble corystids and some of the atelecyclids, and all burrow. However we can assume the similarities are due to convergence as these belliids have no antennular fossae, and male abdominal segments 3–5 are fused (vs. free). They also have a proportionately longer G2 compared to corystids. *Acanthocyclus* is related to *Bellia* and *Corystoides*, because it also lacks antennular fossae, although the antennules are much shorter and less setose than those of *Bellia* and *Corystoides*.

Heterozius does not fit into the typical "belliid plan" (Guinot, 1976). Its antennules fold normally into well formed fossae, the G1 is straight, not curved, and proportionately more slender; and the G2 is much shorter, being only about 1/4 the length of the G1. The carapace of *Heterozius* is also clearly tranverse, more closely resembling pseudoziids like *Pseudozius*. The G1 and G2 of *Heterozius* ,bear a resemblance to those of *Pseudozius*. However, *Heterozius* has male abdominal segments 3–5 fused as in other belliids (versus all segments free in *Pseudozius*). Lacking further evidence, we are inclined to consider *Heterozius* to be a plesiomorphic belliid, but requiring its own subfamily, Heteroziinae Števčić, 2005.

Subfamily Belliinae Dana, 1852

Cyclinea Dana, 1851
Belliidea Dana, 1852
Acanthocyclidae Dana, 1852
Corystoidini Števčić, 2005

Acanthocyclus Lucas, in H. Milne Edwards & Lucas, 1844 {1}
  = *Acanthocyclus* Lucas, in H. Milne Edwards & Lucas, 1844 (type species *Acanthocyclus gayi* Lucas, in H. Milne Edwards & Lucas, 1844, by monotypy; gender masculine) [Opinion 73]
  = *Plagusetes* Heller, 1862 (type species *Plagusetes elatus* Heller, 1862, by monotypy; gender masculine)
Acanthocyclus albatrossis Rathbun, 1898
Acanthocyclus gayi Lucas, in H. Milne Edwards & Lucas, 1844 [Direction 36] {1}
  = *Acanthocyclus villosus* Strahl, 1862
  = *Plagusetes elatus* Heller, 1862
Acanthocyclus hassleri Rathbun, 1898

Bellia H. Milne Edwards, 1848
  = *Bellia* H. Milne Edwards, 1867 (type species *Bellia picta* H. Milne Edwards, 1848, by monotypy; gender feminine) [Opinion 73]
Bellia picta H. Milne Edwards, 1848 [Direction 36]

Corystoides Lucas, in H. Milne Edwards & Lucas, 1844 {1}
  = *Corystoides* Lucas, in H. Milne Edwards & Lucas, 1844 (type species *Corystoides chilensis* Lucas, in H. Milne Edwards & Lucas, 1844, by monotypy; gender masculine) [Opinion 73]
?*Corystoides abbreviatus* A. Milne-Edwards, 1880
Corystoides chilensis Lucas, in H. Milne Edwards & Lucas, 1844 [Direction 36] {1}

Subfamily Heteroziinae Števčić, 2005

Heteroziidae Števčić, 2005

Heterozius A. Milne-Edwards, 1867
  = *Heterozius* A. Milne-Edwards, 1867 (type species *Heterozius rotundifrons* A. Milne-Edwards, 1867, by monotypy; gender masculine) [Opinion 73]
Heterozius rotundifrons A. Milne-Edwards, 1867 [Direction 36]

Notes

{1} The precise authorship for these taxa should be "Lucas, in H. Milne Edwards & Lucas, 1844", not "H. Milne Edwards & Lucas, 1844" as more frequently cited (Guinot & Cleva, 2002). Also, the reference, H. Milne Edwards & Lucas (1842–1844), is problematic in that the publication came out in a series of undated parts, and the precise date of publication of each is uncertain. Following the Code, the latest date should be followed for all new taxa described inside this publication, i.e. 1844.

Fig. 22. *Acanthocyclus hassleri*, Chile (photo: A. Anker)

Fig. 23. *Heterozius rotundifrons*, New Zealand (photo: S.T. Ahyong)

SUPERFAMILY BYTHOGRAEIODEA WILLIAMS, 1980

FAMILY BYTHOGRAEIDAE WILLIAMS, 1980

Bythograeidae Williams, 1980

Allograea Guinot, Hurtado & Vrijenhoek, 2002
= *Allograea* Guinot, Hurtado & Vrijenhoek, 2002 (type species *Allograea tomentosa* Guinot, Hurtado & Vrijenhoek, 2002, by original designation; gender feminine)
Allograea tomentosa Guinot, Hurtado & Vrijenhoek, 2002

Austinograea Hessler & Martin, 1989
= *Austinograea* Hessler & Martin, 1989 (type species *Austinograea williamsi* Hessler & Martin, 1989, by original designation; gender feminine)
Austinograea alayseae Guinot, 1990
Austinograea rodriguezensis Tsuchida & Hashimoto, 2002
Austinograea williamsi Hessler & Martin, 1989

Bythograea Williams, 1980
= *Bythograea* Williams, 1980 (type species *Bythograea thermydron* Williams, 1980, by original designation; gender feminine
Bythograea galapagensis Guinot & Hurtado, 2003
Bythograea intermedia Saint Laurent, 1988
Bythograea laubieri Guinot & Segonzac, 1997
Bythograea microps Saint Laurent, 1984
Bythograea thermydron Williams, 1980
Bythograea vrijenhoeki Guinot & Hurtado, 2003

Cyanagraea Saint Laurent, 1984
= *Cyanagraea* Saint Laurent, 1984 (type species *Cyanagraea praedator* Saint Laurent, 1984, by original designation; gender feminine)
Cyanagraea praedator Saint Laurent, 1984

Gandalfus McLay, 2007
= *Gandalfus* McLay, 2007 (type species *Gandalfus puia* McLay, 2007, by original designation; gender masculine)
Gandalfus puia McLay, 2007
Gandalfus yunohana (Takeda, Hashimoto & Ohta, 2000) [*Austinograea*]

Segonzacia Guinot, 1989
= *Segonzacia* Guinot, 1989 (type species *Bythograea mesatlantica* Williams, 1988, by original designation; gender feminine)
Segonzacia mesatlantica (Williams, 1988) [*Bythograea*]

Fig. 24. *Bythograea thermydron*, East Pacific Rise; preserved coloration (photo: P. Ng)

Fig. 25. *Gandalfus puia*, New Zealand; preserved coloration (photo: P. Ng)

SUPERFAMILY CALAPPOIDEA DE HAAN, 1833

FAMILY CALAPPIDAE DE HAAN, 1833

Calappidea De Haan, 1833 [Opinion 712]

Acanthocarpus Stimpson, 1871
= *Acanthocarpus* Stimpson, 1871 (type species *Acanthocarpus alexandri* Stimpson, 1871, by monotypy; gender masculine)
Acanthocarpus alexandri Stimpson, 1871
Acanthocarpus bispinosus A. Milne-Edwards, 1880
Acanthocarpus brevispinis Monod, 1946
= *Acanthocarpus africanus* Capart, 1951
Acanthocarpus delsolari Garth, 1973
Acanthocarpus meridionalis Mané-Garzon, 1980

Calappa Weber, 1795
= *Calappa* Weber, 1795 (type species *Cancer granulatus* Linnaeus, 1758, subsequent designation by Latreille, 1810; gender feminine) [Opinion 712]
= *Lophos* De Haan, 1837 (type species *Cancer lophos* Herbst, 1782, by tautonymy and monotypy; gender masculine)
= *Camara* De Haan, 1837 (type species *Calappa fornicata* Fabricius, 1781, by monotypy; gender feminine)
= *Gallus* De Haan, 1837 (type species *Cancer gallus* Herbst, 1803, by tautonymy and monotypy; gender masculine)
= *Pistor* Gistel, 1848 (replacement name for *Gallus* De Haan, 1837; gender neuter)
Calappa acutispina Lai, Chan & Ng, 2006
Calappa africana Lai & Ng, 2006
Calappa bicornis Miers, 1884
Calappa bilineata Ng, Lai & Aungtonya, 2002
Calappa calappa (Linnaeus, 1758) [*Cancer*]
= *Cancer fornicatus* Fabricius, 1781
Calappa capellonis Laurie, 1906
Calappa cinerea Holthuis, 1958
Calappa clypeata Borradaile, 1903
= *Calappa terrareginae* Ward, 1936
Calappa conifera Galil, 1997
Calappa convexa Saussure, 1853
= *Calappa xanthusiana* Stimpson, 1860
Calappa dumortieri Guinot 1962
Calappa flammea (Herbst, 1794) [*Cancer*]
Calappa galloides Stimpson, 1859
= *Calappa squamosa* Desbonne, in Desbonne & Schramm, 1867
Calappa gallus (Herbst, 1803) [*Cancer*]
Calappa granulata (Linnaeus, 1758) [*Cancer*] [Opinion 712]
Calappa guerini Brito Capello, 1871
Calappa hepatica (Linnaeus, 1758) [*Cancer*]
= *Cancer tuberculatus* Herbst, 1785
= *Calappa tuberculosa* Guérin, 1829
= *Calappa spinosissima* H. Milne Edwards, 1837
= *Calappe sandwichien* Eydoux & Souleyet, 1842 (not available, not in Latin)
Calappa japonica Ortmann, 1892
= *Calappa exanthematosa* Alcock & Anderson, 189
Calappa liaoi Ng, 2002
Calappa lophos (Herbst, 1782) [*Cancer*]
= *Calappa lophos* Latreille, in Milbert, 1812
Calappa monilicanthus Galil, 1997
Calappa nitida Holthuis, 1958
Calappa ocellata Holthuis, 1958
Calappa ocularia Ng, 2002
Calappa pelii Herklots, 1851
= *Calappa piscatorum* Calman, 1914
Calappa philargius (Linnaeus, 1758) [*Cancer*]
= *Cancer inconspectus* Herbst, 1794
= *Calappa cristata* Fabricius, 1798
Calappa pokipoki Ng, 2000
Calappa pustulosa Alcock, 1896
Calappa quadrimaculata Takeda & Shikatani, 1990
Calappa rosea Jarocki, 1825 {1}
= *Calappa webbii* Risso, 1844
= *Calappa webbiana* Risso, in Holthuis, 1977
= *Calappa rissoana* Pastore, 1995
Calappa rubroguttata Herklots, 1851
= *Calappa bocagei* Brito Capello, 1871
Calappa sebastieni Galil, 1997
Calappa springeri Rathbun, 1931
Calappa sulcata Rathbun, 1898
Calappa tortugae Rathbun, 1933
Calappa torulosa Galil, 1997
Calappa tuberculata (Fabricius, 1793) (*Cancer*) {2}
= *Calappa matsuzawa* Galil, 1997
Calappa tuerkayana Pastore, 1995
Calappa undulata Dai & Yang, 1991
Calappa woodmasoni Alcock, 1896 {2}
= *Calappa depressa* Miers, 1886 (name pre-occupied) {3}
= *Calappa alata* Rathbun, 1911
Calappa yamasitae Sakai, 1980

Calappula Galil, 1997
= *Calappula* Galil, 1997 (type species *Calappa saussurei* Rathbun, 1898, by original designation; gender feminine)
Calappula saussurei (Rathbun, 1898) [*Calappa*]

Cryptosoma Brullé, 1837
= *Cryptosoma* Brullé, 1837 (type species *Cryptosoma cristatum* Brullé, 1837, by monotypy; gender neuter)
Cryptosoma bairdii (Stimpson, 1860) [*Cycloes*]
= *Cycloes bairdii* var. *atlantica* Verrill, 1908
Cryptosoma balguerii (Desbonne, in Desbonne & Schramm, 1867) [*Mursia*]
Cryptosoma cristatum Brullé, 1837
= *Cryptosoma dentatum* Brullé, 1839
= *Cyloes deweti* Chace, 1968
Cryptosoma garthi Galil & Clark, 1996

Cycloes De Haan, 1837
= *Cycloes* De Haan, 1837 (type species *Cycloes granulosa* De Haan, 1837, by monotypy; gender feminine)
Cycloes granulosa De Haan, 1837
Cycloes marisrubri Galil & Clark, 1996

Cyclozodion Williams & Child, 1990
= *Cyclozodion* Williams & Child, 1990 (type species *Calappa angusta* A. Milne-Edwards, 1880, by original designation; gender neuter)
Cyclozodion angustum (A. Milne-Edwards, 1880) [*Calappa*]
Cyclozodion tuberatum Williams & Child, 1990

Mursia Desmarest, 1823
= *Mursia* Desmarest, 1823 (type species *Mursia cristiata* H. Milne Edwards, 1837, by subsequent monotypy; gender feminine)
= *Thealia* Lucas, 1839 (type species *Thealia acanthophora* Lucas, 1839, by monotypy; gender feminine)
Mursia africana Galil, 1993
Mursia armata De Haan, 1837
= *Thealia acanthophora* Lucas, 1839
= *Mursia armata typica* Doflein, 1904
Mursia aspera Alcock, 1899
Mursia australiensis Campbell, 1971
Mursia baconaua Galil & Takeda, 2004
Mursia bicristimana Alcock & Anderson, 1895

Mursia buwaya Galil & Takeda, 2004
Mursia coseli Crosnier, 1997
Mursia cristiata H. Milne Edwards, 1837
= *Mursia cristimanus* De Haan, 1837
= *Cryptosoma orientis* Adams & White, 1849
Mursia curtispina Miers, 1886
Mursia danigoi Galil, 1993
Mursia diwata Galil & Takeda, 2004
Mursia flamma Galil, 1993
Mursia hawaiiensis Rathbun, 1894
Mursia longispina Crosnier, 1997
Mursia mameleu Galil & Takeda, 2004
Mursia mcdowelli Manning & Chace, 1990
Mursia microspina Davie & Short, 1989
Mursia musorstomia Galil, 1993
Mursia orientalia Galil & Takeda, 2005
Mursia poupini Galil, 2001
Mursia spinimanus Rathbun, 1906
Mursia trispinosa Parisi, 1914
Mursia xianshengi Lai & Galil, 2006
Mursia zarenkovi Galil & Spiridonov, 1998

Paracyclois Miers, 1886
= *Paracyclois* Miers, 1886 (type species *Paracyclois milneedwardsii* Miers, 1886, by monotypy; gender feminine) [Opinion 73]
Paracyclois atlantis Chace, 1939
Paracyclois milneedwardsii Miers, 1886 [Direction 36]

Platymera H. Milne Edwards, 1837
= *Platymera* H. Milne Edwards, 1837 (type species *Platymera gaudichaudii* H. Milne Edwards, 1837, by monotypy; gender feminine) [Opinion 73]
Platymera gaudichaudii H. Milne Edwards, 1837 [Direction 36]
= *Platymera californiensis* Rathbun, 1894

Incertae sedis

Calappa marmorata Weber, 1795 (nomen nudum)
Calappa spinifrons Weber, 1795 (nomen nudum)

Notes

{1} The confusing state of affairs associated with this name have been discussed by Holthuis (2001).

{2} Remarkably, the name *Cancer tuberculatus* Fabricius, 1793, has been ignored since it was published. Fabricius (1793: 454) described it from "Habitat in Oceano pacifico Mus. Dom. Banks". This locality is too vague to be reliable, but it is likely to be from somewhere in Australia, from which many of his specimens came. Fabricius (1798: 345) subsequently referred it to *Calappa*. In the ZMUC is a specimen labelled as the type (Cru 61, female, 70.1 × 52.5 mm) that agrees well with his description. It is here designated the lectotype of *Cancer tuberculatus* Fabricius, 1793. This specimen is identical to what Galil (1997: 304) recently described as *Calappa matsuzawa*, and we here synonymise the two names. While *C. matsuzawa* has thus far only been reported from Japan (type locality) and Philippines (Ng, 2002b), its possible presence in Australia can be expected if our interpretation of the type locality is correct.

{3} *Calappa depressa* Miers, 1886, is a widely distributed species from the Indo-West Pacific (Galil, 1997), but is not often reported. Unfortunately, *Calappa depressa* Miers, 1886, is a junior primary homonym of *Calappa depressa* Latreille, in Milbert, 1812, and is not available. *Calappa depressa* Latreille, in Milbert, 1812, is currently regarded as a junior synonym of *Aethra scruposa* (Linnaeus, 1764) (see detailed discussion under Notes for Aethridae). The next available name for the species now known as *C. depressa* Miers, 1886, is *C. woodmasoni* Alcock, 1896.


Fig. 26. *Calappa ocularia*, central Philippines (photo: P. Ng)

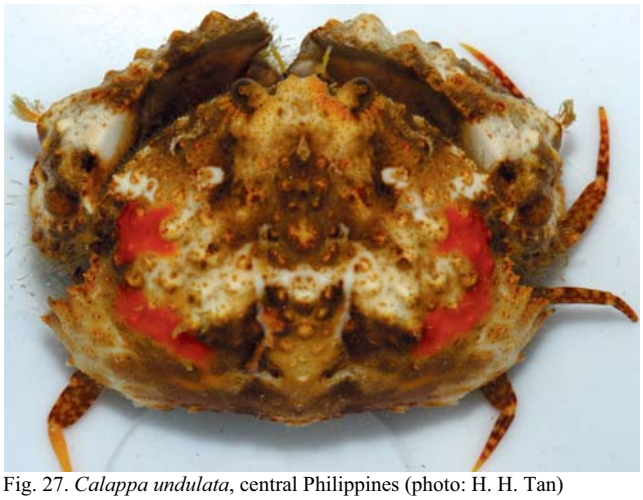
Fig. 27. *Calappa undulata*, central Philippines (photo: H. H. Tan)


Fig. 28. *Cycloes marisrubri*, central Philippines (photo: T. Y. Chan)

FAMILY MATUTIDAE DE HAAN, 1835

Matutoidea De Haan, 1835

Remarks. – The affinities of the Matutidae with the Calappidae are not clear and they are probably not closely related. Števčić (1983) questioned the classical composition of the Calappidae as being one family with two subfamilies, Calappinae and Matutinae, and since then, an increasing number of workers have chosen to recognise the two taxa as distinct families (e.g. Bellwood, 1996; Ng, 1998; Ng et al., 2001; Davie, 2002). Bellwood (1996) reappraised the affinities of the Matutidae and suggests it is not close to the Calappidae. Certainly, the form of their ambulatory legs and chelipeds are very different. Until more work is done, we take the somewhat more conservative approach and keep the Matutidae and Calappidae in one superfamily, Calappoidea.

Ashtoret Galil & Clark, 1994
= *Ashtoret* Galil & Clark, 1994 (type species *Matuta picta* Hess, 1865, by original designation; gender feminine)
Ashtoret granulosa (Miers, 1877) [*Matuta*]
Ashtoret lunaris (Forskål, 1775) [*Cancer*]
= *Matuta banksii* Leach, 1817
Ashtoret maculata (Miers, 1877) [*Matuta*]
Ashtoret miersii (Henderson, 1887) [*Matuta*]
Ashtoret obtusifrons (Miers, 1877) [*Matuta*]
Ashtoret picta (Hess, 1865) [*Matuta*]
= ?*Matuta doryophora* Latreille, 1825
= *Matuta distinguenda* Hoffmann, 1877
Ashtoret sangiannulata Galil & Clark, 1994
Ashtoret shengmuae Galil & Clark, 1994

Izanami Galil & Clark, 1994
= *Izanami* Galil & Clark, 1994 (type species *Matuta inermis* Miers, 1884, by original designation; gender feminine)
Izanami curtispina (Sakai, 1961) [*Matuta*]
Izanami inermis (Miers, 1884) [*Matuta*]

Matuta Weber, 1795
= *Matuta* Weber, 1795 (type species *Cancer victor* Fabricius, 1787, subsequent designation by Latreille 1810: 422; gender feminine)
= *Matutinus* MacLeay, 1838 (type species *Cancer victor* Fabricius, 1787, by monotypy; gender masculine)
= *Matata* (incorrect spelling by Desmarest, 1858)
Matuta circulifera Miers, 1880
Matuta planipes Fabricius, 1798
= *Cancer americanus* Seba, 1758 [pre-Linnaean, unavailable]
= *Cancer lunaris* Herbst, 1783 (pre-occupied name)
= *Cancer planipes* Weber, 1795 (nomen nudum)
= *Matuta appendiculata* Bosc, 1830
= *Matuta lineifera* Miers, 1877
= *Matuta rubrolineata* Miers, 1877
= *Matuta laevidactyla* Miers, 1880
= *Matuta flagra* Shen, 1936
Matuta purnama Lai & Galil, 2007
Matuta victor (Fabricius, 1781) [*Cancer*]
= *Matuta peronii* Leach, 1817
= *Matuta lesueurii* Leach, 1817
= *Matuta victrix crebripunctata* Miers, 1877

Mebeli Galil & Clark, 1994
= *Mebeli* Galil & Clark, 1994 (type species *Matuta michaelseni* Balss, 1921, by original designation; gender feminine)
Mebeli michaelseni (Balss, 1921) [*Matuta*]

Fig. 29. *Matuta planipes*, Qingdao, China (photo: P. Ng)

Fig. 30. *Matuta purnama*, Sumatra, Indonesia; freshly preserved colours (photo: J. Lai)

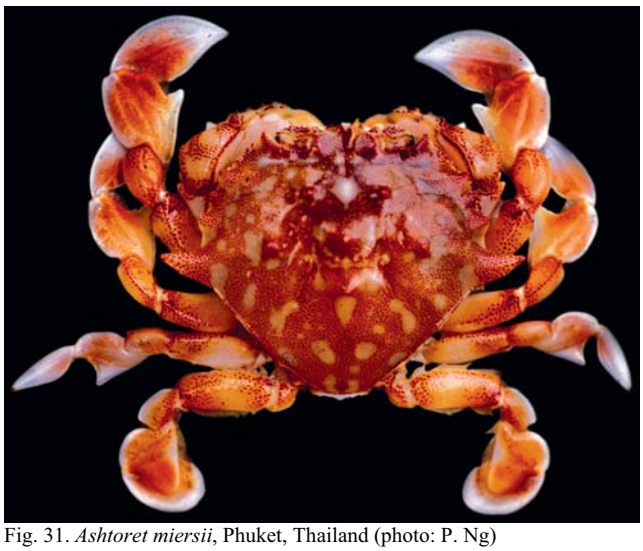

Fig. 31. *Ashtoret miersii*, Phuket, Thailand (photo: P. Ng)

SUPERFAMILY CANCROIDEA LATREILLE, 1802

Remarks. – The composition of the superfamily Cancroidea has varied with different authors. The Portunoidea are sometimes included, and while there does appears to be a link, we prefer to keep them apart until more compelling evidence surfaces. Recently, the Atelecyclidae sensu stricto has also been assigned to the Cancroidea (Guinot et al., 2008), however the composition of this family is also currently bring re-evaluated and it is to be restricted to the type-genus *Atelecyclus* Leach, 1814. All other atelecyclid genera are not in the Cancroidea, and are being referred elsewhere. *Peltarion* Hombron & Jacquinot, 1846, *Podocatactes* Ortmann, 1893, *Pteropeltarion* Dell, 1972, and *Trichopeltarion* A. Milne-Edwards, 1880 (= *Krunopeltarion* Števčić, 1993), will be placed into a separate new family (see Cleva & Tavares, in prep.; Guinot et al., 2008). The status of the unusual genus *Pseudocorystes* H. Milne Edwards, 1837, is also uncertain. Because all the relevant research data sets are not yet published, we keep all these genera in the Atelecyclidae and the Cancroidea (both sensu lato) for convenience and ease of reference.

Podocatactes has been long placed in the Corystidae, but other than its elongate carapace and somewhat setose antennae, it has nothing in common with typical corystids. Specifically: all male abdominal segments are free; the G1 is stout; the G2 is longer than the G1; the antennae are much shorter than a typical corystid (distinctly less than half carapace length), and the setae are less dense and shorter; and finally, male *Podocatactes* have pronounced heterochely and an asymmetrical sternum. It is thus necessary to transfer *Podocatactes* to the group including *Peltarion*, *Pteropeltarion* and *Trichopeltarion* (currently in the Atelecyclidae, but as mentioned above, to be in a new family) (see also Ng et al., 2001). As mentioned for *Podocatactes*, some of these genera (e.g. *Trichopeltarion* and *Peltarion*) have a markedly asymmetrical thoracic sternum, being wider at the base of the very enlarged cheliped (see Guinot & Bouchard, 1998: Fig. 13D). Presumably this cheliped requires an enlarged block of muscle to support and move it, causing the asymmetry. We have observed this phenomenon only in crabs with a narrow sternum. Crabs with a broad sternum must have sufficient space inside the sternites for the enlarged muscles — certainly sternal asymmetry is not known in gecarcinids or *Uca*.

FAMILY ATELECYCLIDAE ORTMANN, 1893

Chlorodinae Dana, 1851 (suppressed by ICZN, pending) {1}
Atelecyclidae Ortmann, 1893

Atelecyclus Leach, 1814
= *Atelecyclus* Leach, 1814 (type species *Cancer* (*Hippa*) *septemdentatus* Montagu, 1813, by monotypy; gender masculine) [Opinion 712] {1}
= *Clorodius* Desmarest, 1823 (type species *Cancer undecimdentatus* Herbst, 1783, subsequent designation by ICZN, pending; gender masculine) {1}
= *Chlorodius* H. Milne Edwards, 1834 (incorrect spelling of *Clorodius* Desmarest, 1823; gender masculine) {1}
= *Chlorodius* Agassiz, 1846 (unnecessary emendation of *Clorodius* Desmarest, 1823; gender masculine) {1}
= *Fucicola* Gistel, 1848 (unnecessary replacement name for *Clorodius* Desmarest, 1823; gender feminine)
Atelecyclus rotundatus (Olivi, 1792) [*Cancer*] [Opinion 712]
= *Cancer* (*Hippa*) *septemdentatus* Montagu, 1813
= *Atelecyclus heterodon* Leach, 1815
Atelecyclus undecimdentatus (Herbst, 1783) [*Cancer*]
= *Atelecyclus cruentatus* Desmarest, 1825
= *Atelecyclus homoiodon* Risso, 1827

Peltarion Hombron & Jacquinot, 1846
= *Peltarion* Hombron & Jacquinot, 1846 (type species *Peltarion magellanicus* Hombron & Jacquinot, 1846, by monotypy; gender neuter)
= *Hypopeltarium* Miers, 1886 (type species *Atelecyclus spinulosus* White, 1843, by monotypy; gender neuter)
Peltarion dextrum (Rathbun, 1898) [*Hypopeltarium*]
Peltarion spinulosum (White, 1843) [*Atelecyclus*]
= ?*Atelecyclus chilensis* Nicolet, in Gay, 1849
= *Peltarion magellanicus* Hombron & Jacquinot, 1846

Podocatactes Ortmann, 1893
= *Podocatactes* Ortmann, 1893 (type species *Podocatactes hamifer* Ortmann, 1893, by original designation; gender masculine)
Podocatactes hamifer Ortmann, 1893

Pteropeltarion Dell, 1972
= *Pteropeltarion* Dell, 1972 (type species *Pteropeltarion novaezelandiae* Dell, 1972, by original designation; gender neuter)
Pteropeltarion novaezelandiae Dell, 1972

Pseudocorystes H. Milne Edwards, 1837
= *Pseudocorystes* H. Milne Edwards, 1837 (type species *Pseudocorystes armatus* H. Milne Edwards, 1837, by monotypy; gender masculine)
Pseudocorystes sicarius (Poeppig, 1836) [*Corystes*]
= *Pseudocorystes armatus* H. Milne Edwards, 1837

Trichopeltarion A. Milne-Edwards, 1880
= *Trichopeltarion* A. Milne-Edwards, 1880 (type species *Trichopeltarion nobile* A. Milne-Edwards, 1880, by monotypy; gender neuter) [Opinion 73]
= *Trachycarcinus* Faxon, 1893 (type species *Trachycarcinus corallinus* Faxon, 1893, by monotypy; gender masculine) {2}
= *Krunopeltarion* Števčić, 1993 (type species *Krunopeltarion timorense* Števčić, 1993, by original designation; gender neuter) {3}
Trichopeltarion alcocki Doflein, in Chun, 1903
Trichopeltarion balssi (Rathbun, 1932) [*Trachycarcinus*]
Trichopeltarion corallinum (Faxon, 1893) [*Trachycarcinus*]
Trichopeltarion crosnieri (Guinot, 1986) [*Trachycarcinus*]
"*Trichopeltarion*" *delli* (Guinot, 1989) [*Trachycarcinus*] {2}
Trichopeltarion elegans (Guinot & Sakai, 1970) [*Trachycarcinus*]
Trichopeltarion fantasticum Richardson & Dell, 1964
"*Trichopeltarion*" *foresti* (Guinot, 1989) [*Trachycarcinus*] {2}
Trichopeltarion glaucus (Alcock & Anderson, 1899) [*Trachycarcinus*]

"*Trichopeltarion*" *hystricosum* (Garth, in Garth & Haig, 1971) [*Trachycarcinus*] {2}
Trichopeltarion intesi (Crosnier, 1981) [*Trachycarcinus*]
Trichopeltarion moosai (Guinot, 1989) [*Trachycarcinus*]
Trichopeltarion nobile A. Milne-Edwards, 1880 [Direction 36]
= *Trichopeltarion spinulifer* (Rathbun, 1898) [*Trachycarcinus*]
Trichopeltarion ovale Anderson, 1896
= ?*Trachycarcinus huziokai* Imaizumi, 1951
Trichopeltarion pezzutoi Tavares & Melo, 2005
Trichopeltarion sagamiense (Rathbun, 1932) [*Trachycarcinus*]
Trichopeltarion timorense (Števčić, 1993) [*Krunopeltarion*] {3}
Trichopeltarion wardi Dell, 1968

Notes

{1} The nomenclatural complexities associated with the suprageneric names Chlorodinae Dana, 1851, and Atelecyclidae Ortmann, 1893, as well as the generic names *Atelecyclus* Leach, 1814, *Clorodius* Desmarest, 1823, *Chlorodius* H. Milne Edwards, 1834, and *Chlorodius* Agassiz, 1846, have been discussed in depth by Ng & Holthuis (2007). The genus *Chlorodius* H. Milne Edwards, 1834, and subfamily Chlorodinae Dana, 1851, have long been associated with the Xanthidae sensu stricto, but the original descriptions make the matter complex.

{2} Salva & Feldmann (2001), in a re-apprasial of the Atelecyclidae using extant and fossil taxa, synonymised *Trichopeltarion* and *Trachycarcinus* Faxon, 1893. While we agree in principle, we are not yet convinced that *Trichopeltarion* is monophyletic. Salva & Feldmann (2001) specifically excluded three species from *Trichopeltarion*, viz. *Trachycarcinus delli* Guinot, 1989, *T. foresti* Guinot, 1989, and *T. hystricosus* Garth, in Garth & Haig, 1971, with the suggestion that they may need to be referred to another, perhaps new genus. We tentatively continue to include them in *Trichopeltarion*. A revision of the Atelecyclidae is ongoing by Régis Cleva and Marcos Tavares. Salva & Feldmann's (2001) revision missed several recent papers, most notable being the formal removal of *Kraussia* out of this family and into a separate subfamily in the Xanthidae (Ng, 1993; see also Clark & Ng, 1997). The diagnosis of the Atelecyclidae (restricted to *Atelecyclus*, type and sole genus) must be emended, and the family transferred to the Cancroidea (Guinot et al., 2008).

{3} Števčić (1993) established a new genus, *Krunopeltarion*, for a new species, *Krunopeltarion timorense* Števčić, 1993, from the Timor Sea. Recent work suggests that the genus is a junior subjective synonym of *Trichopeltarion* A. Milne-Edwards, 1880 (D. Guinot, unpublished data; see also Cleva & Tavares, in prep.).

Fig. 32. *Trichopeltarion* aff. *balssi*, central Philippines (photo: P. Ng)

Fig. 33. *Trichopeltarion elegans*, Taiwan (photo: T. Y. Chan)

Fig. 34. *Podocatactes hamifer*, central Philippines (photo: T. Y. Chan)

FAMILY CANCRIDAE LATREILLE, 1802

Cancerides Latreille, 1802
Trichoceridae Dana, 1852

Anatolikos Schweitzer & Feldmann, 2000
= *Anatolikos* Schweitzer & Feldmann, 2000 (type species *Cancer japonicus* Ortmann, 1893, by original designation; gender masculine)
Anatolikos japonicus (Ortmann, 1893) [*Cancer*]
= ?*Cancer sanbonugii* Imaizumi, 1962
= ?*Cancer odosensis* Imaizumi, 1962
= ?*Cancer imamurae* Imaizumi, 1962
Anatolikos tumifrons (Yokoya, 1933) [*Cancer*]

Cancer Linnaeus, 1758
= *Cancer* Linnaeus, 1758 (type species *Cancer pagurus* Linnaeus, 1758, subsequent designation by Latreille, 1810; gender masculine) [Opinion 104]
= *Platycarcinus* H. Milne Edwards, 1834 (type species *Cancer pagurus* Linnaeus, 1758, subsequent designation by Rathbun, 1930; gender masculine)
Cancer bellianus Johnson, 1861
Cancer borealis Stimpson, 1859
Cancer irroratus Say, 1817
Cancer johngarthi Carvacho, 1989
Cancer pagurus Linnaeus, 1758 [Direction 36]
= *Cancer luederwaldti* Rathbun, 1930
Cancer plebejus Poeppig, 1836
= ?*Cancer coronatus* Molina, 1782
= *Cancer irroratus* Bell, 1835 (pre-occupied name)
Cancer porteri Rathbun, 1930
= *Cancer longipes* Bell, 1835 (pre-occupied name)
Cancer productus Randall, 1840
= *Cancer perlatus* Stimpson, 1856
= *Cancer breweri* Gabb, 1869

Glebocarcinus Nations, 1975
= *Glebocarcinus* Nations, 1975 (type species *Trichocera oregonensis* Dana, 1852, by original designation; gender masculine)
Glebocarcinus amphioetus (Rathbun, 1898) [*Cancer*]
= *Trichocarcinus dentatus* Miers, 1879 (pre-occupied name)
= *Cancer pygmaeus* Ortmann, 1893 (pre-occupied name)
= *Cancer bullatus* Balss, 1922
Glebocarcinus oregonensis (Dana, 1852) [*Trichocera*]
= *Platycarcinus recurvidens* Bate, 1864
= *Trichocarcinus walkeri* Holmes, 1900
= *Lophopanopeus somaterianus* Rathbun, 1930

Metacarcinus A. Milne-Edwards, 1862
= *Metacarcinus* A. Milne-Edwards, 1862 (type species *Cancer magister* Dana, 1852, by original designation; gender masculine)
Metacarcinus anthonyi (Rathbun, 1897) [*Cancer*]
Metacarcinus edwardsii (Bell, 1835) [*Cancer*]
= *Cancer edwardsii* var. *annulipes* Miers, 1881
Metacarcinus gracilis (Dana, 1852) [*Cancer*]
Metacarcinus magister (Dana, 1852) [*Cancer*]
Metacarcinus novaezelandiae (Hombron & Jacquinot, 1846) [*Platycarcinus*]

Platepistoma Rathbun, 1906
= *Platepistoma* Rathbun, 1906 (type species *Platepistoma macrophthalmus* Rathbun, 1906, by monotypy; gender neuter)
Platepistoma anaglyptum (Balss, 1922) [*Cancer*]
= *Cancer sakaii* Takeda & Miyake, 1972 (unnecessary replacement name for *Cancer anaglyptus* Balss, 1922)
= *Cancer margaritarius* Crosnier, 1976
Platepistoma balssii (Zarenkov, 1990) [*Cancer*]
Platepistoma guezei (Crosnier, 1976) [*Cancer*]
Platepistoma kiribatiense Davie, 1991
Platepistoma macrophthalmus Rathbun, 1906
Platepistoma nanum Davie, 1991
Platepistoma seychellense Davie, 1991

Romaleon Gistel, 1848
= *Corystes* (*Trichocera*) De Haan, 1833 (type species *Corystes* (*Trichocera*) *gibbosula* De Haan, 1833, by monotypy; name pre-occupied by *Trichocera* Meigen, 1803 [Diptera]; gender feminine)
= *Romaleon* Gistel, 1848 (replacement name for *Corystes* (*Trichocera*) De Haan, 1833; gender neuter)
= *Trichocarcinus* Miers, 1879 (replacement name for *Cancer* (*Trichocera*) De Haan, 1833; gender masculine)
Romaleon antennarium (Stimpson, 1856) [*Cancer*]
Romaleon branneri (Rathbun, 1926) [*Cancer*]
Romaleon gibbosulum (De Haan, 1833) [*Corystes* (*Trichocera*)]
= *Trichocarcinus affinis* Miers, 1879
Romaleon jordani (Rathbun, 1900) [*Cancer*]
Romaleon luzonense (Sakai, 1983) [*Cancer*] {1}
Romaleon nadaense (Sakai, 1969) [*Cancer*]
Romaleon polyodon (Poeppig, 1836) [*Cancer*]
= ?*Cancer setosus* Molina, 1782
= *Cancer dentatus* Bell, 1835

Incertae sedis

Trichocera porcellana Adams & White, 1849

Notes

{1} *Cancer luzonensis* Sakai, 1983, was described from the Philippines, but was not included in Schweitzer & Feldmann (2000b). On the basis of the description and figure, it is close to *C. nadaensis* Sakai, 1969, which was referred to *Romaleon*. On this basis we also place it there.

FAMILY PIRIMELIDAE ALCOCK, 1899

Pirimelinae Alcock, 1899

Pirimela Leach, 1816
= *Pirimela* Leach, 1816 (type species *Cancer denticulatus* Montagu, 1808, by monotypy; gender feminine) [Opinion 73]
= *Perimela* Agassiz, 1846 (unnecessary emendation; gender feminine)
Pirimela denticulata (Montagu, 1808) [*Cancer*] [Direction 36]
= *Pirimela princeps* Hope, 1851

Sirpus Gordon, 1953
= *Sirpus* Gordon, 1953 (type species *Sirpus zariquieyi* Gordon, 1953, by original designation; gender masculine)
Sirpus gordonae Manning & Holthuis, 1981
Sirpus monodi Gordon, 1953
Sirpus ponticus Verestchaka, 1989
Sirpus zariquieyi Gordon, 1953

SUPERFAMILY CARPILIOIDEA ORTMANN, 1893

Remarks. – The Carpiliidae has a suite of unusual adult and larval characters (see Guinot, 1968c; Clark et al., 2005) that suggest that its traditional inclusion in the Xanthoidea is unwarranted. Karasawa & Schweitzer (2006) were the first to recognise this as a superfamily. Števčić (2005) recognised it as a family in the Eriphioidea.

FAMILY CARPILIIDAE ORTMANN, 1893

Carpilidés A. Milne-Edwards, 1862 (not in Latin, unavailable name)
Carpiliinae Ortmann, 1893

Remarks. – Three genera have been at one time or another referred (some tentatively) to the Carpiliidae, but our studies indicate that only *Carpilius* belongs there (see also Guinot, 1968c). The male abdomen of *Carpilius* has been variously stated as segments 3–5 or 4–6 fused, but only segments 3 and 4 can be truly regarded as fused. Between these two segments, the suture is very shallow or indiscernible. Segment 5 retains some motion from segments 3/4, and though the movement is much less than that of the other free segments, it cannot be regarded as fused. The larvae of true carpiliids are very distinctive (see Laughlin et al., 1983; Clark et al., 2005). The two other genera sometimes placed in the Carpiliidae are *Liagore*, here referred to the Xanthinae, Xanthidae (see Ng & Chen, 2004a); and *Euryozius*, here transferred to the Pseudoziidae (see Ng & Liao, 2002) (see discussion for these families).

Carpilius Desmarest, 1823
  = *Carpilius* Desmarest, 1823 (type species *Cancer maculatus* Linnaeus, 1758, by monotypy; gender masculine) [Opinion 73] {1}
Carpilius convexus (Forskål, 1775) [*Cancer*]
  = *Cancer adspersus* Herbst, 1790 {2}
  = *Cancer petraeus* Herbst, 1801 {1}
Carpilius corallinus (Herbst, 1783) [*Cancer*]
  = *Cancer marmarinus* Herbst, 1804 {1}
Carpilius maculatus (Linnaeus, 1758) [*Cancer*] [Directiobn 36]

Notes

{1} Desmarest (1823: 227) listed *Cancer corallinus* (which he incorrectly attributed to Fabricius) in his compilation, and in a footnote for the species on the next page (p. 228), he noted that Leach had proposed to him that he would establish a new genus, *Carpilius*, for *Cancer maculatus* (also incorrectly attributed to Fabricius), and that it would be diagnosed by various carapace features. The diagnosis, while very short, is nevertheless sufficient, and makes the name available from Desmarest (1823), and the authorship of the genus should be credited to him even though the concept may have been Leach's (see Introduction). The type species is not so obvious. From Desmarest's (1823) account, it is clear that he recognises two species in *Carpilius*, *Cancer corallinus* and *Cancer maculatus*. However, he did not indicate either as type species. Rathbun (1930: 239) stated that the type was *Cancer maculatus* Linnaeus, 1758, and most people follow this. The ICZN made a ruling on this in Opinion 73, regarding *Cancer maculatus* as the type species by monotypy, and effectively ratified Rathbun's (1930) selection. However, E. Desmarest (1858: 17) [not to be confused with A. G. Desmarest, see Introduction] had much earlier stated that the type species is *Cancer corallinus*, and although this has clear priority over Rathbun's (1930) action, Opinion 73 has precedence over this, and *Cancer maculatus* remains as the type species of *Carpilius*. Clark et al. (2005), however, have suggested that the three species now placed in *Carpilius* may not be congeneric. This matter is now under review by P. K. L. Ng, D. Guinot and P. F. Clark.

{2} *Cancer adspersus* Herbst, 1790, *Cancer petraea* Herbst, 1801, and *Cancer marmarinus* Herbst, 1804, have not been used since their description, and the latter two were not treated by Sakai (1999). On the basis of the descriptions and figures, we consider *C. adspersus* (see Herbst, 1790: 264, pl. 21 fig. 119) and *C. petraeus* (see Herbst, 1801: 18, pl. 51 fig. 4) to be identical with *Carpilius convexus*, the different colour patterns being explained by the variable nature of this character. Similarly, *Cancer marmarinus* (see Herbst, 1804: 7, pl. 60 fig. 1) matches *C. corallinus*.

Fig. 35. *Carpilus convexus*, Philippines (photo: T. Y. Chan)

Fig. 36. *Carpilus convexus*, Philippines (photo: T. Y. Chan)

SUPERFAMILY CHEIRAGONOIDEA ORTMANN, 1893

FAMILY CHEIRAGONIDAE ORTMANN, 1893

Cheiragonidae Ortmann, 1893
Telmessidae Guinot, 1977

Erimacrus Benedict, 1892
= *Platycorystes* (*Podacanthus*) Brandt, 1848 (type species *Platycorystes* (*Podacanthus*) *isenbeckii* Brandt, 1848, by monotypy; name pre-occupied by *Podacanthus* Gray, 1833 [Orthoptera]; gender masculine) [Opinion 73]
= *Erimacrus* Benedict, 1892 (replacement name *Podacanthus* Brandt, 1848; gender masculine) [Opinion 73]

Fig. 37. *Erimacrus isenbeckii*, northern Japan, in tanks for sale in Tsukiji market in Tokyo (photo: P. Ng)

Erimacrus isenbeckii (Brandt, 1848) [*Platycorystes* (*Podacanthus*)] [Direction 36]

Telmessus White, 1846
= *Telmessus* White, 1846 (type species *Telmessus serratus* White, 1846, by monotypy; gender masculine) [Opinion 73]
= *Platycorystes* Brandt, 1848 (type species *Platycorystes ambiguus* Brandt, 1848, by monotypy; gender masculine)
= *Cheiragonus* Brandt, 1851 (type species *Cheiragonus hippocarcinoides* Brandt, 1851, by monotypy; gender masculine)
Telmessus acutidens (Stimpson, 1848) [*Cheiragonus*]
Telmessus cheiragonus (Tilesius, 1812) [*Cancer*] [Direction 36]
= *Telmessus serratus* White, 1846
= *Platycorystes ambiguus* Brandt, 1848
= *Cheiragonus hippocarcinoides* Brandt, 1851

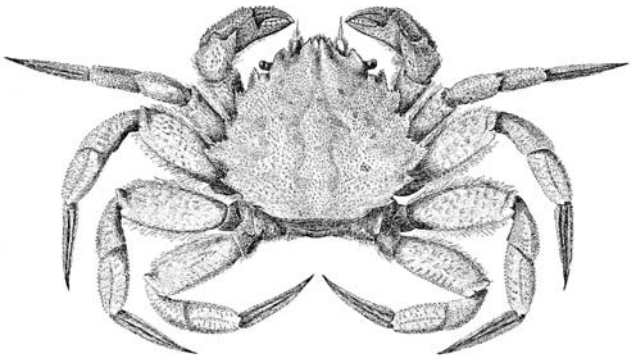

Fig. 38. *Telmessus cheiragonus* (after Rathbun, 1930)

SUPERFAMILY CORYSTOIDEA SAMOUELLE, 1819

FAMILY CORYSTIDAE SAMOUELLE, 1819

Corystidae Samouelle, 1819
Euryalidae Rathbun, 1930 (suppressed by ICZN) [Opinion 689]

Corystes Bosc, 1802
= *Euryala* Weber, 1795 (type species *Hippa dentata* Fabricius, 1793, by monotypy; gender masculine; priority suppressed by ICZN) [Opinion 689]
= *Corystes* Bosc, 1802 (type species *Hippa dentata* Fabricius, 1793, by monotypy; gender masculine) [Opinion 689]
Corystes cassivelaunus (Pennant, 1777) [*Cancer*]
= *Cancer personatus* Herbst, 1785
= *Hippa dentata* Fabricius, 1793 [Opinion 689]

Gomeza Gray, 1831
= *Gomeza* Gray, 1831 (type species *Gomeza bicornis* Gray, 1831, by monotypy; gender feminine) [Opinion 85, Direction 37]
= *Corystes* (*Oeidea*) De Haan, 1835 (type species *Corystes* (*Oeidea*) *vigintispinosa* De Haan, 1835, by monotypy; gender feminine)
Gomeza bicornis Gray, 1831 [Direction 36]
= *Corystes* (*Oeidea*) *vigintispinosa* De Haan, 1835
Gomeza serrata Dana, 1852

Jonas Hombron & Jacquinot, 1846
= *Jonas* Hombron & Jacquinot, 1846 (type species *Jonas macrophthalmus* Hombron & Jacquinot, 1846, by monotypy; gender masculine)
Jonas choprai Serène, 1971
Jonas formosae (Balss, 1922) [*Gomeza*]
Jonas distinctus (De Haan, 1835) [*Corystes*]
Jonas indicus (Chopra, 1935) [*Gomeza*]
Jonas leuteanus Ward, 1933
Jonas macrophthalmus Hombron & Jacquinot, 1846


Fig. 40. *Jonas choprai*, central Philippines (photo: P. Ng)


Fig. 39. *Corystes cassivelaunus*, Mediterranean (photo: A. De Angeli)


Fig. 41. *Jonas* cf. *distinctus*, central Philippines (photo: T. Y. Chan)

SUPERFAMILY DAIROIDEA SERÈNE, 1965

Remarks. – The systematic status of *Daira* and *Dairoides* has long been a challenge. Believed to be related, they have often been classified together. Guinot (1967b) discussed the possible affinities of the two genera but left the matter unresolved. *Daira*, while superficially looking like many xanthids, has many unusual features, and in particular, a unique cuticular ornamentation Guinot (1967b, 1977a). *Dairoides* has similarities with *Daira*, although externally, it more closely resembles a parthenopid. For this reason, most modern texts keep *Daira* in the Xanthidae (see Sakai, 1976; Dai & Yang, 1991) and *Dairoides* in the Parthenopidae (see Sakai, 1976; Ng & S. H. Tan, 1996; Ng et al., 2001). Serène (1965a: 37) established Dairoida in Xanthidae for *Daira*, *Dairoides* and *Dacryopilumnus*, without comment or diagnosis, and while this grouping is interesting, most have focussed on just *Daira* and *Dairoides*. This was partly because Serène (1984) later established a new subfamily in the Eriphiidae (as Menippidae) for *Dacryopilumnus*, which was widely accepted as a member of the Xanthoidea. Ng & Rodríguez (1986) defined Dairidae for *Daira* and *Dairoides* when they reviewed the state of parthenopid systematics, and were the first to use it as a family. Števčić (2005) also focussing on *Daira* and *Dairoides*, established a new family, Dairoididae, for the latter, and placed both in the superfamily Dairoidea.

With S. H. Tan, we had a detailed look at the representative genera of the Eriphiidae, Menippidae and Oziidae (eriphioids as defined within this work, the Eriphiidae of Ng, 1998), and selected members of the Parthenopidae, as well as *Daira*, *Dairoides* and *Dacryopilumnus*. Members of all these taxa have a very stout G1 and a long G2 which is as long as, or much longer than the first, so this character is not informative.

Against expectations, we found that *Daira* and *Dacryopilumnus* are allies, as Serène (1965a) first suspected. In both genera the chelae are similar in form or only slightly heterochelous, neither chela having any cutting teeth, the fingers of both chelae are short, closing completely without any gape, and the distal part is partially scalloped with the margins denticulate; the press-button on the sterno-abdominal cavity that retains the abdomen, consists of a low peg-like tubercle positioned on the anterior edge of sternite 5; and the male abdomen is narrow. While the press-buttom structure and male abdomens of parthenopids, *Daira* and *Dacryopilumnus* are similar, and suggest a relationship between them, they differ markedly in carapace and other features. In particular their chelipeds are very different. The evidence therefore indicates the parthenopids should be in their own superfamily (Parthenopoidea), separate from *Daira* and *Dacryopilumnus*, which we here transfer to the Dairoidea as redefined here. As *Daira* and *Dacryopilumnus* have several other marked differences in the form of the carapace, endostome and legs, it seems reasonable to keep them in separate families for the time being, i.e. the Dairidae and Dacryopilumnidae.

Dairoides is most closely allied to the eriphioids. All eriphioids and *Dairoides* share the same suite of key characters: chelae are markedly heterochelous, but both relatively short, the larger chela with a crushing or peeling tooth at the base of the dactylus, and the smaller chela with slender forceps-like fingers of varying lengths; the press-button on the sterno-abdominal cavity that retains the abdomen, consists of a rounded tubercle positioned on the posterior edge of sternite 5; and the male abdomen is usually relatively broad. In most parthenopids, the chelae are usually very long, usually heterochelous, with the larger chela possessing a prominent crushing (never peeling) tooth at the base of the dactylus, and the smaller chela with short, stout fingers; the press-button tubercle on the sterno-abdominal cavity consists of a low peg-like tubercle on the anterior edge of sternite 5; and the male abdomen is slender. While the chelae of parthenopids and eriphioids (and *Dairoides*) are all heterochelous, they look very different in form, with those of eriphioids especially distinctive. The large chela of some eriphiiods is specially adapted for peeling gastropods (like in calappids, see Ng & L. W. H. Tan, 1984a, 1985), with the smaller chela acting like a pair of forceps to extract the flesh of the broken mollusc. They can do this to varying degrees, with some species of *Ozius* even changing from peeling to crushing as they grow in size (P. K. L. Ng, unpublished data), and all clearly use their chelae differently – one for crushing or peeling the molluscs, and the other to pull out the meat within. It seems this feeding method is common to all eriphioids and *Dairoides*. The peculiar carapace and other features of *Dairoides* are clearly highly apomorphic, but the fact that it has the same kind of chelipeds, broad abdomen and press-button, makes for a convincing case that it is close to eriphioids and should be placed there. However, as suggested by Števčić (2005), it should be placed in its own family, the Dairoididae.

The relationships within and between the superfamilies Eriphioidea, Dairoidea and Parthenopoidea are complex, and we hope ongoing research, in particular using larval and molecular tools, will help shed more light on this problem.

FAMILY DACRYOPILUMNIDAE SERÈNE, 1984

Dacryopilumninae Serène, 1984

Dacryopilumnus Nobili, 1906
- = *Dacryopilumnus* Nobili, 1906 (type species *Dacryopilumnus eremita* Nobili, 1906, by monotypy; gender masculine) [Opinion 73]
- = *Nullicrinis* Edmondson, 1935 (type species *Nullicrinitus amplifrons* Edmondson, 1935, by monotypy; gender masculine)

Dacryopilumnus eremita Nobili, 1906 [Direction 36]
- = *Dacryopilumnus yamanarii* Sakai, 1936

Dacryopilumnus rathbunae Balss, 1932
- = *Nullicrinis amplifrons* Edmondson, 1935

FAMILY DAIRIDAE SERÈNE, 1965

Dairoida Serène, 1965 {1}
Dairidae Ng & Rodríguez, 1986

Daira De Haan, 1833
= *Cancer* (*Daira*) De Haan, 1833 (type species *Cancer perlatus* Herbst, 1790, subsequent designation by ICZN plenary powers; gender feminine) [Opinion 73, Direction 78]
= *Lagostoma* H. Milne Edwards, 1834 (type species *Cancer perlata*, 1790, by monotypy; gender feminine)
Daira perlata (Herbst, 1790) [*Cancer*] [Direction 78]
= *Cancer variolosus* Fabricius, 1798 {2}
Daira americana Stimpson, 1860

Notes

{1} Serène (1965a: 37) briefly suggested establishing a new tribe, Dairoida, as an alliance of the Menippinae in Xanthidae for three genera, *Daira*, *Dairoides* and *Dacryopilumnus*. As no diagnosis or description was provided, subsequent authors (e.g. Ng, 1998) have considered the name to be a nomen nudum. However Article 11.7.1 of the Code allows the name to be regarded as available as long as there is a mention or indication of the type genus. Thus Dairoida Serène, 1965, is an available name. Števčić (2005) was therefore correct in giving authorship of the family to Serène (1965a).

{2} On the basis of the description by Fabricius (1798), this species is almost certainly *Daira perlata* (Herbst, 1790). P. K. L. Ng could not find any type specimens of *C. variolosus* Fabricius, 1798, in the Copenhagen Museum (see also Zimsen, 1964) and they are here regarded as lost. To keep the synonymy, we hereby designate the lectotype of *Cancer perlata* Herbst, 1790 (in the Berlin Museum, K. Sakai, 1999), as the neotype of *C. variolosus* Fabricius, 1798. This will make both names objective synonyms. This species is not to be confused with *Cancer variolosus* Fabricius, 1793, which is a species of *Symethis* (Raninidae).

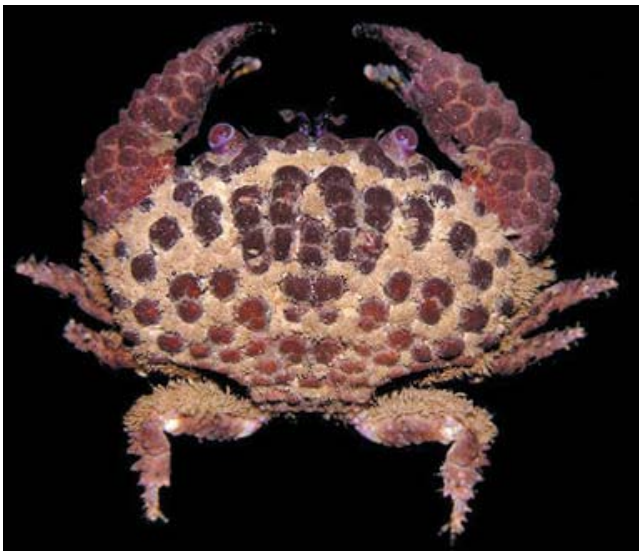

Fig. 42. *Daira americana*, Panama (photo: A. Anker)

Fig. 43. *Daira perlata*, Taiwan (photo: P.-H. Ho)

SUPERFAMILY DORIPPOIDEA MACLEAY, 1838

Remarks. – The recognition of the superfamily Dorippoidea with two families, Dorippidae sensu stricto and Ethusidae Guinot, 1977, seems justifiable. Members of the Dorippidae sensu stricto have the male gonopores showing a series of transformations from coxal to coxo-sternal condition while the Ethusidae only show a coxo-sternal condition (see Guinot et al., in prep.). The monophyly of the Dorippoidea, however, is not in question.

FAMILY DORIPPIDAE MACLEAY, 1838

Dorippiens H. Milne Edwards, 1837 (vernacular name) [Opinion 688]
Dorippina MacLeay, 1838 [Opinion 688]
Dorippidea De Haan, 1841 (incorrect spelling) [Opinion 688]

Dorippe Weber, 1795
= *Dorippe* Weber, 1795 (type species *Cancer quadridens* Fabricius, 1793, subsequent designation by Latreille, 1810; gender feminine) [Opinion 688] {1}
= *Notogastropus* Vosmaer, 1763 (potential type species *Cancer lanatus* Linnaeus, 1767, or *Cancer frascone* Herbst, 1785; gender masculine; name rejected by ICZN) [Opinion 688]
= *Notogastropus* Vosmaer, 1765 (potential type species *Cancer lanatus* Linnaeus, 1767, or *Cancer frascone* Herbst, 1785; gender masculine; name rejected by ICZN) [Opinion 688]
Dorippe frascone (Herbst, 1785) [*Cancer*] [Opinion 688]
= *Cancer nodulosus* Olivier, 1791
Dorippe glabra Manning, 1993
Dorippe irrorata Manning & Holthuis, 1986
Dorippe quadridens (Fabricius, 1793) [*Cancer*]
= *Dorippe rissoana* Desmarest, 1817
= *Dorippe nodosa* Desmarest, 1817
= *Dorippe atropos* Lamarck, 1818
Dorippe sinica Chen, 1980
Dorippe tenuipes Chen, 1980
= *Dorippe miersi* Serène, 1982
Dorippe trilobata Manning, 1993

Dorippoides Serène & Romimohtarto, 1969
= *Dorippoides* Serène & Romimohtarto, 1969 (type species *Cancer facchino* Herbst, 1785, by original designation and monotypy; gender feminine) [Opinion 1437]
Dorippoides facchino (Herbst, 1785) [*Cancer*] [Opinion 1437]
= *Dorippe astuta* Weber, 1795 (nomen nudum) {2}
= *Dorippe astuta* Fabricius, 1798
= *Dorippe sima* H. Milne Edwards, 1837
= *Dorippe facchino alcocki* Nobili, 1903
Dorippoides nudipes Manning & Holthuis, 1986

Heikeopsis, new genus {3}
= *Heikea* Holthuis & Manning, 1990 (type species *Dorippe japonica* von Siebold, 1824, by original designation; name pre-occupied by *Heikea* Isberg, 1934 [Mollusca]; gender feminine)
= *Heikeopsis*, new genus (replacement name for *Heikea* Holthuis & Manning, 1990; gender feminine)
Heikeopsis arachnoides (Manning & Holthuis, 1986) [*Nobilum*]
Heikeopsis japonica (von Siebold, 1824) [*Dorippe*]
= *Neodorippe* (*Neodorippe*) *japonicum* var. *taiwanensis* Serène & Romimohtarto, 1969

Medorippe Manning & Holthuis, 1981
= *Medorippe* Manning & Holthuis, 1981 (type species *Cancer lanatus* Linnaeus, 1767, by original designation; gender feminine)
Medorippe lanata (Linnaeus, 1767) [*Cancer*] [Opinion 688]
= *Dorippe affinis* Desmarest, 1823
= *Medorippe crosnieri* Chen, 1987

Neodorippe Serène & Romimohtarto, 1969
= *Neodorippe* Serène & Romimohtarto, 1969 (type species *Dorippe callida* Fabricius, 1798, subsequent designation by ICZN plenary powers; gender feminine) [Opinion 1437]
Neodorippe callida (Fabricius, 1798) [*Dorippe*] [Opinion 1437]
= *Dorippe callida* Weber, 1795 (nomen nudum) [Opinion 1437] {4}
Neodorippe simplex Ng & Rahayu, 2002

Nobilum Serène & Romimohtarto, 1969
= *Nobilum* Serène & Romimohtarto, 1969 (type species *Dorippe histrio* Nobili, 1903, by original designation; gender neuter)
Nobilum histrio (Nobili, 1903) [*Dorippe*]

Paradorippe Serène & Romimohtarto, 1969
= *Paradorippe* Serène & Romimohtarto, 1969 (type species *Dorippe granulata* De Haan, 1841, by original designation; gender feminine)
Paradorippe australiensis (Miers, 1884) [*Dorippe*]
Paradorippe cathayana Manning & Holthuis, 1986
Paradorippe granulata (De Haan, 1841) [*Dorippe*]
Paradorippe polita (Alcock & Anderson, 1894) [*Dorippe*]

Philippidorippe Chen, 1985
= *Philippidorippe* Chen, 1985 (type species *Philippidorippe philippinensis* Chen, 1985, by monotypy; gender feminine)
Philippidorippe philippinensis Chen, 1985

Phyllodorippe Manning & Holthuis, 1981
= *Phyllodorippe* Manning & Holthuis, 1981 (type species *Dorippe armata* Miers, 1881, by original designation; gender feminine)
Phyllodorippe armata (Miers, 1881) [*Dorippe*]
= *Dorippe senegalensis* Monod, 1933

Notes

{1} *Dorippe* Weber, 1795, was established without a type designation although four species were listed: *Cancer lanatus* Linnaeus, 1767, *Cancer quadridens* Fabricius, 1793, *Dorippe astuta* Fabricius, 1798, and *Dorippe callida* Fabricius, 1798. At the time of Weber (1795), *Dorippe astuta* Fabricius, 1798, and *Dorippe callida* Fabricius, 1798, were both nomina nuda, and *Cancer lanatus* Linnaeus, 1767, was only questionably assigned to *Dorippe*. As such, there was only one valid species included in the original description of *Dorippe* Weber, 1795, *Cancer quadridens* Fabricius, 1793, and it must be the type species by monotypy. *Dorippe astuta* Fabricius, 1798, is actually a junior synonym of *Dorippoides facchino* (Herbst, 1785). The identity of *D. callida* and its designation as the type species of *Neodorippe* Serène & Romimohtarto, 1969, has been confirmed by the International Commission of Zoological Nomenclature (Opinion 1437). This matter has been discussed at length in Holthuis & Manning (1990).

{2} Weber (1795: 93) noted "*Cancer Pinnophylax* F.?" in listing "*Dorippe astuta*", but as this was done in doubt, it cannot be regarded as a valid indication, and the name should be regarded as a nomen nudum. Curiosly, there is also a *Cancer pinnophylax* Linnaeus, 1767, now regarded as a possible synonym of *Tumidotheres maculatus* (Say, 1818) (Pinnotheridae).

{3} *Heikea* Holthuis & Manning, 1990 (type species *Dorippe japonica* von Siebold, 1824) is, unfortunately, a junior homonym of *Heikea* Isberg, 1934, a bivalve mollusc. We hereby propose a replacement name, *Heikeopsis*, for the two species now recognised from this genus, *H. arachnoides* (Manning & Holthuis, 1986) and *H. japonica* (von Siebold, 1824). The type species of *Heikeopsis* remains as *Dorippe japonica* von Siebold, 1824.

{4} Weber (1795: 93) also noted "*Cancer Pinnotheres* F.?" in listing "*Dorippe callida*", but as in the above case, it cannot be regarded as a valid indication, even if it corresponds to the same species *Dorippe callida* of Fabricius (1798), that was described from the unpublished notes of Daldorff (see discussion of Weber versus Fabricius in the main Introduction). One also questions if he may not have been confused with *Cancer pinnotheres* Linnaeus, 1758 (now in *Nepinnotheres* Manning, 1993, Pinnotheridae).

Fig. 44. *Paradorippe granulata*, carrying a bivalve shell, Qingdao, China (photo: P. Ng)

Fig. 45. *Philippidorippe philippinensis*, central Philippines (photo P. Ng)

FAMILY ETHUSIDAE GUINOT, 1977

Ethusinae Guinot, 1977

Ethusa Roux, 1830
  = *Ethusa* Roux, 1830 (type species *Cancer mascarone* Herbst, 1785, subsequent designation by Fowler, 1912; gender feminine) [Opinion 712]
  = *Aethusa* Guérin, 1832 (incorrect spelling)
  = *Pridope* Nardo, 1869 (type species *Pridope typica* Nardo, 1869, by monotypy; gender feminine)
Ethusa abbreviata Castro, 2005
Ethusa americana A. Milne-Edwards, 1880
Ethusa andamanica Alcock, 1894
Ethusa barbata Castro, 2005
Ethusa brevidentata Chen, 1993
Ethusa ciliatifrons Faxon, 1893 [*Aethusa*]
Ethusa crassipodia Castro, 2005
Ethusa crosnieri Chen, 1993
Ethusa curvipes Chen, 1993
Ethusa dilatidens Chen, 1997
Ethusa foresti Chen, 1985
Ethusa furca Chen, 1993
Ethusa granulosa Ihle, 1916
Ethusa hawaiiensis Rathbun, 1906
Ethusa hirsuta McArdle, 1900
  =*Ethusa makasarica* Chen, 1993
Ethusa indica Alcock, 1894
  = *Ethusa serenei* Sakai, 1983
Ethusa indonesiensis Chen, 1997
Ethusa izuensis Sakai, 1937
Ethusa lata Rathbun, 1894
  = *Aethusa pubescens* Faxon, 1893
Ethusa latidactylus (Parisi, 1914) [*Ethusina*]
Ethusa longidentata Chen, 1997
Ethusa machaera Castro, 2005
Ethusa magnipalmata Chen, 1993
Ethusa mascarone (Herbst, 1785) [*Cancer*] [Opinion 712]
  = *Dorippe mascaronius* Risso, 1816
  = *Aethusa makarone* Guérin, 1832
Ethusa microphthalma Smith, 1881
Ethusa minuta Sakai, 1937
Ethusa obliquedens Chen, 1993
Ethusa orientalis Miers, 1886
  =*Ethusa major* Chen, 1993
Ethusa panamensis Finnegan, 1931
Ethusa parapygmaea Chen, 1993
Ethusa philippinensis Sakai, 1983
Ethusa pygmaea Alcock, 1894
Ethusa quadrata Sakai, 1937
Ethusa rosacea A. Milne-Edwards & Bouvier, 1897
Ethusa rugulosa A. Milne-Edwards & Bouvier, 1897
Ethusa sexdentata (Stimpson, 1858) [*Dorippe*]
Ethusa sinespina Kensley, 1969
Ethusa steyaerti Hendrickx, 1989
Ethusa tenuipes Rathbun, 1897
Ethusa thieli Spiridonov & Türkay, 2007
Ethusa truncata A. Milne-Edwards & Bouvier, 1899
Ethusa vossi Manning & Holthuis, 1981
Ethusa zurstrasseni Doflein, 1904
  = *Ethusa madagascariensis* Chen, 1987

Ethusina Smith, 1884
  = *Ethusina* Smith, 1884 (type species *Ethusina abyssicola* Smith, 1884, by monotypy; gender feminine)
  = *Aethusina* Faxon, 1895 (incorrect spelling)
Ethusina abyssicola Smith, 1884
  = *Ethusina abyssicola typica* Ihle, 1916
Ethusina alba (Filhol, 1884) [*Ethusa*]

Ethusina beninia Manning & Holthuis, 1981
Ethusina bicornuta Chen, 1997
Ethusina brevidentata Chen, 1993
Ethusina challengeri (Miers, 1886) [*Ethusa* (*Ethusina*)]
  = *Ethusina sinuatifrons* Miers, 1886 (nomen nudum)
Ethusina chenae Ng & Ho, 2003
Ethusina ciliacirrata Castro, 2005
Ethusina coronata Castro, 2005
Ethusina crenulata Castro, 2005
Ethusina desciscens Alcock, 1896
Ethusina dilobotus Chen, 1993
Ethusina dofleini Ihle, 1916
Ethusina exophthalma Castro, 2005
Ethusina faxonii Rathbun, 1933
Ethusina gracilipes (Miers, 1886) [*Ethusa* (*Ethusina*)]
  = *Ethusa gracilipes typica* Serène & Lohavanijaya, 1973 [objective junior synonym]
Ethusina huilianae Castro, 2005
Ethusina insolita Ng & Ho, 2003 {1}
Ethusina isolata Castro, 2005
Ethusina longipes Chen, 1987
Ethusina macrospina Ng & Ho, 2003
Ethusina microspina Chen, 2000
Ethusina ocellata Castro, 2005
Ethusina paralongipes Chen, 1993
  = *Ethusina saltator* Ng & Ho, 2003
Ethusina pubescens Chen, 1993
Ethusina robusta (Miers, 1886) [*Ethusa* (*Ethusina*)] {1}
  = ?*Ethusina investigatoris* Alcock, 1896
  = ?*Ethusina alcocki* Ng & Ho, 2003
Ethusina smithiana (Faxon, 1893) [*Aethusina*]
Ethusina somalica (Doflein, 1904) [*Ethusa*]
Ethusina stenommata Castro, 2005
Ethusina taiwanensis Ng & Ho, 2003
Ethusina talismani A. Milne-Edwards & Bouvier, 1897
Ethusina vanuatuensis Chen, 2000

Parethusa Chen, 1997
  = *Parethusa* Chen, 1997 (type species *Parethusa glabra* Chen, 1997, by original designation gender feminine)
Parethusa glabra Chen, 1997
Parethusa hylophora Castro, 2005

Incertae sedis

Dorippe armata White, 1847 (nomen nudum)

Notes

{1} Castro (2005: 559) argued that *Ethusina insolita* Ng & Ho, 2003, is a junior synonym of *E. dilobotus* Chen, 1993, but noted there were some differences even though the gonopod structures were similar. Specimens of the two species, both from Taiwan (see Ng & Ho, 2003) suggest there are two separate taxa, and we maintain them as separate taxa at least until more material becomes available. Similarly, Castro (2005: 570) synonymised *Ethusina robusta* (Miers, 1886) with *E. investigatoris* Alcock, 1896, and *E. alcocki* Ng & Ho, 2003, however the range of character variation suggests at least two taxa. This matter will need more detailed study, but for the moment, we retain the synonymy with some hesitation.


Fig. 46. *Ethusa* aff. *sexdentata*, central Philippines (photo: T. Y. Chan)


Fig. 47. *Ethusina macrospina*, Taiwan (photo: T. Y. Chan)


Fig. 48. *Ethusina insolita*, Taiwan (photo: T. Y. Chan)


Fig. 49. New genus, new species, Santo, Vanuatu, T. Naruse, P. Castro & P.K.L. Ng, in prep. (photo: T. Y. Chan)

SUPERFAMILY ERIPHIOIDEA MACLEAY, 1838

Remarks. – Števčić (2005) was the first to recognise the superfamily Eriphioidea with four families, Eriphiidae, Ladomedaeidae, Pilumnoididae and Carpiliidae. Karasawa & Schweitzer (2006) had a different arrangement, recognising in it, the families Eriphiidae, Oziidae, Hypothalassiidae, Platyxanthidae and Pseudoziidae.

As was discussed earlier under the Dairoidea and Dairidae, the Eriphioidea recognised here is a coherent group defined by the following characters: the chelae are markedly heterochelous and relatively short, the larger chela has a crushing or peeling tooth at the base of the dactylus, and the smaller chela has slender fingers of varying lengths but never with a crushing tooth; the press-button on the sterno-abdominal cavity that retains the abdomen is a rounded tubercle positioned on the posterior edge of sternite 5; and the male abdomen is relatively broad to very broad. On the basis of these characters, we exclude the Pseudoziidae and Pilumnoididae (referred to Pseudozioidea), as well as Carpiliidae (to Carpilioidea). The Ladomedaeidae is a synonym of the Euxanthinae (Xanthidae) as it was diagnosed incorrectly (see Manuel-Santos & Ng, 2007). The present classification also makes changes to the families recognised by Števčić (2005) and Karasawa & Schweitzer (2006) which we now include in this superfamily.

Crosnier (in Serène 1984) recognised three subfamilies in what he called the Menippidae: Eriphiinae, Oziinae (regarded as a senior synonym of Menippidae) and Dacryopiluminae. As discussed earlier (see also Koh & Ng, 2007), if Menippidae Ortmann, 1893, Eriphiidae MacLeay, 1838, and Oziidae Dana, 1851, are regarded as synonymous or in the same family, the oldest name that must be used is Eriphiidae. Based on an unpublished thesis by S. K. Koh, Ng et al. (2001) discussed in depth the problem of groupings in the Eriphiidae (= present Eriphioidea) and argued that four distinct groups (i.e. subfamilies) can be recognised – Eriphiinae, Menippinae, Oziinae and Dacryopilumninae, and this was followed by Davie (2002). As earlier discussed however, in the present work we transfer the Dacryopilumninae to form its own family within the Dairoidea. As the work in Ng et al. (2001) was brief, we elaborate on it here and discuss new characters recently discovered.

The Eriphiinae have a totally closed orbital margin; the antenna is positioned some distance from the orbit and antennule, being inserted almost vertically at the outer edge of the frontal margin; the larger chela has a prominent molariform tooth for crushing molluscs (not a peeling tooth); the anterior thoracic sternum is longitudinally broad with a prominent longitudinal groove on sternite 4; the male abdomen is relatively broad with the lateral margins more or less subparallel; and the distal part of G2 tapers gradually to a sharp tip, the distal part is long but distinctly shorter than the subdistal part. Carapaces are trapezoidal, with the posterolateral margins sharply converging towards the posterior carapace margin.

The Oziinae have either an open or almost closed orbital margin; the antenna is positioned near the orbit and antennule; the larger chela has a prominent tooth (molariform to peg-like) for crushing or peeling molluscs; the anterior thoracic sternum is tranversely broad without a longitudinal groove on sternite 4; the male abdomen is relatively narrower with the lateral margins weakly converging towards the telson; the distal part of the G2 tapers gradually to a sharp tip, with the distal part subequal or longer than the subdistal part. Carapaces are generally transversely ovate.

The Menippinae have an open orbital margin; the antenna is positioned near the orbit and antennules; the larger chela has a prominent molariform tooth for crushing molluscs (not peeling tooth); the anterior thoracic sternum is longitudinally broad with a prominent longitudinal groove on sternite 4; the male abdomen is relatively broad with the lateral margins more or less subparallel; and the distal part of the G2 tapers abruptly just before the end, with the terminal part filiform in structure. Carapaces are generally transversely ovate.

The Dacryopiluminae are very unusual as they have their eyes positioned at the lateral edge of a trapezoidal carapace, with the frontal and anterolateral margins entire; the orbital margin is not closed; the antenna is positioned some distance from the orbit and frontal margin; the chelipeds are subequal, both lack a crushing or peeling tooth, and they are scalloped distally; the anterior thoracic sternum is broad without a prominent longitudinal groove on sternite 4; the male abdomen is narrow with the lateral margins weakly converging towards the telson; the distal part of the G2 tapers abruptly just before the end, with the terminal part filiform. Carapaces are prominently trapezoidal with the posterolateral margins sharply converging.

Looking at these groups, it seems reasonable to recognise the first subfamilies as full families within the Eriphioidea, i.e. the Eriphiidae, Menippidae, Oziidae. However, as discussed earlier under the Dairoidea and Dairidae, the relationships of the Dacryopilumnidae lie with the Dairoidea. Karasawa & Schweitzer (2006) argued that *Hypothalassia* (placed in the family Menippidae (as Menippinae) by Ng et al. (2001) and Davie (2002), should be transferred to a new family, the Hypothalassiidae. We have re-examined specimens of the two species in the genus (see Koh & Ng, 2000), and the anterior thoracic sternal structure is rather different from other members of the Menippidae as now defined. It has sufficient "atypical" features to perhaps justify recognizing this family for the moment. In any case, its affinities still appear to be with menippids.

As has been discussed earlier for *Daira* and Dairidae, we believe *Dairoides* is a member of the Eriphioidea, the peculiar carapace and legs being the result of extreme apomorphy. In the form of its abdomen, sternum and chelipeds, we have little doubt it is an eriphioid.

The family Platyxanthidae Guinot, 1977, is also transferred to the Eriphioidea. The family has been linked with the Xanthidae and Guinot (1979) treated it provisionally as a subfamily in the Xanthidae. However, its sternal, male abdominal as well as gonopodal characters all demonstrate affinities with the eriphioids (see Guinot, 1968: 695–699, Figs. 1–12; Guinot, 1979: 94, Fig. 25). In platyxanthids, the thoracic sternum is relatively narrow, male abdomen relatively broad with all segments freely articulating (like most menippids), G1 relatively stout, simple and armed only with short spines and setae, and the G2 usually as long as or longer than the G1 (except for *Peloeus* which has a relatively shorter G2, see Guinot, 1968a: Fig. 12).

FAMILY DAIROIDIDAE ŠTEVČIĆ, 2005

Dairoididae Števčić, 2005 {1}

Dairoides Stebbing, 1920
= *Dairoides* Stebbing, 1920 (type species *Dairoides margaritatus* Stebbing, 1920, by monotypy; gender masculine)
= *Asterolambrus* Sakai, 1938 (type species *Asterolambrus kusei* Sakai, 1938, by original designation; gender masculine)
Dairoides kusei (Sakai, 1938) [*Asterolambrus*]
Dairoides margaritatus Stebbing, 1920
Dairoides seafdeci Takeda & Ananpongsuk, 1991

Notes

{1} The affinities of the Superfamily Dairoidea and the status of the family Dairoididae has been discussed earlier. A point of nomenclature is important. Števčić (2005) wrote the family name as "Dairoididae Števčić, in Martin & Davis, 2001". We find no indication of this name in Martin & Davis (2001), and the first valid publication of Dairoididae is by Števčić (2005).

FAMILY ERIPHIIDAE MACLEAY, 1838

Eriphidae MacLeay, 1838

Eriphia Latreille, 1817
= *Eriphia* Latreille, 1817 (type species *Cancer spinifrons* Herbst, 1785, subsequent designation by H. Milne Edwards, 1842, in 1836–1844; gender feminine) [Opinion 712] {1}
Eriphia gonagra (Fabricius, 1781) [*Cancer*]
= *Eriphia armata* Dana, 1852
Eriphia granulosa A. Milne-Edwards, 1880
Eriphia scabricula Dana, 1852
= *Eriphia gonagra* Krauss, 1843 (pre-occupied name)
= *Eriphia pilumnoides* Ward, 1941
= *Eriphia scabricula garciaensis* Ward, 1942
Eriphia sebana (Shaw & Nodder, 1803) [*Cancer*]
= *Gecarcinus anisocheles* Latreille, 1818
= *Eriphia laevimana* Guérin, 1829
= *Eriphia fordii* MacLeay, 1838
= *Eriphia trapeziformis* Hess, 1865
= *Eriphia sebana hawaiiensis* Ward, 1939
Eriphia squamata Stimpson, 1860
Eriphia smithii MacLeay, 1838 {2}
Eriphia verrucosa (Forskål, 1775) [*Cancer*] [Opinion 712]
= *Cancer spinifrons* Herbst, 1785
= *Eriphia spinifrons angusta* Czerniavsky, 1884
= *Eriphia spinifrons mediterranea* Czerniavsky, 1884
= *Eriphia spinifrons orientalis* Czerniavsky, 1884
= *Eriphia spinifrons* var. *canariensis* Balss, 1921

Eriphides Rathbun, 1897
= *Pseuderiphia* A. Milne-Edwards, 1880 (type species *Pseuderiphia hispida* Stimpson, 1860, by monotypy; name pre-occupied by *Pseuderiphia* Reuss, 1857 [Crustacea]; gender feminine)
= *Eriphides* Rathbun, 1897 (replacement name for *Eripides* Rathbun, 1897; gender feminine)
Eriphides hispida (Stimpson, 1860) [*Eriphia*]

Incertae sedis

?*Eriphia verrucosa* White, 1847 (nomen nudum)

Notes

{1} The first designation of a type species for *Eriphia* should be by H. Milne Edwards (1842). In his plates from Cuvier's "*Règne Animal*", which he also notes represent types, *Eriphia spinifrons* is figured (in colour) on plate 14. According to Cowan (1976), plate 14 was published in November 1842.

{2) *Eriphia smithii* is supposedly a widely distributed Indo-West Pacific species. The actual *E. smithii* is restricted to the Indian Ocean. Most of the specimens in Southeast and East Asia as well as Australia belong to an undescribed species (Koh & Ng, in press).

FAMILY HYPOTHALASSIIDAE KARASAWA & SCHWEITZER, 2006

Hypothalassiidae Karasawa & Schweitzer, 2006

Hypothalassia Gistel, 1848
= *Acanthodes* De Haan, 1833 (type species *Cancer* (*Acanthodes*) *armatus* De Haan, 1835, by monotypy; name pre-occupied by *Acanthodes* Agassiz, 1833 [Pisces]; gender masculine)
= *Hypothalassia* Gistel, 1848 (replacement name for *Acanthodes* De Haan, 1833, gender feminine)
= *Acanthocarcinus* Hilgendorf in Weltner, 1897 (unnecessary replacement name for *Acanthodes* De Haan, 1833, gender masculine)
Hypothalassia acerba Koh & Ng, 2000
Hypothalassia armata (De Haan, 1835) [*Cancer* (*Acanthodes*)]

Fig. 50. *Hypothalassia armata*, Guam (photo: G. Paulay)

FAMILY MENIPPIDAE ORTMANN, 1893

Menippidae Ortmann, 1893
Myomenippinae Ortmann, 1893
Ruppellioida Alcock, 1898

Menippe De Haan, 1833
= *Menippe* De Haan, 1833 (type species *Cancer rumphii* Fabricius, 1798, subsequent designation by Glaessner, 1929; gender feminine)
Menippe adina Williams & Felder, 1986
Menippe frontalis A. Milne-Edwards, 1879
?*Menippe hirtipes* (Lucas, in Jacquinot & Lucas, 1853) [*Galene*]
Menippe mercenaria (Say, 1818) [*Cancer*]
= *Pseudocarcinus ocellatus* H. Milne Edwards, 1834
Menippe nodifrons Stimpson, 1859
= *Menippe rudis* A. Milne-Edwards, 1879
= *Menippe nanus* A. Milne-Edwards & Bouvier, 1898
Menippe obtusa Stimpson, 1859
Menippe rumphii (Fabricius, 1798) [*Cancer*]
= *Alpheus Rumphii* Weber, 1795 (nomen nudum)
= *Pseudocarcinus bellangerii* H. Milne Edwards, 1834

Myomenippe Hilgendorf, 1879
= *Myomenippe* Hilgendorf, 1879 (type species *Menippe fornasinii* Bianconi, 1851, by original designation; gender feminine)
= *Pararuppellia* Haswell, 1881 (type species *Pararuppellia saxicola* Haswell, 1881, by monotypy; gender feminine)
Myomenippe fornasinii (Bianconi, 1851) [*Menippe*]
= *Cancer* (*Menippe*) *dentatus* De Haan, 1833 (pre-occupied name)
= *Cancer* (*Menippe*) *quadridens* De Haan, 1833 (pre-occupied name)
= *Menippe leguillouii* A. Milne-Edwards, 1867
= *Pararuppellia saxicola* Haswell, 1881
Myomenippe hardwickii (Gray, 1831) [*Cancer*]
= *Menippe granulosa* A. Milne-Edwards, 1867
= *Menippe granulosa* De Man, 1888
= *Menippe duplicidens* Hilgendorf, 1878

Pseudocarcinus H. Milne Edwards, 1834
= *Pseudocarcinus* H. Milne Edwards, 1834 (type species *Cancer gigas* Lamarck, 1818, subsequent designation by Miers, 1886; gender masculine) [Opinion 85, Direction 37] {1}
Pseudocarcinus gigas (Lamarck, 1818) [*Cancer*] [Direction 36]

Ruppellioides A. Milne-Edwards, 1867
= *Ruppellioides* A. Milne-Edwards, 1867 (type species *Ruppellioides convexus* A. Milne-Edwards, 1867, by monotypy; gender masculine) [Opinion 85, Direction 37]
Ruppellioides convexus A. Milne-Edwards, 1867
Ruppellioides philippinensis Ward, 1941

Sphaerozius Stimpson, 1858
= *Sphaerozius* Stimpson, 1858 (type species *Sphaerozius nitidus* Stimpson, 1858, by monotypy; gender masculine) [Opinion 85, Direction 37]
Sphaerozius nitidus Stimpson, 1858 [Direction 36]
= *Actumnus nudus* A. Milne-Edwards, 1867
= *Menippe ortmanni* De Man, 1899
= *Menippe convexa* Rathbun, 1894
= *Sphaerozius oeschi* Ward, 1941
Sphaerozius scaber (Fabricius, 1798) [*Cancer*] {2}
= *Alpheus scaber* Weber, 1795 (nomen nudum)
= *Cancer panope* Herbst, 1801
= *Pilumnopeus granulosus* Miers, 1880

Incertae sedis

?*Menippe cumingii* White, 1847 (nomen nudum)
Menippe signata White, 1847 (nomen nudum)

Notes

{1} In establishing *Pseudocarcinus*, H. Milne Edwards (1834: 407–409) listed four species as belonging to his new genus, viz. *Cancer rumphii* Fabricius, 1798, *Pseudocarcinus bellangerii* H. Milne Edwards, 1834, *Pseudocarcinus ocellatus* H. Milne Edwards, 1834, and *Cancer gigas* Lamarck, 1818. No type species was designated. Most of the current literature accepts the type designation by Miers (1886) who selected *Cancer gigas* Lamarck, 1818, as the type species (see also Davie, 2002). The Commission placed *Cancer gigas* Lamarck, 1818, on the Official List and regards it as the type species of *Pseudocarcinus* (Opinion 85, Direction 37) (ICZN, 1987). E. Desmarest (1858: 17) commented that *Cancer rumphii* Fabricius, 1798, was the type species, and his designation is not only valid but precedes that of Miers (1886). As has been discussed above, E. Desmarest is not to be confused with the better known A. G. Desmarest, and his 1858 paper is poorly known. If E. Desmarest's designation is accepted, it would mean that *Pseudocarcinus* H. Milne Edwards, 1834, becomes an objective junior synonym of *Menippe* De Haan, 1833, whose type species is also *Cancer rumphii* Fabricius, 1798 (subsequent designation by Glaessner, 1929). Fortunately, because of ICZN Opinion 85, any earlier type selection is invalid, and *Cancer gigas* Lamarck, 1818, remains the type species of *Pseudocarcinus* H. Milne Edwards, 1834. This is significant as *Pseudocarcinus gigas* (Lamarck, 1818), well known as the Tasmanian Giant Crab, Australian Giant Crab or Queen Crab, is one of the largest crabs in the world and has substantial commercial value (see Gardner, 1998; Ng, 1998; Davie, 2002).

{2}The identity of *Cancer scaber* Fabricius, 1798, has always been uncertain. Examination of the syntypes in ZMUC (1 male, 15.5 by 12.3 mm, Cru 112-4; 1 male, 18.0 × 14.0 mm, Cru 112-1; 1 female, 18.4 × 14.2 mm, Cru 112-2; 1 female, 18.4 × 14.2 mm, 112-3; 1 female, 17.7 × 13.5 mm, Cru 112-5; "India Orientali", Dom. Daldorff) clearly identifies it as a species of *Sphaerozius*. *Sphaerozius*, however, has only one recognised species, *Sphaerozius nitidus* Stimpson, 1858, although there are a number of junior subjective synonyms. One of the authors (P. K. L. Ng) has examined a good series of specimens from Singapore, Malaysia and southern China, and they all agree with the definition of *Sphaerozius nitidus*, as described by Stimpson (1858a, 1907) and all subsequent authors. *Cancer scaber* is prominently granular, while *S. nitidus* is a smoother crab, thus two species of *Sphaerozius* must be recognised. Sakai (1999: 31) recognised *Sphaerozius panope* (Herbst, 1801) in his reappraisal of Herbst's taxa, and from his figure (K. Sakai, 1999: pl. 16C), it is clear that it is a synonym of *Sphaerozius scaber* (Fabricius, 1798). *Pilumnopeus granulosus* Miers, 1880, is also probably the same species. A revision is clearly necessary to clarify the identities of the other available names.

FAMILY OZIIDAE DANA, 1851

Oziinae Dana, 1851

Baptozius Alcock, 1898
= *Baptozius* Alcock, 1898 (type species *Ruppellia vinosa* H. Milne Edwards, 1834, by original designation; gender masculine)
Baptozius vinosus (H. Milne Edwards, 1834) [*Ruppellia*]
= *Rueppellia lata* A. Milne-Edwards, 1873

Bountiana Davie & Ng, 2000
= *Bountiana* Davie & Ng, 2000 (type species *Eriphia norfolcensis* Grant & McCulloch, 1907, by original designation; gender feminine)
Bountiana norfolcensis (Grant & McCulloch, 1907) [*Eriphia*]

Epixanthoides Balss, 1935
= *Epixanthoides* Balss, 1935 (type species *Epixanthoides anomalus* Balss, 1935, by original designation; gender masculine)
Epixanthoides anomalus Balss, 1935

Epixanthus Heller, 1861
= *Epixanthus* Heller, 1861 (type species *Epixanthus kotschii* Heller, 1861, by monotypy; gender masculine) [Opinion 85, Direction 37]
Epixanthus corrosus A. Milne-Edwards, 1873
Epixanthus dentatus (White, 1848) [*Panopeus*]
= *Epixanthus dilatatus* De Man, 1879
= *Panopeus acutidens* Haswell, 1881
Epixanthus frontalis (H. Milne Edwards, 1834) [*Ozius*] [Direction 36]
= *Epixanthus kotschii* Heller, 1861
Epixanthus hellerii A. Milne-Edwards, 1867
= *Ozius corrugatus* Osorio, 1887
Epixanthus subcorrosus De Man, 1891

Eupilumnus Kossmann, 1877
= *Pilumnus* (*Eupilumnus*) Kossmann, 1877 (type species *Pilumnus actumnoides* A. Milne-Edwards, 1873, subsequent designation by Rathbun, 1930; gender masculine) {1}
= *Globopilumnus* Balss, 1933 (type species *Pilumnus globosus* Dana, 1852, by original designation; gender masculine)
Eupilumnus actumnoides (A. Milne-Edwards, 1873) [*Pilumnus*]
Eupilumnus africanus (A. Milne-Edwards, 1867) [*Pilumnus*]
Eupilumnus calmani (Balss, 1933) [*Globopilumnus*]
Eupilumnus fragaria (Yang, Dai & Ng, 1998) [*Globopilumnus*]
Eupilumnus globosus (Dana, 1852) [*Pilumnus*]
= *Pilumnus ovalis* A. Milne-Edwards, 1867
= *Pilumnus margaritatus* Ortmann, 1893
= *Globopilumnus globosus spinosus* Balss, 1933
Eupilumnus kiiensis (Takeda & Nagai, 1983) [*Globopilumnus*]
Eupilumnus laciniatus (Sakai, 1980) [*Pilumnus*]
= *Globopilumnus multituberosus* Garth & Kim, 1983
Eupilumnus stridulans (Monod, 1956) [*Globopilumnus*]
Eupilumnus xantusii (Stimpson, 1860) [*Pilumnus*]

Lydia Gistel, 1848
= *Cancer* (*Eudora*) De Haan, 1833 (type species *Cancer tenax* Rüppell, 1830, subsequent designation by Holthuis, 1993; name pre-occupied by *Eudora* Péron & Leueur, 1810 [Cnidaria]; gender feminine)
= *Lydia* Gistel, 1848 (replacement name for *Cancer* (*Eudora*) De Haan, 1833; gender feminine)
= *Rueppellia* H. Milne Edwards, 1834 (type species *Rueppellia annulipes* H. Milne Edwards, 1834, by monotypy; name pre-occupied by *Rueppellia* Kertész, 1809 [Diptera]; gender feminine)
= *Eurueppellia* Miers, 1884 (replacement name for *Rueppellia* H. Milne Edwards, 1834; gender feminine)
Lydia annulipes (H. Milne Edwards, 1834) [*Rueppellia*]
= *Lydia danae* Ward, 1939
Lydia granulosa A. Milne-Edwards, 1867
Lydia tenax (Rüppell, 1830) [*Cancer*]

Ozius H. Milne Edwards, 1834
= *Ozius* H. Milne Edwards, 1834 (type species *Ozius tuberculosus* H. Milne Edwards, 1834, subsequent designation by Desmarest, 1858; gender masculine) {2}
Ozius deplanatus (White, 1847) [*Xantho*]
Ozius granulosus De Man, 1879
Ozius guttatus H. Milne Edwards, 1834
= *Cancer* (*Eudora*) *incisus* De Haan, 1833 (nomen nudum)
= *Panopeus formio* White, 1847 (nomen nudum)
= *Panopeus formio* Adams & White, 1849
= *Ozius speciosus* Hilgendorf, 1869
= *Ozius guttatus garcianensis* Ward, 1942
Ozius hawaiiensis Rathbun, 1902
Ozius lobatus Heller, 1861
Ozius perlatus Stimpson, 1860
Ozius reticulatus (Desbonne, in Desbonne & Schramm, 1867) [*Lagostoma*]
= *Ozius integer* Smith, 1871
Ozius rugulosus Stimpson, 1858
= *Ozius rugulosus mauritiensis* Ward, 1942
Ozius tenuidactylus (Lockington, 1877) [*Xantho*]
= *Ozius agqassizii* A. Milne-Edwards, 1880
Ozius tricarinatus Rathbun, 1907
Ozius truncatus H. Milne Edwards, 1834
Ozius tuberculosus H. Milne Edwards, 1834
Ozius verreauxii Saussure, 1853
= *Xantho grandimanus* Lockington, 1877

Incertae sedis

Ozius subverrucosus White, 1848

Notes

{1} Kossmann (1877) listed *P. actumnoides* A. Milne-Edwards, 1873, *P. nitidus* A. Milne-Edwards, 1873, *P. longipes* A. Milne-Edwards, 1873, *P. fissifrons* Stimpson, 1858, *P. dilatipes* Adams & White, 1848, *P. vauquelinii* Audouin, 1826, and *P. savignyi* Heller, 1861, under this subgenus, and although most workers closely associate *Eupilumnus* with *Pilumnus* Leach, 1815; Rathbun's (1930) action is valid and effectively makes *Pilumnus* (*Eupilumnus*) Kossmann, 1877, a senior synonym of *Globopilumnus* Balss, 1933 (see Ng et al., 2001). Guinot (1960) had earlier reviewed the genus (as *Globopilumnus*).

{2} In describing the genus *Ozius*, H. Milne Edwards (1834) listed four species in the following order: *O. tuberculosus* H. Milne Edwards, 1834, *O. truncatus* H. Milne Edwards, 1834, *O. guttatus* H. Milne Edwards, 1834, and *O. frontalis* H. Milne Edwards, 1834) (now in *Epixanthus*). Most authors list *O. tuberculosus* as the type species, either by monotypy (which is incorrect) or from Rathbun (1930: 539). The first valid type species designation was in fact made by Desmarest (1858: 17) who selected *O. tuberculosus*.

Fig. 51. *Epixanthoides anomalus*, Guam; this rare species lives in coral rubble (photo: G. Paulay)

Fig. 52. *Baptozius vinosus*, central Philippines (photo: T. Y. Chan)

Fig. 53. *Eupilumnus laciniatus*, central Philippines (photo: P. Ng)

FAMILY PLATYXANTHIDAE GUINOT, 1977

Platyxanthidae Guinot, 1977

Homalaspis A. Milne-Edwards, 1863
  = *Homalaspis* A. Milne-Edwards, 1863 (type species *Xantho planus* H. Milne Edwards, 1834, by monotypy; gender feminine)
Homalaspis plana (H. Milne Edwards, 1834) [*Xantho*]
  = *Gecarcinus regius* Poeppig, 1836

Peloeus Eydoux & Souleyet, 1842
  = *Peloeus* Eydoux & Souleyet, 1842 (type species *Peloeus armatus* Eydoux & Souleyet, 1842, by monotypy; gender masculine)
  = *Pelaeus* Guinot, 1969 (incorrect spelling)
Peloeus armatus Eydoux & Souleyet, 1842
?*Peloeus cokeri* (Rathbun, 1930) [*Platyxanthus*]

Platyxanthus A. Milne-Edwards, 1863
  = *Platyxanthus* A. Milne-Edwards, 1863 (type species *Xantho orbignyi* H. Milne Edwards & Lucas, 1843, by monotypy; gender masculine) [Opinion 85, Directions 36, 37]
?*Platyxanthus balboai* Garth, 1940
Platyxanthus crenulatus A. Milne-Edwards, 1879
Platyxanthus orbignyi (H. Milne Edwards & Lucas, 1843) [*Xantho*] [Direction 36]
Platyxanthus patagonicus A. Milne-Edwards, 1879

Fig. 54. *Homalaspis plana*, Chile; colour pattern of juveniles (photo: A. Anker)

SUPERFAMILY GECARCINUCOIDEA RATHBUN, 1904

Remarks. – The classification of the Gecarcinucoidea has come under some scrutiny recently. Bott (1970) recognised three families in it, the Gecarcinucidae Rathbun, 1904, Parathelphusidae Alcock, 1910, and Sundathelphusidae Bott, 1969. Various authors hace challenged the characters used to distinguish these subfamilies. Holthuis (1979) queried the accuracy of the frontal median triangle as a character, suggesting there may be more variation than Bott (1970) accepted. More studies (e.g. Ng, 1988, 1990b; Ng & Stuebing, 1989, 1990; Ng & Sket, 1996) have subsequently shown that this character is not reliable; and these authors synoymised Sundathelphusidae with the Parathelphusidae. Studies by Ng (1988) and Ng (1990) also suggested that the Gecarcinucidae may also not be distinct from the Parathelphusidae, and the latter may be a synonym. Recently, Bahir & Yeo (2007) cast more doubt when they rearranged several genera between these two families. Klaus et al. (2006), in a major rearrangement of gecarcinucoid and potamoid families and subfamilies, argued on the basis of DNA and gonopodal characters that the Gecarcincoidea was composed of two sister groups, the Deckeniidae (with three subfamilies, Deckeniinae, Globonautinae and Hydrothelphusinae) and Gecarcinucidae (with two subfamilies, Gecarcinucinae and Parathelphusinae). In a markedly different conclusion drawn mainly from molecular evidence, Daniels et al. (2006) argued that the deckenines, globonautines and hydrothelphusines were potamonautids in the Potamoidea, and allied to the Potamidae (see also Cumberlidge et al., 2007; and our later remarks for Potamidae and Potamonautidae). In a recent appraisal of the world freshwater crab fauna, Yeo et al. (2008) followed Cumberlidge et al. (2008) in treating all the African crabs as belonging to the Potamoidea, and recognised two families in the Gecarcinucoidea.

FAMILY GECARCINUCIDAE RATHBUN, 1904

Gecarcinucinae Rathbun, 1904
Liotelphusinae Bott, 1969

Baratha Bahir & Yeo, 2007 {1}
  = *Baratha* Bahir & Yeo, 2007 (type species *Baratha pushta* Bahir & Yeo, 2007, by original designation; gender feminine)
Baratha peena Bahir & Yeo, 2007
Baratha pushta Bahir & Yeo, 2007

Barytelphusa Alcock, 1909 {2}
  = *Paratelphusa* (*Barytelphusa*) Alcock, 1909 (type species *Potamon* (*Potamonautes*) *jacquemontii* Rathbun, 1905, by original designation; gender feminine)
Barytelphusa cunicularis (Westwood, 1836) [*Thelphusa*]
Barytelphusa guerini (H. Milne Edwards, 1853) [*Thelphusa*]
  = *Telphusa pocockiana* Henderson, 1893
  = *Thelphusa planata* A. Milne-Edwards, 1869
  = *Paratelphusa* (*Barytelphusa*) *mccanni* Chopra & Das, 1935
Barytelphusa jacquemontii (Rathbun, 1905) [*Potamon* (*Potamonautes*)]
Barytelphusa pulvinata (Alcock, 1909) [*Paratelphusa* (*Barytelphusa*)]

Cylindrotelphusa Alcock, 1909
  = *Cylindrotelphusa* Alcock, 1909 (type species *Gecarcinucus* (*Cylindrotelphusa*) *steniops* Alcock, 1909, by original designation; gender feminine)
Cylindrotelphusa steniops (Alcock, 1909) [*Gecarcinucus* (*Cylindrotelphusa*)]

Gecarcinucus H. Milne Edwards, 1844
  = *Gecarcinucus* H. Milne Edwards, 1844 (type species *Gecarcinucus jacquemontii* H. Milne Edwards, 1844, by monotypy; gender masculine) [Opinion 73]
  = *Gecarcinicus* Dana, 1852 (incorrect spelling) [Direction 37]
Gecarcinucus edwardsi Alcock, 1909
Gecarcinucus jacquemontii H. Milne Edwards, 1844 [Direction 36]

Globitelphusa Alcock, 1909
  = *Paratelphusa* (*Globitelphusa*) Alcock, 1909 (type species *Paratelphusa* (*Globitelphusa*) *bakeri* Alcock, 1909, by original designation; gender feminine)
Globitelphusa bakeri (Alcock, 1909) [*Paratelphusa* (*Globitelphusa*)]
Globitelphusa cylindra (Alcock, 1909) [*Paratelphusa* (*Globitelphusa*)]
Globitelphusa pistorica (Alcock, 1909) [*Paratelphusa* (*Globitelphusa*)]
Globitelphusa planifrons (Bürger, 1894) [*Telphusa*]

Gubernatoriana Bott, 1970 {1}
  = *Gubernatoriana* Bott, 1970 (type species *Paratelphusa* (*Globitelphusa*) *gubernatoris* Alcock, 1909, by original designation; gender feminine)
Gubernatoriana gubernatoris (Alcock, 1909) [*Paratelphusa* (*Globitelphusa*)]
Gubernatoriana pilosipes (Alcock, 1909) [*Paratelphusa* (*Globitelphusa*)]

Inglethelphusa Bott, 1970
  = *Inglethelphusa* Bott, 1970 (type species *Paratelphusa* (*Globitelphusa*) *fronto* Alcock, 1909, by original designation; gender feminine)
Inglethelphusa fronto (Alcock, 1909) [*Paratelphusa* (*Globitelphusa*)]

Lamella Bahir & Yeo, 2007 {2}
  = *Lamella* Bahir & Yeo, 2007 (type species *Paratelphusa* (*Barytelphusa*) *lamellifrons* Alcock, 1909, by original designation and monotypy; gender feminine)
Lamella lamellifrons (Alcock, 1909) [*Paratelphusa* (*Barytelphusa*)]

Lepidothelphusa Colosi, 1920
  = *Parathelphusa* (*Lepidothelphusa*) Colosi, 1920 (type species *Potamon* (*Geotelphusa*) *cognetti* Nobili, 1903, by original designation; gender feminine)
Lepidothelphusa cognetti (Nobili, 1903) [*Potamon* (*Geotelphusa*)] {3}

Liotelphusa Alcock, 1909
  = *Paratelphusa* (*Liotelphusa*) Alcock, 1909 (type species *Telphusa laevis* Wood-Mason, 1871, by original designation; gender feminine)
Liotelphusa campestris (Alcock, 1909) [*Paratelphusa* (*Phricotelphusa*)]
Liotelphusa gageii (Alcock, 1909) [*Paratelphusa* (*Phricotelphusa*)]

Liotelphusa laevis (Wood-Mason, 1871) [*Telphusa*]
Liotelphusa quadrata (Alcock, 1909) [*Paratelphusa* (*Phricotelphusa*)]
Liotelphusa wuermlii (Pretzmann, 1975) [*Gecarcinucus* (*Liothelphusa*)]

Maydelliathelphusa Bott, 1969
= *Barytelphusa* (*Maydelliathelphusa*) Bott, 1969 (type species *Thelphusa masoniana* Henderson, 1893, by original designation; gender feminine)
Maydelliathelphusa edentula (Alcock, 1909) [*Potamon*]
Maydelliathelphusa falcidigitis (Alcock, 1910) [*Paratelphusa* (*Barytelphusa*)]
Maydelliathelphusa harpax (Alcock, 1909) [*Potamon*]
Maydelliathelphusa lugubris (Wood-Mason, 1871) [*Thelphusa*]
Maydelliathelphusa masoniana (Henderson, 1893) [*Thelphusa*]

Phricotelphusa Alcock, 1909
= *Paratelphusa* (*Phricotelphusa*) Alcock, 1909 (type species: *Telphusa callianira* De Man, 1887, by original designation; gender feminine)
Phricotelphusa aedes (Kemp, 1923) [*Paratelphusa* (*Phricotelphusa*)]
Phricotelphusa amnicola Ng, 1994
Phricotelphusa callianira (De Man, 1887) [*Telphusa*]
Phricotelphusa carinifera (De Man, 1887) [*Telphusa*]
Phricotelphusa deharvengi Ng, 1988
Phricotelphusa elegans (De Man, 1898) [*Potamon*]
Phricotelphusa gracilipes Ng & H. P. Ng, 1987
Phricotelphusa hockpingi Ng, 1986
Phricotelphusa limula (Hilgendorf, 1882) [*Telphusa*]
Phricotelphusa ranongi Naiyanetr, 1982
Phricotelphusa sirindhorn Naiyanetr, 1989

Pilarta Bahir & Yeo, 2007 {1}
= *Pilarta* Bahir & Yeo, 2007 (type species *Pilarta anuka* Bahir & Yeo, 2007, by original designation and monotypy; gender feminine)
Pilarta anuka Bahir & Yeo, 2007

Snaha Bahir & Yeo, 2007 {1}
= *Snaha* Bahir & Yeo, 2007 (type species *Snaha aruna* Bahir & Yeo, 2007, by original designation; gender feminine)
Snaha aruna Bahir & Yeo, 2007
Snaha escheri (Roux, 1931) [*Paratelphusa* (*Globitelphusa*)]

Thaksinthelphusa Ng & Naiyanetr, 1993
= *Thaksinthelphusa* Ng & Naiyanetr, 1993 (type species *Phricotelphusa yongchindaratae* Naiyanetr, 1988, by original designation; gender feminine)
Thaksinthelphusa yongchindaratae (Naiyanetr, 1988) [*Phricotelphusa*]

Travancoriana Bott, 1969 {1}
= *Travancoriana* Bott, 1969 (type species *Travancoriana schirnerae* Bott, 1969, by original designation; gender feminine)
Travancoriana charu Bahir & Yeo, 2007
Travancoriana convexa (Roux, 1931) [*Paratelphusa* (*Barytelphusa*)] {4}
Travancoriana kuleera Bahir & Yeo, 2007
Travancoriana napaea (Alcock, 1909) [*Paratelphusa* (*Barytelphusa*)]
Travancoriana pollicaris (Alcock, 1909) [*Paratelphusa* (*Barytelphusa*)]
Travancoriana schirnerae Bott, 1969

Vanni Bahir & Yeo, 2007 {1}
= *Vanni* Bahir & Yeo, 2007 (type species *Paratelphusa* (*Liotelphusa*) *malabarica* var. *travancorica* Henderson, 1913, by original designation; gender feminine)
Vanni travancorica (Henderson, 1913) [*Paratelphusa* (*Liotelphusa*)]
Vanni malabarica (Henderson, 1912) [*Paratelphusa* (*Liotelphusa*)]
Vanni nilgiriensis (Roux, 1931) [*Paratelphusa* (*Liotelphusa*)]
Vanni pusilla (Roux, 1931) [*Paratelphusa* (*Liotelphusa*)]
Vanni ashini Bahir & Yeo, 2007
Vanni deepta Bahir & Yeo, 2007
Vanni giri Bahir & Yeo, 2007

Vela Bahir & Yeo, 2007 {1}
= *Vela* Bahir & Yeo, 2007 (type species *Vela virupa* Bahir & Yeo, 2007, by original designation; gender feminine)
Vela carli (Roux, 1931) [*Paratelphusa* (*Barytelphusa*)]
Vela virupa Bahir & Yeo, 2007

Notes

{1} Bahir & Yeo (2007) regarded *Gubernatoriana* Bott, 1970, and *Travancoriana* Bott, 1969, as belonging to the Gecarcinucidae. They also partially revised these genera. Three species placed by Bott (1970) in *Gubernatoriana* were referred to two new genera; *G. nilgiriensis* (Roux, 1931) and *G. pusilla* (Roux, 1931) were transferred to *Vanni* Bahir & Yeo, 2007; while *G. escheri* (Roux, 1931) was moved to *Snaha* Bahir & Yeo, 2007. *Travancoriana malabarica* (Henderson, 1912) was also transferred to *Vanni*. A taxon missed by most workers, *Paratelphusa* (*Liotelphusa*) *malabarica* var. *travancorica*, was regarded as a valid species of *Vanni*. *Travancoriana carli* (Roux, 1931) was transferred to *Vela* Bahir & Yeo, 2007.

{2} One distinctive species, *Barytelphusa lamellifrons* (Alcock, 1909), was referred to its own genus, *Lamella* Bahir & Yeo, 2007. The genus, however, *Barytelphusa*, is still in urgent need of a revision.

{3} What has been redescribed and figured as "*Lepidothelphusa cognetti*" by Bott (1970) from Bau in Sarawak, Malaysian Borneo, is actually an undescribed species. The actual *Potamon* (*Geotelphusa*) *cognetti* Nobili, 1903, was described from the Penrissen Mountains in Sarawak, and has a completely different colour pattern in life as well as differ in the form of the third maxillipeds and G1 structures (P. K. L. Ng, unpublished data).

{4} *Paratelphusa* (*Barytelphusa*) *pollicaris convexa* (Roux, 1931), was synonymised with *Travancoriana pollicaris* (Alcock, 1909) by Bott (1970) but recognised as a distinct species by Bahir & Yeo (2007).

Fig. 55. *Lepidothelphusa cognetti*, Sarawak (photo: D. Kong)

FAMILY PARATHELPHUSIDAE ALCOCK, 1910

Parathelphusinae Alcock, 1910
Spiralothelphusinae Bott, 1968
Somanniathelphusinae Bott, 1968
Ceylonthelphusinae Bott, 1969
Sundathelphusidae Bott, 1969
Nautilothelphusini Števčić, 2005

Adeleana Bott, 1969
= *Adeleana* Bott, 1969 (type species *Adeleana forcarti* Bott, 1969, by original designation; gender feminine)
Adeleana chapmani Holthuis, 1979
Adeleana forcarti Bott, 1970
Adeleana sumatrensis (Balss, 1934) [*Para*-(*Globi*-)*thelphusa*]

Arachnothelphusa Ng, 1991
= *Arachnothelphusa* Ng, 1991 (type species *Potamon* (*Potamon*) *melanippe* De Man, 1899, by original designmation; gender feminine)
Arachnothelphusa kadamaiana (Borradaile, 1900) [*Potamon* (*Geothelphusa*)]
Arachnothelphusa melanippe (De Man, 1899) [*Potamon* (*Potamon*)]
Arachnothelphusa rhadamanthysi Ng & Goh, 1987
Arachnothelphusa terrapes Ng, 1991

Austrothelphusa Bott, 1969 {1}
= *Holthuisana* (*Austrothelphusa*) Bott, 1969 (type species *Thelphusa transversa* von Martens, 1868, by original designation; gender feminine)
Austrothelphusa agassizi (Rathbun, 1905) [*Potamon* (*Geothelphusa*)]
= *Geothelphusa leichardti plana* McCulloch, 1917
Austrothelphusa angustifrons (A. Milne-Edwards, 1869) [*Thelphusa*]
= *Parathephusa* (*Liotelphusa*) *podenzane* Colosi, 1919
Austrothelphusa insularis (Colosi, 1919) [*Paratelphusa* (*Liotelphusa*)] {1}
Austrothelphusa raceki (Bishop, 1963) [*Parathelphusa*]
Austrothelphusa tigrina (Short, 1994) [*Holthuisana* (*Austrothelphusa*)]
Austrothelphusa transversa (von Martens, 1868) [*Thelphusa*]
= *Thelphusa crassa* A. Milne-Edwards, 1869
= *Telphusa leichardti* Miers, 1884
Austrothelphusa valentula (Riek, 1951) [*Parathelphusa*]
Austrothelphusa wasselli (Bishop, 1963) [*Parathelphusa*]

Bakousa Ng, 1995
= *Bakousa* Ng, 1995 (type species *Bakousa sarawakensis* Ng, 1995, by original designation; gender feminine)
Bakousa hendersoniana (De Man, 1899) [*Potamon* (*Geothelphusa*)]
Bakousa kenepai (De Man, 1899) [*Potamon* (*Geothelphusa*)]
Bakousa sarawakensis Ng, 1995

Balssiathelphusa Bott, 1969
= *Balssiathelphusa* Bott, 1969 (type pecies *Parathelphusa* (*Perithelphusa*) *sucki* Balss, 1937, by original designation; gender feminine)
Balssiathelphusa cursor Ng, 1986
Balssiathelphusa natunaensis Bott, 1970
Balssiathelphusa sucki (Balss, 1937) [*Parathelphusa* (*Perithelphusa*)]

Ceylonthelphusa Bott, 1969
= *Ceylonthelphusa* Bott, 1969 (type species *Thelphusa rugosa* Kingsley, 1880, by original designation; gender feminine)
Ceylonthelphusa alpina Bahir & Ng, 2005
Ceylonthelphusa armata (Ng, 1995) [*Perbrinckia*]
Ceylonthelphusa austrina (Alcock, 1909) [*Paratelphusa* (*Liotelphusa*)]
Ceylonthelphusa callista (Ng, 1995) [*Perbrinckia*]
Ceylonthelphusa cavatrix (Bahir, 1998) [*Perbrinckia*]
Ceylonthelphusa diva Bahir & Ng, 2005
Ceylonthelphusa durrelli Bahir & Ng, 2005
Ceylonthelphusa kandambyi Bahir, 1999
Ceylonthelphusa kotagama (Bahir, 1998) [*Perbrinckia*]
Ceylonthelphusa nana Bahir, 1999
Ceylonthelphusa nata Ng & Tay, 2001
Ceylonthelphusa orthos Ng & Tay, 2001
Ceylonthelphusa rugosa (Kingsley, 1880) [*Thelphusa*]
Ceylonthelphusa sanguinea (Ng, 1995) [*Perbrinckia*]
Ceylonthelphusa savitriae Bahir & Ng, 2005
Ceylonthelphusa sentosa Bahir, 1999
Ceylonthelphusa soror (Zehntner, 1894) [*Telphusa*]
Ceylonthelphusa venusta (Ng, 1995) [*Perbrinckia*]

Clinothelphusa Tay & Ng, 2001
= *Clinothelphusa* Tay & Ng, 2001 (type species *Clinothelphusa kakoota* Tay & Ng, 2001, by original designation; gender feminine)
Clinothelphusa kakoota Tay & Ng, 2001

Coccusa S. H. Tan & Ng, 1998
= *Coccusa* S. H. Tan & Ng, 1998 (type species *Coccusa isophallus* S. H. Tan & Ng, 1998, by original designation; gender feminine)
Coccusa adipis (Ng & Wowor, 1990) [*Terrathelphusa*]
Coccusa cristicervix Ng & Jongkar, 2004
Coccusa isophallus S. H. Tan & Ng, 1998

Currothelphusa Ng, 1990
= *Currothelphusa* Ng, 1990 (type species *Currothelphusa asserpes* Ng, 1990, by original designation; gender feminine)
Currothelphusa asserpes Ng, 1990

Esanthelphusa Naiyanetr, 1994
= *Esanthelphusa* Naiyanetr, 1994 (type species *Potamon* (*Parathelphusa*) *dugasti* Rathbun, 1902, by original designation; gender feminine)
Esanthelphusa chiangmai (Ng & Naiyanetr, 1993) [*Somanniathelphusa*]
Esanthelphusa denchaii (Naiyanetr, 1984) [*Somanniathelphusa*]
Esanthelphusa dugasti (Rathbun, 1902) [*Potamon* (*Parathelphusa*)]
Esanthelphusa fangensis (Naiyanetr, 1987) [*Somanniathelphusa*]
Esanthelphusa nani (Naiyanetr, 1984) [*Somanniathelphusa*]
Esanthelphusa nimoafi Yeo, 2004
Esanthelphusa phetchaburi (Ng & Naiyanetr, 1993) [*Somanniathelphusa*]
Esanthelphusa prolatus (Rathbun, 1902) [*Potamon* (*Parathelphusa*)]

Geelvinkia Bott, 1974
= *Geelvinkia* Bott, 1974 (type species *Potamon* (*Liotelphusa*) *calmani* Roux, 1927, by original designation; gender feminine)
Geelvinkia ambaiana Bott, 1974
Geelvinkia calmani (Roux, 1927) [*Potamon* (*Liotelphusa*)]
Geelvinkia darnei Ng & Guinot, 1997
Geelvinkia holthuisi Bott, 1974

Geithusa Ng, 1989
= *Geithusa* Ng, 1989 (type species *Geithusa pulchra* Ng, 1989, by original designation; gender feminine)
Geithusa lentiginosa Ng, 1992
Geithusa pulchra Ng, 1989

Heterothelphusa Ng & Lim, 1986
= *Heterothelphusa* Ng & Lim, 1986 (type species *Heterothelphusa insolita* Ng & Lim, 1986, by original designation; gender masculine)
Heterothelphusa beauvoisi (Rathbun, 1902) [*Potamon* (*Parathelphusa*)]
= *Siamthelphusa phimaiensis* Naiyanetr, 1978 (nomen nudum)
Heterothelphusa fatum Ng, 1997
Heterothelphusa harmandi (Rathbun, 1902) [*Potamon* (*Parathelphusa*)]
Heterothelphusa insolita Ng & Lim, 1986

Holthuisana Bott, 1969
= *Holthuisana* (*Holthuisana*) Bott, 1969 (type species *Paratelphusa* (*Peritelphusa*) *festiva* Roux, 1911, by original designation; gender feminine)
Holthuisana alba Holthuis, 1980
Holthuisana beauforti (Roux, 1911) [*Potamon* (*Geotelphusa*)]
Holthuisana biroi (Nobili, 1905) [*Potamon* (*Geothelphusa*)]
Holthuisana boesemani Bott, 1974
Holthuisana briggsi (Rathbun, 1926) [*Parathelphusa* (*Liothelphusa*)]
Holthuisana festiva (Roux, 1911) [*Paratelphusa* (*Liotelphusa*)]
Holthuisana loriae (Nobili, 1899) [*Potamon* (*Potamonautes*)]
Holthuisana subconvexa (Roux, 1927) [*Paratelphusa* (*Liotelphusa*)]
Holthuisana vanheurni (Roux, 1927) [*Paratelphusa* (*Liotelphusa*)]
Holthuisana wollastoni (Calman, 1914) [*Parathelphusa* (*Liotelphusa*)]

Irmengardia Bott, 1969
= *Irmengardia* Bott, 1969 (type species *Paratelphusa* (*Peritelphusa*) *pilosimana* Roux, 1936, by original designation; gender feminine)
Irmengardia didacta Ng & L. W. H. Tan, 1991
Irmengardia johnsoni Ng & Yang, 1985
Irmengardia nemestrinus Ng, 1992
Irmengardia pilosimana (Roux, 1936) [*Paratelphusa* (*Peritelphusa*)]

Mahatha Ng & Tay, 2001
= *Mahatha* Ng & Tay, 2001 (type species *Mahatha adonis* Ng & Tay, 2001, by original designation; gender feminine)
Mahatha adonis Ng & Tay, 2001
Mahatha helaya Bahir & Ng, 2005
Mahatha iora Ng & Tay, 2001
Mahatha lacuna Bahir & Ng, 2005
Mahatha ornatipes (Roux, 1915) [*Paratelphusa* (*Barytelphusa*)]
= *Ceylonthelphusa inflatissima* Bott, 1970
Mahatha regina Bahir & Ng, 2005

Mainitia Bott, 1969
= *Mainitia* Bott, 1969 (type species *Para-Lio-thelphusa mainitensis* Balss, 1937, by original designation; gender feminine)
Mainitia mainitensis (Balss, 1937) [*Para-Lio-thelphusa*]

Mekhongthelphusa Naiyanetr, 1985
= *Mekhongthelphusa* Naiyanetr, 1985 (type species *Potamon* (*Parathelphusa*) *tetragonum* Rathbun, 1902, by monotypy; gender feminine)
= *Chulathelphusa* Naiyanetr, 1994 (type species *Somanniathelphusa brandti* Bott, 1968, by original designation; gender feminine)
Mekhongthelphusa brandti (Bott, 1968) [*Somanniathelphusa*]
Mekhongthelphusa kengsaphu Naiyanetr & Ng, 1995
Mekhongthelphusa neisi (Rathbun, 1902) [*Potamon* (*Parathelphusa*)]
Mekhongthelphusa tetragona (Rathbun, 1902) [*Potamon* (*Parathelphusa*)]

Migmathelphusa Chia & Ng, 2006
= *Migmathelphusa* Chia & Ng, 2006 (type species *Migmathelphusa olivacea* Chia & Ng, 2006, by original designation; gender feminine)
Migmathelphusa olivacea Chia & Ng, 2006

Nautilothelphusa Balss, 1933
= *Parathelphusa* (*Nautilothelphusa*) Balss, 1933 (type species *Parathelphusa* (*Nautilothelphusa*) *zimmeri* Balss, 1933, by original designation; gender feminine)
= *Para-Nautilo-thelphusa* Balss, 1934 (unjustified emendation)
Nautilothelphusa zimmeri (Balss, 1933) [*Parathelphusa* (*Nautilothelphusa*)]

Niasathelphusa Ng, 1991
= *Niasathelphusa* Ng, 1991 (type species *Paratelphusa* (*Liotelphusa*) *wirzi* Roux, 1930, by original designation; gender feminine)
Niasathelphusa wirzi (Roux, 1930) [*Paratelphusa* (*Liotelphusa*)]

Oziotelphusa Müller, 1887
= *Telphusa* (*Oziotelphusa*) Müller, 1887 (type species *Telphusa* (*Oziotelphusa*) *hippocastanum* Müller, 1887; by monotypy; gender feminine)
Oziotelphusa aurantia (Herbst, 1799) [*Cancer*]
= *Thelphusa indica* Latreille, 1825
= *Thelphusa leschenaudii* H. Milne Edwards, 1837
Oziotelphusa biloba Bahir, Ng & Yeo, 2005
Oziotelphusa bouvieri (Rathbun, 1904) [*Potamon*]
Oziotelphusa ceylonensis (Fernando, 1960) [*Paratelphusa*]
Oziotelphusa dakuna Bahir & Yeo, 2005
Oziotelphusa gallicola Bahir & Yeo, 2005
Oziotelphusa hippocastanum (Müller, 1887) [*Telphusa* (*Oziothelphusa*)]
Oziotelphusa intuta Bahir & Yeo, 2005
Oziotelphusa kerala Bahir & Yeo, 2005
Oziotelphusa kodagoda Bahir & Yeo, 2005
Oziotelphusa minneriyaensis Bott, 1970
Oziotelphusa populosa Bahir & Yeo, 2005
Oziotelphusa ritigala Bahir & Yeo, 2005
Oziotelphusa senex (Fabricius, 1798) [*Cancer*]
= *Alpheus senex* Weber, 1795 (nomen nudum)
Oziotelphusa stricta Ng & Tay, 2001
Oziotelphusa wagrakarowensis (Rathbun, 1904) [*Potamon* (*Potamon*)]

Parathelphusa H. Milne Edwards, 1853
= *Parathelphusa* H. Milne Edwards, 1853 (type species *Parathelphusa tridentata* H. Milne Edwards, 1853, subsequent designation by Rathbun, 1905; gender feminine) [Opinion 73]
= *Parathelphusa* (*Mesotelphusa*) Roux, 1915 (type species *Telphusa celebensis* De Man, 1892, by original designation; gender feminine)
= *Palawanthelphusa* Bott, 1969 (type species *Potamon* (*Parathelphusa*) *tridentata* var. *pulcherrima* De Man, 1902, by original designation; gender feminine)
Parathelphusa balabac Ng & Takeda, 1993 {2}
Parathelphusa batamensis Ng, 1992
Parathelphusa baweanensis Ng, 1997
Parathelphusa bogorensis Bott, 1970

Parathelphusa cabayugan Freitag & Yeo, 2004
Parathelphusa celebensis (De Man, 1892) [*Thelphusa*]
= *Potamon* (*Potamonautes*) *celebense* var. *immaculata* Schenkel, 1902
Parathelphusa ceophallus Ng, 1993
Parathelphusa convexa De Man, 1879
= *Telphusa convexus* Herklots, 1861 (nomen nudum)
= ?*Ozius frontalis* Targioni-Tozzetti, 1872
= *Parathelphusa dentipes* Heller, 1862
Parathelphusa crocea (Schenkel, 1902) [*Potamon* (*Potamonautes*)]
Parathelphusa ferruginea Chia & Ng, 2006
Parathelphusa linduensis (Roux, 1904) [*Potamon*]
Parathelphusa lokaensis (De Man, 1892) [*Telphusa*]
Parathelphusa lombokensis Bott, 1970
Parathelphusa maculata De Man, 1879
= *Potamon* (*Parathelphusa*) *tridentatum* var. *incertum* Lanchester, 1900
= *Parathelphusa maculata* var. *lanchesteri* Nobili, 1901
Parathelphusa maindroni (Rathbun, 1902) [*Potamon* (*Parathelphusa*)]
Parathelphusa malaysiana Ng & Takeda, 1992
Parathelphusa manguao Freitag & Yeo, 2004
Parathelphusa mindoro Ng & Takeda, 1993
Parathelphusa modiglianii Nobili, 1903
Parathelphusa nagasakti Ng, 1988
Parathelphusa nana Ng & Takeda, 1993
Parathelphusa nitida Ng, 1986
Parathelphusa obtusa (Bott, 1969) [*Palawanthelphusa*]
Parathelphusa ovum Ng, 1995
Parathelphusa oxygona Nobili, 1901
Parathelphusa palawanensis (Bott, 1969) [*Palawanthelphusa*]
Parathelphusa pallida (Schenkel, 1902) [*Potamon* (*Potamonautes*)]
= *Potamon* (*Potamonautes*) *celebensis* var. *annulipes* Schenkel, 1902
Parathelphusa pantherina (Schenkel, 1902) [*Potamon* (*Parathelphusa*)]
Parathelphusa pareparensis (De Man, 1892) [*Telphusa*]
Parathelphusa parma Ng & Takeda, 1993 {2}
Parathelphusa possoensis (Roux, 1904) [*Potamon* (*Potamonautes*)]
Parathelphusa pulcherrima (De Man, 1902) [*Potamon* (*Parathelphusa*)]
Parathelphusa quadrata Ng, 1997
Parathelphusa rasilis Ng & Takeda, 1993
Parathelphusa reticulata Ng, 1990
Parathelphusa sabari Ng, 1986
Parathelphusa saginata Ng & Takeda, 1993
Parathelphusa sarasinorum (Schenkel, 1902) [*Potamon* (*Potamonautes*)]
Parathelphusa sarawakensis Ng, 1986
Parathelphusa shelfordi Nobili, 1901
Parathelphusa sorella Chia & Ng, 2006
Parathelphusa tenuipes (Schenkel, 1902) [*Potamon* (*Potamonautes*)]
Parathelphusa tera Chia & Ng, 1998
Parathelphusa torta Chia & Ng, 1998
Parathelphusa tridentata H. Milne Edwards, 1853 [Direction 36]
= *Alpheus tridens* Weber, 1795 (as *3 dens*) (nomen nudum)
= *Cancer* (*Thelphusa*) *tridens* De Haan, 1835 (pre-occupied name and nomen nudum)
= *Telphusa triodon* Herklots, 1861 (nomen nudum)
Parathelphusa undulata Chia & Ng, 1998
Parathelphusa valida Ng & Goh, 1987

Pastilla Ng & Tay, 2001
= *Pastilla* Ng & Tay, 2001 (type species *Pastilla dacuna* Ng & Tay, 2001, by original designation; gender feminine)
Pastilla dacuna Ng & Tay, 2001

Perbrinckia Bott, 1969
= *Perbrinckia* Bott, 1969 (type species *Thelphusa enodis* Kingsley, 1880, by original designation; gender feminine)
Perbrinckia cracens Ng, 1995
Perbrinckia enodis (Kingsley, 1880) [*Thelphusa*]
Perbrinckia fenestra Bahir & Ng, 2005
Perbrinckia fido Ng & Tay, 2001
Perbrinckia gabadagei Bahir & Ng, 2005
Perbrinckia glabra Ng, 1995
Perbrinckia integra Ng, 1995
Perbrinckia morayensis Ng & Tay, 2001
Perbrinckia punctata Ng, 1995
Perbrinckia quadratus Ng & Tay, 2001
Perbrinckia rosae Bahir & Ng, 2005
Perbrinckia scansor (Ng, 1995) [*Ceylonthelphusa*]
Perbrinckia scitula Ng, 1995

Perithelphusa De Man, 1899
= *Potamon* (*Perithelphusa*) De Man, 1899 (type species *Potamon borneense* von Martens, 1868, subsequent designation by Rathbun, 1905; gender feminine) {3}
Perithelphusa borneensis (von Martens, 1868) [*Thelphusa*]
= *Potamon* (*Perithelphusa*) *borneense* var. *hiliaris* De Man, 1899
= *Potamon* (*Perithelphusa*) *silvicola* De Man, 1899
Perithelphusa buettikoferi (De Man, 1899) [*Potamon* (*Perithelphusa*)]
Perithelphusa lehi Ng, 1986
Perithelphusa rouxi Bott, 1970

Rouxana Bott, 1969
= *Rouxana* Bott, 1969 (type species *Paratelphusa* (*Geotelphusa*) *wichmanii* Roux, 1911, by original designation; gender feminine)
Rouxana ingrami (Calman, 1908) [*Gecarcinucus*]
Rouxana minima (Roux, 1927) [*Paratelphusa* (*Liotelphusa*)]
Rouxana papuana (Nobili, 1899) [*Potamon* (*Geotelphusa*)]
Rouxana phreatica Holthuis, 1982
Rouxana plana (Calman, 1914) [*Parathelphusa* (*Liothelphusa*)]
Rouxana roushdyi Bott, 1974
Rouxana wakipensis (Rathbun, 1926) [*Cylindrotelphusa*]
Rouxana wichmanii (Roux, 1911) [*Paratelphusa* (*Geotelphusa*)]

Salangathelphusa Bott, 1968
= *Salangathelphusa* Bott, 1968 (type species *Parathelphusa salangensis* Ortmann, 1893, by monotypy; gender feminine)
Salangathelphusa anophrys (Kemp, 1923) [*Paratelphusa* (*Paratelphusa*)]
Salangathelphusa brevicarinata (Hilgendorf, 1882) [*Parathelphusa*]
= *Parathelphusa salangensis* Ortmann, 1893

Sartoriana Bott, 1969
= *Sartoriana* Bott, 1969 (type species *Paratelphusa* (*Paratelphusa*) *spinigera* Wood-Mason, 1871, by original designation; gender feminine)
Sartoriana afghaniensis (Pretzmann, 1963) [*Parathelphusa* (*Parathelphusa*)]
Sartoriana blandfordi (Alcock, 1909) [*Paratelphusa* (*Paratelphusa*)]

Sartoriana rokitanskyi (Pretzmann, 1982) [*Liotelphusa* (*Sartoriana*)]
Sartoriana spinigera (Wood-Mason, 1871) [*Parathelphusa*]
= *Thelphusa spinigera* White, 1847 (nomen nudum)
Sartoriana trilobata (Alcock, 1909) [*Parathelphusa* (*Parathelphusa*)]

Sayamia Naiyanetr, 1994
= *Sayamia* Naiyanetr, 1994 (type species *Potamon* (*Parathelphusa*) *germaini* Rathbun, 1902, by original present designation; gender feminine)
Sayamia bangkokensis (Naiyanetr, 1982) [*Somanniathelphusa*]
Sayamia germaini (Rathbun, 1902) [*Potamon* (*Parathelphusa*)]
Sayamia maehongsonensis (Naiyanetr, 1987) [*Somanniathelphusa*]
Sayamia melanodactylus Ng, 1997
Sayamia sexpunctata (Lanchester, 1906) [*Potamon* (*Paratelphusa*)]
= *Somanniathelphusa juliae* Bott, 1968 [*Somanniathelphusa*]

Sendleria Bott, 1969
= *Sendleria* Bott, 1969 (type species *Potamon* (*Potamon*) *gloriosa* Balss, in Sendler, 1923, by original designation; gender feminine)
Sendleria genuitei Guinot, 1987
Sendleria gjellerupi (Roux, 1927) [*Paratelphusa* (*Barytelphusa*)]
Sendleria gloriosa (Balss, in Sendler, 1923) [*Potamon* (*Potamon*)]
Sendleria salomonis (Roux, 1934) [*Paratelphusa* (*Barytelphusa*)]

Siamthelphusa Bott, 1968
= *Siamthelphusa* Bott, 1968 (type species *Potamon* (*Parathelphusa*) *improvisum* Lanchester, 1902, by original designation; gender feminine)
Siamthelphusa acutidens Ng & Naiyanetr, 1997
Siamthelphusa faxoni Ng & Naiyanetr, 1997
Siamthelphusa holthuisi Naiyanetr & Ng, 1990
Siamthelphusa improvisa (Lanchester, 1902) [*Potamon* (*Parathelphusa*)]
= *Siamthelphusa improvisa tweediei* Bott, 1968
Siamthelphusa nan Ng & Naiyanetr, 1997
Siamthelphusa paviei (De Man, 1898) [*Parathelphusa*]
Siamthelphusa retimanus Ng & Naiyanetr, 1997
Siamthelphusa transversa Ng & Naiyanetr, 1997
Siamthelphusa variegata Ng & Naiyanetr, 1997

Somanniathelphusa Bott, 1968
= *Somanniathelphusa* Bott, 1968 (type species: *Parathelphusa sinensis* H. Milne Edwards, 1853, by original designation; gender feminine)
Somanniathelphusa amoyensis Naiyanetr & Dai, 1997
Somanniathelphusa araeochela Naiyanetr & Dai, 1997
Somanniathelphusa bawangensis Dai & Xing, 1994
Somanniathelphusa boyangensis Dai, Peng & Zhou, 1994
Somanniathelphusa brevipodum Tai, Song, He, Cao, Xu & Zhong, 1975
Somanniathelphusa dangi Yeo & Nguyen, 1999
Somanniathelphusa falx Ng & Dudgeon, 1992
Somanniathelphusa gaoyunensis Dai, Peng & Zhou, 1994
Somanniathelphusa grayi (Alcock, 1909) [*Parathelphusa* (*Parathelphusa*)]
= *Parathelphusa* (*Parathelphusa*) *chongi* Wu, 1935
Somanniathelphusa guilinensis Naiyanetr & Dai, 1997
Somanniathelphusa hainanensis Dai & Xing, 1994
Somanniathelphusa huaanensis Naiyanetr & Dai, 1997
Somanniathelphusa huanglungensis Dai, Peng & Zhou, 1994
Somanniathelphusa kyphuensis Dang, 1975
Somanniathelphusa lacuvita Ng, 1995
Somanniathelphusa linchuanensis Dai, Peng & Zhou, 1994
Somanniathelphusa longicaudus Naiyanetr & Dai, 1997
Somanniathelphusa megachela Naiyanetr & Dai, 1997
Somanniathelphusa nanningensis Naiyanetr & Dai, 1997
Somanniathelphusa pax Ng & Kosuge, 1995
Somanniathelphusa plicatus (Fabricius, 1798) [*Cancer*] {4}
Somanniathelphusa qiongshanensis Dai & Xing, 1994
Somanniathelphusa ruijinensis Dai, Peng & Zhou, 1994
Somanniathelphusa sinensis (H. Milne Edwards, 1853) [*Parathelphusa*]
Somanniathelphusa taiwanensis Bott, 1968
Somanniathelphusa tongzhaensis Naiyanetr & Dai, 1997
Somanniathelphusa triangularis Dang & Hai, 2005
Somanniathelphusa yangshanensis Naiyanetr & Dai, 1997
Somanniathelphusa yuilinensis Naiyanetr & Dai, 1997
Somanniathelphusa zanklon Ng & Dudgeon, 1992
Somanniathelphusa zhangpuensis Naiyanetr & Dai, 1997
Somanniathelphusa zhapoensis Naiyanetr & Dai, 1997
Somanniathelphusa zhongshiensis Dai, Peng & Zhou, 1994

Spiralothelphusa Bott, 1968
= *Leschenaultia* Alcock, 1909 (type species *Cancer hydrodromus* Herbst, 1794, by original designation; name pre-occupied by *Leschenaultia* Robineau-Desvoidy, 1830 [Diptera]; gender feminine)
= *Spiralothelphusa* Bott, 1968 (type species *Cancer hydrodromus* Herbst, 1794, by original designation; gender feminine)
Spiralothelphusa fernandoi Ng, 1994
Spiralothelphusa hydrodroma (Herbst, 1794) [*Cancer*]
Spiralothelphusa parvula (Fernando, 1961) [*Paratelphusa*]
Spiralothelphusa wuellerstorfi (Heller, 1862) [*Thelphusa*]
= *Parathelphusa innominata* Fernando, 1960
= *Thelphusa corrugata* Heller, 1865

Stygothelphusa Ng, 1989
= *Stygothelphusa* Ng, 1989 (type species by monotypy, *Potamon* (*Thelphusa*) *bidiense* Lanchester, 1900, by original designation; gender feminine)
Stygothelphusa bidiensis (Lanchester, 1900) [*Potamon* (*Thelphusa*)]
Stygothelphusa nobilii (Colosi, 1920) [*Potamon* (*Geothelphusa*)]

Sundathelphusa Bott, 1969
= *Sundathelphusa* Bott, 1969 (type species *Potamon* (*Geothelphusa*) *cassiope* De Man, 1902, by original designation; gender feminine)
= *Archipelothelphusa* Bott, 1969 (type species *Thelphusa grapsoides* H. Milne Edwards, 1853, by original designation; gender feminine)
Sundathelphusa antipoloensis (Rathbun, 1904) [*Potamon* (*Potamon*)]
Sundathelphusa aruana (Roux, 1911) [*Potamon* (*Geothelphusa*)]
Sundathelphusa aspera Ng & Stuebing, 1989
Sundathelphusa boex Ng & Sket, 1996
Sundathelphusa cassiope (De Man, 1902) [*Potamon* (*Geothelphusa*)]
Sundathelphusa cavernicola (Takeda, 1983) [*Archipelothelphusa*]
Sundathelphusa celer (Ng, 1991) [*Archipelothelphusa*]
Sundathelphusa grapsoides (H. Milne Edwards, 1853) [*Thelphusa*]
= *Thelphusa grapsoides* White, 1847 (nomen nudum)
Sundathelphusa hades Takeda & Ng, 2001
Sundathelphusa halmaherensis (De Man, 1902) [*Potamon*]
Sundathelphusa jagori (von Martens, 1868) [*Thelphusa*]

Sundathelphusa leschenaultii (Bürger, 1894) [*Telphusa*]
Sundathelphusa longipes (Balss, 1937) [*Para-Bary-Thelphusa*]
Sundathelphusa minahassae (Schenkel, 1902) [*Potamon* (*Geothelphusa*)]
Sundathelphusa mistio (Rathbun, 1904) [*Potamon* (*Potamon*)]
Sundathelphusa montana (Bürger, 1894) [*Telphusa*]
Sundathelphusa montanoanus (Rathbun, 1904) [*Potamon* (*Potamon*)]
Sundathelphusa philippina (von Martens, 1868) [*Thelphusa*]
?*Sundathelphusa philippina* (Bürger, 1894) [*Telphusa*]
[replacement name needed if this taxon is confirmed to be congeneric with *Thelphusa philippina* von Martens, 1868)
Sundathelphusa picta (von Martens, 1868) [*Thelphusa*]
Sundathelphusa rubra (Schenkel, 1902) [*Potamon* (*Geothelphusa*)]
= ?*Potamon* (*Geothelphusa*) *angustipes* Schenkel, 1902
Sundathelphusa sottoae Ng & Sket, 1996
Sundathelphusa subquadratus (von Martens, 1868) [*Thelphusa*]
Sundathelphusa sutteri (Bott, 1970) [*Archipelothelphusa*]
Sundathelphusa tenebrosa Holthuis, 1979
Sundathelphusa urichi Ng & Sket, 1996
Sundathelphusa vedeniki Ng & Sket, 1996
Sundathelphusa wolterecki (Balss, 1937) [*Para-Bary-Thelphusa*]

Syntripsa Chia & Ng, 2006
= *Syntripsa* Chia & Ng, 2006 (type species *Potamon* (*Parathelphusa*) *matannensis* Schenkel, 1902, by original designation; gender feminine)
Syntripsa flavichela Chia & Ng, 2006
Syntripsa matannensis (Schenkel, 1902) [*Potamon* (*Parathelphusa*)]

Terrathelphusa Ng, 1989
= *Terrathelphusa* Ng, 1989 (type species *Geothelphusa kuhli* De Man, 1883, by original designation; gender feminine)
Terrathelphusa chilensis (Heller, 1862) [*Thelphusa*]
= *Geothelphusa modesta* De Man, 1892
= *Thelphusa gecarcinoides* Herklots, 1861 (nomen nudum)
Terrathelphusa kuchingensis (Nobili, 1901) [*Potamon* (*Geothelphusa*)]
Terrathelphusa kuhli (De Man, 1883) [*Geothelphusa*]
Terrathelphusa loxophthalma (De Man, 1892) [*Geothelphusa*]
Terrathelphusa ovis Ng, 1997
Terrathelphusa telur Ng, 1997

Thelphusula Bott, 1969
= *Thelphusula* Bott, 1969 (type species *Potamon* (*Geothelphusa*) *buergeri* De Man, 1899, by original designation; gender feminine)
Thelphusula baramensis (De Man, 1902) [*Potamon* (*Potamonautes*)]
Thelphusula buergeri (De Man, 1899) [*Potamon* (*Geothelphusa*)]
= *Gecarcinucus* (*Cylindrothelphusa*) *buergeri lebangensis* Balss, 1937
Thelphusula dicerophilus Ng & Stuebing, 1990
Thelphusula granosa Holthuis, 1979
Thelphusula hulu S. H. Tan & Ng, 1997
Thelphusula luidana (Chace, 1938) [*Parathelphusa* (*Liothelphusa*)]
Thelphusula sabana S. H. Tan & Ng, 1998
Thelphusula styx Ng, 1989
Thelphusula tawauensis S. H. Tan & Ng, 1998

Torhusa Ng, 1997
= *Torhusa* Ng, 1997 (type species *Mainitia nieuwenhuisi* Bott, 1970, by original designation; gender feminine)
= *Aberrothelphusa* Ng, in Fransen, Holthuis & Adema, 1997 (unavailable name, Article 13.6.1) {5}
Torhusa niewenhuisi (Bott, 1970) [*Mainitia*]

Incertae sedis

Alpheus vitulus Weber, 1795 (nomen nudum) {6}
"*Potamon* (*Geothelphusa*)" *perrieri* Rathbun, 1904 {7}

Notes

{1} *Austrothelphusa* species are endemic to Australia, except for the poorly known *A. insularis* (Colosi, 1919) supposedly from Fiji but not reported since. Two of the authors (P. K. L. Ng and P. J. F. Davie) have discussed this matter at some length with Satish Choy, who was born and raised in Fiji, and he is very certain this record is mistaken. The geographical location is also suspect – the easternmost record for any freshwater crab is in the Solomons, *Sendleria salomonis* (Roux, 1934) (see also Bott, 1969, 1970). The identity of *A. insularis* (Colosi, 1919) remains unclear and the types need to be checked. A revision of the Australian species of *Austrothelphusa* under way by P. J. F. Davie also suggests the Australian fauna is much more diverse than previously thought, with potentially triple the number of species presently recognised.

{2} Ng & Takeda (1993) described several new species from Palawan in the Philippines. Subsequently, more species have been reported from that island (Freitag & Yeo, 2004). Two species were described from the small island of Balabac north of Palawan – *P. balabac* Ng & Takeda, 1993, and *P. parma* Ng & Takeda, 1993. Recent collections from Balabac by H. Freitag show that the differences between the two species can best explained by variation and an anomalous growth on the G1 of the type of *P. balabac* (unpublished data). The two species will be synonymised in an upcoming paper where these aspects are discussed in detail.

{3} *Perithelphusa* was established by De Man (1899) for four taxa, *Potamon borneense* von Martens, 1868, *Potamon* (*Perithelphusa*) *borneense* var. *hiliaris* De Man, 1899, *Potamon* (*Perithelphusa*) *buettikoferi* De Man, 1899, and *Potamon* (*Perithelphusa*) *silvicola* De Man, 1899. No type species was designated. Rathbun (1905: 224) selected the type species as *Potamon borneense* von Martens, 1868.

{4} P. K. L. Ng has examined the types of *Cancer plicatus* Fabricius, 1798, in the Copenhagen Museum. This is clearly a species of *Somanniathelphusa*, but the type specimens are in very poor condition, with the diagnostic G1 structures only partially intact. While it bears some resemblance to *S. amoyensis*, no reliable decision on its identity has yet been made.

{5} The name *Aberrothelphusa* Ng, in Fransen, Holthuis & Adema (1997) is an unfortunate lapsus. This was the original name intended for the type species, *Mainitia nieuwenhuisi* Bott, 1970, and the labels were captured by the museum databases resulting in the name being published in Fransen et al.'s (1997) catalogue. Although the type species of *Aberrothelphusa* was indicated, since this was a name published after 1930, the Code (Article

13.6.1) renders this name unavailable. As discussed by Ng (2002), the first valid publication of a name for this genus is therefore *Torhusa* Ng, 1997.

{6} Weber's (1795) list was compiled from various sources, including his own, and included the unpublished records of Daldorff as well as published accounts like those of Fabricius. For Fabricius, Weber also listed taxa that Fabricius had not yet published by 1795, but which he later did in 1798. Weber indicated such records with an "S", i.e. the *Supplementum* of Fabricius (1798). Because Weber did not always state whose names they were, and whether any were new, a clear determination of authorship can be confusing. Fortunately, authorship can often be determined by cross-referring the names to the papers of Linnaeus, Pallas, Pennant, Fabricius and Herbst. In this manner, we have sorted out which of the names in Weber were new, or can be regarded as such.

In Weber's paper, the arrangement of the names within each of the genera he recognised was clearly not alphabetical, and from the names, it is obvious that he grouped what he thought were related taxa together. For *Alpheus vitulus* (a name he attributed to Daldorff), the two names before it were *Alpheus ruricola* and *A. senex*, and the two after it were *A. maculatus* and *A. tridens* (as "3 dens"). *Alpheus senex* was attributed to Fabricius (1798), and the types in the ZMUC show that this is what is today known as *Oziotelphusa senex* (Fabricius, 1798), a species of freshwater crab from southern India (see Ng & Tay, 2001). The name "*Alpheus tridens*" was attributed to Fabricius (1798) and while its identity is uncertain (there are no type specimens of this in the ZMUC), it seems most likely to be *Parathelphusa tridentata* H. Milne Edwards, 1853, a well known freshwater crab in Java. *Alpheus ruricola* is almost certainly the American gecarcinid land crab *Gecarcinus ruricola* (Linnaeus, 1758); while *Alpheus maculatus* is likely to be the common Indo-West Pacific carpiliid *Carpilius maculatus* (Linnaeus, 1758). Both these names should not be regarded as new, as Weber almost certainly obtained them from Linnaeus' (1758) work. All four species are relatively stout crabs with weakly to strongly swollen carapaces. As for *Alpheus vitulus*, the name is attributable to Weber, but it has not been used for over a hundred years and its identity is unknown. The name is derived from the Latin for a young heifer, suggesting a stocky and stout species like those listed near it by Weber. All indications thus are that it is also a freshwater crab, possibly also a parathelphusid like *A. senex* and *A. tridens*. For this reason, we refer it there. The name in any case is a nomen nudum and does not cause any problems.

{7} *Potamon* (*Geothelphusa*) *perrieri* Rathbun, 1904, was supposedly described from Africa, and has long believed to be a potamonautid. Recently, Neil Cumberlidge re-examined the types in the Paris Museum. From the carapace features as well as form of the male abdomen and G1 (unpublished data), it is clearly not a species of potamonautid but very likely to be a species of *Terrathelphusa* Ng, 1989, from Borneo. This matter is now under study by N. Cumberlidge and P. K. L. Ng. The genus *Terrathelphusa* is currently represented by six species (Ng, 1989, 1997).

Fig. 56. *Geithusa pulchra*, Peninsular Malaysia (photo: P. Ng)

Fig. 57. *Syntripsa flavichela*, Sulawesi, Indonesia (photo: C. Schubart)

Fig. 58. *Thelphusula baramensis*, Sarawak, Malaysia (photo: P. Ng)

Fig. 59. *Sundathelphusa cavernicola*, Bohol, Philippines (photo: H. C. Liu)

SUPERFAMILY GONEPLACOIDEA MACLEAY, 1838

Remarks. – The taxonomy of this grouping has changed substantially in recent years, but despite this, there are still many problems. Števčić (2005), Karasawa & Kato (2003a, b) and Karawasa & Schweitzer (2006) have rearranged the superfamily and constituent families substantially, although there are still many points of contention. Castro (2007) reviewed the problems associated with their classifications, and cast doubt on some of their arrangements. Ng & Manuel-Santos (2007), in establishing a new family, the Vultocinidae, did a comprehensive review of the recent classifications proposed, and used a suite of characters to substantially clarify the definition of the superfamily and many of the recognised families.

In the present classification of the Goneplacoidea, we recognise 10 families: Acidopsidae, Chasmocarcinidae, Conleyidae, Euryplacidae, Goneplacidae, Lithocheiridae, Mathildellidae, Progeryonidae, Scalopidiidae and Vultocinidae. We are uncertain how these families are related and we have doubts that our Goneplacoidea is monophyletic. Two of the new families described by Števčić (2005), Raouliidae (for the monotypic *Raoulia* Ng, 1987) and Typhlocarcinodidae (for the monotypic *Typhlocarcinodes* Alcock, 1900), are a problem as they do not agree well with any of the families recognised here. They may be distinct families in the Goneplacoidea as Števčić (2005) argued or merely very apomorphic genera allied to better known families in other superfamilies. For genera like these whose members are small and very poorly known, it is imperative that the original specimens are carefully re-examined, and their sternal, abdominal and gonopodal characters properly documented, before firm conclusions are made. Until we better understand their affinities, we prefer to synonymise Raouliidae and Typhlocarcinodidae with the Chasmocarcinidae for the time being.

FAMILY ACIDOPSIDAE ŠTEVČIĆ, 2005

Acidopsidae Števčić, 2005 [recte Acidopidae] {1}
Parapilumnidae Števčić, 2005

Acidops Stimpson, 1871
= *Acidops* Stimpson, 1871 (type species *Acidops fimbriatus* Stimpson, 1871, by monotypy; gender masculine)
= *Epimelus* A, Milne Edwards, 1878 (type species *Epimelus cessacii* A. Milne-Edwards, 1878, by monotypy; gender masculine)
Acidops cessacii (A. Milne-Edwards, 1878) [*Epimelus*]
Acidops fimbriatus Stimpson, 1871

Parapilumnus Kossmann, 1877
= *Parapilumnus* Kossmann, 1877 (type species *Pilumnus cristimanus* A. Milne-Edwards, 1873, by subsequent designation by Rathbun (1930); gender masculine)
Parapilumnus cristimanus (A. Milne-Edwards, 1873) [*Pilumnus*]
Parapilumnus oryctos Ng, 2002

Notes

{1} *Acidops* is a very different from most goneplacoids, with a primitive sternal condition in which the median sutures are complete, and research by one of the authors (D. Guinot, together with M. Tavares and P. Castro, in prep.) over some years, indicates that it must be accomodated in its own family. Števčić (2005: 36) independently stated that the genus was so unusual that it deserved not only its own family but also a superfamily, Acidopsidae Števčić, 2005, and Acidopsoidea Števčić, 2005. At the same time, Števčić (2005: 70) established the family Parapilumnidae Števčić, 2005, and superfamily Parapilumnoidea Števčić, 2005, for *Parapilumnus* (sensu Ng, 2002a), arguing that this genus was peculiar. Števčić (2005) did not compare the two families or genera. This is despite Ng (2002a: 212), who when redefining *Parapilumnus*, commented that "*Parapilumnus* s. str. in fact closely resembles *Acidops* Stimpson, 1971 (type species *Acidops fimbriatus* Stimpson, 1871), a genus with two species (*A. fimbriatus* and *A. cessaci* (A. Milne-Edwards, 1878)) known only from the Atlantic thus far. *Acidops* nevertheless differs from *Parapilumnus* in many aspects, most obvious being the carapace having the regions well demarcated with deep grooves separating them, the anterolateral margin clearly separated into four prominent lobes, the fingers of the cheliped not ridged and grooved, and the carapace and legs far more densely setose, so much so that the margins and surface are almost obscured ... The G1 and G2 of *Acidops* and *Parapilumnus* s. str. are very similar in form and general shape ... The systematic position of *Acidops* is unclear. Until recently, authors have placed it in the Rhizopinae Stimpson, 1858, but Ng (1987), who reappraised this subfamily, formally referred Rhizopinae to the Pilumnidae, excluded *Acidops* from it and transferred it tentatively to the Goneplacidae instead. Within the Goneplacidae, it fits best in the Chasmocarcininae Serène, 1964b. On the same rationale, *Parapilumnus* s. str. should also be referred to the Chasmocarcininae as well." As we have discussed, both *Acidops* and *Parapilumnus* are in a family by themselves, and not chasmocarcinids. Most importantly, both genera lack the characteristic supplementary coxosternal plate present in sternite 8 (see Davie & Guinot, 1996), a synapomorphy of the chasmocarcinids. We have examined specimens of both *Acidops* (*Acidops cessacii*) and *Parapilumnus* (including males of both *P. cristimanus* and *P. oryctos*, see Ng & Chen, 2004b), and we have no doubt that they should be placed in the same family. As the Code regards the names Acidopsidae Števčić, 2005, and Parapilumnidae Števčić, 2005, are published simultaneously (being in the same publication), we hereby select Acidopsidae Števčić, 2005, as having priority.

A point of clarification is also needed on the date and author of Acidopsidae. Števčić (2005) cites the family as "Acidopidae Števčić, in Martin & Davis, 2001". We find no indication in Martin & Davis (2001) of the name, and this must be a mistake. The name was first validly published by Števčić (2005).

FAMILY CHASMOCARCINIDAE SERÈNE, 1964

Chasmocarcininae Serène, 1964b
?Raouliidae Števčić, 2005
?Typhlocarcinodidae Števčić, 2005

Subfamily Chasmocarcininae Serène, 1964

Chasmocarcininae Serène, 1964b
?Raouliidae Števčić, 2005
?Typhlocarcinodidae Števčić, 2005

Camatopsis Alcock & Anderson, 1899
= *Camatopsis* Alcock & Anderson, 1899 (type species *Camatopsis rubida* Alcock & Anderson, 1899, by monotypy; gender feminine)
Camatopsis rubida Alcock & Anderson, 1899

Chasmocarcinops Alcock, 1900
= *Chasmocarcinops* Alcock, 1900 (type species *Chasmocarcinops gelasimoides* Alcock, 1900, by monotypy; gender masculine)
Chasmocarcinops gelasimoides Alcock, 1900

Chasmocarcinus Rathbun, 1898
= *Chasmocarcinus* Rathbun, 1898 (type species *Chasmocarcinus typicus* Rathbun, 1898, by original designation; gender masculine) [Opinion 85, Direction 37]
Chasmocarcinus arcuatus Coelho & Coelho, 1998
Chasmocarcinus chacei Felder & Rabalais, 1986
Chasmocarcinus cylindricus Rathbun, 1898
Chasmocarcinus ferrugineus Glassell, 1936
Chasmocarcinus hirsutipes Coelho & Coelho, 1998
Chasmocarcinus latipes Rathbun, 1898
Chasmocarcinus longipes Rathbun, 1898
Chasmocarcinus meloi Coelho & Coelho, 1998
Chasmocarcinus mississipiensis Rathbun, 1931
Chasmocarcinus obliquus Rathbun, 1898
Chasmocarcinus panamensis Serène, 1964
Chasmocarcinus peresi Rodrigues da Costa, 1968
Chasmocarcinus rathbuni Bouvier, 1917
Chasmocarcinus superbus (Boone, 1927) [*Hephthopelta*]
Chasmocarcinus typicus Rathbun, 1898

Hephthopelta Alcock, 1899
= *Hephthopelta* Alcock, 1899 (type species *Hephthopelta lugubris* Alcock, 1899, by monotypy; gender feminine) [Opinion 85, Direction, 37]
Hephthopelta apta Rathbun, 1914
Hephthopelta aurita Rathbun, 1932
Hephthopelta brunni Serène, 1964
Hephthopelta cavimana (Rathbun, 1914) [*Chasmocarcinus*]
Hephthopelta cribrorum Rathbun, 1932
Hephthopelta knudseni Serène, 1964
Hephthopelta littoralis Tesch, 1918
Hephthopelta lugubris Alcock, 1899
Hephthopelta mortenseni Serène, 1964
Hephthopelta pubescens Chen, 1998

?*Raoulia* Ng, 1987 {1}
= *Raoulia* Ng, 1987 (type species *Raoulia limosa* Ng, 1987, by monotypy; gender feminine)
Raoulia limosa Ng, 1987

?*Typhlocarcinodes* Alcock, 1900
= *Typhlocarcinodes* Alcock, 1900 (type species *Typhlocarcinus integifrons* Miers, 1881, subsequent designation by Tesch, 1918; gender masculine)
Typhlocarcinodes integifrons (Miers, 1881) [*Typhlocarcinus*]

Subfamily Megaesthesiinae Števčić, 2005

Megaesthesiinae Števčić, 2005

Megaesthesius Rathbun, 1909
= *Megaesthesius* Rathbun, 1909 (type species *Megaesthesius sagedae* Rathbun, 1909, by monotypy; gender masculine)
Megaesthesius sagedae Rathbun, 1909
Megaesthesius yokoyai Sakai, 1939

Subfamily Trogloplacinae Guinot, 1986 {2}

Trogloplacinae Guinot, 1986

Australocarcinus Davie, 1988
= *Australocarcinus* Davie, 1988 (type species *Australocarcinus riparius* Davie, 1988, by original designation; gender masculine)
Australocarcinus kanaka Davie & Guinot, 1996
Australocarcinus palauensis Davie & Guinot, 1996
Australocarcinus riparius Davie, 1988

Trogloplax Guinot, 1986
= *Trogloplax* Guinot, 1986 (type species *Trogloplax joliveti* Guinot, 1986, by monotypy; gender feminine)
Trogloplax joliveti Guinot, 1986

Notes

{1} In describing *Raoulia* as a new genus, Ng (1987: 93) wrote "*Raoulia* gen. nov. Type-species: *Typhlocarcinodes piroculatus* Serène, 1964 (not *Typhlocarcinops piroculatus* Rathbun, 1911)". He subsequently described a new species, *R. limosa* with the following synonymy: "*Typhlocarcinodes piroculatus* Barnard, 1955: 35, Fig. 16; Serène, 1964: 237, pl. 21A, Fig. 15 (not *Typhlocarcinus piroculatus* Rathbun, 1911; ? Balss, 1938)" (Ng, 1987: 93). Ng's (1987: 93, 94) discussion of the genus and species, however, made it clear that he was referring to the specimen identified as "*Typhlocarcinodes piroculatus*" by Serène (1964b) (as well as Barnard, 1955), and not the true *Typhlocarcinops piroculatus* Rathbun, 1911. With regards to Rathbun's (1911) species, Tesch (1918b) had referred it to *Typhlocarcinodes* Alcock, 1900, but Ng (1987) transferred it to the pilumnid genus *Caecopilumnus* Borradaile, 1903. *Typhlocarcinops piroculatus* Rathbun, 1911, is therefore not the type species of *Raoulia* Ng, 1987. As the specimen of "*Typhlocarcinodes piroculatus*" identified by Serène (1964b) was referred by Ng (1987) to a new species, *Raoulia limosa*, this should be regarded as the type species of *Raoulia* Ng, 1987. To ensure there is no misinterpretation in the future, the type species of *Raoulia* Ng, 1987, is now fixed (see Article 70.3 of the Code) as *Raoulia limosa* Ng, 1987, incorrectly written as *Typhlocarcinodes piroculatus* Serène, 1964, in the original designation by Ng (1987).

{2} The Trogloplacinae Guinot, 1986, was originally described for a single monotypic genus and placed as a subfamily of the Goneplacidae sensu lato (Guinot 1986, 1987). Davie & Guinot (1996) added *Australocarcinus* including three species, and pointed out the relationship to

the Chasmocarcininae Serène, 1964b, a wholly marine group. Both subfamilies have the penis lying in either an enclosed or open groove in sternite 8, such that sternite 8 shows an intercalated plate anteriorly (or the supplementary coxosternal plate) (see also above discussion for Acidopsidae and Chasmocarcinidae).

Davie (2002) raised the Trogloplacinae to full family status. With the recognition here of the Chasmocarcinidae as a family, we have decided to now treat the Trogloplacinae as a subfamily within the Chasmocarcinidae because of the similarity in the supplementary coxosternal plate. There are some notable differences between the two subfamilies which warrant their separation. A major difference is that in the Chasmocarcininae the basal antennular article is very swollen and completely fills the antennular fossa, such that the flagellum is excluded and cannot be folded. Also in the Chasmocarcininae, the G2 is noticeably shorter than the G1 and the flagellum is more-or-less short, whereas in the Trogloplacinae, the G2 is as long as or slightly longer than the G1, and the flagellum occupies about half, or slightly more, of the length. Finally, the Trogloplacinae is only known from freshwater and upper estuarine environments, and has evolved direct development through to juvenile crab stage, a characteristic completely apart from other Goneplacidae. *Austrocarcinus kanaka*, described from New Caledonia, was recently collected from shallow clear waters in well forested karst areas, several hundred metres above sea level near the type locality in northern New Caledonia (P. K. L. Ng).

Fig. 60. *Australocarcinus kanaka*, New Caledonia (photo: P. Ng)

Fig. 61. *Hephthopelta* sp., central Philippines (photo: P. Ng)

FAMILY CONLEYIDAE ŠTEVČIĆ, 2005

Conleyidae Števčić, 2005

Remarks. – In establishing *Conleyus*, Ng & N. K. Ng (2003: 434) commented that "*Conleyus* also bears a superficial resemblance to more typical carcinoplacines like *Intesius* Guinot & Richer de Forges, 1981, and *Platypilumnus* Alcock, 1894 (see also Richer de Forges, 1996; Ng & Chan, 1997), but its carapace (and G1) features differ so markedly that we have little doubt that they are not congeneric. Both these genera are also typically deeper water taxa, found well below 300 m. In the form of its male abdomen (all segments freely articulating), the stout G1 and relatively long G2 (exceeding half the length of the G1) … *Conleyus* is clearly a member of the Carcinoplacinae. Some of the features associated with *Conleyus*, viz. the poorly pigmented carapace, elongated ambulatory legs and relatively reduced orbits are adaptations associated with obligate cavernicolous animals … These features are also present in species living in deep waters. Considering the habitat where *Conleyus* was collected from, i.e. deep coral rubble beds, it is not surprising that it has features associated with such organisms. Nevertheless, on the basis of just two specimens, not much else can be said about its preferred habitat." On the basis of this, Števčić (2005) established a new family and superfamily Conleyoidea Števčić, 2005, and Conleyidae Števčić, 2005, for the genus. Castro (2007) discussed this and argued that *Conleyus* was not a goneplacid in the strict sense but left its status indeterminate. Ng & Manuel-Santos (2007) listed a suite of unique male abdominal and sternal characters that showed that the recognition of a separate family for this genus was necessary, although the characters listed by Števčić (2005) are not valid. Števčić's (2005) recognition of a superfamily is unwarranted. *Conleyus* is still a goneplacoid.

Conleyus Ng & N. K. Ng, 2003
= *Conleyus* Ng & N. K. Ng, 2003 (type species *Conleyus defodio* Ng & N. K. Ng, 2003, by original designation; gender masculine)
Conleyus defodio Ng & N. K. Ng, 2003

Fig. 62. *Conleyus defodio*, Guam (photo: G. Paulay)

FAMILY EURYPLACIDAE STIMPSON, 1871

Euryplacinae Stimpson, 1871

Remarks. – The Euryplacidae is still a "mixed bag" and needs urgent revision. The series of papers by Guinot (1969a–c, 1971) clarified the specific and generic identities of many species which have been allied, linked or placed in the Euryplacinae or Euryplacidae, but the precise classifications of several were left unsettled. Some genera like *Trizocarcinus* Rathbun, 1914, were placed in the group with some hesitation while others like *Trapezioplax* Guinot, 1969, were only discussed. *Trizocarcinus* is unusual in having a relatively broad male abdomen (in contrast to the narrow ones in most euryplacids) but the G1 condition is more typical of members of the family. Števčić (2005) recognised the family Euryplacidae and even a superfamily Euryplacoidea, but did not list the genera included. In describing *Xenocrate*, Ng & Castro (2007) also stated the key characters of the family Euryplacidae (see also Castro, 2007) and they listed 12 genera as provisionally belonging to this family. A revision of the family is currently in progress by these authors, and a re-appraisal of all the literature and re-examination of the material indicates that *Trapezioplax*, *Chasmophora* and *Eucratodes* are clearly not euryplacids. *Trapezioplax* is referred to the Pseudorhombilidae, *Chasmophora* to the Panopeidae and *Eucratodes* to the Xanthidae (see notes for these families).

Eucrate De Haan, 1835
  = *Cancer* (*Eucrate*) De Haan, 1835 (type species *Cancer* (*Eucrate*) *crenatus* De Haan, 1835, by monotypy; gender feminine) [Opinion 85, Direction 37]
  = *Pilumnoplax* Stimpson, 1858 (type species *Pilumnoplax sulcatifrons* Stimpson, 1858, subsequent designation by Rathbun, 1918; gender feminine)
  = *Pseudozius* (*Platyozius*) Borradaile, 1902 (type species *Pseudozius* (*Platyozius*) *laevis* Borradaile, 1902, by monotypy; gender masculine)
Eucrate affinis Haswell, 1881
  = *Pseudorhombila sulcatifrons* var. *australiensis* Miers, 1884
Eucrate alcocki Serène, in Serène & Lohavanijaya, 1973
  = *Eucrate maculata* Yang & Sun, 1979
Eucrate costata Yang & Sun, 1979
Eucrate crenata (De Haan, 1835) [*Cancer* (*Eucrate*)]
  = ?*Eucrate affinis* Haswell, 1881
Eucrate dorsalis (White, 1849) [*Cancer* (*Galene*)]
  = *Galene dorsalis* White, 1861
  = *Eucrate hamiltoni* McCulloch, 1908
Eucrate formosensis Sakai, 1974
Eucrate haswelli Campbell, 1969
?*Eucrate laevimanus* (Lucas, in Jacquinot & Lucas, 1853) [*Galene*]
Eucrate laevis (Borradaile, 1903) [*Pseudozius* (*Platyozius*)]
Eucrate sexdentata Haswell, 1881
Eucrate solaris Yang & Sun, 1979
Eucrate sulcatifrons (Stimpson, 1858) [*Pilumnoplax*]
Eucrate tripunctata Campbell, 1969

Euryplax Stimpson, 1859
  = *Euryplax* Stimpson, 1859 (type species *Euryplax nitida* Stimpson, 1859, by monotypy; gender feminine) [Opinion 85, Direction 37]
  = *Lipkeplax* Števčić, 2005 (type species *Euryplax bevisi* Stebbing, 1921, by original designation; gender feminine) (unavailable name) {1}
Euryplax nitida Stimpson, 1859 [Direction 36]
Euryplax polita Smith, 1870
"*Euryplax*" *bevisi* Stebbing, 1921 {2}

Frevillea A. Milne-Edwards, 1880
  = *Frevillea* A. Milne-Edwards, 1880 (type species *Frevillea barbata* A. Milne-Edwards, 1880, by original designation; gender feminine)
Frevillea barbata A. Milne-Edwards, 1880
Frevillea hirsuta (Borradaile, 1916) [*Goneplax*]
Frevillea rosaea A. Milne-Edwards, 1880

Heteroplax Stimpson, 1858 {3}
  = *Heteroplax* Stimpson, 1858 (type species *Heteroplax transversa* Stimpson, 1858, subsequent designation by Guinot, 1969b; gender feminine)
  = *Otmaroplax* Števčić, 2005 (type species *Goneplax maldivensis* Rathbun, 1902, by original designation; gender feminine) (unavailable name) {2}
Heteroplax dentata Stimpson, 1858
"*Heteroplax*" *maldivensis* (Rathbun, 1902) [*Goneplax*] {3}
Heteroplax nagasakiensis Sakai, 1934
?*Heteroplax nitida* Miers, 1879
Heteroplax transversa Stimpson, 1858

Machaerus Leach, 1818
  = *Machaerus* Leach, 1818 (type species *Pilumnoplax oxyacantha* Monod, 1956, subsequent designation by Manning & Holthuis, 1981; gender masculine)
  = *Henryalphonsia* Števčić, 2005 (type species *Pilumnoplax elata* Boone, 1927, by original designation; gender feminine) (unavailable name) {2}
Machaerus atlanticus (Miers, 1881) [*Pilumnoplax*]
?*Machaerus elata* (Boone, 1927) [*Pilumnoplax*]
Machaerus oxyacanthus (Monod, 1956) [*Pilumnoplax*]

Nancyplax Lemaitre, García-Gómez, von Sternberg & Campos, 2001
  = *Nancyplax* Lemaitre, García-Gómez, von Sternberg & Campos, 2001 (type species *Nancyplax vossi* Lemaitre, García-Gómez, von Sternberg & Campos, 2001, by original designation; gender feminine)
Nancyplax vossi Lemaitre, García-Gómez, von Sternberg & Campos, 2001

Psopheticoides Sakai, 1969 {4}
  = *Psopheticoides* Sakai, 1969 (type species *Psopheticoides sanguineus* Sakai, 1969, by original designation; gender masculine)
Psopheticoides sanguineus Sakai, 1969

Sotoplax Guinot, 1984 {5}
  = *Sotoplax* Guinot, 1984 (type species *Sotoplax robertsi* Guinot, 1984, by original designation; gender feminine)
Sotoplax robertsi Guinot, 1984

Trizocarcinus Rathbun, 1914
  = *Trizocarcinus* Rathbun, 1914 (type species *Carcinoplax dentatus* Rathbun, 1894, by monotypy; gender masculine)
Trizocarcinus dentatus (Rathbun, 1894) [*Carcinoplax*]
Trizocarcinus peruvianus Garth, 1973
Trizocarcinus tacitus Chace, 1940

Xenocrate Ng & Castro, 2007
  = *Xenocrate* Ng & Castro, 2007 (type species *Xenocrate peculiaris* Ng & Castro, 2007, by original designation; gender feminine)
Xenocrate peculiaris Ng & Castro, 2007

Incertae sedis

?*Galene panopeoides* White, 1847 (nomen nudum)
"*Carcinoplax*" *angusta* Rathbun, 1914 {6}

Notes

{1} In the last part of his work, Števčić (2005: 133–134) gave names for many new genera, none of which are available under the Code. Although he applied formal Latin names and designated type species, no diagnostic characters were provided. From our unpublished data, the two genera listed here would appear to be good taxa, but they will need to be formally described from material on hand.

{2} Barnard (1950: 283) and Guinot (1969b: 512) have both commented that *Euryplax bevisi* Stebbing, 1921, is not a true species of *Euryplax*, but its generic affinities will require the types be re-examined. Števčić (2005), nevertheless, established a new genus, *Lipkeplax*, for this species, but the name is not available (see point 1). We keep the species in *Euryplax* pending a revision of the genus.

{3} Stimpson (1858: 94) established the genus *Heteroplax* for two new species from Hong Kong, *H. dentatus* and *H. tranversus*. Miers (1879) subsequently described *H. nitida* from Korea, and Sakai (1934) added *H. nagasakiensis* from Japan. Serène & Lohavanijaya (1973: 93) commented that the genus was established with *H. dentata* as type species but Stimpson (1858, 1907) made no such indication. However, Guinot (1969b: 511) had discussed this matter and selected *H. tranversus* Stimpson, 1858, as the type species of *Heteroplax* Stimpson, 1858. Miers (1879b) queried the validity of *Heteroplax* and indicated it may be the same as *Eucrate*. De Man (1888), Alcock (1900) and Tesch (1918b) subsequently regarded *Heteroplax* as a junior synonym of *Eucrate*. Balss (1922b), Sakai (1934, 1939, 1976), Guinot (1969b, 1971), Serène (1965, 1968), Serène & Lohavanijaya (1973) and Serène & Soh (1976), however, preferred to keep them separate. Several authors (e.g. Alcock, 1900; Balss, 1922b; Guinot, 1969b) have commented on the affinities of *H. dentata* with *Eucrate* and it seems clear that they are related. Alcock (1900) regards *H. dentata* only as a subspecies of *Eucrate crenata* (see also Campbell, 1969). Guinot (1969b, 1971), Serène (1968) and Serène & Lohavanijaya (1973) recognised four species in *Heteroplax*: *H. dentata* Stimpson, 1858, *H. transversus* Stimpson, 1858, *H. nitida* Miers, 1879 (with doubt) and *H. nagasakiensis* Sakai, 1934. The matter is compounded by the fact that Stimpson's type specimens of *H. dentata* and *H. transversus* are no longer extant. Serène & Lohavanijaya's (1973) study of *Heteroplax* is perhaps the most detailed to date, and shows that *Heteroplax* is unlikely to be congeneric with *Eucrate*. They had specimens of *H. dentata*, *H. transversa* and *H. nitida*, and commented that *Goneplax maldivensis* Rathbun, 1902, *H. nitida* and *H. nagaskiensis* may be conspecific (Serène & Lohavanijaya, 1973: 75). Guinot (1969b: 511, 518), in discussing the position of *G. maldivensis* Rathbun, 1902, noted that it had clear euryplacid affinities and compared it with *Heteroplax* but she did not formally transfer the species there. Guinot (1971: 1080) also did not include this species in her list of *Heteroplax* species, but placed it her group of "Autres Euryplacinae" as "[*Goneplax*] *maldivensis* Rathbun, 1902" (Guinot, 1971: 1081). Števčić (2005) proposed a new name, *Otmaroplax*, for this species but as he did not provide any diagnosis, indication or explanation, his name is not available for nomenclatural purposes (see point 1). A revision of *Heteroplax* and "*Goneplax*" *maldivensis* by Peter Castro and P. K. L. Ng is currently in progress.

Serène & Lohavanijaya (1973: 72) noted that Stimpson (1858, 1907) used the masculine gender for *Heteroplax* but they inferred this from the way Stimpson (1858) named the two species, *H. dentatus* and *H. transversus*. However, Stimpson (1858, 1907) did not explicitly state that the gender of *Heteroplax* was masculine. As all brachyuran names ending in –plax are regarded as feminine (Article 30.1), we are of the opinion Stimpson (1858) merely mistook *Heteroplax* for a masculine name. We here regard *Heteroplax* as feminine.

{4) *Psopheticoides* Sakai, 1969, is clearly an euryplacid, with a narrow male abdomen and long slender and spinous G1s with a short G2 (Castro, 2007).

{5} The family placement of *Sotoplax* Guinot, 1984 (type species *Sotoplax robertsi* Guinot, 1984) described from Mexico is problematic. It has features of both Goneplacidae sensu stricto as well as Euryplacidae, but Guinot (1984) provisionally referred it to the Euryplacidae. Even so, the G1 is unusual among known euryplacids in having the tip rounded and armed with several large spines.

{6} Castro (2007) has commented that *Carcinoplax angusta* Rathbun, 1914, is likely to be a euryplacid and is not a goneplacid sensu stricto. "*Carcinoplax*" *angusta* is perhaps closest to *Xenocrate peculiaris* Ng & Castro, 2007, and may need to placed in its own genus. Peter Castro and P. K. L. Ng are currently revising these species as part of a study of the family.

Fig. 63. *Psopheticoides sanguineus*, central Philippines (photo: T. Y. Chan)

FAMILY GONEPLACIDAE MACLEAY, 1838

Goneplacidae MacLeay, 1838
Carcinoplacinae H. Milne Edwards, 1852
Bathyplacinae Števčić, 2005
Notonycidae Števčić, 2005
Psopheticini Števčić, 2005

Subfamily Bathyplacinae Števčić, 2005

Bathyplacinae Števčić, 2005

Bathyplax A. Milne-Edwards, 1880 {1}
  = *Bathyplax* A. Milne-Edwards, 1880 (type species *Bathyplax typhlus* A. Milne-Edwards, 1880, by monotypy; gender feminine) [Opinion 85, Direction 37]
Bathyplax typhla A. Milne-Edwards, 1880
  = *Bathyplax typhlus* var. *oculiferus* Miers, 1886

Subfamily Goneplacinae MacLeay, 1838

Gonoplacidae MacLeay, 1838 [sic]
Carcinoplacinae H. Milne Edwards, 1852 {2}
Notonycidae Števčić, 2005
Psopheticini Števčić, 2005

Carcinoplax H. Milne Edwards, 1852
  = *Curtonotus* De Haan, 1833 (no type species designated; name pre-occupied by *Curtonotus* Stephens, 1827 [Coleoptera]; gender masculine)
  = *Carcinoplax* H. Milne Edwards, 1852 (replacement name for *Curtonotus* De Haan, 1833; type species *Cancer* (*Curtonotus*) *longimanus* De Haan, 1835, subsequent designation by Glaessner, 1929; gender feminine)
Carcinoplax abyssicola (Miers, 1886) [*Pilumnoplax*]
"*Carcinoplax*" *bispinosa* Rathbun, 1914 {3}
Carcinoplax confragosa Rathbun, 1914
"*Carcinoplax*" *cooki* Rathbun, 1906 {3}
"*Carcinoplax*" *crosnieri* Guinot & Richer de Forges, 1981 {3}
?*Carcinoplax eburnea* Stimpson, 1858
Carcinoplax eurysternum Guinot & Richer de Forges, 1981
Carcinoplax indica Doflein, 1904
Carcinoplax inaequalis (Yokoya, 1933) [*Pilumnoplax*]
Carcinoplax ischurodous (Stebbing, 1923) [*Geryon*] {4}
Carcinoplax longimana (De Haan, 1835) [*Cancer* (*Curtonotus*)]
  = *Carcinoplax longimanus japonicus* Doflein, 1904
  = *Carcinoplax longimanus typicus* Doflein, 1904
"*Carcinoplax*" *longispinosa* Chen, 1984 {3}
Carcinoplax longipes (Wood-Mason, 1899) [*Nectopanope*]
Carcinoplax meridionalis Rathbun, 1923 {3}
Carcinoplax monodi Guinot, 1989
Carcinoplax nana Guinot, 1989
Carcinoplax polita Guinot, 1989
Carcinoplax purpurea Rathbun, 1914
Carcinoplax sinica Chen, 1984
Carcinoplax specularis Rathbun, 1914
Carcinoplax spinosissima Rathbun, 1914
"*Carcinoplax*" *suruguensis* Rathbun, 1932 {3}
Carcinoplax tomentosa Sakai, 1969
Carcinoplax verdensis Rathbun, 1914
"*Carcinoplax*" *vestita* (De Haan, 1835) [*Cancer* (*Curtonotus*)] {3}
"*Carcinoplax*" *victoriensis* Rathbun, 1923 {3}

Goneplax Leach, 1814
  = *Goneplax* Leach, 1814 (type species *Ocypoda bispinosa* Lamarck, 1801, by original designation; gender feminine) [Opinion 85, Direction 37]
  = *Goneplat* Leach, 1814 (incorrect spelling) [Direction 37]
  = *Gonoplax* Leach, 1816 (unjustified emendation) [Direction 37]
  = *Teschia* Števčić, 2005 (type species *Goneplax sinuatifrons* Miers, 1886, by original designation; gender feminine) (unavailable name) {5}
Goneplax barnardi (Capart, 1951) [*Carcinoplax*]
Goneplax clevai Guinot & Castro, 2007
"*Goneplax*" *marivenae* Komatsu & Takeda, 2004 {6}
  = *Goneplax megalops* Komatsu & Takeda, 2004 {6}
"*Goneplax*" *renoculis* Rathbun, 1914 {6}
Goneplax rhomboides (Linnaeus, 1758) [*Cancer*]
  = *Goneplax angulata* (Pennant, 1777) [*Cancer*]
  = *Ocypoda bispinosa* Lamarck, 1801
  = *Ocypode longimana* Latreille, 1803
  = *Goneplax rhomboidalis* Risso, 1827
  = *Gelasimus bellii* Couch, 1838
"*Goneplax*"*serenei* Zarenkov, 1972 {6}
Goneplax sigsbei (A. Milne-Edwards, 1880) [*Frevillea*]
"*Goneplax sinuatifrons* Miers, 1886 {7}

Neommatocarcinus Takeda & Miyake, 1969 {8}
  = *Neommatocarcinus* Takeda & Miyake, 1969 (type species *Ommatocarcinus huttoni* Filhol, 1885, by monotypy; gender masculine)
Neommatocarcinus huttoni (Filhol, 1885) [*Ommatocarcinus*]

Notonyx A. Milne-Edwards, 1873
  = *Notonyx* A. Milne-Edwards, 1873 (type species *Notonyx nitidus* A. Milne-Edwards, 1873, by monotypy; gender masculine) [Opinion 85, Direction 37] {9}
Notonyx gigacarcinicus Clark & Ng, 2005
Notonyx nitidus A. Milne-Edwards, 1873 [Direction 36]
Notonyx vitreus Alcock, 1900

Ommatocarcinus White, 1851
  = *Ommatocarcinus* White, 1851 (type species *Ommatocarcinus macgillivrayi* White, 1851, by monotypy; gender masculine) [Opinion 85, Direction 37]
Ommatocarcinus elegans Chen, 1998 {10}
Ommatocarcinus fibriophthalmus Yokoya, 1933
Ommatocarcinus granulatus Chen, 1998
Ommatocarcinus macgillivrayi White, 1851
Ommatocarcinus orientalis Tesch, 1918
Ommatocarcinus pulcher Barnard, 1950

Psopheticus Alcock, 1892
  = *Psopheticus* Alcock, 1892 (type species *Psopheticus stridulans* Wood-Mason, 1892; by original indication; gender masculine)
Psopheticus crosnieri Guinot, 1990
"*Psopheticus*" *hughi* Alcock, 1900 {11}
"*Psopheticus*" *insignis* Alcock, 1900 {11}
Psopheticus musicus Guinot, 1990
Psopheticus stridulans Wood-Mason, 1892
  = *Psopheticus insolitus* Guinot, 1990 {11}
Psopheticus vocans Guinot, 1985

Singhaplax Serène & Soh, 1976 {12}
  = *Singhaplax* Serène & Soh, 1976 (type species *Goneplax ockelmanni* Serène, 1971, by original designation; gender feminine)
Singhaplax nipponensis (Yokoya, 1933) [*Goneplax*]
Singhaplax ockelmanni (Serène, 1971) [*Goneplax*]
Singhaplax wolffi (Serène, 1964) [*Goneplax*] {12}

Incertae sedis

"*Psopheticus*" *megalops* Takeda, 1989 {13}

Notes

{1} The systematic position of *Bathyplax* A. Milne-Edwards, 1880 (type species *Bathyplax typhlus* A. Milne-Edwards, 1880) has always been uncertain, and placing it in the Goneplacidae has traditionally been difficult (see Guinot, 1969c: 696, Fig. 100, 101; Tavares, 1996). Not unexpectedly, Števčić (2005) established a new subfamily, Bathyplacinae Števčić, 2005, for the genus. We are still uncertain if such a rank is needed or what are the real affinities of the genus, but on the basis of the general facies and form of the gonopods, it can be accommodated in the Goneplacidae, albeit with some difficulty, and we tentatively recognise the Bathyplacinae.

{2} The type genera of the Goneplacinae MacLeay, 1838 (*Goneplax*) and Carcinoplacinae H. Milne Edwards, 1852 (*Carcinoplax*), appear strikingly different, however other genera show many intermediate characters. Karasawa & Kato (2003a, b) have already synonymised the two subfamilies, and this is also supported by Castro (2008).

{3} Castro (2007) revised the genus *Carcinoplax* and established four new genera; one for *C. vestita*; one for *C. crosnieri* and *C. cooki* (with three new species); one for *C. longispinosa*; and one for *C. suruguensis*, *C. bispinosa*, *C. meridionalis* and *C. victoriensis* (with one new species). "*Carcinoplax*" *angusta* Rathbun, 1914, is transferred to the Euryplacidae, while "*Carcinoplax*" *microphthalmus* Guinot & Richer de Forges, 1981, is a progeryonid (see notes for respective families).

{4} This species may be a junior synonym of *Carcinoplax eurysternum* Guinot & Richer de Forges, 1981. *Carcinoplax ischurodous* (Stebbing, 1923) was described on the basis of a small specimen, and in many species of this genus marked changes in carapace morphology take place as size increases.

{5} Števčić (2005: 133–134) listed a large number of new genera, and although he designated type species, none of them was diagnosed, nor any indication made or explanations provided. Under the Code, none are available names. However, it is likely that a number of the species listed will deserve new generic allocations as Števčić proposed.

{6} Castro (2007) revised the genus *Goneplax* and recognised three new genera; one for *G. marivenae*; one for *G. renoculis* (with two new species); and one for *G. serenei*. In this same study, *G. megalops* Komatsu & Takeda, 2004, was also synonymised with *G. marivenae* Komatsu & Takeda, 2004, by Castro (2007) as the differences described are related to growth changes.

{7} A new genus will established for "*Goneplax*" *sinuatifrons* Miers, 1886, by Castro (2007). Castro (2007) also discusses "*Goneplax*" *maldivensis* Rathbun, 1902, and comments that this species should be in a separate genus but has deferred this action until it is re-examined. Guinot (1969b: 518) had already pointed out that this species is not a goneplacid but a euryplacid. A new genus, *Otmaroplax*, was established by Števčić (2005) for *G. maldivensis*, but as noted in point 5, his name is a nomen nudum. Guinot (1969b) and Serène & Lohavanijaya (1973) have both noted the close affinities of "*Goneplax*" *maldivensis* with the euryplacid *Heteroplax* and we tentatively transfer it there until the necessary revisions are made (see Notes for the Euryplacidae).

{8} The correct spelling for this genus should be *Neommatocarcinus*, following the original intent of Takeda & Miyake (1969b), and not as it is sometimes spelt, "*Neoommatocarcinus*" (e.g. Guinot, 1971) (see also Castro, 2007).

{9} The classification of *Notonyx* A. Milne-Edwards, 1873, has not been straightforward. In his discussion on the taxonomy of the Goneplacidae, Serène (1964a, b) did not consider it. Later, Serène (1968: 91) transferred *Notonyx* to the Rhizopinae Stimpson, 1858, which at that time was a subfamily of the Goneplacidae. *Notonyx* was subsequently assigned to the Goneplacinae by Serène & Umali (1972) and Serène & Soh (1976) but without any explanation. Ng (1987), transferred a redefined Rhizopinae to the Pilumnidae and specifically excluded *Notonyx* from the family, although he could not place it anywhere else. Karasawa & Kato (2003) also did not consider the genus in their reappraisal of the Goneplacidae Clark & Ng (2005b) argued that despite its peculiar carapace shape, all sternal, abdominal and gonopodal affinities were with the Goneplacinae, and it should be referred there. Števčić (2005) regarded the superficial differences as major and established a new family and superfamily, Notonycidae Števčić, 2005, and Notonycoidea, respectively for *Notonyx*. Castro (in 2007), in his revision of the Goneplacinae sensu stricto, agrees with us that *Notonyx* is simply an unusual member of the Goneplacinae. At least two more new species are now being described by P. F. Clark and P. K. L. Ng.

{10} *Ommatocarcinus elegans* Chen, 1998, was referred to a new genus by Castro (2007). Four new species were also added to this new genus by him.

{11} Castro (2007) revised the genus *Psopheticus*. Two species, *P. hughi* Alcock, 1900, and *P. insignis* Alcock, 1900, will be referred to a new genus; while *P. insolitus* Guinot, 1990, is synonymised with *P. stridulans* Wood-Mason, 1892.

{12} In his revision of the Goneplacidae, Castro (2007) transferred *G. wolffi* Serène, 1964, to *Singhaplax*, as well as describe four new species. More species are now being described by Peter Castro, as well as with Tohru Naruse (pers. comm.).

{13} *Psopheticus megalops* was described from two specimens from northern Ryukyus in Japan (Takeda, 1999), and Castro (2007) commented that it was not a

member of the genus, and on the basis of its gonopods, probably not even a goneplacid sensu lato. While the general carapace and abdominal features resemble a *Psopheticus*, the chelipeds, and certainly the gonopods (Takeda, 1989: Fig. 17C–F) do not. The holotype male is a small specimen measuring only 5.6 by 4.8 mm, but it is certainly already an adult on the basis of the well developed G1s. It will need to be re-examined. For the moment, we leave it in the Goneplacidae as an incerta sedis.

Fig. 64. *Goneplax clevai*, South Africa; freshly preserved colour (after Guinot & Castro, 2007) (photo: Jean-François Dejouannet)

Fig. 65. *Ommatocarcinus fibriophthalmus*, central Philippines (photo: T. Y. Chan)

Fig. 66. *Carcinoplax vestita*, Qingdao, China (photo: P. Ng)

Fig. 67. *Carcinoplax nana*, central Philippines (photo: T. Y. Chan)

Fig. 68. *Carcinoplax crosnieri*, central Philippines (photo: T. Y. Chan)

Fig. 69. *Notonyx gigacarcinicus*, Phuket, Thailand (photo: P. Ng)

Fig. 70. *Psopheticus musicus*, Taiwan (photo: T. Y. Chan)

FAMILY LITOCHEIRIDAE ŠTEVČIĆ, 2005

Litocheiridae Števčić, 2005

Georgeoplax Türkay, 1983
  = *Georgeoplax* Türkay, 1983 (type species *Litocheira glabra* Baker, 1906, by monotypy; gender feminine) {1}
Georgeoplax glabra (Baker, 1906) [*Litocheira*]

Litocheira Kinahan, 1856
  = *Litocheira* Kinahan, 1856 (type species *Liotocheira bispinosa* Kinahan, 1856, by monotypy; gender feminine) [Opinion 85, Direction 37] {1}
  = *Brachygrapsus* Kingsley, 1880 (type species *Brachygrapsus laevis* Kingsley, 1880, by monotypy; gender masculine)
Litocheira bispinosa Kinahan, 1856
  = *Melia brevipes* Haswell, 1881
  = *Brachygrapsus laevis* Kingsley, 1880
?*Litocheira perpusillus* (Nobili, 1906) [*Platyozius*]

Notes

{1} The transfer of *Litocheira* Kinahan, 1856, and *Georgeoplax* Türkay, 1983, into a separate family has been under study by Guinot et al. (in prep.), and there a suite of characters that warrant this. The G1s of the species of these two genera are stout and "grapsoid-like", being contorted and similar in form to some *Euchirograpsus* species (Plagusiidae). In the Plagusiidae, the antennules fold more-or-less longitudinally, but in *Litocheira* and *Georgeoplax*, the antennules fold obliquely transversely, although this may be plesiomorphic for these genera. The general facies of the carapace and pereiopods of *Litocheira* and *Georgeoplax* also superficially resemble *Euchirograpsus* species (see Türkay, 1975, 1978, 1983a; Crosnier, 2001; McCulloch, 1913), however, despite their apparent links to the Plagusiidae, *Litocheira* and *Georgeoplax* are heterotremes while plagusiids are thoracotremes. More work will need to be done to establish relationships and affinities. Števčić (2005) was the first to formally recognise a separate family for these genera, and his name must be used.

Fig. 71. *Litocheira bispinosa*, Australia (photo: K. Gowlett-Holmes)

FAMILY MATHILDELLIDAE KARASAWA & KATO, 2003

Mathildellinae Karasawa & Kato, 2003a {1}
Intesiini Števčić, 2005
Platypilumninae Števčić, 2005

Beuroisia Guinot & Richer de Forges, 1981
  = *Beuroisia* Guinot & Richer de Forges, 1981 (type species *Beuroisia duhameli* Guinot & Richer de Forges, 1981, by original designation; gender feminine) {2}
Beuroisia duhameli Guinot & Richer de Forges, 1981
  = *Beuroisia duhameli* forma *tomentosa* Guinot & Richer de Forges, 1981 (unavailable name)
Beuroisia major (Sakai, 1978) [*Neopliumnoplax*] (sic)
Beuroisia manquenei Guinot & Richer de Forges, 1981

Intesius Guinot & Richer de Forges, 1981
  = *Intesius* Guinot & Richer de Forges, 1981 (type species *Intesius pilosus* Guinot & Richer de Forges, 1981, by original designation; gender masculine)
Intesius crosnieri Davie, 1998
Intesius lucius Crosnier & Ng, 2004
Intesius pilosus Guinot & Richer de Forges, 1981
Intesius richeri Crosnier & Ng, 2004

Mathildella Guinot & Richer de Forges, 1981
  = *Mathildella* Guinot & Richer de Forges, 1981 (type species *Mathildella maxima* Guinot & Richer de Forges, 1981, by original designation; gender feminine)
Mathildella maxima Guinot & Richer de Forges, 1981
Mathildella kyushupalauensis Takeda & Watabe, 2004
Mathildella rubra Ng & Ho, 2003
Mathildella serrata (Sakai, 1974) [*Neopilumnoplax*]

Neopilumnoplax Serène, 1969
  = *Neopilumnoplax* Serène, 1969 (type species *Pilumnus heterochir* Studer, 1883, by original designation; gender feminine)
Neopilumnoplax americana (Rathbun, 1898) [*Pilumnoplax*]
Neopilumnoplax gervaini Tavares & Guinot, 1996
Neopilumnoplax heterochir (Studer, 1883) [*Pilumnus*]
?*Neopilumnoplax incerta* (Cano, 1889) [*Pilumnoplax*] {2}
Neopilumnoplax sinclairi (Alcock & Anderson, 1899) [*Pilumnoplax*]

Platypilumnus Alcock, 1894
  = *Platypilumnus* Alcock, 1894 (type species *Platypilumnus gracilipes* Alcock, 1894, subsequent designation under Article 68.2.1; gender masculine) [Opinion 85, Direction 37]
Platypilumnus inermis Guinot, 1985
Platypilumnus gracilipes Alcock, 1894
Platypilumnus jamiesoni Richer de Forges, 1996
Platypilumnus soelae Garth, 1987

Notes

{1} Karasawa & Kato (2003a, b) reappraised the phylogeny of the Goneplacidae and rearranged the subfamilial system based on selected extant and fossil taxa. They established a new subfamily, Mathildellinae Karasawa & Kato, 2003, for *Beuroisia*, *Intesius*, *Mathildella*, *Platypilumnus* and *Neopilumnoplax*. Later Karasawa & Schweitzer (2006) elevated the Mathildellinae to a full family but placed it in the Portunoidea. Ng & Manuel-Santos (2007) reappraised the status of several goneplacoid families and subfamilies, and citing diagnostic male sternal and abdominal characters,

recognise the Mathildellidae as a family, but retain it in the Goneplacoidea. Their position was followed by Castro (2007).

{2} *Pilumnoplax incerta* Cano, 1889, is a problem. On the basis of the original description, it is unlikely to be a species of *Neopilumnoplax* where it is currently placed. The description and figure (Cano, 1899a, b) indicate that this species has only one, not two, inner carpal spines and may be a species of *Machaerus* Leach, 1814 (Euryplacidae), or *Thalassoplax* Guinot, 1969 (Eucratopsinae, Panopeidae) (S. T. Ahyong, in litt.). It is retained in *Neopilumnoplax* for convenience but with doubt.

Fig. 72. *Mathildella rubra*, central Philippines (photo: T. Y. Chan)

Fig. 73. *Platypilumnus* cf. *gracilipes*, central Philippines (photo: T. Y. Chan)

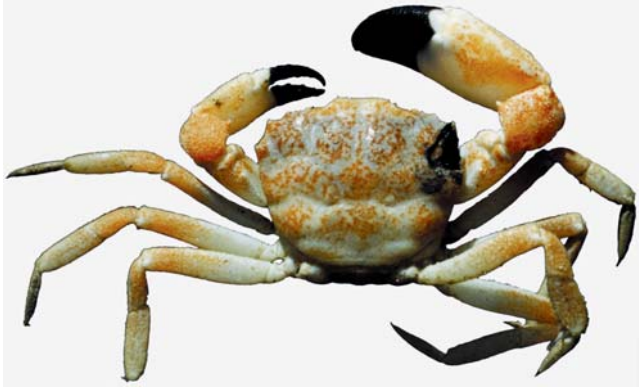

Fig. 74. *Intesius richeri*, Norfolk Ridge, New Caledonia (after Crosnier & Ng, 2004; photo: B. Richer de Forges)

FAMILY PROGERYONIDAE ŠTEVČIĆ, 2005

Paragalenini Števčić, 2005
Progeryonini Števčić, 2005

Paragalene Kossmann, 1878 {1, 2}
  = *Paragalene* Kossmann, 1878 (type species *Paragalene neapolitana* Kossmann, 1878, by monotypy; gender feminine) [Opinion 85, Direction 37]
Paragalene longicrura (Nardo, 1868) [*Eriphia*]
  = *Paragalene neapolitana* Kossmann, 1878

Progeryon Bouvier, 1922 {1}
  = *Progeryon* Bouvier, 1922 (type species *Progeryon paucidens* Bouvier, 1922, by monotypy; gender masculine)
Progeryon guinotae Crosnier, 1976
Progeryon mararae Guinot & Richer de Forges, 1981
Progeryon mus Ng & Guinot, 1999
Progeryon paucidens Bouvier, 1922 {3}
Progeryon vaubani Guinot & Richer de Forges, 1981

Incertae sedis

"*Carcinoplax*"*microphthalmus* Guinot & Richer de Forges, 1981 {4}

Notes

{1} Castro (2007) noted that *Paragalene* Kossmann, 1878, and *Progeryon* Bouvier, 1922, are not true goneplacines. Ng & Guinot (1999) had commented that *Progeryon* is no more than a peculiar carcinoplacine (now Goneplacinae). Števčić (2005) argues that these two genera needed to be placed in separate tribes within the Goneplacidae, but Karasawa & Schweitzer (2006) felt that at least *Progeryon* should be recognised in its own family and superfamily. We point out however that carapace features are unreliable in many goneplacids (for example *Carcinoplax indica* and *C. longimana*), and the form of the carapace and structure of the anterolateral margins can change dramatically with size (large specimens losing the prominent lateral spines and having an ovate carapace). Ng & Manuel-Santos (2007) recently showed that the sternal and abdominal condition of *Progeryon* is unique and cannot be accommodated in the Goneplacidae. They retained the family Progeryonidae in the Goneplacoidea, and also included *Paragalene*, whose diagnostic characters conform with their definition of the Progeryonidae.

Since both names Paragalenini Števčić, 2005, and Progeryonini Števčić, 2005, were published together, both are regarded as simultaneously published under the present Code. We here select Progeryonini Števčić, 2005, as having seniority over Paragalenini Števčić, 2005, in the event they are recognised as synonymous as in this paper.

{2} *Paragalene* is also unusual among progeryonids in that male segments 4 and 5 and fused, with only the median and lateral parts of the suture still visible. Other genera have all the sutures well defined (Ng & Manuel-Santos, 2007). However, such fusion is also present in some taxa of Goneplacidae sensu stricto (Castro, 2007), and we do not believe this character alone is significant enough to take it out of the family. Admittedly, the G2 of *Paragalene* is also atypical in that the distal part is

somewhat compressed laterally, and the carapace features are very different from other progeryonids. However, as has been discussed in detail by Ng & Manuel-Santos (2007), the form of the male sternum, position of the penis, structure of the press-button and G1 structures all agree with the others (see also Castro & Ng, in prep.).

{3} Bouvier (1922) described the type species, *Progeryon paucidens*, from the Atlantic (near the Mediterranean), and the first record of the genus from the Indo-West Pacific was by Crosnier (1976). On the basis of Bouvier's (1922) detailed description and figures, there does not appear to be much doubt that the Atlantic and Indo-West Pacific species are conspecific, but considering the distances involved, a revision is clearly desirable. The details of the male sternum, abdomen and gonopod structures of *P. paucidens* remain undescribed.

{4} Castro (2007) has commented that *Carcinoplax microphthalmus* Guinot & Richer de Forges, 1981, is not a goneplacid sensu stricto. A study of a good series of "*Carcinoplax*" *microphthalmus* from the Philippines suggests that it is in fact a progeryonid. A new genus will be established for this species (Castro & Ng, in prep.)

bottom female (photo: T. Y. Chan)

FAMILY SCALOPIDIIDAE ŠTEVČIĆ, 2005

Scalopidiidae Števčić, 2005 {1}

Scalopidia Stimpson, 1858
= *Scalopidia* Stimpson, 1858 (type species *Scalopidia spinosipes* Stimpson, 1858, by monotypy; gender feminine) [Opinion 85, Direction 37]
= *Hypophthalmus* Richters, 1881 (type species *Hypophthalmus leuchochirus* Richters, 1881, by monotypy; gender masculine)
Scalopidia leuchochirus (Richters, 1881) [*Hypophthalmus*]
Scalopidia spinosipes Stimpson, 1858 [Direction 36]

Notes

{1} The systematic position of *Scalopidia* is difficult. It has the general carapace, cheliped and even gonopodal features of many chasmocarcinids; but it differs markedly in the way its penis is positioned. In the Chasmocarcinidae, there is a supplementary coxosternal plate at sternite 8, enclosing the long penis which starts from the coxa, exiting in the sterno-abdominel cavity. In *Scalopidia*, there is only a narrow groove between thoracic sternites 7 and 8, in which the long penis sits. The penis lying in the narrow groove is also calcified. We cannot be confident that the *Scalopidia* condition is linked to that of the chasmocarcinids. Thus for the moment, it is most parsimonious to recognise it in its own family and use the available name, Scalopidiidae (see Guinot et al., in prep.).

FAMILY VULTOCINIDAE NG & MANUEL-SANTOS, 2007

Vultocinus anfractus Ng & Manuel-Santos, 2007
= *Vultocinus* Ng & Manuel-Santos, 2007 (type species *Vultocinus anfractus* Ng & Manuel-Santos, 2007, by original designation; gender masculine) {1}
Vultocinus anfractus Ng & Manuel-Santos, 2007

Notes

{1} The discovery and description of this unusual wood-dwelling genus forced a reappraisal of goneplacoid affinities, and in this exercise, Ng & Manuel-Santos (2007) also recognised the Mathildellidae, Conleyidae and Progeryonidae as distinct families in the Goneplacoidea.

Fig. 76. *Vultocinus anfractus*, Philippines (photo: P. Ng)

SUPERFAMILY HEXAPODOIDEA MIERS, 1886

FAMILY HEXAPODIDAE MIERS, 1886

Hexapodinae Miers, 1886

Remarks. – The rediscovery of the holotype of *Paeduma cylindraceum* has permited the re-examination of the P5 rudiment described by Bell (1859). It is in fact the external, exposed part of the apodeme of P4, and does not represent an "aborted" pereopod (Guinot, 2006). Nevertheless, a vestigial coxa, articulated on the reduced sternite 8, is present in the Hexapodidae, at least in males (Guinot et al., in prep.).

Hexalaughlia Guinot, 2006
= *Hexalaughlia* Guinot, 2006 (type species *Thaumastoplax orientalis* Rathbun, 1909, by original designation; gender feminine)
Hexalaughlia chuenensis (Rathbun, 1909) [*Thaumastoplax*]
Hexalaughlia orientalis (Rathbun, 1909) [*Thaumastoplax*]

Hexapinus Manning & Holthuis, 1981
= *Hexapinus* Manning & Holthuis, 1981 (type species *Hexapus latipes* De Haan, 1835, by original designation; gender masculine)
Hexapinus buchanani (Monod, 1956) [*Hexapus*]
Hexapinus granuliferus (Campbell & Stephenson, 1970) [*Hexapus*]
Hexapinus latipes (De Haan, 1835) [*Hexapus*]

Hexaplax Doflein, 1904
= *Hexaplax* Doflein, 1904 (type species *Hexaplax megalops* Doflein, 1904, by monotypy; gender feminine)
Hexaplax megalops Doflein, 1904

Hexapus De Haan, 1835
= *Hexapus* De Haan, 1835 (type species *Cancer sexpes* Fabricius, 1798, subsequent designation by ICZN; gender masculine) [Opinion 85, Direction 37]
Hexapus anfractus (Rathbun, 1909) [*Lambdophallus*]
?*Hexapus edwardsi* Serène & Soh, 1976
Hexapus estuarinus Sankarankutty, 1975
Hexapus sexpes (Fabricius, 1798) [*Cancer*] [Direction 36]
= *Alpheus sexpes* Weber, 1795 (nomen nudum)
Hexapus stebbingi Barnard, 1947

Lambdophallus Alcock, 1900
= *Lambdophallus* Alcock, 1900 (type species *Lambdophallus sexpes* Alcock, 1900, by monotypy; gender masculine)
Lambdophallus sexpes Alcock, 1900

Latohexapus Huang, Hsueh & Ng, 2002
= *Latohexapus* Huang, Hsueh & Ng, 2002 (type species *Latohexapus granosus* Huang, Hsueh & Ng, 2002, by original designation; gender masculine)
Latohexapus granosus Huang, Hsueh & Ng, 2002

Paeduma Rathbun, 1897
= *Amorphopus* Bell, 1859 (type species *Amorphopus cylindraceus* Bell, 1859, by monotypy; name pre-occupied by *Amorphopus* Audinet-Serville, 1838 [Orthoptera]; gender masculine)
= *Paeduma* Rathbun, 1897 (replacement name for *Amorphopus* Bell, 1859; gender feminine)
Paeduma cylindracea (Bell, 1859) [*Amorphopus*]

Parahexapus Balss, 1922
= *Parahexapus* Balss, 1922 (type species *Parahexapus africanus* Balss, 1922, by monotypy; gender masculine)
Parahexapus africanus Balss, 1922

Pseudohexapus Monod, 1956
= *Pseudohexapus* Monod, 1956 (type species *Hexapus* (*Pseudohexapus*) *platydactylus* Monod, 1956, by monotypy; gender masculine)
Pseudohexapus platydactylus Monod, 1956

Spiroplax Manning & Holthuis, 1981
= *Spiroplax* Manning & Holthuis, 1981 (type species *Thaumastoplax spiralis* Barnard, 1950, by monotypy; gender feminine)
Spiroplax spiralis (Barnard, 1950) [*Thaumastoplax*]

Stevea Manning & Holthuis, 1981
= *Stevea* Manning & Holthuis, 1981 (type species *Hexapus williamsi* Glassell, 1938, by monotypy; gender feminine)
Stevea williamsi (Glassell, 1938) [*Hexapus*]

Thaumastoplax Miers, 1881
= *Thaumastoplax* Miers, 1881 (type species *Thaumastoplax anomalipes* Miers, 1881, subsequent designation under Article 68.2.1; gender feminine) [Opinion 85, Direction 37]
Thaumastoplax anomalipes Miers, 1881

Tritoplax Manning & Holthuis, 1981
= *Tritoplax* Manning & Holthuis, 1981 (type species *Hexapus stebbingi* Barnard, 1947, by monotypy; gender feminine)
Tritoplax stebbingi (Barnard, 1947) [*Hexapus*]
Tritoplax stephenseni (Serène & Soh, 1976) [*Hexapus*]


Fig. 77. *Hexapus* sp., central Philippines (photo: P. Ng)


Fig. 78. *Hexaplax megalops*, northern Philippines (photo: T. Y. Chan)

SUPERFAMILY LEUCOSIOIDEA SAMOUELLE, 1819

FAMILY IPHICULIDAE ALCOCK, 1896

Iphiculoida Alcock, 1896

Remarks. – The recognition of a separate family for *Iphiculus* Adams & White, 1849, and *Pariphiculus* Alcock, 1896, seems appropriate. First recognised as a grouping by Alcock (1896), it was ignored by almost all subsequent workers, although Števčić (2005) recognised it by making it a separate subfamily. We have been aware of the distinctiveness of this grouping for some years now – with *Iphiculus* and *Pariphiculus* differing markedly from other leucosiids in several key aspects (see also Serène, 1955, 1956). Guinot (1978: 282; Guinot, 1979: 103, 146) and Guinot & Bouchard (1998: 653) highlighted the fact that the abdominal segments of males and females are not fused; there is no fusion between the thoracic sternum and pterygostome; the brood cavity is not complete; and, the episternites do not cover the condyles of the first four pereiopods, thus only holding the abdomen in place by juxtaposition and engagment. This mode of abdomen attachment is very atypical (Guinot & Bouchard, 1998: 653).

The difference in female abdomens is particularly stark. In typical adult female leucosiids, the female abdomen has at least some of the somites fused (often most of them), and strongly arched, forming a dome-like plate over the sternum. The sutures may sometimes be visible (e.g. in some *Parilia* species) but the somites are nevertheless immovable. The thoracic sternal cavity is also deep, and the anterior part of the sternum is deeply excavated, with the edges forming a rim, to which the abdomen fits tightly. This sternal and abdominal structure effectively forms a "brood-pouch" holding the eggs. As such, when the abdomen is closed, the eggs are not visible externally and completely sheltered. The adult female abdomen of *Iphiculus* and *Pariphiculus* species, however, has all seven segments free and normal in form, is relatively much narrower and flatter, and does not form any dome-like structure. Its sternoabdominal cavity is also relatively shallow, and even in large females, and the anterior part never develops a rim or edge. Ovigerous specimens we have examined have most of the eggs exposed and not enclosed by the relatively narrower abdomen (as in carpiliids, xanthids, parthenopids and portunids). We explored the possibility of just retaining these two genera as a subfamily in the Leucosiidae but because of the unique female abdominal structure we feel a family-rank better reflects its level of phylogenetic divergence. The relationship of the Iphiculidae with the other leucosioids, and more generally, is now being studied by P. K. L. Ng, Bella Galil and others.

Iphiculus Adams & White, 1849
  = *Iphiculus* Adams & White, 1849 (type species *Iphiculus spongiosus* Adams & White, 1849, by monotypy; gender masculine) [Opinion 73, Direction 37]
Iphiculus convexus Ihle, 1918
Iphiculus spongiosus Adams & White, 1849 [Direction 36]

Pariphiculus Alcock, 1896
  = *Pariphiculus* Alcock, 1896 (type species *Pariphiculus coronata* Alcock & Anderson, 1896, subsequent designation Rathbun, 1922; gender masculine) [Opinion 73, Direction 37]
Pariphiculus agariciferus Ihle, 1918
Pariphiculus coronatus (Alcock & Anderson, 1894) [*Randallia*]
Pariphiculus mariannae (Herklots, 1852) [*Ilia*]
  = *Pariphiculus rostratus* Alcock, 1896

Fig. 79. *Iphiculus spongiosus*, central Philippines (photo: T. Y. Chan)

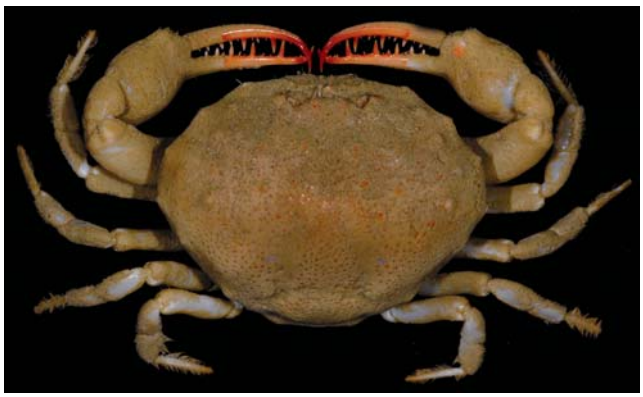

Fig. 80. *Iphiculus convexus*, Santo, Vanuatu (photo: J.C. Mendoza)

Fig. 81. *Pariphiculus mariannae*, central Philippines (photo: T. Y. Chan)

FAMILY LEUCOSIIDAE SAMOUELLE, 1819

Leucosiadae Samouelle, 1819 [Opinion 712]
Iliinae Stimpson, 1871
Ebaliinae Stimpson, 1871
Myrodinae Miers, 1886
Oreophorinae Miers, 1886
Myroida Alcock, 1896
Nucioida Alcock, 1896
Nursilioida Alcock, 1896
Cryptocnemidae Stimpson, 1907
Philyrinae Rathbun, 1937
Arcaniini Števčić, 2005
Ixini Števčić, 2005
Leuciscini Števčić, 2005
Lissomorphini Števčić, 2005
Onychomorphini Števčić, 2005
Pariliini Števčić, 2005
Persephonini Števčić, 2005
Randalliini Števčić, 2005

Remarks. – Leucosiids show a very strong cephalic compression resulting in an apparent shortening of the cephalic region (Pichod Viale, 1966: 1263–1266). In addition, the thoracic sternum is wide, with all the sutures (4/5–7/8) interrupted (Guinot, 1978, 1979), and their endophragmal skeleton is diagnostic (see Guinot, 1979). Males have coxal genital openings, but the orifices are sometimes in a coxosternal position (e.g. *Leucosia*), and so are sometimes confused as being sternal (Balss, 1957: 1612; Bouvier, 1940: 205); thus the leucosiids are heterotreme (Guinot, 1979: 195, Fig. 45 A-C). In all leucosiids that we have examined, the cheliped has its ischiobasis completely fused with the merus, without any trace of a suture (Guinot, 1968b: 163). Ihle (1918) has also noted the special surfaces of articulation of the appendages in leucosiids. In the Leucosiinae, in particular, there is a special mode of holding the male abdomen to the sternum (see Guinot & Bouchard, 1998: Fig. 19).

The general consensus is that the Leucosiidae contains four or five subfamilies, viz. Leucosiinae Samouelle, 1819, Cryptocneminae Stimpson, 1907, Ebaliinae Stimpson, 1871, Philyrinae Rathbun, 1937, and perhaps the Iliinae Stimpson, 1871 (see Rathbun, 1937; Chen & Sun, 2002). Of these, only the last has a wholly Atlantic distribution, the other four occurring in all the major oceans. The Leucosiinae is perhaps the best defined: the frontal region and orbits are very narrow transversely, a well developed thoracic sinus is present, and the G1s are often contorted to various degrees. The Ebaliinae, Philyrinae and Iliinae, however, are not well defined, with the diagnostic characters given by Rathbun (1937), Sakai (1976) and Chen & Sun (2002) failing to be reliable, especially when both Pacific and Atlantic genera are considered. It is also well known that some species currently placed in *Ebalia*, *Philyra* and *Nursia* cannot be accommodated in these genera with any confidence, and many species have in fact been transferred from one to the other in recent years (e.g. see Takeda & Nakasone, 1991; Komatsu & Takeda, 2000; Chen & Ng, 2003). The allocation of the various included genera in one subfamily or the other has been very subjective and we have ourselves encountered problems regularly. Often cited characters like relative length of chelipeds, degree of carapace areolation, carapace shape, carapace armature, epistomial form, and relative length of the maxillipeds etc., all do not work at the suprageneric level and there are simply too many intermediates, especially in genera like *Arcania*, *Pseudophilyra* and *Randallia*. In addition, several of these characters vary substantially with age (e.g. *Parilia*). We thus prefer here to synonymise all three subfamilies (with Ebaliinae having seniority) until a complete generic reappraisal can be conducted. While we believe that it may be eventually possible to recognise more than one subfamily within our present Ebaliinae, we are of the opinion that it will be very different from the system that is now used. In addition, the current use of the name Philyrinae must be considered in the light that there are actually three senior synonyms, viz. Myrodinae Miers, 1886, Myroida Alcock, 1896, and Nursilioida Alcock, 1896. Under the present Code, it is possible to maintain usage of a junior name for a suprageneric taxon, but to do this now would be premature while the taxon is so ill-defined. Two genera, *Iphiculus* and *Pariphiculus* have been transferred to their own family, the Iphiculidae Alcock, 1896 (see above).

Incertae sedis

Cancer excisus Fabricius, 1787 {1}
Leucosia graniolaris Weber, 1795 (nomen nudum)
Leucosia pila Fabricius, 1798
  = *Leucosia pila* Weber, 1795 (nomen nudum)

Subfamily Cryptocneminae Stimpson, 1907

Cryptocnemidae Stimpson, 1907
Leuciscini Števčić, 2005
Lissomorphini Števčić, 2005
Onychomorphini Števčić, 2005

Cryptocnemus Stimpson, 1858
  = *Cryptocnemus* Stimpson, 1858 (type species *Cryptocnemus pentagonus* Stimpson, 1858, by monotypy; gender masculine) [Opinion 739]
Cryptocnemus aberrans Balss, 1938
Cryptocnemus calmani Ihle, 1915
Cryptocnemus chinensis Chen, 1995
Cryptocnemus crenulatus Grant & MacCulloch, 1906
Cryptocnemus grandidieri A. Milne-Edwards, 1865
Cryptocnemus haddoni Calman, 1900
Cryptocnemus hemispheroides Campbell, 1971
Cryptocnemus holdsworthi Miers, 1877
Cryptocnemus kamekii Sakai, 1961
Cryptocnemus macrognathus Ihle, 1918
Cryptocnemus marginatus Sakai, 1983
Cryptocnemus mortenseni Rathbun, 1909
Cryptocnemus obolus Ortmann, 1892
Cryptocnemus pentagonus Stimpson, 1858
Cryptocnemus planus Ward, 1933
Cryptocnemus siamensis Serène & Soh, 1976
Cryptocnemus stimpsoni Ihle, 1915
Cryptocnemus trapezoides Ihle, 1915
Cryptocnemus trigonus Komatsu & Takeda, 2000
Cryptocnemus tuberosus Klunzinger, 1906
Cryptocnemus vincentianus Hale, 1927

Leucisca MacLeay, 1838
= *Leucisca* MacLeay, 1838 (type species *Leucisca squalina* MacLeay, 1838, by monotypy; gender feminine)
= *Carcinaspis* Stimpson, 1858 (type species *Carcinaspis marginatus* Stimpson, 1858, by monotypy; gender masculine)
= *Leucocarcinus* Rathbun, 1897 (unnecessary replacement name for *Leucisca* MacLeay, 1838; gender masculine)
Leucisca levigena George & Clark, 1976
Leucisca squalina MacLeay, 1838
= *Carcinaspis marginatus* Stimpson, 1858
= *Leucisca phenomena* Stebbing, 1920
Leucisca rubifera (Müller, 1887) [*Nursia*]

Lissomorpha Ward, 1933
= *Lissomorpha* Ward, 1933 (type species *Lissomorpha haswelli* Ward, 1933, by original designation; gender feminine)
Lissomorpha haswelli Ward, 1933

Onychomorpha Stimpson, 1858
= *Onychomorpha* Stimpson, 1858 (type species *Onychomorpha lamelligera* Stimpson, 1858, by monotypy; gender feminine)
Onychomorpha lamelligera Stimpson, 1858

Subfamily Ebaliinae Stimpson, 1871

Ebaliinae Stimpson, 1871
Iliinae Stimpson, 1871
Myrodinae Miers, 1886
Oreophorinae Miers, 1886
Myroida Alcock, 1896
Nucioida Alcock, 1896
Nursilioida Alcock, 1896
Philyrinae Rathbun, 1937
Arcaniini Števčić, 2005
Ixini Števčić, 2005
Pariliini Števčić, 2005
Persephonini Števčić, 2005
Randalliini Števčić, 2005

Acanthilia Galil, 2000
= *Acanthilia* Galil, 2000 (type species *Iliacantha intermedia* Miers, 1886, by original designation; gender feminine)
Acanthilia intermedia (Miers, 1886) [*Iliacantha*]

Alox C. G. S. Tan & Ng, 1995
= *Alox* C. G. S. Tan & Ng, 1995 (type species *Alox glene* C. G. S. Tan & Ng, 1995, by original designation; gender neuter)
Alox antheos C. G. S. Tan & Ng, 1995
Alox bothros Galil & Ng, 2007
Alox chaunos Galil & Ng, 2007
Alox glene C. G. S. Tan & Ng, 1995
Alox latusoides (Sakai, 1937) [*Oreophorus* (*Oreotlos*)]
Alox ornatum (Ihle, 1918) [*Oreophorus* (*Oreophorus*)]
Alox patella (Alcock, 1896) [*Tlos*]
Alox rugosum (Stimpson, 1858) [*Oreophorus*]
Alox somphos C. G. S. Tan & Ng, 1995
Alox uru Naruse & Ng, 2006
Alox zalion C. G. S. Tan & Ng, 1995

Ancylodactyla Galil, 2004
= *Ancylodactyla* Galil, 2004 (type species *Praebebalia elongata* Zarenkov, 1969, by original designation; gender feminine)
Ancylodactyla elata (Zarenkov, 1994) [*Praebebalia*]
Ancylodactyla elongata (Zarenkov, 1969) [*Praebebalia*]
= *Praebebalia semblatae* Chen, 1989
= *Praebebalia bidentata* Chen & Sun, 2002
Ancylodactyla nana (Zarenkov, 1990) [*Randallia*]

Arcania Leach, 1817
= *Arcania* Leach, 1817 (type species *Cancer erinaceus* Fabricius, 1787, by monotypy; gender feminine) [Opinion 73]
= *Iphis* Leach, 1817 (type species *Cancer septemspinosus* Fabricius, 1787, by monotypy; gender feminine) [Opinion 73, Direction 49]
= *Ixoides* MacGilchrist, 1905 (type species *Ixoides cornutus* MacGilchrist, 1905, by monotypy; gender masculine)
Arcania aspera Miers, 1880
Arcania brevifrons Chen, 1989
Arcania cornuta (MacGilchrist, 1905) [*Ixoides*]
= *Arcania spinixa* Zarenkov, 1994
Arcania elongata Yokoya, 1933
Arcania echinata Galil, 2001
Arcania erinacea (Fabricius, 1787) [*Cancer*] [Direction 36]
Arcania foliolata Galil, 2001
Arcania fungilifera Galil, 2001
Arcania globata Stimpson, 1858
Arcania gracilis Henderson, 1893
= *Arcania quinquespinosa* Alcock & Anderson, 1894
Arcania granulipes Bell, 1855
Arcania heptacantha (De Haan, 1861) [*Iphis*]
= *Iphis heptacantha* Herklots, 1861 (nomen nudum)
Arcania marinduquensis Komatsu, Manuel & Takeda, 2004
Arcania muricata Galil, 2001
Arcania novemspinosa (Lichtenstein, 1816) [*Leucosia*]
= *Iphis novemspinosa* White, 1847 (nomen nudum)
= *Iphis novemspinosa* Adams & White, 1849
?*Arcania orientalis* Miers, 1879
Arcania sagamiensis Sakai, 1969
Arcania septemspinosa (Fabricius, 1787) [*Cancer*]
= ?*Cancer hystrix* Fabricius, 1793
= *Iphis longipes* Dana, 1852
= *Arcania siamensis* Rathbun, 1909
Arcania tuberculata Bell, 1855
= *Arcania laevimana* White, 1847 (nomen nudum)
= *Arcania laevimana* Bell, 1855
Arcania undecimspinosa De Haan, 1841
= *Arcania granulosa* Miers, 1877

Atlantotlos Doflein, 1904
= *Atlantotlos* Doflein, 1904 (type species *Atlantotlos rhombifer* Doflein, 1904, by monotypy; gender masculine)
Atlantotlos rhombifer Doflein, 1904

Bellidilia Kinahan, 1856
= *Bellidilia* Kinahan, 1856 (type species *Bellidilia undecimspinosa* Kinahan, 1856, subsequent designation by Manning & Holthuis, 1981; gender feminine)
= *Dittosa* Tan, 1995 (type species *Philyra laevis* Bell, 1855, by original designation; gender feminine)
Bellidilia cheesmani (Filhol, 1886) [*Ebalia*]
Bellidilia laevis (Bell, 1855) [*Philyra*]
Bellidilia undecimspinosa (Kinahan, 1856) [*Bellidilia*]
= *Phlyxia orbicularis* Haswell, 1879
= *Philyra murrayensis* Rathbun, 1923

Callidactylus Stimpson, 1871
= *Callidactylus* Stimpson, 1871 (type species *Callidactylus asper* Stimpson, 1871, by monotypy; gender masculine)
Callidactylus asper Stimpson, 1871

Cateios C. G. S. Tan & Ng, 1995
= *Cateios* C. G. S. Tan & Ng, 1995 (type species *Oreophorus frontalis* Miers, 1884, by original designation; gender masculine)
Cateios frontalis (Miers, 1884) [*Oreophorus*]

Dolos C. G. S. Tan & Richer de Forges, 1993
= *Dolos* C. G. S. Tan & Richer de Forges, 1993 (type species *Tlos petraeus* A. Milne-Edwards, 1874, by original designation; gender masculine)
Dolos petraeus (A. Milne-Edwards, 1874) [*Tlos*]

Ebalia Leach, 1817
= *Ebalia* Leach, 1817 (type species *Ebalia bryerii* Leach, 1817, subsequent designation by Rathbun, 1922; gender feminine) [Opinion 73, Direction 37]
= *Phlyxia* Bell, 1855 (type species *Phlyxia crassipes* Bell, 1855, subsequent designation by Rathbun, 1922; gender feminine) [Opinion 73, Direction 37]
Ebalia abdominalis Nobili, 1906
Ebalia affinis Miers, 1881
Ebalia agglomus Barnard, 1955
Ebalia barnardi Stebbing, 1914
Ebalia bituberculata Miers, 1879
Ebalia braminae Ihle, 1918
Ebalia brevimana Campbell, 1971
Ebalia cariosa (Stimpson, 1860) [*Lithadia*]
= *Lithadia lacunosa* Kingsley, 1879
= *Lithadia geometrica* Boone, 1927
Ebalia clarionensis Rathbun, 1935
Ebalia conifera Ortmann, 1892
Ebalia cranchii Leach, 1817
Ebalia crassipes (Bell, 1885) [*Phlyxia*]
Ebalia cristata Rathbun, 1898
= *Nursia tuberculata* Rathbun, 1894 (pre-occupied name)
Ebalia cryptocnemoides Takeda & Miyake, 1972
Ebalia dentifrons Miers, 1886
Ebalia deshayesi Lucas, 1846
= *Ebalia edwardsi* A. Milne-Edwards & Bouvier, 1900
= ?*Ebalia aspera* Costa, 1853
= ?*Ebalia setubalensis* Brito Capello, 1876
Ebalia diadumena Alcock, 1896
Ebalia dimorphoides Sakai, 1963
Ebalia discrepans Costa in Hope, 1851 {2}
Ebalia edwardsii Costa, 1838
= *Ebalia algirica* Lucas, 1846
= *Ebalia ambigua* Bouvier, 1940
= *Ebalia bryerii* Leach, 1817
Ebalia fragifera Miers, 1881
Ebalia glans (Alcock, 1896) [*Randallia*]
Ebalia glomus Stebbing, 1921
Ebalia granulata (Rüppell, 1830) [*Nursia*]
Ebalia granulosa H. Milne Edwards, 1837
Ebalia hancocki Rathbun, 1933
Ebalia hayamaensis Sakai, 1963
Ebalia heterochalaza Kemp, 1918
Ebalia humilis Takeda, 1977
Ebalia intermedia Miers, 1886
Ebalia jordani Rathbun, 1906
Ebalia lacertosa Nobili, 1906
Ebalia laevis (Bell, 1885) [*Phylxia*]
Ebalia lambriformis (Bell, 1885) [*Phlyxia*]
= *Phlyxia petleyi* Haswell, 1879
Ebalia longimana Ortmann, 1892
= *Ebalia gotoensis* Rathbun, 1932
Ebalia longispinosa Ihle, 1918
Ebalia magdalenensis Rathbun, 1933
Ebalia maldivensis Borradaile, 1903
Ebalia nana Ihle, 1918
Ebalia nobilii Balss, 1916
Ebalia nudipes Sakai, 1963
Ebalia nux A. Milne-Edwards, 1883
Ebalia orientalis Kossmann, 1877
Ebalia paratuberculosa Türkay, Chen & Zarenkov, in Chen & Sun, 2002
Ebalia philippinensis Chen, 1989
Ebalia pondoensis Barnard, 1955
Ebalia postulans Stebbing, 1910
Ebalia punctulata Sakai, 1983
Ebalia quadrata A. Milne-Edwards, 1873
Ebalia quadridentata Gray, 1831
Ebalia ramsayi (Haswell, 1880) [*Phlyxia*]
Ebalia rhomboidalis Miers, 1879
Ebalia rotundata (A. Milne-Edwards, 1880) [*Lithadia*]
Ebalia sakaii Takeda & Miyake, 1972
Ebalia salamensis Doflein, 1904
Ebalia scabriuscula Ortmann, 1892
Ebalia scandens Stebbing, 1910
Ebalia sculpta Zarenkov, 1990
Ebalia serenei Chen, 1989
Ebalia spinifera Miers, 1886
Ebalia spinosa A. Milne-Edwards, 1873
Ebalia stellaris Naruse & Ng, 2006
Ebalia stimpsoni A. Milne-Edwards, 1880
Ebalia tosaensis Sakai, 1963
Ebalia tuberculata Miers, 1881
= *Lithadia barnardi* Stebbing, 1920
Ebalia tuberculosa (A. Milne-Edwards, 1873) [*Persephona*]
= *Phylxia granulosa* Haswell, 1880
= *Ebalia salamensis* Doflein, 1904
= *Nursia scandens* Stebbing, 1920
= *Nursia postulans* Stebbing, 1921
= *Ebalia japonica* Rathbun, 1932
Ebalia tuberosa (Pennant, 1777) [*Cancer*] [Direction 36]
= *Ebalia pennantii* Leach, 1817
= *Ebalia insignis* Lucas, 1849
= ?*Ebalia madeirensis* Stimpson, 1858
Ebalia tumefacta (Montagu, 1808) [*Cancer*]
Ebalia woodmasoni Alcock, 1896
Ebalia yokoyai Sakai, 1965
= *Ebalia tuberculata* Yokoya, 1933 (pre-occupied name)
Ebalia ypsilon (Ortmann, 1895) [*Nursia*]

Ebaliopsis Ihle, 1918
= *Ebaliopsis* Ihle, 1918 (type species *Phlyxia erosa* A. Milne-Edwards, 1873, by original designation and by monotypy; gender feminine)
Ebaliopsis erosa (A. Milne-Edwards, 1873) [*Phlyxia*]
Ebaliopsis vadieri Ward, 1942

Favus Lanchester, 1900
= *Favus* Lanchester, 1900 (type species *Favus granulatus* Lanchester, 1900, by monotypy; gender masculine) [preceded by *Favus* Schafthaeutl, 1850, name suppressed; Opinion 73, Direction 24]
Favus granulatus Lanchester, 1900 [Direction 25]

Galilia Ng & Richer de Forges, 2007
= *Galilia* Ng & Richer de Forges, 2007 (type species *Galilia narusei* Ng & Richer de Forges, 2007, by original designation and monotypy; gender feminine)
Galilia narusei Ng & Richer de Forges, 2007

Heterolithadia Alcock, 1896
= *Heterolithadia* Alcock, 1896 (type species *Ebalia fallax* Henderson, 1893, by monotypy; gender feminine) [Opinion 73]
Heterolithadia fallax (Henderson, 1893) [*Ebalia*]

Heteronucia Alcock, 1896
= *Heteronucia* Alcock, 1896 (type species *Heteronucia vesiculosa* Alcock, 1896, by monotypy; gender feminine) [Opinion 73]
Heteronucia angulata Barnard, 1947

Heteronucia elegans Chen & Türkay, 2001
Heteronucia globata Sakai, 1963
Heteronucia granulata Komatsu & Takeda, 2005
Heteronucia laminata (Doflein, 1904) [*Philyra*]
Heteronucia margaritata Chen & Ng, 2003
Heteronucia mesanensis Rathbun, 1909
Heteronucia minuta Chen, 1996
Heteronucia obfastigiatus Chen & Sun, 2002
Heteronucia oeschi Ward, 1941
Heteronucia perlata (Sakai, 1963) [*Nucia*]
Heteronucia spinifera Edmondson, 1951
Heteronucia toyoshioae Komatsu & Takeda, 2005
Heteronucia tuberculata Chen & Türkay, 2001
Heteronucia venusta Nobili, 1906
= *Nucia gelida* Rathbun, 1907
Heteronucia vesiculosa Alcock, 1896
Heteronucia xincunensis Chen & Türkay, 2001

Ihleus Ovaere, 1989
= *Ihleus* Ovaere, 1989 (type species *Randallia lanata* Alcock, 1896, by original designation; gender masculine)
= *Nucilobus* Morris & Collins, 1991 (type species *Nucilobus symmetricus* Morris & Collins, 1991, by monotypy; gender masculine) (fossil) ?
Ihleus lanatus (Alcock, 1896) [*Randallia*]
Ihleus villosus (Chen, 1989) [*Randallia*]

Ilia Leach, 1817
= *Ilia* Leach, 1817 (type species *Cancer nucleus* Linnaeus, 1758, by monotypy; gender feminine) [Opinion 712]
= *Leucosia* Fabricius, 1798 (invalid junior homonym of *Leucosia* Weber, 1795; type species *Cancer nucleus* Linnaeus, 1758, subsequent designation by Latreille, 1810; gender feminine)
= *Thaumasta* Gistel, 1848 (unnecessary replacement name for *Leucosia* Fabricius, 1798; gender feminine)
Ilia leachi Risso, 1822
Ilia nucleus (Linnaeus, 1758) [*Cancer*]
= *Cancer orbicularis* Olivi, 1792
= *Ilia laevigata* Risso, 1827
= *Ilia rugulosa* Risso, 1827
= *Ilia parvicauda* Costa, 1853
Ilia spinosa Miers, 1881

Iliacantha Stimpson, 1871
= *Iliacantha* Stimpson, 1871 (type species *Iliacantha subglobosa* Stimpson, 1871, subsequent designation by Rathbun, 1922; gender feminine) [Opinion 73, Direction 37]
Iliacantha hancocki Rathbun, 1935
Iliacantha liodactylus Rathbun, 1898
Iliacantha schmitti Rathbun, 1935
Iliacantha sparsa Stimpson, 1871
Iliacantha subglobosa Stimpson, 1871

Ixa Leach, 1815
= *Ixa* Leach, 1815 (type species *Cancer cylindrus* Fabricius, 1777, by monotypy; gender feminine) [Opinion 73]
Ixa acuta Tyndale-Biscoe & George, 1962
Ixa cylindrus (Fabricius, 1777) [*Cancer*]
= *Ixa canaliculata* Leach, 1817
Ixa edwardsii Lucas, 1858
Ixa inermis Leach, 1817
Ixa investigatoris Chopra, 1933
Ixa megaspis Adams & White, 1849
Ixa monodi Holthuis & Gottlieb, 1956
Ixa profundus Zarenkov, 1994
Ixa pulcherrima (Haswell, 1879) [*Arcania*]

Leucosilia Bell, 1855
= *Leucosilia* Bell, 1855 (type species *Guaia* (*Ilia*) *jurinei* Saussure, 1853, by monotypy; gender feminine) [Opinion 73, Direction 37]
Leucosilia jurinii (Saussure, 1853) [*Guaia* (*Ilia*)]
Leucosilia maldivensis Borradaile, 1903

Lithadia Bell, 1855
= *Lithadia* Bell, 1855 (type species *Lithadia cumingii* Bell, 1855, by monotypy; gender feminine) [Opinion 73, Direction 37]
Lithadia barnardi Stebbing, 1920
Lithadia brasiliensis (von Martens, 1872) [*Ebalia* (*Lithadia*)]
Lithadia cadaverosa Stimpson, 1871
Lithadia conica (Coelho, 1973) [*Ebalia*]
Lithadia cumingii Bell, 1855
Lithadia granulosa A. Milne-Edwards, 1880
Lithadia obliqua (Coelho, 1973) [*Ebalia*]
Lithadia vertiginosa (Coelho, 1973) [*Ebalia*]

Merocryptoides Sakai, 1963
= *Merocryptoides* Sakai, 1963 (type species *Merocryptoides frontalis* Sakai, 1963, by original designation; gender masculine)
Merocryptoides frontalis Sakai, 1963
Merocryptoides ohtsukai Komatsu & Takeda, 2001
Merocryptoides peteri Komatsu & Takeda, 2001

Merocryptus A. Milne-Edwards, 1873
= *Merocryptus* A. Milne-Edwards, 1873 (type species *Merocryptus lambriformis* A. Milne-Edwards, 1873, by monotypy; gender masculine) [Opinion 73]
Merocryptus boletifer A. Milne-Edwards & Bouvier, 1894
Merocryptus durandi Serène, 1955
Merocryptus lambriformis A. Milne-Edwards, 1873
Merocryptus obsoletus A. Milne-Edwards & Bouvier, 1898

Myra Leach, 1817
= *Myra* Leach, 1817 (type species *Leucosia fugax* Fabricius, 1798, by monotypy; gender feminine) [Opinion 712]
= *Myrodes* Bell, 1855 (type species *Myrodes eudactylus* Bell, 1855, by monotypy; gender masculine) [Opinion 73, Direction 37]
Myra affinis Bell, 1855
= *Myra affinis* White, 1847 (nomen nudum)
Myra australis Haswell, 1880
Myra biconica Ihle, 1918
Myra brevimana Alcock, 1896
Myra celeris Galil, 2001
Myra currax Galil, 2001
Myra curtimana Galil, 2001
Myra digitata Galil, 2004
Myra elegans Bell, 1855
Myra eudactylus (Bell, 1855) [*Myrodes*]
= *Myra dilatimanus* White, 1847 (nomen nudum)
= *Myrodes gigas* Haswell, 1879
Myra fugax (Fabricius, 1798) [*Leucosia*]
= *Leucosia fugax* Weber, 1795 (nomen nudum)
= *Cancer punctatus* Herbst, 1783 (pre-occupied name)
= *Myra carinata* White, 1847 (nomen nudum)
= *Myra carinata* Bell, 1855
= *Myra pentacantha* Alcock, 1896
= *Myra longimerus* Chen & Türkay, 2001 {3}
Myra grandis Zarenkov, 1990
Myra hainanica Chen & Türkay, 2001
Myra intermedia Borradaile, 1902
Myra mammilaris Bell, 1855

Myra pernix Galil, 2001
Myra subgranulata Kossmann, 1877
= *Myra coalita* Hilgendorf, 1878
= *Myra dubia* Miers, 1879
= *Myra cyrenae* Ward, 1942
Myra tumidospina Galil, 2001

Myrine Galil, 2001
= *Myrine* Galil, 2001 (type species *Callidactylus kessleri* Paul'son, 1875, by original designation; gender feminine)
Myrine acutidens (Ihle, 1918) [*Myra*]
Myrine kessleri (Paul'son, 1875) [*Callidactylus*]
= *Myra darnleyensis* Haswell, 1879

Myropsis Stimpson, 1871
= *Myropsis* Stimpson, 1871 (type species *Myropsis quinquespinosa* Stimpson, 1871, by monotypy; gender feminine)
Myropsis quinquespinosa Stimpson, 1871
= *Myropsis constricta* A. Milne-Edwards, 1880
= *Myropsis goliath* A. Milne-Edwards, 1880

Nobiliella Komatsu & Takeda, 2003
= *Nobiliella* Komatsu & Takeda, 2003 (type species *Nursia jousseaumei* Nobili, 1905, by original designation; gender feminine)
Nobiliella cornigera (Nobili, 1905) [*Nursia*]
Nobiliella jousseaumei (Nobili, 1905) [*Nursia*]

Nucia Dana, 1852
= *Nucia* Dana, 1852 (type species *Nucia speciosa* Dana, 1852, by monotypy; gender feminine)
Nucia bouvieri Ihle, 1918 [Opinion 73]
Nucia ingens (Rathbun, 1911) [*Heteronucia*]
Nucia miliaris (A. Milne-Edwards, 1873) [*Ebalia*]
Nucia pulchella (A. Milne-Edwards, 1873) [*Ebalia*]
Nucia rosea Nobili, 1906
Nucia speciosa Dana, 1852
= *Ebalia pfefferi* De Man, 1887
Nucia tuberculosa A. Milne-Edwards, 1874

Nuciops Serène & Soh, 1976
= *Nuciops* Serène & Soh, 1976 (type species *Nucia modesta* Ihle, 1918, by original designation; gender masculine)
Nuciops modestus (Ihle, 1918) [*Nucia*]

Nursia Leach, 1817
= *Nursia* Leach, 1817 (type species *Nursia hardwickii* Leach, 1817, by monotypy; gender feminine) [Opinion 73]
Nursia alata Komatsu & Takeda, 1999
Nursia blandfordi Alcock, 1896
Nursia dimorpha Balss, 1916
Nursia elegans Ihle, 1918
Nursia guinotae Komatsu & Takeda, 2001
Nursia hamipleopoda Chen & Fang, 1998
Nursia japonica Sakai, 1935
Nursia lamellata Ihle, 1918
Nursia lar (Fabricius, 1793) [*Cancer*]
= *Parthenope lar* Weber, 1795 (nomen nudum)
= *Parthenope lar* Fabricius, 1798 {4}
= *Nursia hardwickii* Leach, 1817
Nursia mimetica Nobili, 1906
Nursia minor (Miers, 1879) [*Ebalia*]
= *Nursia sinica* Shen, 1937
Nursia nasuta Alcock, 1896
Nursia persica Alcock, 1896
Nursia phylloides Ihle, 1918
Nursia plicata (Herbst, 1803) [*Cancer*]
Nursia rhomboidalis (Miers, 1879) [*Ebalia*]
Nursia sexangulata Ihle, 1918
Nursia sinuata Miers, 1877
Nursia trilobata Chen & Sun, 2002
Nursia weberi Ihle, 1918

Nursilia Bell, 1855
= *Nursilia* Bell, 1855 (type species *Nursillia dentata* Bell, 1855, by monotypy; gender feminine)
Nursilia dentata Bell, 1855 [Opinion 73, Direction 37]
Nursilia sinica Chen, 1982
Nursilia tonsor Alcock, 1896

Oreophorus Rüppell, 1830
= *Oreophorus* Rüppell, 1830 (type species *Oreophorus horridus* Rüppell, 1830, by monotypy; gender masculine) [Opinion 73]
Oreophorus alcicornis Alcock, 1896
Oreophorus crosnieri C. G. S. Tan & Ng, 1995
Oreophorus fenestrus C. G. S. Tan & Ng, 1995
Oreophorus horridus Rüppell, 1830
Oreophorus reticulatus Adams & White, 1849

Oreotlos Ihle, 1918
= *Oreophorus* (*Oreotlos*) Ihle, 1918 (type species *Tlos angulatus* Rathbun, 1906, designation by C. G. S. Tan & Ng, 1995; gender masculine)
Oreotlos angulatus (Rathbun, 1906) [*Tlos*]
Oreotlos bertrandi C. G. S. Tan & Ng, 1995
Oreotlos encymus C. G. S. Tan & Ng, 1993
Oreotlos etor C. G. S. Tan & Richer de Forges, 1993
Oreotlos havelocki (Laurie, 1906) [*Tlos*]
Oreotlos heuretos C. G. S. Tan & Ng, 1995
Oreotlos lagarodes C. G. S. Tan & Ng, 1995
Oreotlos latus (Borradaile, 1903) [*Tlos*]
Oreotlos pala C. G. S. Tan & Ng, 1995
Oreotlos pax C. G. S. Tan & Ng, 1995
Oreotlos potanus C. G. S. Tan & Ng, 1993
Oreotlos speciosus Chen, 1989

Orientotlos Sakai, 1980
= *Orientotlos* Sakai, 1980 (type species *Orientotlos iishibai* Sakai, 1980, by original designation; gender masculine)
Orientotlos iishibai Sakai, 1980

Paranursia Serène & Soh, 1976
= *Paranursia* Serène & Soh, 1976 (type species *Nursia abbreviata* Bell, 1855, by original designation; gender feminine)
Paranursia abbreviata (Bell, 1855) [*Nursia*]

Parilia Wood-Mason, 1891
= *Parilia* Wood-Mason, 1891 (type species *Parilia alcocki* Wood-Mason, 1891, subsequent designation under Article 68.2.1; gender feminine) [Opinion 73]
Parilia alcocki Wood-Mason, 1891 [Direction 36]
Parilia major Sakai, 1961
Parilia ovata Chen, 1984
= *Myra anomala* Zarenkov, 1990
Parilia tuberculata Sakai, 1961

Persephona Leach, 1817
= *Persephona* Leach, 1817 (type species *Persephona latreillei* Leach, 1817, subsequent designation by Rathbun, 1922; gender feminine) [Opinion 73, Direction 37]
= *Guaia* H. Milne Edwards, 1837 (type species *Cancer punctatus* Linnaeus, 1758, by monotypy; gender feminine)
Persephona aquilonaris Rathbun, 1933
Persephona crinita Rathbun, 1931
Persephona edwardsii Bell, 1855

Persephona finneganae Rathbun, 1931
Persephona lichtensteinii Leach, 1817
Persephona mediterranea (Herbst, 1794) [*Cancer*]
Persephona orbicularis Bell, 1855
Persephona punctata (Linnaeus, 1758) [*Cancer*]
= *Persephona latreillei* Leach, 1817
= *Persephona lamarckii* Leach, 1817
= *Persephona guaia* Bell, 1855
Persephona subovata (Rathbun, 1894) [*Myra*]
Persephona townsendi (Rathbun, 1894) [*Myra*]

Philyra Leach, 1817
= *Philyra* Leach, 1817 (type species *Leucosia globus* Fabricius, 1775, subsequent designation by H. Milne Edwards, 1837, in 1836–1844; gender feminine) [Opinion 712] {5}
Philyra acutidens Chen, 1987
Philyra adamsii Bell, 1855
Philyra alcocki Kemp, 1915
Philyra angularis Rathbun, 1924
Philyra biprotubera Dai & Guan, 1986
Philyra bicornis Rahayu & Ng, 2003
Philyra cancella (Herbst, 1783) [*Cancer*]
= *Cancer scabriuscula* Fabricius, 1798
Philyra carinata Bell, 1855
Philyra chefooensis Shen, 1932
Philyra concinnus Ghani & Tirmizi, 1995
Philyra corallicola Alcock, 1896
Philyra cristata Miers, 1881
Philyra fuliginosa Targioni-Tozetti, 1877
Philyra globus (Fabricius, 1775) [*Cancer*]
= *Cancer globosus* Fabricius, 1793
= *Leucosia globulosus* Bosc, 1802
= *Philyra globulosa* H. Milne Edwards, 1837
= *Philyra polita* Henderson, 1893
Philyra granigera Nobili, 1905
Philyra granulosa Ihle, 1918
Philyra heterograna Ortmann, 1892
= ?*Philyra peitahoensis* Shen, 1932
Philyra iriomotensis Sakai, 1983
Philyra kanekoi Sakai, 1934
= *Philyra nipponensis* Yokoya, 1933
Philyra laevidorsalis Miers, 1881
Philyra macrophthalma Bell, 1855
Philyra malefactrix (Kemp, 1915) [*Ebalia*]
= *Philyra minuta* Chen & Türkay, 2001
Philyra marginata A. Milne-Edwards, 1873
Philyra misagoana Sakai, 1937
Philyra nishihirai Takeda & Nakasone, 1991
Philyra olivacea Rathbun, 1909
Philyra orbicularis (Bell, 1855) [*Leucosia*]
Philyra pisum De Haan, 1841
Philyra platycheir De Haan, 1841
= *Philyra longimana* A. Milne-Edwards, 1874
Philyra porcellanea (Herbst, 1783) [*Cancer*]
= *Leucosia porcellana* Weber, 1795 (nomen nudum)
Philyra punctata Bell, 1855
Philyra rectangularis Miers, 1884
Philyra rudis Miers, 1884
Philyra sagittifera (Alcock, 1896) [*Ebalia*]
Philyra scabra (Dai, Yang, Song & Chen, 1984) [*Ebalia*]
Philyra scabriuscula (Fabricius, 1798) [*Leucosia*]
= *Leucosia scabriusculus* Weber, 1795 (nomen nudum)
Philyra sexangula Alcock, 1896
Philyra syndactyla Ortmann, 1892
Philyra taekoae Takeda, 1972
Philyra tuberculosa Stimpson, 1858
Philyra unidentata Stimpson, 1858
Philyra variegata (Rüppell, 1830) [*Cancer*]
Philyra verrucosa Henderson, 1893
Philyra yangmataoensis Shen, 1932
Philyra zhoushanensis Chen & Sun, 2002

Praebebalia Rathbun, 1911
= *Praebebalia* Rathbun, 1911 (type species *Praebebalia extensiva* Rathbun, 1911, by monotypy; gender feminine)
?*Praebebalia dondonae* Chen, 1989
?*Praebebalia fasciata* (Ihle, 1918) [*Ebalia*]
?*Praebebalia fujianensis* Chen & Fang, 2000
Praebebalia extensiva Rathbun, 1911
?*Praebebalia kumanoensis* Sakai, 1983
?*Praebebalia longidactyla* Yokoya, 1933
?*Praebebalia mosakiana* Sakai, 1965
?*Praebebalia pisiformis* Ihle, 1918
Praebebalia madagascariensis Galil, 2001
Praebebalia magna Galil, 2001
?*Praebebalia nanhaiensis* Chen & Sun, 2002
Praebebalia septemspinosa Sakai, 1983
?*Praebebalia sikokuensis* (Yokoya, 1933) [*Ebalia*]
?*Praebebalia taeniata* Takeda, 1977

Praosia C. G. S. Tan & Ng, 1993
= *Praosia* C. G. S. Tan & Ng, 1993 (type species *Praosia punctata* C. G. S. Tan & Ng, 1993, by monotypy; gender feminine)
Praosia punctata C. G. S. Tan & Ng, 1993

Pseudomyra Capart, 1951
= *Pseudomyra* Capart, 1951 (type species *Pseudomyra mbizi* Capart, 1951, by original designation; gender feminine)
Pseudomyra mbizi Capart, 1951

Pseudophilyra Miers, 1879
= *Pseudophilyra* Miers, 1879 (type species *Pseudophilyra tridentata* Miers, 1879, subsequent designation by Rathbun, 1922; gender feminine) [Opinion 73, Direction 37]
Pseudophilyra albimaculata Chen & Sun, 2002
Pseudophilyra blandfordi Alcock, 1896
Pseudophilyra burmensis Sakai, 1983
Pseudophilyra deficiens Ihle, 1918
Pseudophilyra intermedia Ihle, 1918
Pseudophilyra melita De Man, 1888
Pseudophilyra nanshaensis Chen, 1995
Pseudophilyra perryi (Miers, 1876) [*Leucosia*]
Pseudophilyra polita Miers, 1884
Pseudophilyra pubescens (Miers, 1877) [*Leucosia*]
Pseudophilyra punctata Chen & Ng, 2003
Pseudophilyra pusilla Henderson, 1893
Pseudophilyra tenuipes Ihle, 1918
Pseudophilyra tridentata Miers, 1879 [Direction 36]
= *Pseudophilyra dinops* Takeda, 1977
Pseudophilyra woodmasoni Alcock, 1896

Randallia Stimpson, 1857
= *Randallia* Stimpson, 1857 (type species *Ilia ornata* Randall, 1840, by monotypy; gender feminine) [Opinion 73]
Randallia agaricias Rathbun, 1898
Randallia americana (Rathbun, 1894) [*Ebalia*]
Randallia bulligera Rathbun, 1898
Randallia curacaoensis Rathbun, 1922
Randallia gilberti Rathbun, 1906
Randallia granulata Miers, 1886
Randallia laevis (Borradaile, 1916) [*Persephona* (*Myropsis*)]
Randallia minuta Rathbun, 1935
Randallia ornata (Randall, 1840) [*Ilia*]
= *Randallia angelica* Garth, 1940

Raylilia Galil, 2001
= *Zarenkovia* Chen & Türkay, in Chen, 1996 (type species *Randallia mirabilis* Zarenkov, 1969, by monotypy; gender feminine) (nomen nudum) {6}
= *Raylilia* Galil, 2001 (type species *Arcania gracilipes* Bell, 1855, by original designation; gender feminine)
Raylilia coniculifera Galil, 2001
Raylilia gracilipes (Bell, 1855) [*Arcania*]
Raylilia intermedia Komatsu, Manuel & Takeda, 2005
Raylilia mirabilis (Zarenkov, 1969) [*Randallia*]
Raylilia uenoi (Takeda, 1995) [*Arcania*]

Speloeophoroides Melo & Torres, 1998
= *Speloeophoroides* Melo & Torres, 1998 (type species *Speloeophoroides capixaba* Melo & Torres, 1998, by original designation; gender masculine)
Speloeophoroides capixaba Melo & Torres, 1998

Speloeophorus A. Milne-Edwards, 1865
= *Speloeophorus* A. Milne-Edwards, 1865 (type species *Oreophorus nodosus* Bell, 1855, subsequent designation by Rathbun, 1922; gender masculine) [Opinion 73, Direction 37]
Speloeophorus brasiliensis Melo & Torres, 1998
Speloeophorus callapoides A. Milne-Edwards, 1865
Speloeophorus digueti (Bouvier, 1898) [*Lithadia*]
Speloeophorus elevatus Rathbun, 1898
Speloeophorus inflatus Telford, 1980
Speloeophorus microspeos Telford, 1980
Speloeophorus nodosus (Bell, 1855) [*Oreophorus*]
Speloeophorus pontifer (Stimpson, 1871) [*Lithadia*]
= *Ebalia* (*Lithadia*) *cubensis* von Martens, 1872
= *Speloeophorus triangulus* A. Milne-Edwards, 1880
Speloeophorus schmitti Glassell, 1935

Tanaoa Galil, 2003
= *Tanaoa* Galil, 2003 (type species *Randallia pustulosa* Wood-Mason, in Wood-Mason & Alcock, 1891, by original designation; gender masculine)
Tanaoa distinctus (Rathbun, 1894) [*Randallia*]
Tanaoa granulatus (Miers, 1886) [*Randallia*] {7}
Tanaoa nanus Galil, 2003
Tanaoa pustulilabris (Alcock, 1896) [*Randallia*] {8}
= *Leucosilia granulosa* Alcock & Anderson, 1896 {8}
Tanaoa pustulosus (Wood-Mason, in Wood-Mason & Alcock, 1891) [*Randallia*]
= *Randallia vitjazi* Zarenkov, 1994
Tanaoa serenei (Richer de Forges, 1983) [*Randallia*] {7}
Tanaoa speciosus (Chen, 1989) [*Randallia*] {7}

Tlos Adams & White, 1849
= *Tlos* White, 1847 (nomen nudum) [Direction 37]
= *Tlos* Adams & White, 1849 (type species *Tlos muriger* Adams & White, 1849, by monotypy; gender masculine) [Opinion 73, Direction 37]
Tlos muriger Adams & White, 1849

Tokoyo Galil, 2003
= *Tokoyo* Galil, 2003 (type species *Randallia eburnea* Alcock, 1896, by original designation; gender feminine)
Tokoyo cirrata Galil, 2003
Tokoyo eburnea (Alcock, 1896) [*Randallia*]
= *Randallia japonica* Yokoya, 1933
= *Tokoyo trilobata* Komatsu, Manuel & Takeda, 2005

Toru Galil, 2003
= *Toru* Galil, 2003 (type species *Randallia granuloides* Sakai, 1961, by original designation; gender masculine)
= *Ihleorandallia* Števčić, 2005 (type species *Randallia pila* C. G. S. Tan, 1996, by original designation; gender feminine) (unavailable name) {9}
Toru granuloides (Sakai, 1961) [*Randallia*]
Toru mesjatzevi (Zarenkov, 1990) [*Randallia*]
Toru pilus (Tan, 1996) [*Randallia*]
Toru septimus Galil, 2003
Toru trituberculatus Sakai, 1961) [*Randallia*]

Uhlias Stimpson, 1871
= *Uhlias* Stimpson, 1871 (type species *Uhlias ellipticus* Stimpson, 1871, subsequent designation by Rathbun, 1937; gender masculine)
Uhlias ellipticus Stimpson, 1871
Uhlias limbatus Stimpson, 1871

Urashima Galil, 2003
= *Urashima* Galil, 2003 (type species *Randallia pustuloides* Sakai, 1961, by original designation; gender masculine)
Urashima lamellidentatus (Wood-Mason, 1892) [*Randallia*]
Urashima pustuloides (Sakai, 1961) [*Randallia*]

Incertae sedis

Arcania belcheri White, 1847 (nomen nudum)
Myra dilatimanus White, 1847 (nomen nudum)
Myra elongata White, 1847 (nomen nudum)
Oreophorus tenerrimus White, 1847 (nomen nudum)
Philyra granigera White, 1847 (nomen nudum)
Philyra humilis White, 1847 (nomen nudum)

Subfamily Leucosiinae Samouelle, 1819

Leucosiadae Samouelle, 1819 [Opinion 712]

Coleusia Galil, 2006
= *Coleusia* Galil, 2006 (type species *Cancer urania* Herbst, 1801, by original designation; gender feminine)
Coleusia biannulata (Tyndale-Biscoe & George, 1962) [*Leucosia*]
= *Leucosia longifrons neocaledonia* Alcock, 1896 (pre-occupied name)
Coleusia magna (Tyndale-Biscoe & George, 1962) [*Leucosia*]
Coleusia rangita Galil, 2006
Coleusia signata (Paul'son, 1875) [*Leucosia*]
= *Leucosia fuscomaculata* Miers, 1876
Coleusia urania (Herbst, 1801) [*Cancer*]
= *Leucosia grandis* Chen & Türkay, in Chen & Sun, 2002

Euclosia Galil, 2003
= *Euclosia* Galil, 2003 (type species *Leucosia obtusifrons* De Haan, 1841, by original designation; gender feminine)
Euclosia concinna Galil, 2003
Euclosia crosnieri (Chen, 1989) [*Leucosia*]
Euclosia exquisita Galil, 2003
Euclosia nitida Galil, 2003
Euclosia obtusifrons (De Haan, 1841) [*Leucosia*]
= *Leucosia mimasensis* Sakai, 1969
Euclosia rotundifrons (Chopra, 1933) [*Leucosia*]
Euclosia scitula Galil, 2003
Euclosia tornatilia Galil, 2003
Euclosia unidentata (De Haan, 1841) [*Leucosia*]
Euclosia vella Galil, 2007

Leucosia Weber, 1795
= *Leucosia* Weber, 1795 (type species *Cancer craniolaris* Linnaeus, 1758, subsequent designation by Holthuis, 1959; gender feminine) [Opinion 712]
= *Leucosides* Rathbun, 1897 (type species *Cancer craniolaris* Linnaeus, 1758, by original designation; gender masculine) [Opinion 712]
Leucosia affinis Bell, 1855

Leucosia anatum (Herbst, 1783) [*Cancer*]
= *Leucosia longifrons* De Haan, 1841
= *Leucosia polita* Hess, 1865
= *Leucosia neocaledonica* A. Milne-Edwards, 1873
= *Leucosia ornata* Miers, 1877
= *Leucosia splendida* Haswell, 1879
= *Leucosia australiensis* Miers, 1880
Leucosia brevimana Bell, 1855
Leucosia brevior Ortmann, 1892
Leucosia compressa Shen & Chen, 1978
Leucosia corallicola Alcock, 1896
Leucosia craniolaris (Linnaeus, 1758) [*Cancer*]
= *Leucosia perlata* De Haan, 1841
= *Leucosia obscura* White, 1847 (nomen nudum)
= *Leucosia pallida* Bell, 1855
= *Leucosia obscura* Bell, 1855
= *Leucosia parvimana* Stimpson, 1858
Leucosia formosensis Sakai, 1937
Leucosia haswelli Miers, 1886
Leucosia jecusculum (Rathbun, 1911) [*Leucosides*]
Leucosia leslii Haswell, 1879
Leucosia laevimana Miers, 1884
Leucosia longibrachia Shen & Chen, 1978
Leucosia longimaculata Chen & Fang, 1991
Leucosia margaritacea Bell, 1855
Leucosia moresbiensis Haswell, 1880
Leucosia ocellata Bell, 1855
Leucosia phyllocheira White, 1847
= *Leucosia phyllocheira* Bell, 1855
Leucosia pulcherrima Miers, 1877
Leucosia punctata Bell, 1855
Leucosia reticulata Miers, 1877
Leucosia rubripalma Galil, 2003
Leucosia sima Alcock, 1896
Leucosia tetraodon Bouvier, 1914
Leucosia whitmeei Miers, 1875

Seulocia Galil, 200
= *Seulocia* Galil, 2005 (type species *Leucosia rhomboidalis* De Haan, 1841, by original designation; gender feminine)
Seulocia anahita Galil, 2005
Seulocia crepuscula Galil, 2005
Seulocia cristata Galil, 2005
Seulocia laevimana (Miers, 1884) [*Leucosia*]
Seulocia latirostrata (Shen & Chen, 1978) [*Leucosia*]
Seulocia pubescens (Miers, 1877) [*Leucosia*]
= ?*Pseudophilyra hoedtii* De Man, 1881
Seulocia pulchra (Shen & Chen, 1978) [*Leucosia*]
Seulocia rhomboidalis (De Haan, 1841) [*Leucosia*]
= *Leucosia maculata* Stimpson, 1858
Seulocia truncata (Alcock, 1896) [*Leucosia*]
Seulocia vittata (Stimpson, 1858) [*Leucosia*]
= *Leucosia sinica* Shen & Chen, 1978

Soceulia Galil, 2006
= *Soceulia* Galil, 2006 (type species *Leucosia marmorea* Bell, 1855, by original designation; gender feminine)
Soceulia alainia Galil, 2006
Soceulia brunnea (Miers, 1877) [*Leucosia*]
= *Leucosia singaporensis* Chen & Ng, 2003
Soceulia major (Chen & Ng, 2003) [*Leucosia*]
Soceulia marmorea (Bell, 1855) [*Leucosia*]
= *Leucosia marmorea* White, 1847 (nomen nudum)

Urnalana Galil, 2005
= *Urnalana* Galil, 2005 (type species *Leucosia haematosticta* Adams & White, 1849, by original designation; gender feminine)
Urnalana angulata (Rathbun, 1911) [*Leucosides*]
Urnalana chevretii (Haswell, 1880) [*Leucosia*] {10}
Urnalana cristata Galil & Ng, 2007
Urnalana cumingii (Bell, 1855) [*Leucosia*]
= *Leucosia cumingii* White, 1847 (nomen nudum)
= *Leucosia galantua* Ovaere, 1988
Urnalana elata (A. Milne-Edwards, 1873) [*Leucosia*]
= *Leucosia sagamiensis* Sakai, 1961
= *Leucosia bikiniensis* Sakai, 1983
Urnalana elatoides (Bouvier, 1915) [*Leucosia*]
Urnalana elatula Galil, 2005
Urnalana foresti (Chen, 1989) [*Leucosia*] {11}
Urnalana granulimera Galil, 2005
Urnalana haematosticta (Adams & White, 1849) [*Leucosia*]
= *Leucosia haematosticta* White, 1847 [nomen nudum]
= *Leucosia hoematosticta* Adams & White, 1849 [alternate spelling]
Urnalana hilaris (Nobili, 1905) [*Leucosia*]
Urnalana insularis (Takeda & Kurata, 1976) [*Leucosia*]
Urnalana margaritata (A. Milne-Edwards, 1873) [*Leucosia*]
= *Leucosia biminentis* Dai & Xu, 1991
Urnalana minuta (Chen & Xu, 1991) [*Leucosia*] {11}
Urnalana parhaematostica Galil, 2005
Urnalana pulchella (Bell, 1855) [*Leucosia*]
= *Leucosia pseudomargaritata* Chen, 1987
= *Leucosia alcocki* Ovaere, 1987 {12}
= *Leucosia parapulchella* Dai & Xu, 1991
Urnalana pururensis (Ovaere, 1987) [*Leucosia*]
Urnalana thysanotus (George & Clark, 1976) [*Leucosia*]
Urnalana whitei (Bell, 1855) [*Leucosia*] {10}

Incertae sedis

Leucosia hestia White, 1847 (nomen nudum)

Notes

{1} *Cancer excisus* Fabricius, 1787, is a problem as it seems to be more like a porcellanid than a brachyuran. However, Fabricius (1787) compared it with other leucosiids, suggesting it might be a juvenile or small species of leucosiid, or even a hymensomatid. There are too few characters to be sure, and we retain it as an uncertain species of leucosiid for the time being, albeit with some reluctance.

{2} The identity of *Ebalia discrepans* Costa in Hope, 1851 (Hope, 1851: 41) cannot be determined here. The description is brief, and considering the state of the taxonomy of the genus, we can only regard it as a doubtful *Ebalia* species.

{3} *Myra longimerus* Chen & Türkay, 2001, described from China, is a junior subjective synonym of *Myra fugax* (Fabricius, 1798).

{4} In the ZMUC are type specimens labelled as *Parthenope lar* Fabricius, 1798, which are what is today known as *Nursia lar* (Fabricius, 1793). Presumably, Fabricius (1798) had decided that what he had named as *Cancer lar* in 1793 may be better accommodated in *Parthenope*. This is not surprising as *Nursia lar* does superficially look like many parthenopid species.

{5} The 1837 type species designation for *Philyra* Leach, 1817, is in the series of plates by H. Milne Edwards

(1836–1844), in his Règne Animal, not Histoire naturelle des Crustacés (H. Milne Edwards, 1837). The plate dealing with *Philyra* was number 24, and according to Cowan (1976), this was published in March 1837. In his plate, H. Milne Edwards used the spelling "*Philyra globulosa*", but this was after a Fabricius name. Fabricius (1775) first spelt the name as *Cancer globus* but later (Fabricius, 1793) changed it to *Cancer globosus*, although both names apparently share the same types so should be regarded as objective synonyms. The first spelling has priority.

{6} The issue with the two names *Raylilia* Galil, 2001, and *Zarenkovia* Chen & Türkay, in Chen, 1996, is somewhat complicated. Chen (1996: 283) first used the name "*Zarenkovia* Chen and Türkay, 1995" when she treated a species she identified as "*Zarenkovia mirabilis* (Zarenkov, 1969)" from the South China Sea. She was referring to a paper that was at that time still unpublished, citing it as "Chen H. L. & Türkay, M., 1995. Brachyuran crabs of Hainan Island (South China Sea). I. Family Leucosiidae (Crustacea: Decapoda). *Senckenbergiana marit*, Frankfura a. M. (in the press)." (Chen, 1996: 303). The name "*Zarenkovia*" is a nomen nudum as it was not described or discussed, although *Randallia gracilipes* Zarenkov, 1969, can be regarded as its type species by monotypy, since it was the only species mentioned. In 2000, one of the present authors (P. K. L. Ng) read a manuscript by B. Galil which described a new genus she proposed to name after the late Ray Manning and his wife, Lili Manning, *Raylilia*; a paper which was due to be published in the Proeedings of the Biological Society of Washington in 2001 to honour Manning. Realising that Galil's "*Raylilia*" was the same as Chen & Türkay's "*Zarenkovia*" which was still unpublished at that time, he informed both H. L. Chen and B. Galil that the matter should be examined to see if it was possible to prevent an unnecessary synonymy. However, Chen & Türkay's paper had already been submitted to another journal, the Chinese Acta Zootaxonomica Sinica, and H. L. Chen informed us that it was already in press and too late to retract it. Galil's paper was eventually published in early 2001, whilst Chen & Türkay's paper came out in the second half of 2001. However, Chen & Türkay's (2001) paper only treated the six new species they had found and made no mention of the name "*Zarenkovia*". While the overall situation is unfortunate, there is no nomenclatural problem as both generic names are subjective synonyms; the type species of *Raylilia* Galil, 2001, is *Arcania gracilipes* Bell, 1855, while that for *Zarenkovia* Chen & Türkay, in Chen, 1996, is *Randallia mirabilis* Zarenkov, 1969. Chen & Sun (2002), in their review of the Chinese Leucosiidae, also accepted that the name *Zarenkovia* is a nomen nudum and junior name, and used *Raylilia* for this genus.

{7} One species, *Randallia serenei* Richer de Forges, 1983, synonymised with *Tanaoa distinctus* (Rathbun, 1893) by Galil (2003) was recently shown to be a distinct species by Ng & Richer de Forges (2007). Two species provisionally placed in *Randallia* Stimpson, 1897, by Galil (2003), *Randallia granulatus* Miers, 1886, and *Randallia speciosus* Chen, 1989, were also transferred to *Tanaoa* Galil, 2003, by Ng & Richer de Forges (2007).

{8} Galil (2003) revised *Randallia* Stimpson, 1897, separating it into five genera. One species, *Randallia pustulilabris* Alcock, 1896 (together with several others), was provisionally left in the genus with only the comment "these species are herein retained in *Randallia* s. s. pending further revision, rather than leave them as *incertae sedis*" (Galil, 2003: 401). There is however a nomenclatural problem with *R. pustulilabris* that has not been previously mentioned. In describing this as a *Randallia*, Alcock (1896: 194) commented that he " … thought it justifiable to change the name of this species from *granulosa* to *pustulilabris*, as Miers, 'Challenger' Brachyura (1886) p. 317 has already used the very similar name *granulata* for a species belonging to this genus as here defined". Interestingly, in the plates volume, Alcock & Anderson (1896), wrote on the captions page facing plate 24 the following: "Fig. 3. – *Randallia pustulilabris*, Alcock. Journal, Asiatic Society of Bengal, Vol. LXV. Pt. 2, 1896 (= *Leucosilia granulosa*, Alcock and Anderson." (see Clark & Crosnier, 1992, for the dates of the various "Investigator" plates). However, on plate 24 itself, all the species figured on the page are also named at the bottom of the page, and here, the name "3. *Leucosilia granulosa* A & A ♀" is used instead! It seems obvious that "*Leucosilia granulosa*" was the name originally used by Alcock but after he changed his mind, he altered the name in the description and captions page to *Randallia pustulilabris* but not the headings on the actual plate. *Leucosilia granulosa* Alcock & Anderson, 1896, is an available name under the Articles 12.2.7 and 13.1.3 of the Code. It is nevertheless, clearly an objective synonym of *Randallia pustulilabris* Alcock, 1896, according to Article 72.7 and therefore shares the same type series. Ng & Richer de Forges (2007) transferred this species to *Tanaoa*.

{9} Števčić (2005: 133) listed a number of new genera, with designated type species, however as no diagnoses were given all are unavailable under the Code. In this case however, there is no problem as *Ihleorandallia* Števčić, 2005 (type species *Randallia pila* Tan, 1996) is clearly identical with *Toru* Galil, 2003 (type species *Randallia granuloides* Sakai, 1961), their type species agreeing in all key characters.

{10} *Leucosia whitei* Miers, 1875, is a homonym of *Leucosia whitei* Bell, 1855, with the latter having priority. Haswell (1879) replaced *Leucosia whitei* Miers, 1875, with name *Leucosia chevretii* (incorrectly spelt as *chevertii* by most authors) (see also Arnold & George, 1987). Recently, Galil (2005) established a new genus, *Urnalana*, for several species previously placed in *Leucosia*, including *Leucosia whitei* Bell, 1855, and *Leucosia chevretii* Haswell, 1879.

{11} *Leucosia foresti* Chen, 1989, and *L. minuta* Chen & Xu, 1991, are close and although both are clearly *Urnalana*, they may be synonymous (Galil & Ng, 2007).

{12} Although the two names *Leucosia pseudomargaritata* Chen, 1987, and *Leucosia alcocki* Ovaere, 1987, were published in the same year, through correspondence, Chen and Sun (2002: 454) established that *L. pseudomargaritata* Chen, 1987, has priority over *L. alcocki* Ovaere, 1987, which was only published in December of that year. In any case, Galil (2005) synonymised both taxa with *Urnalana pulchella* (Bell, 1855). In the event that *L. pseudomargaritata* and *L. alcocki* are regarded as distinct from *U. pulchella*, *L. pseudomargarita* has priority but must be referred to *Urnalana*.

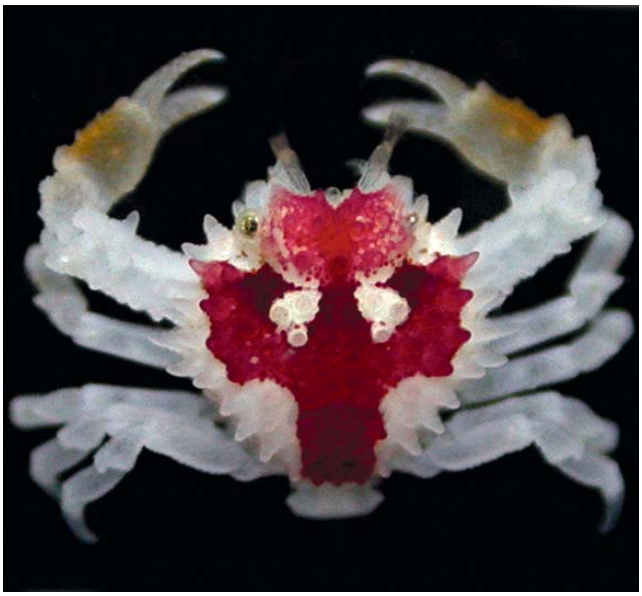

Fig. 82. *Heteronucia venusta*, central Philippines (photo: P. Ng)

Fig. 83. *Nucia speciosa*, Hawaii (photo: P. Ng)

Fig. 84. *Leucosia scitula*, central Philippines (photo: P. Ng)

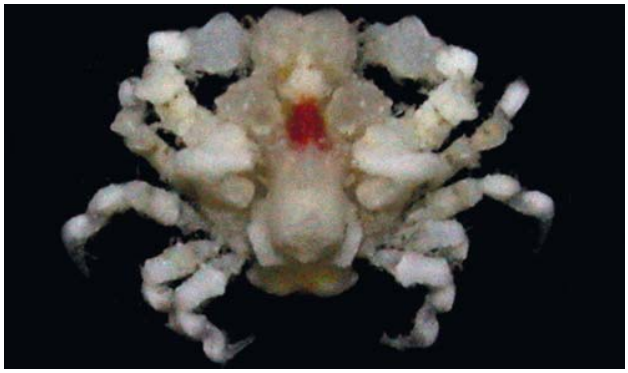

Fig. 85. *Merocryptoides* sp., central Philippines, under study by H. Komatsu (photo: P. Ng)

Fig. 86. *Onychomorpha lamelligera*, central Philippines (photo: P. Ng)

Fig. 87. *Tlos muriger*, Philippines (photo: T. Y. Chan)

SUPERFAMILY MAJOIDEA SAMOUELLE, 1819

Remarks. – The concept of the Majidae (or Majoidea) as used here has changed substantially from earlier concepts, and needs explanation. There is now a trend, especially in the Americas, of recognising up to eight families in the superfamily Majoidea, basically raising to full family status all the subfamilies so nicely defined for the American fauna by Garth (1958), viz. Majidae Samouelle, 1819, Epialtidae MacLeay, 1838, Inachidae MacLeay, 1838, Mithracidae MacLeay, 1838, Inachoididae Dana, 1851, Pisidae Dana, 1851, Tychiidae Dana, 1851, and Oregoniidae Garth, 1958 (see Garth, 1958; Hendrickx, 1995a, 1999; Guinot & Richer de Forges, 1997; Boschi, 2000; Martin & Davis, 2002). However, there has been no thorough revision of both the Indo-West Pacific and Atlantic genera, and many of these "families" are in fact poorly defined. In the Indo-West Pacific, the excellent revision by Griffin & Tranter (1986) is generally followed by most workers. However because of the great diversity of form in the Indo-West Pacific fauna, the characters Griffin & Tranter used to separate the subfamilies (families as conceived in the Americas) often seem vague and subjective. Most workers have great practical difficulty in using the keys to subfamilies; and often work directly with specific genera and their allies instead. Those who are less familiar with the Majidae are more often than not, left bewildered and confused. Confusion such as this has compelled recent workers familiar with the Indo-West Pacific fauna (e.g. Grifin & Tranter, 1986; Ng, 1998; Ng et al., 2001; Davie, 2002), to recognise only a single family with numerous subfamilies. While the consensus is that the majoids are monophyletic (together with the Hymenosomatidae), the "inaccuracy" of the subfamilial or familial definitions has been problematic. The recent "brief reappraisal" by Števčić (1994), and elaborated on slightly in Števčić (2005), who established many new subfamilies and tribes, does not improve the situation. With so many subfamilies already difficult to distinguish, having numerous tribes does nothing to help.

Looking at the subfamilies and families proposed, it is clear to us that there is an intrinsic morphological pattern which has been generally overlooked, and four major groups can be discerned within what is now called the Majidae sensu lato. Certainly all the majoids (including the hymenosomatids, assuming they are really majoids) can be diagnosed in having all the thoracic sternal sutures (4/5–7/8) interrupted (Guinot, 1977a, b, 1979). In addition the retaining mechanism of the male abdomen generally consists of a typical press-button, usually in the form of a very acute structure, often positioned on the oblique sides of the sterno-abdominal cavity, with an extremely deep socket on the abdomen. In certain majoids (for example in most inachids), abdominal segment 6 is fused to the telson as a pleotelson so that the sockets are unusually located on the last element of the abdomen (Guinot & Bouchard, 1998). From what is known, all majoids (again with the exception of the Hymenosomatidae) have highly abbreviated larval developments, with two or less zoeal stages before the megalopa (Rice, 1980; Clark et al., 1998). This is an extremely conservative larval development pattern.

Members of the Oregoniinae form a distinct assemblage of perhaps rather primitive majoids: many genera have a more typical brachyuran form (rather than distinctly pyriform); lack specialised setae on the carapace or pereiopods to hold objects of camouflage; possess a male abdomen in which the distal part is broadened with the telson prominently "inserted" into the distal margin of segment 6; and the G1 has a prominent longitudinal groove, and is distally lined with numerous stout setae and/or spinules. The Majinae and Mithracinae form a second group, characterised by the possession of complete or almost complete orbits, presence of specialised hooked setae for carrying objects (occasionally absent), and a relatively broad basal antennal segment. The Inachinae and Inachoidinae are both very different from other majoids in the form of their carapace and are superficially similar to each other, although the published literature suggests they may not be closely related (see Guinot & Richer de Forges, 1997); and both can be recognised as distinct. The Inachoididae was not recognised as a valid group for many decades until being resurrected by Drach & Guinot (1982, 1983), followed by a detailed justification by Guinot & Richer de Forges (1997). There is no confirmation by larval morphology and, moreover, there are many similarities between the Inachidae and Inachoididae. Consequently a complete re-appraisal of both families may indicate that the Inachoididae is only a subfamily of the Inachidae. The next group is perhaps the most heterogeneous and contains the Pisinae, Tychinae and Epialtinae. We have some difficulty in separating them – all have poorly developed or no orbits, although the "line" separating several genera is "grey" at best. The need to separate obviously related genera like *Pugettia* and *Rochinia* (in Epialtinae and Pisinae respectively) does seem logical. On the other hand, unusual genera like *Criocarcinus*, *Picroceros* and *Stilbognathus* (at present in Tychiinae), while "lacking orbits" are in fact much closer to more typical pisines (which have incipient orbits). In any case, these three subfamilies are relatively close to the Majinae and Mithracinae, with the differences highlighted here not substantial.

With regard to the suprageneric taxa established by Števčić (1991, 1994, 2005), viz. the Planoterginae, Eurynolambrinae, Pliosomatinae and Thoini, some may be recognised. Members of the Thoini are nothing more than rather specialised mithracines and should be transferred there. The Planoterginae (with only one genus *Planotergum*) requires more comment. It has already been discussed in some depth by Serène (1965b) that *Planotergum* has many affinities with the eastern American mithracine genus *Hemus*, and the two genera are clearly closely related (cf. Števčić, 1991; Garth, 1958; Hendrickx, 1999). *Planotergum*, like *Hemus*, has a relatively broad basal antennal article (like other mithracines) and shares with *Hemus*, not only a similar carapace and short, hook-like ambulatory pereiopods, but also the delicate chelipeds which can be barely seen in dorsal view, and the prominently foliaceous third antennal

article visible in dorsal view. This suggests that *Planotergum* and *Hemus* should be placed together in the Planoterginae. Both are close to the Mithracinae, with the genus *Thoe* forming a link between the two subfamilies. *Thoe*, however, is still better placed in the Mithracinae, at least for the time being, with its third antennal article not as prominently enlarged, the ambulatory pereiopods not as obviously short and hook-like, and the adult male chelipeds typically elongate. The Pliosomatinae (for only one American genus *Pliosoma*) is another matter. Guinot (1979: 33) states that *Pliosoma* was clearly a majoid and likely a pisine, not an atelecyclid as it had been classified (cf. Rathbun, 1925), a view in which we concur. It nevertheless differs from typical pisines in its carapace form, and especially in its upcurved last two ambulatory dactyli. It is here provisionally recognized as a separate subfamily, Pliosomatinae). With regards to *Eurynolambrus*, it is clear from the study by Krefft (1952), that younger specimens bear a striking resemblance to many genera of majines like *Leptomithrax* and *Maja*, possessing all the Majinae features noted earlier (see also Griffin & Tranter, 1986). The adults of *Eurynolambrus* have a disproportionately broadened carapace giving the crab a peculiar, almost "parthenopid" appearance, but its affinities to the Majinae are indisputable. Guinot (1967c: 840; 1979: 32–33) has already stated emphatically that it is a majoid. For the moment at least, we recognise the Eurynolambrinae, but in the Majidae sensu stricto.

Larval characters are also providing some useful insights. Using larval morphology, Clark & Webber (1991) argued that four families can be recognised, viz. the Majidae, Inachidae, Oregoniidae and Macrocheiridae (see also Pohle & Marques, 2000). This view resembles what is proposed here, including our observations that the Inachoididae is close to the Inachidae, and the Epilatidae is close to the Majidae. Pohle & Marques (2000) commented that while there was some larval support for the Inachoididae, this is not unambiguous, and there was no larval support for the Epilatinae, Mithracinae and Pisinae (see also Marques et al., 2003). At the moment, *Macrocheira* is classified in the Inachidae, but admittedly, it is a rather aberrant member of that family. In addition to its enormous size (the only species, *Macrocheira kaempferi*, is generally regarded as the largest crustacean), and its unusually twisted G1, it differs markedly from all other inachids, and resembles oregoniids in many ways. Interestingly, all larval trees show the larvae of *Macrocheira kaempferi* as coming out basally. On the available evidence, there is clearly some support for the recognition of a separate suprageneric taxon for *Macrocheira kaempferi*, however, further study is needed before we will be comfortable to recognise the Macrocheiridae as a separate family.

From the foregoing evidence and discussion, we can only recognise five majoid families with any confidence, viz. the Majidae (with four subfamilies, Majinae, Mithracinae, Planoterginae and Eurynolambrinae), Inachidae, Inachoididae, Oregoniidae, and Epialtidae (with four subfamilies Epialtinae, Tychiinae, Pisinae and Pliosomatinae).

With regards to the placement of the Hymenosomatidae in the Majoidea, this is still somewhat provisional. In her original synthesis of the modern Brachyura, Guinot (1978) regarded the hymenosomatids as thoracotremes. In a later paper, Guinot & Richer de Forges (1997) suggested they were heterotremes instead. Richer de Forges et al. (1997) using sperm data suggest they are close to the majoids. We have had a look at several hymenosomatid genera to ascertain where the penis is actually derived, but we are still uncertain. It does appear that they are more thoracotrematous than heterotrematous, but we prefer to defer any decision until a more proper study with better techniques and more genera can be conducted. The determination of the penial condition is very difficult in small, highly decalcified and simplified crabs (including the cryptochiroids and pinnotheroids), and their condition may differ from that observed in more typical thoracotremes like the grapsoids and ocypodoids (see Guinot, 1979). The available evidence from larvae and morphology (other than the penial condition) does suggest a close affinity with majoids (see also Guinot & Richer de Forges, 1997; unpublished data). We therefore keep the Hymenosomatidae in the Majoidea for the moment.

FAMILY EPIALTIDAE MACLEAY, 1838

Epialtidae MacLeay, 1838
Huenidae MacLeay, 1838
Amathinae Dana, 1851
Chorininae Dana, 1851
Criocarcininae Dana, 1851
Libiniinae Dana, 1851 [recte Libininae]
Menaethinae Dana, 1851
Othoninae Dana, 1851
Pisinae Dana, 1851
Pyrinae Dana, 1851
Tychiidae Dana, 1851 [recte Tychidae]
Acanthonychinae Stimpson, 1871
Picrocerinae Neumann, 1878
Lissoida Alcock, 1895
Blastidae Stebbing, 1902
Hyasteniinae Balss, 1929
Ophthalmiinae Balss, 1929
Pliosomatinae Števčić, 1994 [recte Pliosominae]
Alcockiini Števčić, 2005

Subfamily Epialtinae MacLeay, 1838

Epialtidae MacLeay, 1838
Huenidae MacLeay, 1838
Menaethinae Dana, 1851
Acanthonychinae Stimpson, 1871
Alcockiini Števčić, 2005

Acanthonyx Latreille, 1828
= *Acanthonyx* Latreille, 1828 (type species *Maia lunulata* Risso, 1816, by monotypy; gender masculine) [Opinion 712]
= *Gonosoma* Costa, 1844 (type species *Gonosoma viridis* Costa, 1844, by monotypy; gender neuter)

= *Peltinia* Dana, 1851 (type species *Peltinia scutiformis* Dana, 1851; subsequent designation by Manning & Holthuis, 1981; gender feminine)
= *Dehaanius* MacLeay, 1838 (type species *Dehaanius acanthopus* MacLeay, 1838, by monotypy; gender masculine)
Acanthonyx consobrinus A. Milne-Edwards, 1862
Acanthonyx dentatus H. Milne Edwards, 1834
= *Dehaanius acanthopus* MacLeay, 1838
Acanthonyx depressifrons Manning & Holthuis, 1981
Acanthonyx dissimulatus Coelho, 1993
Acanthonyx elongatus Miers, 1877
Acanthonyx euryseroche Griffin & Tranter, 1986
Acanthonyx formosa Wu, Yu & Ng, 1999
Acanthonyx inglei Tirmizi & Kazmi, 1988
Acanthonyx limbatus A. Milne-Edwards, 1862
Acanthonyx lunulatus (Risso, 1816) [*Maia*]
= *Maia glabra* Latreille, 1836
= *Acanthonyx viridis* Costa, 1838
= *Gonosoma viridis* Costa, 1844
= *Acanthonyx brevifrons* A. Milne-Edwards, 1869
Acanthonyx minor Manning & Holthuis, 1981
?*Acanthonyx nodulosa* (Dana, 1852) [*Peltinia*]
Acanthonyx petiverii H. Milne Edwards, 1834
= *Acanthonyx simplex* Dana, 1852 {1}
= *Acanthonyx emarginatus* H. Milne Edwards & Lucas, 1843
= *Acanthonyx debilis* Dana, 1851
= *Acanthonyx concamerata* Kinahan, 1857
Acanthonyx quadridentatus Krauss, 1843
Acanthonyx sanctaehelenae Chace, 1966
Acanthonyx scutellatus MacLeay, 1838
= *Acanthonyx macleaii* Krauss, 1843
Acanthonyx scutiformis (Dana, 1851) [*Peltinia*]
Acanthonyx undulatus Barnard, 1947

Alcockia Števčić, 2005
= *Alcockia* Števčić, 2005 (type species *Collodes malabaricus* Alcock, 1895, by original designation; gender feminine)
Alcockia malabarica (Alcock, 1895) [*Collodes*]

Antilibinia MacLeay, 1838
= *Antilibinia* MacLeay, 1838 (type species *Antilibinia smithii* MacLeay, 1838, by monotypy; gender feminine)
Antilibinia smithii MacLeay, 1838

Cyclonyx Miers, 1879
= *Cyclonyx* Miers, 1879 (type species *Huenia frontalis* White, 1848, by monotypy; gender masculine)
Cyclonyx frontalis (White, 1848) [*Huenia*]

Epialtoides Garth, 1958
= *Epialtoides* Garth, 1958 (type species *Epialtus hiltoni* Rathbun, 1923, by original designation; gender masculine)
Epialtoides hiltoni (Rathbun, 1923) [*Epialtus*]
Epialtoides kingsleyi (Rathbun, 1923) [*Epialtus*]
Epialtoides murphyi (Garth, 1948) [*Epialtus*]
Epialtoides paradigmus Garth, 1958
Epialtoides rostratus Coelho, 1972

Epialtus H. Milne Edwards, 1834
= *Epialtus* H. Milne Edwards, 1834 (type species *Epialtus bituberculatus* H. Milne Edwards, 1834, subsequent designation by Miers, 1879a; gender masculine)
= *Carnifex* Gistel, 1848 (unnecessary replacement name for *Epialtus* H. Milne Edwards, 1834; gender feminine)
Epialtus bituberculatus H. Milne Edwards, 1834
= *Epialtus affinis* Stimpson, 1859
Epialtus brasiliensis Dana, 1852
Epialtus dilatatus A. Milne-Edwards, 1878
Epialtus elongatus Rathbun, 1923
Epialtus hiltoni Rathbun, 1923
Epialtus kingsleyi Rathbun, 1923
Epialtus longirostris Stimpson, 1860
Epialtus minimus Lockington, 1877
= *Epialtus crenulatus* Rathbun, 1923
Epialtus peruvianus Rathbun, 1923
Epialtus portoricensis Rathbun, 1923
Epialtus sulcirostris Stimpson, 1860

Esopus A. Milne-Edwards, 1875
= *Esopus* A. Milne-Edwards, 1875 (type species *Esopus crassus* A. Milne-Edwards, 1875, by monotypy; gender masculine)
Esopus crassus A. Milne-Edwards, 1875

Eupleurodon Stimpson, 1871
= *Eupleurodon* Stimpson, 1871 (type species *Eupleurodon trifurcatus* Stimpson, 1871, by monotypy; gender masculine)
= *Euplorodon* A. Milne-Edwards, 1878 (incorrect spelling)
Eupleurodon peruvianus Rathbun, 1923
Eupleurodon rathbunae Garth, 1939
Eupleurodon trifurcatus Stimpson, 1871

Goniothorax A. Milne-Edwards, 1878
= *Goniothorax* A. Milne-Edwards, 1878 (type species *Goniothorax ruber* A. Milne-Edwards, 1878, by monotypy; gender neuter)
Goniothorax ruber A. Milne-Edwards, 1878

Griffinia Richer de Forges, 1994
= *Pisidarum* Serène & Vadon, 1981 (nomen nudum) {2}
= *Griffinia* Richer de Forges, 1994 (type species *Antilibinia lappacea* Rathbun, 1918, by original designation; gender feminine)
Griffinia gilloloensis (Rathbun, 1916) [*Antilibinia*]
Griffinia lappacea (Rathbun, 1918) [*Antilibinia*]
Griffinia polita (Griffin & Tranter, 1986) [*Antilibinia*]

Huenia De Haan, 1837
= *Maja* (*Huenia*) De Haan, 1837 (type species *Maja* (*Huenia*) *heraldica* De Haan, 1837, subsequent designation by Holthuis, 1987; gender feminine) {3}
Huenia australis Griffin & Tranter, 1986
Huenia bifurcata Streets, 1870
Huenia brevifrons Ward, 1941
Huenia grandidierii A. Milne-Edwards, 1865
Huenia halei Griffin & Tranter, 1986
Huenia heraldica (De Haan, 1837) [*Maja* (*Huenia*)]
= *Maja* (*Huenia*) *elongata* De Haan, 1839
= *Maja* (*Huenia*) *proteus* De Haan, 1839
= *Huenia brevirostrata* Dana, 1851 {4}
Huenia keelingensis Griffin & Tranter, 1986
Huenia pacifica Miers, 1879

Leucippa H. Milne Edwards, 1833 {5}
= *Leucippa* H. Milne Edwards, 1833 (type species *Leucippa pentagona* H. Milne Edwards, 1833, by monotypy; gender feminine)
Leucippa pentagona H. Milne Edwards, 1834
= *Pisa* (*Leucippa*) *ensinadae* De Haan, 1833 {6}
= *Leucippa laevis* Dana, 1851
= *Pugettia australis* Miers, 1881

Lophorochinia Garth, 1969
= *Lophorochinia* Garth, 1969 (type species *Lophorochinia parabranchia* Garth, 1969, by original designation; gender feminine)
Lophorochinia parabranchia Garth, 1969

Menaethiops Alcock, 1895
= *Menaethiops* Alcock, 1895 (type species *Menaethiops bicornis* Alcock, 1895, by monotypy; gender masculine)
= *Parahoplophrys* Nobili, 1905 (type species *Parahoplophrys nodulosa* Nobili, 1905, by monotypy; gender masculine)
Menaethiops acutifrons (A. Milne-Edwards, 1868) [*Pisa*]
Menaethiops bicornis Alcock, 1895
Menaethiops brevicornis (A. Milne-Edwards, 1868) [*Pisa*]
Menaethiops contiguicornis (Klunzinger, 1906) [*Herbstia*]
Menaethiops delagoae Barnard, 1955
Menaethiops dubius Balss, 1929
Menaethiops fascicularis (Krauss, 1843) [*Pisa*]
Menaethiops gadaniensis Kazmi & Tirmizi, 1999
Menaethiops moebii Türkay, 1981
Menaethiops natalensis Barnard, 1955
Menaethiops ninii Guinot, 1962
Menaethiops nodulosus (Nobili, 1905) [*Parahoplophrys*]
= *Herbstia corniculata* Klunzinger, 1906
Menaethiops okai Sakai, 1935
Menaethiops portoricensis Rathbun, 1924
Menaethiops xiphias Griffin & Tranter, 1986

Menaethius A. Milne-Edwards, 1834
= *Menaethius* A. Milne-Edwards, 1834 (type species *Pisa monoceros* Latreille, 1825, by monotypy; gender masculine)
Menaethius monoceros (Latreille, 1825) [*Pisa*]
= *Inachus arabicus* Rüppell, 1830
= *Menaethius porcellus* White, 1848
= *Menaethius subserratus* Adams & White, 1848
= *Menaethius tuberculatus* Adams & White, 1848
= *Menaethius angustus* Dana, 1852
= *Menaethius depressus* Dana, 1852
= *Menaethius areolatus* Dana, 1852
= *Menaethius inornatus* Dana, 1852
= *Menaethius dentatus* Stimpson, 1857
= *Menaethius rugosus* A. Milne-Edwards, 1862
Menaethius orientalis (Sakai, 1969) [*Epialtus*]

Mimulus Stimpson, 1860
= *Mimulus* Stimpson, 1860 (type species *Mimulus foliatus* Stimpson, 1860, by monotypy; gender masculine)
Mimulus foliatus Stimpson, 1860
= ?*Mimulus acutifrons* A. Milne-Edwards, 1867

Mocosoa Stimpson, 1871
= *Mocosoa* Stimpson, 1871 (type species *Mocosoa crebripunctata* Stimpson, 1871, by monotypy; gender feminine)
Mocosoa crebripunctata Stimpson, 1871

Perinia Dana, 1851
= *Perinia* Dana, 1851 (type species *Perinia tumida* Dana, 1851, by monotypy; gender feminine)
= *Perinea* Dana, 1852 (incorrect spelling) {7}
= *Parathoe* Miers, 1879 (type species *Parathoe rotundata* Miers, 1879, by original designation; gender feminine)
Perinia laevisima Dai, Cai & Yang, 1994
Perinia tumida Dana, 1851
= *Parathoe rotundata* Miers, 1879

Pugettia Dana, 1851
= *Pugettia* Dana, 1851 (type species *Pugettia gracilis* Dana, 1851, subsequent designation by Miers, 1879a; gender feminine)
Pugettia dalli Rathbun, 1894
Pugettia elongata Yokoya, 1933
Pugettia gracilis Dana, 1851
= *Pugettia lordii* Spence Bate, 1864
Pugettia hubbsi Garth, 1958
Pugettia incisa (De Haan, 1839) [*Pisa* (*Menoethius*)]
= *Pugettia cristata* Gordon, 1931
Pugettia intermedia Sakai, 1938
Pugettia kagoshimensis Rathbun, 1933
Pugettia leytensis Rathbun, 1916
Pugettia marissinica Takeda & Miyake, 1972
Pugettia mindanaoensis Rathbun, 1916
Pugettia minor Ortmann, 1893
Pugettia nipponensis Rathbun, 1932
Pugettia productus (Randall, 1840) [*Epialtus*]
Pugettia quadridens (De Haan, 1839) [*Pisa* (*Menoethius*)]
Pugettia pellucens Rathbun, 1932
Pugettia richii Dana, 1851
Pugettia similis Rathbun, 1932
Pugettia tasmanensis Richer de Forges, 1993
Pugettia venetiae Rathbun, 1924

Sargassocarcinus Ward, 1936
= *Sargassocarcinus* Ward, 1936 (type species *Sargassocarcinus foliatus* Ward, 1936, by monotypy; gender masculine)
Sargassocarcinus sublimis (Rathbun, 1916) [*Peltinia*]
= *Sargassocarcinus foliatus* Ward, 1936
= *Mimulus cristatus* Balss, 1924

Simocarcinus Miers, 1879
= *Simocarcinus* Miers, 1879 (type species *Huenia simplex* Dana, 1852, by original designation; gender masculine)
= *Trigonothir* Miers, 1879 (type species *Trigonothir obtusirostris* Miers, 1879, by original designation; gender feminine)
= *Xenocarcinoides* Borradaile, 1900 (type species *Xenocarcinoides rostratus* Borradaile, 1900, by monotypy; gender masculine)
Simocarcinus camelus Klunzinger, 1906
= *Simocarcinus camelus pinnirostris* Klunzinger, 1906
= *Simocarcinus camelus brevirostris* Klunzinger, 1906
= *Huenia platyrostrata* Pillai, 1951
Simocarcinus depressus (H. Milne Edwards, 1862) [*Huenia*]
Simocarcinus longirostris Lenz, 1910
Simocarcinus obtusirostris (Miers, 1879) [*Trigonothir*]
Simocarcinus pyramidatus (Heller, 1861) [*Huenia*]
= *Huenia hellerii* Paul'son, 1875
?*Simocarcinus pusillus* Cano, 1889
Simocarcinus rostratus (Borradaile, 1900) [*Xenocarcinoides*]
Simocarcinus samoaensis (Edmondson, 1951) [*Trigonothir*]
Simocarcinus simplex (Dana, 1852) [*Huenia*]

Taliepus A. Milne-Edwards, 1878
= *Epialtus* (*Taliepus*) A. Milne-Edwards, 1878 (type species *Epialtus nuttallii* Randall, 1840, subsequent designation by Rathbun, 1925; gender masculine)
Taliepus dentatus (H. Milne Edwards, 1834) [*Epialtus*]
= ?*Cancer xaiva* Molina, 1782
= *Inachus mitis* Poeppig, 1836
Taliepus marginatus (Bell, 1835) [*Epialtus*]
Taliepus nuttallii (Randall, 1840) [*Libinia*]

Xenocarcinus White, 1847
= *Xenocarcinus* White, 1847 (type species *Xenocarcinus tuberculatus* White, 1847, by monotypy; gender masculine)
= *Huenioides* A. Milne-Edwards, 1865 (type species *Huenioides conica* A. Milne-Edwards, 1865, by monotypy; gender feminine)
Xenocarcinus conicus (A. Milne-Edwards, 1865) [*Huenioides*]
= *Xenocarcinus tuberculatus alcocki* Laurie, 1906
= *Xenocarcinus nakazawai* Sakai, 1938
Xenocarcinus longicornis Dai & Chen, 1993
Xenocarcinus monoceros Sakai, 1937

Xenocarcinus depressus Miers, 1874
Xenocarcinus truncatifrons Balss, 1938
Xenocarcinus tuberculatus White, 1847

Incertae sedis

Acanthonyx elongatus White, 1847 (nomen nudum)
Huenia dehaanii White, 1848
Huenia proteus var. *tenuipes* Adams & White, 1848
Inachus australis Gray, 1831
Menaethius brevirostris Heller, 1862

Subfamily Pisinae Dana, 1851

Amathinae Dana, 1851
Chorininae Dana, 1851
Libiniinae Dana, 1851 [recte Libininae]
Pisinae Dana, 1851
Pyrinae Dana, 1851
Lissoida Alcock, 1895
Blastidae Stebbing, 1902
Hyasteniinae Balss, 1929

Acanthophrys A. Milne-Edwards, 1865
= *Acanthophrys* A. Milne-Edwards, 1865 (type species *Acanthophrys cristimanus* A. Milne-Edwards, 1865, subsequent designation by Miers, 1879a; gender masculine)
= *Parazewa* Balss, 1938 (type species *Parazewa bocki* Balss, 1938, by original designation; gender feminine)
Acanthophrys bocki (Balss, 1938) [*Parazewa*]
Acanthophrys costatus Griffin & Tranter, 1986
Acanthophrys cristimanus A. Milne-Edwards, 1865
Acanthophrys paucispina Miers, 1879

Anamathia Smith, 1884
= *Amathia* Roux, 1828 (type species *Amathia rissoana* Roux, 1828, by monotypy; junior homonym of *Amathia* Lamouroux, 1812 [Bryozoa]; gender feminine) [Opinion 712]
= *Anamathia* Smith, 1884 (replacement name for *Amathia* Roux, 1828; gender feminine)
Anamathia rissoana (Roux, 1828) [*Amathia*]

Apias Rathbun, 1897
= *Pyria* Dana, 1851 (type species *Pyria pubescens*, 1851; subsequent designation by Miers 1879; name pre-occupied by *Apias* Lepelitier & Serville, 1828 [Hymenoptera]; gender feminine)
= *Apias* Rathbun, 1897 (replacement name for *Pyria* Dana, 1851; gender masculine)
Apias pubescens (Dana, 1851) [*Pyria*]

Apiomithrax Rathbun, 1897
= *Phycodes* A. Milne-Edwards, 1869 (type species *Phycodes antennarius* A. Milne-Edwards, 1869, by monotypy; name pre-occupied by *Phycodes* Guenée, 1852 [Lepidoptera]; gender masculine)
= *Apiomithrax* Rathbun, 1897 (replacement name for *Phycodes* A. Milne-Edwards, 1869; gender masculine)
Apiomithrax bocagei (Osorio, 1887) [*Micropisa*]
= *Micropisa spinosa* Forest & Guinot, 1966 (nomen nudum)
Apiomithrax violaceus (A. Milne-Edwards, 1868) [*Micropisa*]
= *Phycodes antennarius* A. Milne-Edwards, 1869
= *Micropisa eryophora* Rochebrune, 1883

Austrolibinia Griffin, 1966
= *Austrolibinia* Griffin, 1966 (type species *Chorilibinia gracilipes* Miers, 1879, by original designation; gender feminine)
Austrolibinia andamanica (Alcock, 1895) [*Chorilibinia*]
Austrolibinia capricornensis Griffin & Tranter, 1986
Austrolibinia gracilipes (Miers, 1879) [*Chorilibinia*]
Austrolibinia pincerna Wagner, 1992

Chorilia Dana, 1851
= *Chorilia* Dana, 1851 (type species *Chorilia longipes* Dana, 1852, by monotypy; gender feminine)
Chorilia japonicas (Miers, 1879) [*Hyastenus* (*Chorilia*)]
Chorilia longipes Dana, 1852
Chorilia turgida Rathbun, 1924

Chorilibinia Lockington, 1877
= *Chorilibinia* Lockington, 1877 (type species *Chorilibinia angusta* Lockington, 1877, by monotypy; gender feminine)
Chorilibinia angusta Lockington, 1877

Chorinus Latreille, 1825
= *Pisa* (*Chorinus*) Latreille, 1825 (type species *Cancer heros* Herbst, 1790, by monotypy; gender masculine)
Chorinus heros (Herbst, 1790) [*Cancer*]
= *Chorinus barbirostris* Leach, in White, 1847 (nomen nudum) {8}

Delsolaria Garth, 1973
= *Delsolaria* Garth, 1973 (type species *Delsolaria enriquei* Garth, 1973, by original designation; gender feminine)
Delsolaria enriquei Garth, 1973

Doclea Leach, 1815
= *Doclea* Leach, 1815 (type species *Doclea rissoni* Leach, 1815, by monotypy; gender feminine)
Doclea aduncus Wagner, 1986
Doclea alcocki Laurie, 1906
Doclea armata De Haan, 1839
= *Doclea tetraptera* Walker, 1887
= *Doclea calcitrapa* White, 1847
Doclea brachyrhynchos Bleeker, 1856
Doclea canalifera Stimpson, 1857
= *Doclea japonica* Ortmann, 1893
Doclea canaliformis Ow-Yang, in Lovett, 1981
= *Doclea simeti* Griffin & Tranter, 1986
= *Doclea johnsoni* Ow-Yang, in Lovett, 1981
Doclea macracanthus Bleeker, 1856
= *Doclea microchir* Bleeker, 1856
Doclea muricata (Herbst, 1788) [*Cancer*]
= *Inachus hybridus* Weber, 1795 (nomen nudum)
= *Inachus hybridus* Fabricius, 1798
= *Doclea hybridoidea* Bleeker, 1856
Doclea ovis (Fabricius, 1787) [*Cancer*]
Doclea rissoni Leach, 1815
= *Doclea gracilipes* Stimpson, 1857
= *Doclea andersoni* De Man, 1888
= *Doclea sebae* Bleeker, 1856
= *Doclea sinensis* Dai, 1981
Doclea unidentata Chen & Ng, 2004

Giranauria Griffin & Tranter, 1986
= *Giranauria* Griffin & Tranter, 1986 (type species *Chorinus verrucosipes* Adams & White, 1848, by original designation; gender feminine)
Giranauria gracilirostris (Miers, 1879) [*Hyastenus*]
Giranauria tinaktensis (Rathbun, 1916) [*Hyastenus*]
Giranauria verrucosipes (Adams & White, 1848) [*Chorinus*]

Goniopugettia Sakai, 1986
= *Goniopugettia* Sakai, 1986 (type species *Goniopugettia tanakae* Sakai, 1986, by present designation; gender feminine)
Goniopugettia sagamiensis (Gordon, 1931) [*Pugettia*]
Goniopugettia tanakae Sakai, 1986

Herbstia H. Milne Edwards, 1834
= *Herbstia* H. Milne Edwards, 1834 (type species *Cancer condyliatus* Fabricius, 1787, by monotypy; gender feminine) [Opinion 712]
= *Rhodia* Bell, 1835 (type species *Rhodia pyriformis* Bell, 1835, by monotypy; gender feminine)
= *Herbstiella* Stimpson, 1871 (type species *Herbstia depressa* Stimpson, 1860, by original designation; gender feminine)
= *Fisheria* Lockington, 1877 (type species *Fisheria depressa* Lockington, 1877, by monotypy; gender feminine)
Herbstia camptacantha (Stimpson, 1871) [*Herbstiella*]
= *Fisheria depressa* Lockington, 1877
Herbstia condyliata (Fabricius, 1787) [*Cancer*]
= *Mithrax berbsti* Risso, 1827
= *Mithrax scaber* Costa, 1840
Herbstia crassipes (H. Milne Edwards, 1873) [*Micropisa*]
Herbstia depressa Stimpson, 1860
Herbstia edwardsii Bell, 1835
Herbstia nitida Manning & Holthuis, 1981
Herbstia parvifrons Randall, 1840
Herbstia pubescens Stimpson, 1871
Herbstia pyriformis (Bell, 1835) [*Rhodia*]
Herbstia rubra A. Milne-Edwards, 1869
Herbstia tumida (Stimpson, 1871) [*Herbstiella*]

Holoplites Rathbun, 1894
= *Holoplites* Rathbun, 1894 (type species *Nibilia armata* A. Milne-Edwards, 1880, by original designation; gender masculine)
Hoploplites armatus (A. Milne-Edwards, 1880) [*Nibilia*]

Hoplophrys Henderson, 1893
= *Hoplophrys* Henderson, 1893 (type species *Hoplophrys oatesi* Henderson, 1893, by monotypy; gender masculine)
Hoplophrys oatesi Henderson, 1893
= *Hoplophrys ogilbyi* MacCulloch, 1908
= *Parazewa palauensis* Miyake, 1939

Hyastenus White, 1847
= *Hyastenus* White, 1847 (type species *Hyastenus sebae* White, 1847, by monotypy; gender masculine)
Hyastenus ambonensis Griffin & Tranter, 1986
Hyastenus aries (Latreille, 1825) [*Pisa*]
Hyastenus auctus Rathbun, 1916
Hyastenus biformis Rathbun, 1916
Hyastenus bispinosus Buitendijk, 1939
Hyastenus borradailei (Rathbun, 1907) [*Halimus*]
Hyastenus brachichirus Nobili, 1906
Hyastenus brevicornis Ortmann, 1894
Hyastenus brockii De Man, 1887
Hyastenus campbelli Griffin & Tranter, 1986
Hyastenus consobrinus A. Milne-Edwards, 1895
Hyastenus convexus Miers, 1884
= *Hyastenus tuberculosus* Rathbun, 1916
Hyastenus cracentis Griffin & Tranter, 1986
Hyastenus diacanthus (De Haan, 1839) [*Pisa* (*Naxia*)]
Hyastenus elatus Griffin & Tranter, 1986
Hyastenus elongatus Ortmann, 1893
Hyastenus espinosus (Borradaile, 1903) [*Halimus*]
Hyastenus fracterculus Rathbun, 1916
Hyastenus gracilimanus Yang & Dai, 1994
Hyastenus hectori Miers, 1879
Hyastenus hendersoni (Laurie, 1906) [*Halimus*]
Hyastenus hilgendorfi De Man, 1887
Hyastenus inermis (Rathbun, 1911) [*Halimus*]
Hyastenus kyusyuensis (Yokoya, 1933) [*Halimus*]
Hyastenus mindoro Griffin & Tranter, 1986
Hyastenus minutus Buitendijk, 1939
Hyastenus planasius (Adams & White, 1848) [*Pisa*]
= *Pisa planasius* White, 1847 [nomen nudum]
Hyastenus pleione (Herbst, 1803) [*Cancer*]
Hyastenus scrobiculatus Rathbun, 1916
Hyastenus sebae White, 1847
= *Hyastenus oryx* A. Milne-Edwards, 1872
Hyastenus sinope (Adams & White, 1848) [*Pisa*]
Hyastenus spinosus A. Milne-Edwards, 1872
Hyastenus subinermis Zehntner, 1894
= *Hyastenus trispinosus* Rathbun, 1916
Hyastenus ternatensis Buitendijk, 1939
Hyastenus truncatipes (Miers, 1879) [*Halimus*]
Hyastenus uncifer Calman, 1900
Hyastenus whitei Griffin, 1976

Lahaina Dana, 1851
= *Lahaina* Dana, 1851 (type species *Lahaina ovata* Dana, 1851, by monotypy; gender feminine)
Lahaina agassizi (Rathbun, 1902) [*Halimus*]
= *Naxioides rombloni* Rathbun, 1916
Lahaina incerta (Balss, 1938) [*Pseudomicippe*]
Lahaina mauritiana Griffin & Tranter, 1986
Lahaina ovata Dana, 1851
= *Hyastenus tenuicornis* Pocock, 1890
?*Lahaina tenuirostris* (Miers, 1884) [*Hyastenus*]

Lepidonaxia Targioni-Tozzetti, 1872
= *Lepidonaxia* Targioni-Tozzetti, 1872 (type species *Lepidonaxia defilippii* Targioni-Tozzetti, 1872, by monotypy; gender feminine)
Lepidonaxia defilippii Targioni-Tozzetti, 1872

Lepteces Rathbun, 1893
= *Lepteces* Rathbun, 1893 (type species *Lepteces ornatus* Rathbun, 1893, by monotypy; gender masculine)
Lepteces ornatus Rathbun, 1893

Leptomaia Griffin & Tranter, 1986
= *Leptomaia* Griffin & Tranter, 1986 (type species *Leptomaia tuberculata* Griffin & Tranter, 1986, by original designation; gender feminine).
Leptomaia tuberculata Griffin & Tranter, 1986

Libidoclaea H. Milne Edwards & Lucas, 1842
= *Libidoclaea* H. Milne Edwards & Lucas, 1842 (type species *Libidoclaea granaria* H. Milne Edwards & Lucas, 1842, by monotypy; gender feminine)
Libidoclaea granaria H. Milne Edwards & Lucas, 1842
= *Libidoclea coccinea* Dana, 1851
= *Libinia gracilipes* Miers, 1886
Libidoclaea smithii (Miers, 1886) [*Libinia*]
= *Libinia hahni* A. Milne-Edwards, 1891

Libinia Leach, 1815
= *Libinia* Leach, 1815 (type species *Libinia emarginata* Leach, 1815, by monotypy; gender feminine)
Libinia bellicosa Oliviera, 1944
Libinia cavirostris Chace, 1942
Libinia dubia H. Milne Edwards, 1834
Libinia erinacea (A. Milne-Edwards, 1879) [*Pisa*]
Libinia emarginata Leach, 1815
= *Libinia canaliculata* Say, 1817

Libinia ferreirae Brito Capello, 1871
= *Libinia gibbosa* A. Milne-Edwards, 1878
Libinia mexicana Rathbun, 1892
Libinia peruana Garth, 1983
Libinia rhomboidea Streets, 1870
= *Libinia inflata* Streets, 1870
Libinia rostrata Bell, 1835
Libinia setosa Lockington, 1877
= ?*Libinia affinis* Lockington, 1877
= *Libinia semizonale* Streets, 1877
Libinia spinosa H. Milne Edwards, 1834
= *Libinia espinosa* Guérin-Méneville, 1856 (incorrect spelling)
= *Libidoclaea brasiliensis* Heller, 1865

Lissa Leach, 1815
= *Lissa* Leach, 1815 (type species *Cancer chiragra* Fabricius, 1775, by monotypy; gender feminine) [Opinion 522]
= *Lissula* Rafinesque, 1818 (unnecessary replacement name for *Lissa* Leach, 1815; gender feminine)
Lissa chiragra (Fabricius, 1775) [*Cancer*] [nomen protectum]
= *Cancer cruentatus* Linnaeus, 1758 (suppressed under ICZN Opinion 522) {9}

Loxorhynchus Stimpson, 1857
= *Loxorhynchus* Stimpson, 1857 (type species *Loxorhynchus grandis* Stimpson, 1857, subsequent designation by Miers, 1879a, gender masculine)
= *Loxorynchus* Stimpson, 1857 (incorrect spelling, corrected in same paper)
Loxorhynchus crispatus Stimpson, 1857
Loxorhynchus grandis Stimpson, 1857
Loxorhynchus guinotae Hendrickx & Cervantes, 2003

Lyramaia Griffin & Tranter, 1986
= *Lyramaia* Griffin & Tranter, 1986 (type species *Tiarinia elegans* Haswell, 1882, by original designation; gender feminine)
Lyramaia elegans (Haswell, 1882) [*Tiarinia*]

Micippoides A. Milne-Edwards, 1873
= *Micippoides* A. Milne-Edwards, 1873 (type species *Micippoides angustifrons* A. Milne-Edwards, 1873, by monotypy; gender masculine)
Micippoides angustifrons A. Milne-Edwards, 1873
= *Hyastenus andrewsi* Calman, 1909

Microlissa Pretzmann, 1961
= *Lissa* (*Microlissa*) Pretzmann, 1961 (type species *Lissa* (*Microlissa*) *longirostris* Pretzmann, 1961, by present designation; gender feminine)
Microlissa aurivilliusi (Rathbun, 1898) [*Lissa*]
Microlissa bicarinata (Aurivillius, 1889) [*Lissa*]
Microlissa brasiliensis (Rathbun, 1923) [*Lissa*]
Microlissa longirostris (Pretzmann, 1961) [*Lissa* (*Microlissa*)]
Microlissa tuberosa (Rathbun, 1898) [*Lissa*]

Micropisa Stimpson, 1858
= *Micropisa* Stimpson, 1858 (type species *Micropisa ovata* Stimpson, 1858, by monotypy; gender feminine)
Micropisa ovata Stimpson, 1858

Nasutocarcinus Tavares, 1991
= *Nasutocarcinus* Tavares, 1991 (type species *Sphenocarcinus difficilis* Guinot & Richer de Forges, 1985, by original designation; gender masculine)
Nasutocarcinus aurorae (Alcock, 1899) [*Sphenocarcinus*]
Nasutocarcinus cuneus (Wood-Mason, 1891) [*Oxypleurodon*]
Nasutocarcinus difficilis (Guinot & Richer de Forges, 1985) [*Sphenocarcinus*]
Nasutocarcinus pinocchio (Guinot & Richer de Forges, 1985) [*Sphenocarcinus*]

Naxioides A. Milne-Edwards, 1865
= *Naxioides* A. Milne-Edwards, 1865 (type species *Naxioides hirta* A. Milne-Edwards, 1865, by monotypy; gender masculine)
= *Chlorinoides* Haswell, 1880 (type species *Chlorinoides tenuirostris* Haswell, 1880, by monotypy; gender masculine)
= *Podopisa* Hilgendorf, 1878 (type species *Podopisa petersii* Hilgendorf, 1878, by monotypy; gender feminine)
Naxioides carnarvon Griffin & Tranter, 1986
Naxioides cerastes (Ortmann, 1894) [*Naxia*]
Naxioides hirtus A. Milne-Edwards, 1865
= *Podopisa petersii* Hilgendorf, 1878
Naxioides inermis Bouvier, 1915
Naxioides investigatoris (Alcock, 1896) [*Naxia*]
Naxioides robillardi (Miers, 1882) [*Naxia* (*Naxioides*)]
= *Hyastenus elegans* Miers, 1886
= *Naxia mammillata* Ortmann, 1893
Naxioides taurus (Pocock, 1890) [*Naxia*]
= *Naxioides spinigera* Borradaile, 1903
Naxioides teatui Poupin, 1995
Naxioides tenuirostris (Haswell, 1880) [*Chlorinoides*]
Naxioides vaitahu Poupin, 1995

Neodoclea Buitendijk, 1950
= *Neodoclea* Buitendijk, 1950 (type species *Neodoclea boneti* Buitendijk, 1950, by original designation; gender feminine)
Neodoclea boneti Buitendijk, 1950

Nibilia A. Milne-Edwards, 1878
= *Nibilia* A. Milne-Edwards, 1878 (type species *Nibilia erinacea* A. Milne-Edwards, 1878, by monotypy; gender feminine)
Nibilia antilocarpa (Stimpson, 1871) [*Pisa*]
= *Pisa praelonga* Stimpson, 1871
= *Nibilia erinacea* A. Milne-Edwards, 1878

Nicoya Wicksten, 1987
= *Nicoya* Wicksten, 1987 (type species *Nicoya tuberculata* Wicksten, 1987, by original designation; gender feminine)
Nicoya tuberculata Wicksten, 1987

Notolopas Stimpson, 1871
= *Notolopas* Stimpson, 1871 (type species *Notolopas lamellatus* Stimpson, 1871, by monotypy; gender masculine)
Notolopas brasiliensis Miers, 1886
Notolopas lamellatus Stimpson, 1871
= *Pelia orbiculata* Finnegan, 1931
Notolopas mexicanus Garth, 1940

Oplopisa A. Milne-Edwards, 1879
= *Oplopisa* A. Milne-Edwards, 1879 (type species *Oplopisa spinipes* A. Milne-Edwards, 1879, by monotypy; gender feminine)
Oplopisa spinipes A. Milne-Edwards, 1879

Oxypleurodon Miers, 1886
= *Oxypleurodon* Miers, 1886 (type species *Oxypleurodon stimpsoni* Miers, 1886, by monotypy; gender neuter)
Oxypleurodon auritum (Rathbun, 1916) [*Sphenocarcinus*]
Oxypleurodon bidens (Sakai, 1969) [*Sphenocarcinus*]
Oxypleurodon bipartitum (Guinot & Richer de Forges, 1986) [*Sphenocarcinus*]
Oxypleurodon carbunculum (Rathbun, 1906) [*Sphenocarcinus*]
Oxypleurodon coralliophilum (Takeda, 1980) [*Sphenocarcinus*]
Oxypleurodon karubar Richer de Forges, 1995
Oxypleurodon lowryi (Richer de Forges, 1992) [*Sphenocarcinus*]

Oxypleurodon luzonicum (Rathbun, 1916) [*Sphenocarcinus*]
Oxypleurodon mammatum (Guinot & Richer de Forges, 1986) [*Sphenocarcinus*]
Oxypleurodon nodosum (Rathbun, 1916) [*Sphenocarcinus*]
Oxypleurodon orbiculatum (Guinot & Richer de Forges, 1986) [*Sphenocarcinus*]
Oxypleurodon sphenocarcinoides (Rathbun, 1916) [*Chorilia*]
Oxypleurodon stimpsoni Miers, 1886
Oxypleurodon stuckiae (Guinot & Richer de Forges, 1986) [*Sphenocarcinus*]
Oxypleurodon tavaresi Richer de Forges, 1995
Oxypleurodon velutinum (Miers, 1886) [*Pugettia*]
Oxypleurodon wanganella Webber & Richer de Forges, 1995

Pelia Bell, 1835
= *Pelia* Bell, 1835 (type species *Pelia pulchella* Bell, 1835, by monotypy; gender feminine)
Pelia deflecta Boone, 1927
Pelia mutica (Gibbes, 1850) [*Pisa*]
Pelia pacifica A. Milne-Edwards, 1875
Pelia pulchella Bell, 1835
Pelia rotunda A. Milne-Edwards, 1875
Pelia tumida (Lockington, 1877) [*Pisoides*]
= *Microphrys tenuidus* Miers, 1879 (incorrect spelling)
= *Pelia clausa* Rathbun, 1907

Phalangipus Latreille, 1828
= *Egeria* Leach, 1815 (type species *Egeria indica* Leach, 1815, by monotypy; name pre-occupied by *Egeria* de Roissy, 1805 [Mollusca]; gender feminine) {10}
= *Leptopus* Lamarck, 1818 (type species *Cancer longipes* Linnaeus, 1758, by monotypy; name pre-occupied by *Leptopus* Latreille, 1809 [Hemiptera]; gender masculine)
= *Stenopus* Latreille, 1828 (type species *Cancer longipes* Linnaeus, 1758, by monotypy; name pre-occupied by *Stenopus* Latreille, 1819 [Crustacea]; gender masculine) {11}
= *Phalangipus* Latreille, 1828 (type species *Cancer longipes* Linnaeus, 1758, subsequent designation by Griffin, 1973; gender masculine) {11}
Phalangipus australiensis Rathbun, 1918
Phalangipus filiformis Rathbun, 1916
Phalangipus hystrix (Miers, 1886) [*Naxia*]
= *Egeria investigatoris* Alcock, 1895
Phalangipus indicus (Leach, 1815) [*Egeria*]
= *Egeria herbstii* H. Milne Edwards, 1834
Phalangipus longipes (Linnaeus, 1758) [*Cancer*]
= *Cancer arachnoides* Linnaeus, 1758
= *Cancer lar* Fabricius, 1793
Phalangipus malakkensis Griffin, 1973
Phalangipus persicus Griffin, 1973
Phalangipus retusus Rathbun, 1916
Phalangipus trachysternus Griffin, 1973

Pisa Leach, 1814
= *Arctopsis* Lamarck, 1801 (type species *Arctopsis lanata* Lamarck, 1801, by monotypy; gender feminine; suppressed by ICZN for priority)
= *Pisa* Leach, 1814 (type species *Cancer biaculeatus* Montagu, 1813, by monotypy; gender feminine) [Opinion 708]
= *Blastus* Leach, 1814 (type species *Cancer tetraodon* Pennant, 1777, by monotypy; gender masculine)
Pisa armata (Latreille, 1803) [*Maia*]
= *Blastia tridens* Leach, in White, 1847 (not available name, Article 11.6)
= *Cancer biaculeatus* Montagu, 1813
= *Pisa gibbsii* Leach, 1815
= *Inachus musivus* Otto, 1828
Pisa calva Forest & Guinot, 1966
Pisa carinimana Miers, 1879
Pisa hirticornis (Herbst, 1804) [*Cancer*]
= *Maia corallina* Risso, 1816
= *Pisa intermedia* Nardo, 1869
Pisa lanata (Lamarck, 1801) [*Arctopsis*]
Pisa muscosa (Linnaeus, 1758) [*Cancer*]
Pisa nodipes (Leach, 1815) [*Maia*]
= *Inachus musivus* Otto, 1821
Pisa sanctaehelenae Chace, 1966
Pisa tetraodon (Pennant, 1777) [*Cancer*]
= *Cancer hircus* Fabricius, 1781
= *Cancer praedo* Herbst, 1796
= *Pisa convexa* Brandt, 1880

Pisoides H. Milne Edwards & Lucas, 1843
= *Pisoides* H. Milne Edwards & Lucas, 1843 (type species *Pisoides tuberculosus* H. Milne Edwards & Lucas, 1843, by monotypy; gender masculine)
Pisoides bidentatus (A. Milne-Edwards, 1873) [*Libinia*]
= *Libinia expansa* A. Milne-Edwards, 1878
= *Doclea orientalis* Miers, 1879
Pisoides edwardsii (Bell, 1835) [*Hyas*]
= *Pisoides tuberculosus* H. Milne Edwards & Lucas, 1843
Pisoides ortmanni (Balss, 1924) [*Herbstia*]
Pisoides profundus (Rathbun, 1918) [*Doclea*]

Rochinia A. Milne-Edwards, 1875
= *Rochinia* A. Milne-Edwards, 1875 (type species *Rochinia gracilipes* A. Milne-Edwards, 1875, by monotypy; gender feminine) [Opinion 712]
= *Scyramathia* A. Milne-Edwards, 1880 (type species *Scyramathia carpenteri* Thompson, 1873, subsequent designation by Rathbun, 1925; gender feminine)
= *Rachinia* Alcock, 1895 (incorrect spelling)
Rochinia beauchampi (Alcock & Anderson, 1894) [*Scyramathia*]
Rochinia brevirostris (Doflein, 1904) [*Hyastenus*]
Rochinia carinata Griffin & Tranter, 1986
Rochinia carpenteri (Wyville Thomson, 1873) [*Amathia*]
Rochinia confusa Tavares, 1991
Rochinia cornuta (Rathbun, 1898) [*Anamathia*]
Rochinia crassa (A. Milne-Edwards, 1879) [*Amanthia*]
= *Amathia agassizii* Smith, 1882
Rochinia crosnieri Griffin & Tranter, 1986
Rochinia debilis Rathbun, 1932
Rochinia decipiata Williams & Eldredge, 1994
Rochinia fultoni (Grant, 1905) [*Hyastenus*]
Rochinia galathea Griffin & Tranter, 1986
Rochinia globulifera (Wood-Mason, 1891) [*Pugettia*]
Rochinia gracilipes A. Milne-Edwards, 1875
Rochinia griffini Davie & Short, 1989
Rochinia hertwigi (Doflein, 1904) [*Scyramathia*]
Rochinia hystrix (Stimpson, 1871) [*Amathia*]
Rochinia kotakae Takeda, 2001
Rochinia makassar Griffin & Tranter, 1986
Rochinia molucensis Griffin & Tranter, 1986
Rochinia mosaica (Whitelegge, 1900) [*Pugettia*]
= *Doclea profunda* Rathbun, 1918
Rochinia natalensis Kensley, 1977
Rochinia occidentalis (Faxon, 1893) [*Anamathia*]
Rochinia paulayi Ng & Richer de Forges, 2007
Rochinia pulchra (Miers, 1886) [*Anamathia*]
= *Anamathia liverorii* Wood-Mason, 1891
Rochinia riversandersoni (Alcock, 1895) [*Scyramathia*]
Rochinia sibogae Griffin & Tranter, 1986
Rochinia soela Griffin & Tranter, 1986
Rochinia strangeri Serène & Lohavanijaya, 1973
Rochinia suluensis Griffin & Tranter, 1986
Rochinia tanneri (Smith, 1883) [*Amathia*]
= ?*Amathia modesta* Stimpson, 1871
Rochinia tomentosa Griffin & Tranter, 1986

Rochinia umbonata (Stimpson, 1871) [*Scyra*]
Rochinia vesicularis (Rathbun, 1907) [*Scyramathia*]

Scyra Dana, 1852
= *Scyra* Dana, 1852 (type species *Scyra acutifrons* Dana, 1852, by monotypy; gender feminine)
Scyra acutifrons Dana, 1852
Scyra compressipes Stimpson, 1857
Scyra tuberculata Yokoya, 1933

Sphenocarcinus A. Milne-Edwards, 1878
= *Sphenocarcinus* (A. Milne-Edwards, 1878) (type species *Sphenocarcinus corrosus* A. Milne-Edwards, 1878, by monotypy; gender masculine)
Sphenocarcinus agassizi Rathbun, 1894
Sphenocarcinus corrosus A. Milne-Edwards, 1878

Thusaenys Griffin & Tranter, 1986
= *Thusaenys* Griffin & Tranter, 1986 (type species *Hyastenus cornigerus* Sakai, 1938, by original designation; gender masculine)
Thusaenys cornigerus (Sakai, 1938) [*Hyastenus*]
Thusaenys irami (Laurie, 1906) [*Halimus*]
Thusaenys minimus (Rathbun, 1924) [*Hyastenus*]
Thusaenys orbis (Rathbun, 1916) [*Hyastenus*]
Thusaenys pehlevi (Laurie, 1906) [*Halimus*]

Trachymaia A. Milne-Edwards, 1880
= *Trachymaia* A. Milne-Edwards, 1880 (type species *Trachymaia cornuta* A. Milne-Edwards, 1880, by monotypy; gender feminine)
Trachymaia cornuta A. Milne-Edwards, 1880

Tylocarcinus Miers, 1879
= *Tylocarcinus* Miers, 1879 (type species *Cancer styx* Herbst, 1803, by original designation; gender masculine)
Tylocarcinus dumerilii (H. Milne Edwards, 1834) [*Chorinus*]
= *Tylocarcinus gracilis* Miers, 1879
= ?*Hyastenus macrospinosus* Ward, 1934
Tylocarcinus meijensis Dai, Cai & Yang, 1994
Tylocarcinus nanshensis Dai, Cai & Yang, 1994
Tylocarcinus sinensis Dai, Yang, Feng & Song, 1978
Tylocarcinus styx (Herbst, 1803) [*Cancer*]

Incertae sedis

Arctopsis tesselata White, 1847 (nomen nudum)

Subfamily Pliosomatinae Števčić, 1994

Pliosomatinae Števčić, 1994 [recte Pliosominae]

Pliosoma Stimpson, 1860
= *Pliosoma* Stimpson, 1860 (type species *Pliosoma parvifrons* Stimpson, 1860, by monotypy; gender neuter)
Pliosoma parvifrons Stimpson, 1860

Subfamily Tychinae Dana, 1851

Tychiidae Dana, 1851 [recte Tychidae]
Criocarcininae Dana, 1851
Othoninae Dana, 1851
Picrocerinae Neumann, 1878
Ophthalmiinae Balss, 1929

Criocarcinus H. Milne Edwards, 1834
= *Criocarcinus* H. Milne Edwards, 1834 (type species *Cancer superciliosus* Linnaeus, 1767, by monotypy; gender masculine)
Criocarcinus superciliosus (Linnaeus, 1767) [*Cancer*] {12}

Picrocerus A. Milne-Edwards, 1865
= *Picrocerus* A. Milne-Edwards, 1865 (type species *Picrocerus armatus* A. Milne-Edwards, 1865, by original designation; gender masculine)
Picrocerus armatus A. Milne-Edwards, 1865

Pitho Bell, 1835
= *Pitho* Bell, 1835 (type species *Pitho sexdentata* Bell, 1835, subsequent designation by Miers, 1879a; gender feminine)
= *Othonia* Bell, 1836 (type species *Pitho sexdentata* Bell, 1835, subsequent designation by Miers, 1879a; name pre-occupied by *Othonia* Johnston, 1835 [Polychaeta]; gender feminine)
= *Piloronus* Gistel, 1848 (unnecessary replacement name for *Pitho* Bell, 1835; gender masculine)
= *Engyzomaria* Gistel, 1848 (unnecessary replacement name for *Othonia* Bell, 1836; gender masculine)
= *Microrynchus* Desbonne, in Desbonne & Schramm, 1867 (type species *Microrynchus lherminieri* Desbonne, in Desbonne & Schramm, 1867, by monotypy; gender masculine)
Pitho aculeata (Gibbes, 1850) [*Hyas*]
Pitho anisodon (von Martens, 1872) [*Othonia*]
Pitho dispar Rathbun, 1925
Pitho laevigata (A. Milne-Edwards, 1875) [*Othonia*]
Pitho lherminieri (Desbonne, in Desbonne & Schramm, 1867) [*Othonia*]
= *Othonia carolinensis* Rathbun, 1892
Pitho mirabilis (Herbst, 1794) [*Cancer*]
= *Othonia rotunda* Rathbun, 1892
Pitho picteti (Saussure, 1853) [*Othonia*]
= *Micippa ovata* Lockington, 1877
= *Micippa ovata* var. *laevis* Lockington, 1877
= *Othonia nicholsi* Rathbun, 1892
Pitho quadridentata (Miers, 1879) [*Othonia*]
Pitho quinquedentata Bell, 1835
Pitho sexdentata Bell, 1835

Stilbognathus von Martens, 1866
= *Stilbognathus* von Martens, 1866 (type species *Stilbognathus erythraeus* von Martens, 1866, by monotypy; gender masculine)
= *Ophthalmias* Rathbun, 1897 (type species *Cancer cervicornis* Herbst, 1803, by original designation; gender masculine)
Stilbognathus cervicornis (Herbst, 1803) [*Cancer*]
Stilbognathus curvirostris A. Milne-Edwards, 1865
Stilbognathus erythraeus von Martens, 1866
Stilbognathus longispinus Griffin & Tranter, 1974
Stilbognathus martensii Miers, 1884
Stilbognathus soikai Guinot, 1962
Stilbognathus tycheformis Bouvier, 1915

Stilbomastax Williams, Shaw & Hopkins, 1977
= *Stilbomastax* Williams, Shaw & Hopkins, 1977 (type species *Tyche margaritifera* Monod, 1939, by original designation; gender feminine)
Stilbomastax margaritifera (Monod, 1939) [*Tyche*]
= *Stilbognathus burryi* Garth, 1952

Tyche Bell, 1835
= *Tyche* Bell, 1835 (type species *Tyche lamellifrons* Bell, 1835, by monotypy; gender feminine)
= *Platyrinchus* Desbonne, 1867 (type species *Platyrinchus trituberculatus* Desbonne, 1867, by monotypy; gender masculine)
Tyche clarionensis Garth, 1958
Tyche emarginata White, 1847
= *Platyrinchus trituberculatus* Desbonne, in Desbonne & Schramm, 1867
Tyche galapagensis Garth, 1958
Tyche lamellifrons Bell, 1835
= *Tyche brevipostris* Lockington, 1877
Tyche potiguara Garth, 1952
Tyche sulae Von Prahl & Guhl, 1982

Notes

{1} *Acanthonyx simplex* Dana, 1852, has been a "problem" species for a long time, but it is now regarded as a synonym of *A. petiverii*, with the "type locality" (Hawaii) being a mistake (see Emparanza et al., 2007).

{2} Serène & Vadon (1981) used the genus name *Pisidarum*, and characterised an unnamed species, noting that it was like no other genus. But as no named type species was specified (ICZN Article 13.3), the generic name is a nomen nudum. Richer de Forges (1994) formally named the genus *Griffinia*.

{3} Miers (1879a: 649) was the first to designate *Maja* (*Huenia*) *proteus* De Haan, 1839, as the type species of *Huenia* De Haan, 1837. Holthuis (1987) showed that this designation is invalid as *Maja* (*Huenia*) *proteus* De Haan, 1839, was an unnecessary replacement name for both *Maja* (*Huenia*) *heraldica* De Haan, 1837, and *Maja* (*Huenia*) *elongata* De Haan, 1837, the two species originally described when *Maja* (*Huenia*) De Haan, 1837, was established. As such, *Maja* (*Huenia*) *proteus* De Haan, 1839, cannot be the type species of the genus. Holthuis (1987), as first reviser, selected *Maja* (*Huenia*) *heraldica* De Haan, 1837, as the type species.

{4} The date for the publication of *Huenia brevirostrata* should be Dana (1851a), not 1852. It is now a junior subjective synonym of *Huenia heraldica* (De Haan, 1837).

{5} The date for this species is often cited as 1834, but it should be 1833 as *Leucippa* and *L. pentagona* were first used in H. Milne Edwards' (1833) paper, and the species was figured.

{6} The species *Pisa* (*Leucippa*) *ensinadae* De Haan, 1833, was apparently named from Ensenade Bay, and the spelling of the species name is therefore wrong. However, in the original paper, De Haan used the spelling "*ensinadae*" consistently throughout and as such, this spelling must be maintained. Henri Milne Edwards & Lucas (1843) used *Leucippa ensenadae*, correcting the spelling of the species name, but under the Code, the name cannot be changed as in De Haan's original paper, there was no indication of a lapsus.

{7} Dana (1851c: 433) named the genus "*Perinia*" but in his later monograph (Dana, 1852b: 114) used the spelling *Perinea* instead. Over the years, both spellings have been used. We see no reason why the original spelling should not be retained.

{8} White (1847: 6) listed "Chorinus barbirostris, *Leach, Zool. Misc.*" under the synonymy of *Chorinus heros* (Herbst, 1790) without comment. Subsequently, Rathbun (1925: 305) listed "*Chorinus barbirostris* (Leach MS.) WHITE, List Crust. Brit. Mus., 1847, p. 6" under the synonymy of *C. heros*. The name *Chorinus barbirostris*, however, has never been validly published to our knowledge by Leach or anyone else, and must thus be a nomen nudum (see Clark & Presswell, 2001). The name is also unavailable as it was first used as a synonym of another species by both White (1847) and Rathbun (1925).

{9} *Cancer cruentatus* Linnaeus, 1758, has not been used since its description, but it is sufficiently detailed to make it clear that it is a synonym of *Lissa chiragra* (Fabricius, 1775), a well known European species. The ICZN in 1958 suppressed *Cancer cruentatus* Linnaeus, 1758, in favour of *Cancer chiragra* Fabricius, 1775.

{10} In describing *Egeria* Leach, 1815, Leach (1815) listed only one species, *Egeria indica* Leach, 1815, which is therefore the type species by monotypy. Miers (1879a) incorrectly indicated that the type species was *Cancer longipes* Linnaeus, 1758.

{11} Latreille's Encyclopédie Méthodique was published in two parts; Part 1 (pp. 1–344) on 1 October 1825, and Part 2 (pp. 345–832) on 13 December 1828 (Evenhuis, 2003: 36, 48). As both *Stenopus* and *Phalangipus* were published on pages 486 and 699, respectively, the publication date is therefore 1828.

{12} See note {3} in Majidae for *Halimus* and *Naxia*.

Fig. 88. *Oxypleurodon*, new species, central Philippines, under study by B. Richer de Forges (photo: P. Ng)

FAMILY HYMENOSOMATIDAE MACLEAY, 1838

Hymenosomidae MacLeay, 1838
Hymenicinae Dana, 1851

Amarinus Lucas, 1980 {1}
= *Amarinus* Lucas, 1980 (type species *Elamena lacustris* Chilton, 1882, by original designation; gender masculine)
Amarinus angelicus (Holthuis, 1968) [*Halicarcinus*]
Amarinus crenulatus Ng & Chuang, 1996
Amarinus lacustris (Chilton, 1882) [*Elamena*]
Amarinus laevis (Targioni-Tozzetti, 1877) [*Hymenosoma*]
Amarinus latinasus Lucas, 1980
Amarinus lutarius Lucas & Davie, 1982
Amarinus paralacustris (Lucas, 1970) [*Halicarcinus*]
Amarinus pristes Rahayu & Ng, 2004
Amarinus pumilus Ng & Chuang, 1996
Amarinus wolterecki (Balss, 1934) [*Halicarcinus*]

Apechocinus Ng & Chuang, 1996
= *Apechocinus* Ng & Chuang, 1996 (type species *Apechocinus streptophallus*, Ng & Chuang, 1996, by original designation; gender masculine)
Apechocinus streptophallus Ng & Chuang, 1996

Cancrocaeca Ng, 1991
= *Cancrocaeca* Ng, 1991 (type species *Cancrocaeca xenomorpha* Ng, 1991, by original designation; gender feminine)
Cancrocaeca xenomorpha Ng, 1991

Crustaenia Ng & Chuang, 1996
= *Crustaenia* Ng & Chuang, 1996 (type species *Neorhynchoplax palawanensis* Serène, 1971, by original designation; gender feminine)
Crustaenia palawanensis (Serène, 1971) [*Neorhynchoplax*]

Elamena H. Milne Edwards, 1837 {1}
= *Elamena* H. Milne Edwards, 1837 (type species *Hymenosoma mathoei* Desmarest, 1823, by monotypy; gender feminine)
Elamena abrolhensis Gordon, 1940
Elamena cimex Kemp, 1915
Elamena cristatipes Gravely, 1927
Elamena globosa Chuang & Ng, 1991
Elamena gordonae Monod, 1956
Elamena gracilis Borradaile, 1903
Elamena longidactylis Yang & Sun, 1998
Elamena longisrostris Filhol, 1885
Elamena magnum Ng & Chuang, 1996
Elamena mathoei (Desmarest, 1823) [*Hymenosoma*] {2}
= *Hymenosoma mirabile* Leach, in White, 1847 (nomen nudum)
Elamena mendosa Chuang & Ng, 1991
?*Elamena mexicana* (H. Milne Edwards, 1853) [*Elamene*]
Elamena momona Melrose, 1975
Elamena producta Kirk, 1879
?*Elamena quoyi* (H. Milne Edwards, 1853) [*Elamene*]
Elamena rostrata Ng, Chen & Fang, 2000
Elamena simplidenta Ng & Chuang, 1996
Elamena sindensis Alcock, 1900
Elamena sundaica Ng & Chuang, 1996
Elamena truncata (Stimpson, 1858) [*Trigonoplax*]
Elamena umerata Lucas, 1980
Elamena vesca Ng & Richer de Forges, 1996
Elamena xavieri Kemp, 1917

Elamenopsis A. Milne-Edwards, 1873
= *Elamenopsis* A. Milne-Edwards, 1873 (type species *Elamenopsis lineatus* A. Milne-Edwards, 1873, by monotypy; gender feminine)
Elamenopsis ariakensis (Sakai, 1969) [*Neorhynchoplax*]
Elamenopsis comosa Ng & Chuang, 1996
Elamenopsis lineata A. Milne-Edwards, 1873
Elamenopsis rotunda Naruse & Ng, 2007

Halicarcinides Hale, 1927
= *Halicarcinides* Hale, 1927 (type species *Halicarcinides nuytsi* Hale, 1927, by monotypy; gender masculine)
Halicarcinides nuytsi Hale, 1927

Halicarcinus White, 1846
= *Halicarcinus* White, 1846 (type species *Cancer planatus* Fabricius, 1775, by original designation; gender masculine)
= *Liriopea* Nicolet, 1849 (type species *Hymenosoma leachii* Guérin-Méneville, 1838, subsequent designation by Rathbun, 1925; gender feminine)
= *Hymenicus* Dana, 1851 (type species type species *Hymenicus varius* Dana, 1851, subsequent designation by Kemp, 1917; gender masculine)
= *Hombronia* Lucas, 1853 (type species *Hymenosoma tridentata* Hombron & Jacquinot, 1846, by monotypy; gender feminine)
= *Rhynchoplax* Stimpson, 1858 (type species *Rhynchoplax messor* Stimpson, 1858, subsequent designation by Kemp, 1917; gender feminine)
Halicarcinus afecundus Lucas, 1980
Halicarcinus bedfordi Montgomery, 1931
Halicarcinus cookii Filhol, 1885
= *Hymenicus marmarotus* Chilton, 1882 {3}
Halicarcinus coralicola (Rathbun, 1909) [*Rhynchoplax*]
= *Halicarcinus septentrionalis* Yokoya, 1928
Halicarcinus filholi (De Man, 1887) [*Elamene*]
Halicarcinus hondai (Takeda & Miyake, 1971) [*Rhynchoplax*]
Halicarcinus innominatus Richardson, 1949
Halicarcinus keijibabai (Takeda & Miyake, 1971) [*Rhynchoplax*]
Halicarcinus krefftii (Hess, 1865) [*Hymenicus*] {4}
Halicarcinus longipes Yang & Sun, 1998
Halicarcinus lucasi Richer de Forges, 1992
Halicarcinus messor (Stimpson, 1858) [*Rhynchoplax*]
Halicarcinus orientalis Sakai, 1932
Halicarcinus ovatus Stimpson, 1858
Halicarcinus planatus (Fabricius, 1775) [*Cancer*]
= ?*Cancer orbiculus* Fabricius, 1775
= *Hymenosoma leachii* Guérin-Méneville, 1838
= *Liriopea lucasii* Nicolet, 1849
= ?*Halicarcinus pubescens* Dana, 1851
= ?*Hymenosoma tridentata* Hombron & Jacquinot, 1846
Halicarcinus rostratus (Haswell, 1882) [*Hymenosoma*]
Halicarcinus setirostris (Stimpson, 1858) [*Rhynchoplax*]
Halicarcinus tongi Melrose, 1975
Halicarcinus unidentatus Yang & Sun, 1998
Halicarcinus varius (Dana, 1851) [*Hymenicus*]
= *Hymenicus novizealandiae* Dana, 1851 {3}
= *Hymenicus edwardsii* Filhol, 1885 {3}
Halicarcinus whitei (Miers, 1876) [*Elamene*]

Halimena Melrose, 1975
= *Halimena* Melrose, 1975 (type species *Halimena aotearoa* Melrose, 1975, by monotypy; gender feminine)
Halimena aotearoa Melrose, 1975

Hymenicoides Kemp, 1917 {5}
= *Hymenicoides* Kemp, 1917 (type species *Hymenicoides carteri* Kemp, 1917, by original designation; gender masculine)
Hymenicoides carteri Kemp, 1917
Hymenicoides robertsi Naruse & Ng, 2007

Hymenosoma Desmarest, 1823
= *Hymenosoma* Desmarest, 1823 (type species *Hymenosoma orbiculare* Desmarest, 1823, subsequent designation by H. Milne Edwards, 1842; gender neuter)
= *Leachium* MacLeay, 1838 (type species *Hymenosoma orbiculare* Desmarest, 1825, by monotypy; gender neuter)
= *Centridion* Gistel, 1848 (replacement name for *Leachium* MacLeay, 1838)
= *Cyclohombronia* Melrose, 1975 (type species *Hymenosoma depressa* Hombron & Jacquinot, 1846, by original designation; gender feminine)
Hymenosoma depressum Hombron & Jacquinot, 1846
?*Hymenosoma gaudichaudii* Guérin, 1831
Hymenosoma geometricum Stimpson, 1858 {6}
Hymenosoma hodgkini Lucas, 1980
Hymenosoma orbiculare Desmarest, 1823 {6}

Limnopilos Chuang & Ng, 1991 {5}
= *Limnopilos* Chuang & Ng, 1991 (type species *Limnopilos naiyanetri* Chuang & Ng, 1991, by original designation; gender masculine)
Limnopilos microrhynchus (Ng, 1995) [*Hymenicoides*]
Limnopilos naiyanetri Chuang & Ng, 1991
Limnopilos sumatranus Naruse & Ng, 2007

Micas Ng & Richer de Forges, 1996
= *Micas* Ng & Richer de Forges, 1996 (type species *Elamena minuta* A. Milne-Edwards, 1873, by original designation; gender masculine)
Micas falcipes Ng & Richer de Forges, 1996
Micas minutus (A. Milne-Edwards, 1873) [*Elamena*]

Neohymenicus Lucas, 1980
= *Neohymenicus* Lucas, 1980 (type species *Hymenicus pubescens* Dana, 1851, by monotypy; gender masculine)
Neohymenicus pubescens (Dana, 1851) [*Hymenicus*]

Neorhynchoplax Sakai, 1938 {1}
= *Neorhynchoplax* Sakai, 1938 (type species *Rhyncoplax introversus* Kemp, 1917, subsequent designation by Holthuis, 1968; gender feminine)
Neorhynchoplax alcocki (Kemp, 1917) [*Rhynchoplax*]
Neorhynchoplax aspinifera (Lucas, 1980) [*Elamenopsis*]
Neorhynchoplax attenuipes (Chopra & Das, 1930) [*Rhynchoplax*]
Neorhynchoplax bovis (Barnard, 1946) [*Rhynchoplax*]
Neorhynchoplax demeloi (Kemp, 1917) [*Rhynchoplax*]
Neorhynchoplax dentata Ng, 1995
Neorhynchoplax elongata Rahayu & Ng, 2004
Neorhynchoplax euryrostris Davie & Richer de Forges, 1996
Neorhynchoplax exigua (Kemp, 1917) [*Rhynchoplax*]
Neorhynchoplax frontalis (Lucas & Davie, 1982) [*Elamenopsis*]
Neorhynchoplax hirtirostris (Lucas & Davie, 1982) [*Elamenopsis*]
Neorhynchoplax inachoides (Alcock, 1900) [*Hymenicus*]
Neorhynchoplax inermis (Takeda & Miyake, 1971) [*Rhynchoplax*]
Neorhynchoplax introversa (Kemp, 1917) [*Rhyncoplax*]
Neorhynchoplax kempi (Chopra & Das, 1930) [*Rhynchoplax*]
Neorhynchoplax mangalis (Ng, 1988) [*Elamenopsis*]
Neorhynchoplax minima (Lucas & Davie, 1982) [*Elamenopsis*]
Neorhynchoplax nasalis (Kemp, 1917) [*Rhynchoplax*]
Neorhynchoplax octagonalis (Kemp, 1917) [*Rhynchoplax*]
Neorhynchoplax okinawaensis (Nakasone & Takeda, 1994) [*Elamenopsis*]
Neorhynchoplax pageti Pretzmann, 1975
Neorhynchoplax prima Ng & Chuang, 1996
Neorhynchoplax sinensis (Shen, 1932) [*Rhynchoplax*]
Neorhynchoplax thorsborneorum (Lucas & Davie, 1982) [*Elamenopsis*]
Neorhynchoplax torrensica (Lucas, 1980) [*Elamenopsis*]
Neorhynchoplax tuberculata (Chopra & Das, 1930) [*Rhynchoplax*]
Neorhynchoplax woodmasoni (Alcock, 1900) [*Hymenicus*]
Neorhynchoplax yaeyamaensis Naruse, Shokita & Kawahara, 2005

Odiomaris Ng & Richer de Forges, 1996
= *Odiomaris* Ng & Richer de Forges, 1996 (type species *Elamena pilosa* A. Milne-Edwards, 1873, by original designation; gender masculine)
Odiomaris pilosus (A. Milne-Edwards, 1873) [*Elamena*]
Odiomaris estuarius Davie & Richer de Forges, 1996

Trigonoplax H. Milne Edwards, 1853
= *Trigonoplax* H. Milne Edwards, 1853 (type species *Ocypode* (*Trigonoplax*) *unguiformis* De Haan, 1839, by monotypy; gender feminine)
Trigonoplax longirostris McCulloch, 1908
Trigonoplax spathulifera Lucas, 1980
Trigonoplax unguiformis (De Haan, 1839) [*Inachus* (*Elamene*) *unguiformis*]

Notes

{1} More new species of *Amarinus*, *Elamena* and *Neorhynchoplax* from the Philippines are being described by Naruse et al. (in prep.).

{2} The spelling of this species name is noteworthy. Most workers use *Hymenosoma mathaei* Desmarest, 1825, but this is incorrect. Desmarest (1823) was the first to use the new name and he spelled it as *Hymenosoma mathoei*. This spelling should be maintained and the date of the publication altered.

{3} The identities of some hymenosomatids described from New Zealand by Chilton (1882), Filhol (1885) and Dana (1851c) are not clear and their types will need to be re-examined. Melrose (1975) treats *Hymenicus edwardsii* Filhol, 1885, and *Hymenicus novizealandiae* Dana, 1851, as junior synonyms of *Halicarcinus varius* (Dana, 1851); and *Hymenicus marmarotus* Chilton, 1882, as a junior synonym of *Halicarcinus cookii* Filhol, 1885. This matter is now under study by S. T. Ahyong (pers. comm.).

{4} This species may be a junior synonym of *Halicarcinus ovatus* (unpublished data).

{5} *Limnopilos* Chuang & Ng, 1991, was synonymised under *Hymenicoides* Kemp, 1917, by Ng & Chuang (1996). It was recognised as valid by Naruse & Ng (2007).

{6} What has been widely regarded as one species, *Hymenosoma orbiculare*, by most workers (e.g. see Lucas, 1980), is in fact a species complex of at least five taxa in southern Africa (Edkins et al., 2007). One of these species, *H. geometricum* Stimpson, 1858, has been synonymised under *H. orbiculare* (see Edkins et al., 2007).

FAMILY INACHIDAE MACLEAY, 1838

Macropodiadae Samouelle, 1819 (pre-occupied name)
Eurypodiidae MacLeay, 1838 [recte Eurypodidae]
Inachidae MacLeay, 1838
Leptopodidae Bell, 1844 [recte Leptopodiadae]
Achaeinae Dana, 1851
Camposcinae Dana, 1851
Macrocheirinae Dana, 1851
Stenorhynchinae Dana, 1851
Oncininea Dana, 1852
Oncinopodidae Stimpson, 1858 [recte Oncinopidae]
Anomalopodinae Stimpson, 1871 [recte Anomalopinae]
Podochelinae Neumann, 1878
Microrhynchinae Miers, 1879
Chorinachini Števčić, 2005
Encephaloidini Števčić, 2005
Ephippiini Števčić, 2005
Eucinetopini Števčić, 2005
Grypachaeini Števčić, 2005
Pleistacanthini Števčić, 2005
Sunipeini Števčić, 2005
Trichoplatini Števčić, 2005

Achaeopsis Stimpson, 1857
= *Achaeopsis* Stimpson, 1857 (type species *Achaeopsis spinulosus* Stimpson, 1857, by monotypy; gender feminine) [Opinion 712]
Achaeopsis spinulosa Stimpson, 1857

Achaeus Leach, 1817
= *Achaeus* Leach, 1817 (type species *Achaeus cranchii* Leach, 1817, by monotypy; gender masculine) [Opinion 712]
Achaeus akanensis Sakai, 1937
Achaeus anauchen Buitendijk, 1939
Achaeus barnardi Griffin, 1968
Achaeus boninensis Miyake & Takeda, 1969
Achaeus brevidactylus Sakai, 1938
Achaeus brevirostris (Haswell, 1879) [*Stenorhynchus*]
= ?*Achaeus affinis* Miers, 1884
= ?*Achaeus brevifalcatus* Rathbun, 1911
?*Achaeus brevis* (Ortmann, 1894) [*Stenorhynchus*]
Achaeus buderes Manning & Holthuis, 1981
Achaeus cadelli Alcock, 1896
Achaeus cranchii Leach, 1817
= ?*Achaeus cursor* A. Milne-Edwards & Bouvier, 1898
Achaeus curvirostris (A. Milne-Edwards, 1873) [*Stenorhynchus*]
= *Stenorhynchus fissifrons* Haswell, 1879
= *Achaeus tenuicollis* Miers, 1886
= *Achaeus elongatus* Sakai, 1938
Achaeus dubia Laurie, 1906
Achaeus foresti Monod, 1956
Achaeus erythraeus Balss, 1929
Achaeus gracilis (Costa, 1839) [*Macropodia*]
= *Achaeus gordonae* Forest & Zarquiey Alvarez, 1955
Achaeus inimicus Rathbun, 1911
Achaeus japonicus (De Haan, 1839) [*Inachus* (*Achaeus*)]
Achaeus kermadecensis Webber & Takeda, 2005
Achaeus laevioculis Miers, 1884
Achaeus lacertosus Stimpson, 1858
= *Achaeus breviceps* Haswell, 1880
= *Achaeus spinifrons* Sakai, 1938
Achaeus lorina (Adams & White, 1848) [*Inachus*]
Achaeus monodi (Capart, 1951) [*Podochela*]
Achaeus paradicei Griffin, 1970
Achaeus podocheloides Griffin, 1970
Achaeus powelli Manning, 1982
Achaeus pugnax (De Man, 1928) [*Achaeopsis*]
= *Achaeus stenorhynchus* Rathbun, 1932
Achaeus robustus Yokoya, 1933
Achaeus serenei Griffin & Tranter, 1986
Achaeus spinossisimus Griffin, 1968
Achaeus spinosus Miers, 1879
Achaeus superciliaris (Ortmann, 1893) [*Achaeopsis*]
Achaeus trifalcatus Forest & Guinot, 1966
Achaeus trituberculatus Rathbun, 1894
Achaeus tuberculatus Miers, 1879
Achaeus turbator Manning & Holthuis, 1981
Achaeus varians Takeda & Miyake, 1969
Achaeus villosus Rathbun, 1916

Anomalothir Miers, 1879
= *Anomalopus* Stimpson, 1871 (type species *Anomalopus furcillatus* Stimpson, 1871, by monotypy; name pre-occupied by *Anomalopus* Duméril, 1851 [Reptilia]; gender masculine)
= *Anomalothir* Miers, 1879 (replacement name for *Anomalopus* Stimpson, 1871; gender neuter)
Anomalothir frontalis (A. Milne-Edwards, 1879) [*Anomalopus*]
Anomalothir furcillatus (Stimpson, 1871) [*Anomalopus*]
Anomalothir hoodensis Garth, 1939

Bothromaia Williams & Moffitt, 1991
= *Bothromaia* Williams & Moffitt, 1991 (type species *Bothromaia griffini* Williams & Moffitt, 1991, by original designation; gender feminine)
Bothromaia griffini Williams & Moffitt, 1991

Calypsachaeus Manning & Holthuis, 1981
= *Calypsachaeus* Manning & Holthuis, 1981 (type species *Achaeus calypso* Forest & Guinot, 1966, by original designation; gender masculine)
Calypsachaeus calypso (Forest & Guinot, 1966) [*Achaeus*]

Camposcia Latreille, 1829
= *Camposia* Desmarest, 1823 (nomen nudum)
= *Camposcia* Latreille, 1829 (type species *Maia retusa* Latreille, 1829, by monotypy; gender feminine)
Camposcia retusa (Latreille, 1829) [*Maia*] {1}

Capartiella Manning & Holthuis, 1981
= *Capartiella* Manning & Holthuis, 1981 (type species *Achaeus longipes* Capart, 1951, by original designation; gender masculine)
Capartiella longipes (Capart, 1951) [*Achaeus*]

Chalaroacheus De Man, 1902
= *Chalaroacheus* De Man, 1902 (type species *Chalaroacheus curvipes* De Man, 1902, by monotypy; gender masculine)
Chalaroacheus curvipes De Man, 1902

Chorinachus Griffin & Tranter, 1986
= *Chorinachus* Griffin & Tranter, 1986 (type species *Inachoides dolichorhynchus* Alcock & Anderson, 1894, by original designation; gender masculine)
Chorinachus dolichorhynchus (Alcock & Anderson, 1894) [*Inachoides*]

Cyrtomaia Miers, 1886
= *Cyrtomaia* Miers, 1886 (type species *Cyrtomaia murrayi* Miers, 1886, subsequent designation by Guinot & Richer de Forges, 1982; gender feminine)
= *Echinomaia* Borradaile, 1916 (type species *Echinomaia hispida* Borradaile, 1916, by monotypy; gender feminine)
Cyrtomaia balssi Ihle & Ihle-Landenberg, 1931
Cyrtomaia bicornis Ihle & Ihle-Landenberg, 1931
Cyrtomaia cornuta Richer de Forges & Guinot, 1988
Cyrtomaia coriolisi Richer de Forges & Guinot, 1988
Cyrtomaia danielae Zarenkov, 1990 {2}

Cyrtomaia echinata Rathbun, 1916
Cyrtomaia ericina Guinot & Richer de Forges, 1982
Cyrtomaia furici Richer de Forges & Guinot, 1988
Cyrtomaia gaillardi Guinot & Richer de Forges, 1982
Cyrtomaia goodridgei MacArdle, 1900
Cyrtomaia granulosa Guinot & Richer de Forges, 1982
Cyrtomaia griffini Richer de Forges & Guinot, 1990
Cyrtomaia guillei Guinot, 1985
Cyrtomaia hispida (Borradaile, 1916) [*Echinomaia*]
Cyrtomaia horrida Rathbun, 1916
= *Cyrtomaia smithii tenuipedunculata* Ihle & Ihle-Landenberg, 1931
= *Cyrtomaia horrida typica* Ihle & Ihle-Landenberg, 1931
= *Cyrtomaia horrida pilosa* Ihle & Ihle-Landenberg, 1931
Cyrtomaia ihlei Guinot & Richer de Forges, 1982
Cyrtomaia intermedia Sakai, 1939
Cyrtomaia lamellata Rathbun, 1906
Cyrtomaia largoi Richer de Forges & Ng, 2007
Cyrtomaia maccullochi Rathbun, 1918
Cyrtomaia micronesica Richer de Forges & Ng, 2007
Cyrtomaia murrayi Miers, 1886
Cyrtomaia owstoni Terazaki, 1903
= *Cyrtomaia horrida japonica* Balss, 1924
= *Cyrtomaia septemspinosa* Rathbun, 1932
Cyrtomaia platyceros Doflein, 1904
Cyrtomaia platypes Yokoya, 1933
Cyrtomaia smithi Rathbun, 1894
Cyrtomaia suhmii Miers, 1886
= *Cyrtomaia suhmii curviceros* Bouvier, 1915
Cyrtomaia tenuipedunculata Ihle & Ihle-Landenberg, 1931

Dorhynchus Wyville Thomson, 1873
= *Dorhynchus* Wyville Thomson, 1873 (type species *Dorhynchus thomsoni* Wyville Thomson, 1873, by monotypy; gender masculine) [name emended under ICZN plenary powers from *Dorynchus* Thomson, 1873; Opinion 712]
= *Lispognathus* A. Milne-Edwards, 1881 (type species *Lispognathus furcillatus* A. Milne-Edwards, 1881, by monotypy; gender masculine)
Dorhynchus basi Macpherson, 1984
Dorhynchus furcillatus (A. Milne-Edwards, 1881) [*Lispognathus*]
Dorhynchus ramusculus (Baker, 1906) [*Stenorhynchus*]
Dorhynchus rostratus (Sakai, 1932) [*Achaeopsis*]
Dorhynchus thomsoni Wyville Thomson, 1873 [Opinion 712]

Dumea Loh & Ng, 1999
= *Dumea* Loh & Ng, 1999 (type species *Paratymolus latipes* Haswell, 1880, by original designation; gender feminine)
Dumea latipes (Haswell, 1880) [*Paratymolus*]
= *Paratymolus latipes* var. *quadridentata* Baker, 1906
Dumea taiwanicus (Loh & Wu, 1998) [*Paratymolus*]

Encephalloides Wood-Mason, 1890
= *Encephalloides* Wood-Mason, 1890 (type species *Encephalloides armstrongi* Wood-Mason, 1890, by monotypy; gender masculine)
Encephalloides armstrongi Wood-Mason, 1890

Ephippias Rathbun, 1918
= *Ephippias* Rathbun, 1918 (type species *Ephippias endeavouri* Rathbun, 1918, by original designation; gender masculine)
Ephippias endeavouri Rathbun, 1918

Ergasticus Studer, 1883
= *Ergasticus* Studer, 1883 (type species *Ergasticus clouei* Studer, 1883, by monotypy; gender masculine)
Ergasticus clouei Studer, 1883

Erileptus Rathbun, 1894
= *Erileptus* Rathbun, 1894 (type species *Erileptus spinosus* Rathbun, 1894, by monotypy; gender masculine
Erileptus spinosus Rathbun, 1894
= *Anasimus rostratus* Rathbun, 1894

Eucinetops Stimpson, 1860
= *Eucinetops* Stimpson, 1860 (type species *Eucinetops lucasii* Stimpson, 1860, by monotypy; gender masculine)
Eucinetops blakianus Rathbun, 1896
Eucinetops lucasii Stimpson, 1860
= *Peltinia longioculis* Lockington, 1877
Eucinetops rubellulus Rathbun, 1923
Eucinetops panamensis Rathbun, 1923

Eurypodius Guérin, 1825
= *Eurypodius* Guérin, 1825 (type species *Eurypodius latreillii* Guérin, 1828, subsequent designation by Guérin, 1828; gender masculine)
Eurypodius latreillii Guérin, 1825
= *Eurypodius cuvieri* Audouin, in De Haan, 1838
= *Eurypode tuberculateux* Eydoux & Souleyet, 1842
= *Eurypode tuberculatus* Eydoux & Souleyet, 1842
= *Eurypodius audouinii* H. Milne Edwards & Lucas, 1842
= *Eurypodius septentrionalis* Dana, 1851
= *Eurypodius brevipes* Dana, 1851
= ?*Paramithrax pernonii* Targioni-Tozzetti, 1872
= *Eurypodius danae* Targioni-Tozzetti, 1877
= *Eurypodius quiriquinensis* Yanez, 1948
Eurypodius longirostris Miers, 1886

Grypachaeus Alcock, 1895
= *Grypachaeus* Alcock, 1895 (type species *Grypacheus hyalinus* Alcock & Anderson, 1894, by monotypy; gender masculine)
Grypachaeus hyalinus Alcock & Anderson, 1894
Grypachaeus tenuicollis Takeda, 1978

Inachus Weber, 1795
= *Inachus* Weber, 1795 (type species *Cancer scorpio* Fabricius, 1779; subsequent designation by H. Milne Edwards, 1840, in 1836–1844; gender masculine) [Opinion 763]
= *Macropus* Latreille, 1803 (type species *Cancer phalangium* Fabricius, 1775, by monotypy; name pre-occupied by *Macropus* Shaw, 1790 [Mammalia]; gender masculine) [Opinion 763, Name 1777 on ICZN Official List]
= *Leptopodia* Leach, 1814 (type species *Cancer phalangium* Fabricius, 1775, by monotypy; gender feminine)
= *Pseudocollodes* Rathbun, 1911 (type species *Pseudocollodes complectens* Rathbun, 1911, by monotypy; gender masculine)
Inachus aguiarii Brito Capello, 1876
Inachus angolensis Capart, 1951
Inachus biceps Manning & Holthuis, 1981
Inachus communissimus Rizza, 1839
Inachus complectens (Rathbun, 1911) [*Pseudocollodes*]
Inachus dorsettensis (Pennant, 1777) [*Cancer*] [nomen protectum]
= ?*Cancer dodecos* Linnaeus, 1767 (suppressed under Article 23.9) [nomen oblitum] {3}
= *Cancer scorpio* Fabricius, 1779
= *Macropus parvirostris* Risso, 1816
= ?*Doclea fabriciana* Risso, 1827
Inachus grallator Manning & Holthuis, 1981
Inachus guentheri (Miers, 1879) [*Achaeopsis*]
= *Inachus antarcticus* Doflein, 1904
Inachus leptochirus Leach, 1817
= *Inachus affinis* Rizza, 1839

Inachus mauritanicus Lucas, 1846
Inachus nanus Manning & Holthuis, 1981
Inachus phalangium (Fabricius, 1775) [*Cancer*] [nomen protectum]
= *Cancer tribulus* Linnaeus, 1767 (suppressed, ICZN Opinion 708) {3}
= *Cancer satuak* Herbst, 1782 {4}
= *Inachus dorynchus* Leach, 1814
= *Macropus aracnides* Risso, 1816
Inachus thoracicus Roux, 1830
= *Inachus cocco* Rizza, 1839

Litosus Loh & Ng, 1999
= *Litosus* Loh & Ng, 1999 (type species *Paratymolus sexspinosus* Miers, 1884, by original designation; gender feminine)
Litosus giraffus Loh & Ng, 1999
Litosus sexspinosus (Miers, 1884) [*Paratymolus*]

Macrocheira De Haan, 1839
= *Macrocheira* De Haan, 1839 (type species *Maja kaempferi* Temminck, 1836, by monotypy; gender feminine)
= *Kaempferia* Miers, 1886 (type species *Maja kaempferi* Temminck, 1836, by monotypy; gender feminine)
Macrocheira kaempferi (Temminck, 1836) [*Maja*]
= ?*Macrocheira ginzanensis* Imaizumi, 1965
= ?*Paratymolus yabei* Imaizumi, 1957

Macropodia Leach, 1814
= *Macropodia* Leach, 1814 (type species *Cancer longirostris* Fabricius, 1775, by monotypy; gender feminine) [Opinion 763]
= *Peridromus* Gistel, 1848 (unnecessary replacement name for *Macropodia* Leach, 1814; gender masculine)
Macropodia cirripilus Kensley, 1980
Macropodia czernjawskii (Brandt, 1880) [*Stenorynchus*]
Macropodia deflexa Forest, 1978
Macropodia doracis Manning & Holthuis, 1981
Macropodia formosa Rathbun, 1911
Macropodia gilsoni (Capart, 1951) [*Achaeopsis*]
Macropodia hesperiae Manning & Holthuis, 1981
Macropodia intermedia Bouvier, 1940
Macropodia linaresi Forest & Zariquiey Alvarez, 1964
Macropodia longicornis A. Milne-Edwards & Bouvier, 1899
Macropodia longipes (A. Milne-Edwards & Bouvier, 1899) [*Stenorynchus*]
Macropodia longirostris (Fabricius, 1775) [*Cancer*]
= *Stenorhynchus egyptius* H. Milne Edwards, 1834 {5}
Macropodia macrocheles (A. Milne-Edwards & Bouvier, 1898) [*Stenorynchus*]
Macropodia parva Van Noort & Adema, 1985
Macropodia rostrata (Linnaeus, 1761) [*Cancer*]
= *Stenorhynchus rostratus* var. *spinulosum* Miers, 1881 {6}
Macropodia straeleni Capart, 1951
Macropodia tenuirostris (Leach, 1814) [*Leptopodia*]
Macropodia trigonus Richer de Forges, 1993

Metoporhaphis Stimpson, 1860
= *Metoporhaphis* Stimpson, 1860 (type species *Leptopodia calcarata* Say, 1818, by monotypy; gender masculine)
Metoporhaphis calcarata Say, 1818 [*Leptopodia*]
= *Metoporhaphis forficulatus* A. Milne-Edwards, 1878

Oncinopus De Haan, 1839
= *Oncinopus* De Haan, 1839 (type species *Inachus* (*Oncinopus*) *araneus* De Haan, 1839, by monotypy; gender masculine)
Oncinopus angustifrons Takeda & Miyake, 1969
Oncinopus araneus (De Haan, 1839) [*Inachus* (*Oncinopus*)]
Oncinopus neptunus Adams & White, 1848
Oncinopus postillonensis Griffin & Tranter, 1986
Oncinopus subpellucidus Stimpson, 1857
= *Oncinopus angulatus* Haswell, 1880

Paratymolus Miers, 1879
= *Paratymolus* Miers, 1879 (type species *Paratymolus pubescens* Miers, 1879, by monotypy; gender masculine)
Paratymolus barnardi Loh & Ng, 1999
Paratymolus bituberculatus Haswell, 1880
= *Paratymolus bituberculatus* var. *gracilis* Miers, 1884
Paratymolus coccus Loh & Ng, 1999
Paratymolus cygnus Loh & Ng, 1999
Paratymolus griffini Loh & Ng, 1999
Paratymolus hastatus Alcock, 1895
Paratymolus prolatus Loh & Ng, 1999
Paratymolus pubescens Miers, 1879
Paratymolus vannus Loh & Ng, 1999

Physacheus Alcock, 1895
= *Physacheus* Alcock, 1895 (type species *Physacheus ctenurus* Alcock, 1895, subsequent designation by Griffin & Tranter, 1986; gender masculine)
Physacheus ctenurus Alcock, 1895
Physacheus tonsor Alcock, 1895

Platymaia Miers, 1886
= *Platymaia* Miers, 1886 (type species *Platymaia wyvillethomsoni* Miers, 1886, by monotypy; gender feminine)
Platymaia alcocki Rathbun, 1918
Platymaia bartschi Rathbun, 1916
Platymaia fimbriata Rathbun, 1916
Platymaia longimana Macpherson, 1984
Platymaia maoria Dell, 1963
Platymaia mindirra Griffin & Tranter, 1986
Platymaia rebierei Guinot & Richer de Forges, 1986
Platymaia remifera Rathbun, 1916
Platymaia turbnyei Stebbing, 1902
Platymaia wyvillethomsoni Miers, 1886

Pleistacantha Miers, 1879
= *Pleistacantha* Miers, 1879 (type species *Pleistacantha sanctijohannis* Miers, 1879, by monotypy; gender feminine)
= *Echinoplax* Miers, 1886 (type species *Echinoplax moseleyi* Miers, 1886, by original designation; gender feminine)
= *Parapleistacantha* Yokoya, 1933 (type species *Parapleistacantha japonica* Yokoya, 1933, by monotypy; gender feminine) {7}
= *Pleistacanthoides* Yokoya, 1933 (type species *Pleistacanthoides nipponensis* Yokoya, 1933, by monotypy; gender feminine) {7}
Pleistacantha cervicornis Ihle & Ihle-Landenberg, 1931
= *Pleistacantha terribilis* Rathbun, 1932
Pleistacantha exophthalmus Guinot & Richer de Forges, 1982
Pleistacantha griffini Ahyong & Lee, 2006
Pleistacantha japonica (Yokoya, 1933) [*Parapleistacantha*]
Pleistacantha maxima Ahyong & Lee, 2006
Pleistacantha moseleyi (Miers, 1886) [*Echinoplax*]
Pleistacantha naresii (Miers, 1886) [*Ergasticus*]
Pleistacantha ori Ahyong & Ng, 2007
Pleistacantha oryx Ortmann, 1893
Pleistacantha pungens (Wood-Mason & Alcock, 1891) [*Echinoplax*]
Pleistacantha rubida (Alcock, 1895) [*Echinoplax*]
Pleistacantha sanctijohannis Miers, 1879
= *Pleistacantha sanctijohannis* var. *erecta* Ihle & Ihle-Landenberg, 1931
Pleistacantha simplex Rathbun, 1932
= *Pleistacanthoides nipponensis* Yokoya, 1933
Pleistacantha stilipes Ahyong, Chen & Ng, 2005

Podochela Stimpson, 1860
= *Podonema* Stimpson, 1860 (type species *Podonema riisei* Stimpson, 1860, subsequent designation by Miers, 1879a; name pre-occupied by *Podonema* Solier, 1851 [Coleoptera]; gender feminine)
= *Podochela* Stimpson, 1860 (type species *Podochela grossipes* Stimpson, 1860, subsequent designation by Miers, 1879a; gender feminine)
= *Driope* Desbonne, 1867 (type species *Driope falcipoda* Desbonne, in Desbonne & Schramm, 1867, by monotypy; gender feminine)
= *Acrorhynchus* A. Milne-Edwards, 1879 (type species *Acrorhynchus depressus* A. Milne-Edwards, 1879, by monotypy; gender masculine)
= *Anisonotus* A. Milne-Edwards, 1879 (type species *Anisonotus curvirostris* A. Milne-Edwards, 1879, by monotypy; gender masculine)
= *Coryrhynchus* Kingsley, 1879 (replacement name for *Podonema* Stimpson, 1860; gender masculine)
= *Ericerus* Rathbun, 1894 (type species *Ericerus latimanus* Rathbun, 1894, by monotypy; name pre-occupied by *Ericerus* Guérin-Ménéville, 1858 [Hemiptera]; gender masculine)
= *Ericerodes* Rathbun, 1897 (replacement name for *Ericerus* Rathbun, 1894; gender masculine)
Podochela algicola (Stebbing, 1914) [*Coryrhynchus*]
Podochela angulata Finnegan, 1931
Podochela atlantica Coelho, 1997
Podochela barbarensis Rathbun, 1924
Podochela brasiliensis Coelho, 1972
Podochela botti Türkay, 1968
Podochela casoae Hendrickx, 1987
Podochela curvirostris (A. Milne-Edwards, 1879) [*Anisonotus*]
= *Podochela spinifrons* Rathbun, 1894
Podochela gracilipes Stimpson, 1871
Podochela grossipes Stimpson, 1860
= *Acrorhynchus depressus* A. Milne-Edwards, 1879
Podochela hemphillii (Lockington, 1877) [*Microrhynchus*]
= *Podochela tenuipes* Rathbun, 1894
Podochela hypoglypha (Stimpson, 1871) [*Podonema*]
Podochela lamelligera (Stimpson, 1871) [*Podonema*]
Podochela latimanus (Rathbun, 1894) [*Ericerus*]
Podochela lobifrons Rathbun, 1894
= *Podochela barbarensis* Rathbun, 1924
Podochela macrodera Stimpson, 1860
Podochela margaritaria Rathbun, 1902
Podochela miniscula Coelho, 1972
Podochela riisei Stimpson, 1860
= *Driope falcipoda* Desbonne, in Desbonne & Schramm, 1867
= *Podochela deflexifrons* Stimpson, 1860
= *Podochela hyopglypha* Stimpson, 1871
= *Podochela spatulifrons* A. Milne-Edwards, 1879
Podochela schmitti Garth, 1939
Podochela sidneyi Rathbun, 1924
Podochela veleronis Garth, 1948
Podochela vestita (Stimpson, 1871) [*Podonema*]
= *Podochela* (*Coryrhynchus*) *mexicana* Rathbun, 1894
Podochela ziesenhennei Garth, 1940

Prosphorachaeus Takeda & Miyake, 1969
= *Prosphorachaeus* Takeda & Miyake, 1969 (type species *Achaeopsis suluensis* Rathbun, 1916, by monotypy; gender masculine)
Prosphorachaeus galatheae (Griffin, 1970) [*Achaeus*]
Prosphorachaeus multispina Griffin & Tranter, 1986
Prosphorachaeus suluensis (Rathbun, 1916) [*Achaeopsis*]
Prosphorachaeus sumbawa Griffin & Tranter, 1986

Pseudocollodes Rathbun, 1911
= *Pseudocollodes* Rathbun, 1911 (type species *Pseudocollodes complectens* Rathbun, 1911, by original designation; gender masculine)
Pseudocollodes complectens Rathbun, 1911

Rhinospinosa Griffin & Tranter, 1986
= *Rhinospinosa* Griffin & Tranter, 1986 (type species *Pseudocollodes demani* Balss, 1929, by original designation; gender feminine)
Rhinospinosa demani (Balss, 1929) [*Pseudocollodes*]
= *Achaeopsis atypicus* Rathbun, 1932

Stenorhynchus Lamarck, 1818
= *Stenorhynchus* Lamarck, 1818 (type species *Cancer seticornis* Herbst, 1788, subsequent designation by ICZN plenary powers; gender masculine) [Opinion 763]
= *Pactolus* Leach, 1815 (type species *Pactolus boscii* Leach, 1815, by monotypy; gender masculine; name suppressed by ICZN)
= *Stenorynchus* Lamarck, 1818 (incorrect spelling) [Opinion 763] {8}
= *Stenorrhynchus* Berthold, 1827 (incorrect spelling)
= *Tactolus* Berthold, 1827 (incorrect spelling)
Stenorhynchus debilis (Smith, 1871) [*Leptopodia*]
= *Leptopodia sagittaria* var. *modesta* A. Milne-Edwards, 1878
Stenorhynchus lanceolatus (Brullé, 1837) [*Leptopodia*]
= *Pactolus boscii* Leach, 1815
= *Leptopodia canariensis* Brullé, 1839
Stenorhynchus seticornis (Herbst, 1788) [*Cancer*]
= *Cancer sagittarius* Fabricius, 1793
Stenorhynchus yangi Goeke, 1989

Sunipea Griffin & Tranter, 1986
= *Sunipea* Griffin & Tranter, 1986 (type species *Aprocremnus indicus* Alcock, 1895, by original designation; gender masculine)
Sunipea indicus (Alcock, 1895) [*Aprocremnus*]

Trichoplatus A. Milne-Edwards, 1876
= *Trichoplatus* A. Milne-Edwards, 1876 (type species *Trichoplatus huttoni* A. Milne-Edwards, 1876, by monotypy; gender masculine)
Trichoplatus huttoni A. Milne-Edwards, 1876
= *Halimus hectori* Miers, 1876
= *Naxia rubiginosus* Kirk, 1887

Vitjazmaia Zarenkov, 1994
= *Vitjazmaia* Zarenkov, 1994 (type species *Vitjazmaia latidactyla* Zarenkov, 1994, by original designation; gender feminine)
= *Ewdawsonia* Webber & Richer de Forges, 1994, in Thompson, 1994 (nomen nudum) (type species by monotypy, *Ewdawsonia profundorum* Webber & Richer de Forges, 1994, in Thompson, 1994 (nomen nudum); gender neuter) {9}
Vitjazmaia latidactyla Zarenkov, 1994
= *Ewdawsonia profundorum* Webber & Richer de Forges, 1994, in Thompson, 1994 (nomen nudum) {9}

Incertae sedis

Cancer auritus Fabricius, 1775 {10}
= *Alpheus auritus* Weber, 1795 (nomen nudum)
Cancer nasutus Fabricius, 1779
Cancer chelatus Fabricius, 1787
Cancer angustatus Fabricius, 1798
= *Inachus angustatus* Weber, 1795 (nomen nudum)

Notes

{1} In his original description of *Camposcia* Latreille, 1829, only one species was mentioned and this was spelt "*Maia retuja* Latreille, 1829" (Latreille, 1829: 60). This name was used only once in Latreille (1829), so we cannot be totally sure it was a mis-spelling. Certainly, the word "retuja" has no meaning, and not surprisingly, all later workers (including Latreille himself) used the correct spelling "retusa". *Camposcia retusa* is a well known species and the name has been widely used in many marine publications, albeit more in the realm of ethology, books and aquarium literature. Nevertheless, there is no good reason to keep the original spelling as it will create unnecessary confusion. All subsequent workers since Latreille (1829) have used the name "retusa" and as such, we enact Article 33.3.1 of the Code (regarding incorrect spellings in prevailing usage), to keep the spelling as "*Camposcia retusa*".

{2} Zarenkov (1990) described "*Cyrtomaia danieli*" from the Indian Ocean, stating explicity (Zarenkov, 1990: 232) that the species was named after "D. Guinot", which is of course, Danièle Guinot. As it is named after a woman, the name must be amended to *Cyrtomaia danielae*.

{3} Neither *Cancer dodecos* Linnaeus, 1767, and *Cancer tribulus* Linnaeus, 1767, have been used since they were described, which is surprising as from Linnaeus' descriptions, it is clear that they are conspecific with *Inachus dorsettensis* (Pennant, 1777) and *Inachus phalangium* (Fabricius, 1775), respectively. *Cancer tribulus* Linnaeus, 1767, has already been suppressed under ICZN Opinion 708, so it no longer poses a problem. However for *Cancer dodecos* Linnaeus, 1767, we invoke Article 23.9.2 of the Code to conserve the better known name.

{4} Herbst (1782: 224) described *Cancer satuak* from Greenland and noted it was close to what was known as *Cancer phalangium* Fabricius, 1775. There appears no good reason not to regard both names as subjective synonyms.

{5} In describing *Stenorhynchus egyptius* H. Milne Edwards, 1834, the species was named "*Stenorhynchus égyptius*", with an accent on the e. Some have spelt it as "*S. aegyptius*" but it is clear the original spelling should be conserved. The species is now regarded as a junior subjective synonym of *Macropodia longirostris* (Fabricius, 1775).

{6} *Stenorhynchus rostratus* var. *spinulosum* was first established by Miers (1881, No. 45: 206), who in a footnote, named and compared it with *Stenorhynchus rostratus* (now *Macropodia*). The name *Stenorhynchus rostratus* var. *spinulosus* also appears in a later part of the same series of papers (Miers, 1881, No. 47) that same year. Monod (1956: 562) placed *Stenorhynchus rostratus* var. *spinulosus* in the synonmy of *Macropodia rostrata* and wrote (Monod, 1956: 566) that he had seen the types of Miers from BMNH, and that he was following Odhner (1923: 18) in not accepting the name.

{7} The status of the genus *Pleistacanthoides* Yokoya, 1933, is unclear, and although some authors have recognised it as distinct, more recent ones (e.g. Griffin & Tranter, 1986; Ahyong et al., 2005) suggest that it is synonymous with *Pleistacantha* Miers, 1879, like *Parapleistacantha* Yokoya, 1933. The genus *Pleistacantha* may need to be split, but new characters will need to be determined and should be done as part of a full revision (S. T. Ahyong, pers. comm.).

{8} The original spelling of this genus was *Stenorynchus* Lamarck, 1818, but in Opinion 763, the name was emended to *Stenorhynchus* with the same author and year, and the type species was fixed as *Cancer seticornis* Herbst, 1788.

{9} The name "*Ewdawsonia profundorum* Webber & Richer de Forges, 1994" first appeared in a book compiled by Thompson (1994), on page 168 in Chapter 9 - 'Living For Ever', as part of a list of living things named after New Zealand Oceanographic Institute scientists. The name was used, unfortunately, without the prior consultation of Richard Webber and Bertrand Richer de Forges, and thus was a nomen nudum. In that same year the species was independently named by Zarenkov (1994) as *Vitjazmaia latidactyla*. Thus when Webber & Richer de Forges' paper was published in 1995, *Ewdawsonia profundorum* was omitted because a different valid name was already available.

{10} On the basis of the description, *Cancer auritus* Fabricius, 1775, certainly belongs to the Majidae. The type locality was stated as Iceland. The description is too inadeqate to be able to identify a species, but it indicates that it is probably an Atlantic species of *Macropodia*.

Fig. 89. *Litosus sexspinosus*, central Philippines (photo: P. Ng)

FAMILY INACHOIDIDAE DANA, 1851

Inachoidinae Dana, 1851
Salacinae Dana, 1851
Collodinae Stimpson, 1871

Aepinus Rathbun, 1897
= *Apocremnus* A. Milne-Edwards, 1878 (type species *Apocremnus septemspinosus* A. Milne-Edwards, 1878, by monotypy; name pre-occupied by *Apocremnus* Fieber, 1858 [Hemiptera]; gender masculine)
= *Aepinus* Rathbun, 1897 (replacement name for *Apocremnus* A. Milne-Edwards, 1878; gender masculine)
Aepinus septemspinosus (A. Milne-Edwards, 1878) [*Apocremnus*]

Anasimus A. Milne-Edwards, 1880
= *Anasimus* A. Milne-Edwards, 1880 (type species *Anasimus fugax* A. Milne-Edwards, 1880, by monotypy; gender masculine)
Anasimus fugax A. Milne-Edwards, 1880
Anasimus latus Rathbun, 1894

Arachnopsis Stimpson, 1871
= *Arachnopsis* Stimpson, 1871 (type species *Arachnopsis filipes* Stimpson, 1871, by monotypy; gender feminine)
Arachnopsis filipes Stimpson, 1871

Batrachonotus Stimpson, 1871
= *Batrachonotus* Stimpson, 1871 (type species *Batrachonotus fragosus* Stimpson, 1871, by monotypy; gender masculine)
Batrachonotus fragosus Stimpson, 1871
= *Batrachonotus brasiliensis* Rathbun, 1894

Collodes Stimpson, 1860
= *Microrhynchus* Bell, 1835 (type species *Microrhynchus gibbosus* Bell, 1835, subsequent designation by Miers, 1879a; name pre-occupied by *Microrhynchus* Dejean, 1821 [Coleoptera]; gender masculine)
= *Collodes* Stimpson, 1860 (type species *Collodes granosus* Stimpson, 1860, by monotypy; gender masculine)
= *Neorhynchus* A. Milne-Edwards, 1879 (replacement name for *Microrhynchus* Bell, 1835; name pre-occupied by *Neorhynchus* Sclater, 1869 [Aves]; gender masculine)
= *Dasygyius* Rathbun, 1897 (unnecessary replacement name for *Neorhynchus* A. Milne-Edwards, 1879; gender masculine)
Collodes armatus Rathbun, 1898
Collodes gibbosus (Bell, 1835) [*Microrhynchus*]
Collodes granosus Stimpson, 1860
Collodes inermis A. Milne-Edwards, 1878
Collodes leptocheles Rathbun, 1894
Collodes levis Rathbun, 1901
Collodes nudus Stimpson, 1871
Collodes obesus A. Milne-Edwards, 1878
Collodes robsonae Garth, 1958
Collodes robustus Smith, 1881
Collodes rostratus A. Milne-Edwards, 1879
Collodes tenuirostris Rathbun, 1894
Collodes trispinosus Stimpson, 1871
= *Collodes depressus* A. Milne-Edwards, 1878
Collodes tumidus Rathbun, 1898

Euprognatha Stimpson, 1871
= *Euprognatha* Stimpson, 1871 (type species *Euprognatha rastellifera* Stimpson, 1871, by monotypy; gender feminine)
Euprognatha acuta A. Milne-Edwards, 1880
Euprognatha bifida Rathbun, 1894
= *Batrachonotus nicholsi* Rathbun, 1894
Euprognatha gracilipes A. Milne-Edwards, 1878
Euprognatha granulata Faxon, 1893
Euprognatha marthae Rathbun, 1925
Euprognatha rastellifera Stimpson, 1871
= *Euprognatha inermis* A. Milne-Edwards, 1879
= *Euprognatha rastellifera spinosa* Rathbun, 1894
= ?*Inachus cardenensis* Gundlach & Torralbas, 1900

Inachoides H. Milne Edwards & Lucas, 1842 {1}
= *Cyrnus* De Haan, 1839 (type species *Cyrnus microrhynchus* Audouin, in De Haan, 1839, nomen nudum; by monotypy; name pre-occupied by *Cyrnus* Stephens, 1833 [Trichoptera]; gender masculine)
= *Inachoides* H. Milne Edwards & Lucas, 1842 (type species *Inachus microrhynchus* H. Milne Edwards & Lucas, 1842, by monotypy; gender masculine)
Inachoides forceps A. Milne-Edwards, 1879
Inachoides laevis Stimpson, 1860
Inachoides lambriformis (De Haan, 1839) [*Inachus* (*Microrhynchus*)]
= *Inachoides microrhynchus* H. Milne Edwards & Lucas, 1842
= *Inachoides inornatus* A. Milne-Edwards, 1873

Leurocyclus Rathbun, 1897
= *Salacia* H. Milne Edwards & Lucas, 1842 (type species *Salacia tuberculosa* H. Milne Edwards & Lucas, 1842, by monotypy; name pre-occupied by *Salacia* Lamouroux, 1816 [Cnidaria]; gender feminine)
= *Leurocyclus* Rathbun, 1897 (replacement name for *Salacia* H. Milne Edwards & Lucas, 1842; gender masculine)
Leurocyclus gracilipes (A. Milne-Edwards & Bouvier, 1898) [*Microrhynchus*]
Leurocyclus tuberculosus (H. Milne Edwards & Lucas, 1842) [*Salacia*]

Paradasygyius Garth, 1958
= *Paradasygyius* Garth, 1958 (type species *Microrhynchus depressus* Bell, 1835, by original designation; gender masculine)
Paradasygyius depressus (Bell, 1835) [*Microrhynchus*]
Paradasygyius tuberculatus (Lemos de Castro, 1949) [*Dasygyius*]

Pyromaia Stimpson, 1871
= *Pyromaia* Stimpson, 1871 (type species *Pyromaia cuspidata* Stimpson, 1871, by monotypy; gender feminine)
= *Apiomaia* von Martens, 1873 (unnecessary replacement name for *Pyromaia* Stimpson, 1871; gender feminine)
Pyromaia acanthina Lemaitre, Campos & Bermúdez, 2001
Pyromaia arachna Rathbun, 1924
Pyromaia cuspidata Stimpson, 1871
= ?*Inachoides brevirostrum* Lockington, 1877
= *Inachoides magdalenensis* Rathbun, 1894
Pyromaia mexicana Rathbun, 1893
Pyromaia tuberculata (Lockington, 1877) [*Inachus*]
= *Neorhynchus mexicanus* Rathbun, 1894
Pyromaia vogelsangi Türkay, 1968

Notes

{1} Although cited as a synonym in publications, "*Xiphus* Eydoux & Souleyet, 1842" is not available as a name. "Xiphus margaritifère" was first published by Eydoux & Souleyet (1842) only on their plate 1. On the plate, only the French vernacular name "Xiphus margaritifère" was used, without latinisation. It was not mentioned in the text. Under Article 11.2 of the Code, the name is invalid.

FAMILY MAJIDAE SAMOUELLE, 1819

Maiadae Samouelle, 1819
Mithracidae MacLeay, 1838
Cyclacinae Dana, 1851
Micippinae Dana, 1851
Paramicippinae Dana, 1851
Periceridae Dana, 1851
Prionorhynchinae Dana, 1851
Stenociopinae Dana, 1851
Leptopisinae Stimpson, 1871 [recte Leptopinae]
Naxiinae Stimpson, 1871
Cyphocarcininae Neumann, 1878
Eurynominae Neumann, 1878
Ixioninae Neumann, 1878
Schizophrysinae Miers, 1879
Mamaiidae Stebbing, 1905
Macrocoelominae Balss, 1929
Eurynolambrinae Števčić, 1994
Planoterginae Števčić, 1991
Thoini Števčić, 1994
Coelocerini Števčić, 2005

Subfamily Eurynolambrinae Števčić, 1994

Eurynolambrinae Števčić, 1994

Eurynolambrus H. Milne Edwards & Lucas, 1841
= *Eurynolambrus* H. Milne Edwards & Lucas, 1841 (type species *Eurynolambrus australis* H. Milne Edwards & Lucas, 1841, by monotypy; gender masculine)
Eurynolambrus australis H. Milne Edwards & Lucas, 1841

Subfamily Majinae Samouelle, 1819

Maiadae Samouelle, 1819
Cyclacinae Dana, 1851
Prionorhynchinae Dana, 1851
Naxiinae Stimpson, 1871
Eurynominae Neumann, 1878
Schizophrysinae Miers, 1879
Mamaiidae Stebbing, 1905
Thersandrini Števčić, 2005

Ageitomaia Griffin & Tranter, 1986
= *Ageitomaia* Griffin & Tranter, 1986 (type species *Paramithrax baeckstroemi* Balss, 1924, by original designation; gender feminine)
Ageitomaia baeckstroemi (Balss, 1924) [*Paramithrax*]

Anacinetops Miers, 1879
= *Anacinetops* Miers, 1879 (type species *Anacinetops stimpsoni* Miers, 1879, by monotypy; gender masculine)
= *Eruma* McCulloch, 1913 (type species *Paramicippa hispida* Baker, 1905, original designation; gender neuter)
Anacinetops stimpsoni Miers, 1879
= *Paramicippa hispida* Baker, 1905

Choniognathus Rathbun, 1932
= *Choniognathus* Rathbun, 1932 (type species *Choniognathus koreensis* Rathbun, 1932, by monotypy; gender masculine)
Choniognathus elegans (Stebbing, 1921) [*Eurynome*]
Choniognathus granulosus (Baker, 1906) [*Eurynome*]
Choniognathus reini (Balss, 1924) [*Eurynome*]
= *Choniognathus koreensis* Rathbun, 1932
Choniognathus verhoeffei (Balss, 1929) [*Eurynome*]

Cyclax Dana, 1851
= *Cyclax* Dana, 1851 (type species *Cyclax perryi* Dana, 1851, by monotypy; gender masculine)
= *Cyclomaia* Stimpson, 1858 (type species *Cyclomaia suborbicularis* Stimpson, 1858, by monotypy; gender feminine)
Cyclax spinicinctus Heller, 1861
= *Cyclomaia margaritata* A. Milne-Edwards, 1872
= ?*Cyclax perryi* Dana, 1851
= ?*Schizophrys spiniger* White, 1848
Cyclax suborbicularis (Stimpson, 1858) [*Cyclomaia*]

Entomonyx Miers, 1884
= *Entomonyx* Miers, 1884 (type species *Entomonyx spinosus* Miers, 1884, by monotypy; gender masculine)
Entomonyx spinosus Miers, 1884
= *Entomonyx nummifer* Alcock, 1895

Eurynome Leach, 1814
= *Eurynome* Leach, 1814 (type species *Cancer asper* Pennant, 1777, by monotypy; gender feminine) [Opinion 712]
Eurynome aspera (Pennant, 1777) [*Cancer*]
= *Eurynome scutellata* Risso, 1827
= *Eurynome boletifera* Costa, 1838
= ?*Eurynome longimana* Stimpson, 1858
= *Eurynome aspera* var. *acuta* A. Milne-Edwards & Bouvier, 1900
Eurynome bituberculata Griffin, 1964
Eurynome erosa A. Milne-Edwards, 1873
Eurynome parvirostris Forest & Guinot, 1966
Eurynome spinosa Hailstone, 1835

Jacquinotia Rathbun, 1915
= *Prionorhynchus* Jacquinot, in Jacquinot & Lucas, 1853 (type species *Prionorhynchus edwardsii* Jacquinot, in Jacquinot & Lucas, 1853, by monotypy; name pre-occupied by *Prionorhynchus* Leach, 1830 [Crustacea]; gender masculine)
= *Jacquinotia* Rathbun, 1915 (replacement name for *Prionorhynchus* Jacquinot & Lucas, 1854; gender feminine)
= *Campbellia* Balss, 1930 (type species *Campbellia kohli* Balss, 1930, by monotypy; gender feminine)
Jacquinotia edwardsi (Jacquinot, in Jacquinot & Lucas, 1853) [*Prionorhynchus*]
= *Campbellia kohli* Balss, 1930

Kasagia Richer de Forges & Ng, 2007
= *Kasagia* Richer de Forges & Ng, 2007 (type species *Kasagia arbastoi* Richer de Forges & Ng, 2007, by original designation and monotypy; gender feminine)
Kasagia arbastoi Richer de Forges & Ng, 2007

Kimbla Griffin & Tranter, 1986
= *Kimbla* Griffin & Tranter, 1986 (type species *Kimbla neocaledonica* Griffin & Tranter, 1986, by original designation; gender feminine)
Kimbla franklini Richer de Forges, 1993
Kimbla neocaledonica Griffin & Tranter, 1986

Leptomithrax Miers, 1876
= *Paramithrax* (*Leptomithrax*) Miers, 1876 (type species *Paramithrax* (*Leptomithrax*) *longimanus* Miers, 1876, subsequent designation by Miers, 1879a; gender masculine)
= *Leptomithrax* (*Austromithrax*) Bennett, 1964 (type species *Leptomithrax* (*Austromithrax*) *mortenseni* Bennett, 1964, by original designation; gender masculine)
= *Leptomithrax* (*Zemithrax*) Bennett, 1964 (type species *Paramithrax longipes* Thompson, 1902, by original designation; gender masculine)

Leptomithrax australis (Jacquinot, in Jacquinot & Lucas, 1853) [*Maia*]
= *Paramithrax* (*Leptomithrax*) *brevirostris* Miers, 1879
Leptomithrax bifidus (Ortmann, 1893) [*Paramithrax* (*Leptomithrax*)]
Leptomithrax depressus Richer de Forges, 1993
Leptomithrax edwardsii (De Haan, 1835) [*Maja* (*Paramithrax*)]
Leptomithrax gaimardii (H. Milne Edwards, 1834) [*Paramithrax*]
= *Leptomithrax spinulosus* Haswell, 1879
= *Leptomithrax australiensis* Miers, 1876
Leptomithrax garricki Griffin, 1966
Leptomithrax globifer Rathbun, 1918
Leptomithrax kiiensis Sakai, 1969
Leptomithrax longimanus (Miers, 1876) [*Paramithrax* (*Leptomithrax*)]
= *Paramithrax* (*Leptomithrax*) *affinis* Borradaile, 1916
Leptomithrax longipes (Thompson, 1902) [*Paramithrax*]
= *Leptomithrax* (*Zemithrax*) *molloch* Bennett, 1964
Leptomithrax sinensis Rathbun, 1916
Leptomithrax sternocostulatus (H. Milne Edwards, 1851) [*Paramithrax*]
Leptomithrax tuberculatus Whitelegge, 1900
Leptomithrax waitei (Whitelegge, 1900) [*Chlorinoides*]

Maiopsis Faxon, 1893
= *Maiopsis* Faxon, 1893 (type species *Maiopsis panamensis* Faxon, 1893; by monotypy; gender feminine)
Maiopsis panamensis Faxon, 1893

Maja Lamarck, 1801
= *Maja* Lamarck, 1801 (type species *Cancer squinado* Herbst, 1788; subsequent designation by ICZN plenary powers; gender feminine) [Opinion 511] {1}
= *Maia* Lamarck, 1801 (incorrect spelling) [Opinion 511]
= *Paramaya* De Haan, 1837 (type species *Pisa* (*Paramaya*) *spinigera* De Haan, 1837; by monotypy; gender feminine)
= *Mamaia* Stebbing, 1905 (unneccesary replacement name for *Maja* Lamarck, 1801; gender feminine)
Maja africana Griffin & Tranter, 1986
Maja bisarmata Rathbun, 1916
?*Maja capensis* Ortmann, 1894
Maja compressipes (Miers, 1879) [*Paramithrax* (*Leptomithrax*)]
= *Maja brevispinosis* Dai, 1981
Maja confragosa Griffin & Tranter, 1986
Maja crispata Risso, 1827
= *Maia verrucosa* H. Milne Edwards, 1834
= *Cancer majodes* Nardo, 1847
Maja erinacea de Ninni, 1924
Maja gracilipes Chen & Ng, 1999
Maja gibba Alcock, 1899
Maja goltziana d'Oliviera, 1888
Maja japonica Rathbun, 1932
= *Maja nipponensis* Sakai, 1934
Maja kominatoensis Kubo, 1936
Maja linapacanensis Rathbun, 1916
Maja miersii Walker, 1887
Maja sakaii Takeda & Miyake, 1969
Maja spinigera (De Haan, 1837) [*Pisa* (*Paramaya*)]
Maja squinado (Herbst, 1788) [*Cancer*] [Opinion 511]
= ?*Cancer cornutus* Fabricius, 1787
= *Maja squinado* var. *brachydactyla* Balss, 1922
Maja suluensis Rathbun, 1916
?*Maja tuberculata* De Haan, 1839

Majella Ortmann, 1893
= *Majella* Ortmann, 1893 (type species *Majella brevipes* Ortmann, 1893; by monotypy; gender feminine)
Majella brevipes Ortmann, 1893

Microhalimus Haswell, 1880
= *Microhalimus* Haswell, 1880 (type species *Halimus* (*Microhalimus*) *deflexifrons* Haswell, 1880, by monotypy; gender masculine)
Microhalimus deflexifrons (Haswell, 1880) [*Halimus* (*Microhalimus*)]

Naxia Latreille, 1825
= *Naxia* Latreille, 1825 (type species *Pisa aurita* Latreille, 1825, by monotypy; gender feminine) {2, 3}
= *Helimus* Desmarest, 1823 (nomen nudum) {3}
= *Halime* Latreille, 1825 (nomen nudum) {3}
= *Helimus* Berthold, 1827 (nomen nudum) {3}
= *Halimus* Latreille, 1829 (type species *Halimus aries* H. Milne Edwards, 1834, subsequent designation by Rathbun, 1897; gender masculine) {3}
= *Kalimus* Griffith & Pidgeon, 1833: 168) (nomen nudum) {3}
Naxia aries (H. Milne Edwards, 1834) [*Halimus*] {3}
= *Naxia gracilis* Baker, 1905
Naxia aurita (Latreille, 1825) [*Pisa*]
= *Halimus laevis* Haswell, 1880
Naxia spinosa (Hess, 1865) [*Halimus*]
= *Naxia truncatipes* Miers, 1876
Naxia tumida (Dana, 1851) [*Halimus*]

Notomithrax Griffin, 1963
= *Notomithrax* Griffin, 1963 (type species *Paramithrax peronii* H. Milne Edwards, 1834, by original designation; gender masculine)
Notomithrax minor (Filhol, 1885) [*Paramithrax*]
= *Paramithrax* (*Paramithrax*) *parvus* Borradaile, 1916
Notomithrax peronii (H. Milne Edwards, 1834) [*Paramithrax*]
Notomithrax spinosus (Miers, 1879) [*Paramithrax* (*Paramithrax*)]
Notomithrax ursus (Herbst, 1788) [*Cancer*]
= ?*Cancer ursus* Fabricius, 1787
= *Paramithrax* (*Paramithrax*) *latreillei* Miers, 1876
= *Paramithrax cristatus* Filhol, 1886

Paraentomonyx Sakai, 1983
= *Paraentomonyx* Sakai, 1983 (type species *Entomonyx depressus* Sakai, 1974, by original designation; gender masculine)
Paraentomonyx depressus (Sakai, 1974) [*Entomonyx*]

Paramithrax H. Milne Edwards, 1834
= *Paramithrax* H. Milne Edwards, 1834 (type species *Pisa barbicornis* Latreille, 1825, subsequent designation by Desmarest, 1858, gender masculine) {4}
= *Gonatorhynchus* Haswell, 1880 (type species *Gonatorhynchus tumidus* Haswell, 1880, by monotypy; gender masculine)
= *Lobophrys* Filhol, 1885 (type species *Pisa barbicornis* Latreille, 1825, by original designation; gender masculine)
Paramithrax barbicornis (Latreille, 1825) [*Pisa*]
= *Gonatorhynchus tumidus* Haswell, 1880

Pippacirama Griffin & Tranter, 1986
= *Pippacirama* Griffin & Tranter, 1986 (type species *Paramicippa tuberculosa* H. Milne Edwards, 1834, by original designation; gender feminine)
Pippacirama tuberculosa (H. Milne Edwards, 1834) [*Paramicippa*]
= *Micippa parvirostris* Miers, 1879

Prismatopus Ward, 1933
= *Prismatopus* Ward, 1933 (type species *Prismatopus albanyensis* Ward, 1933, by monotypy; gender masculine) {5}

= *Thacanophrys* Griffin & Tranter, 1986 (type species *Chorinus aculeatus* H. Milne Edwards, 1834, by original designation; gender masculine)
Prismatopus acanthonotus (White, 1847) [*Chorinus*]
Prismatopus aculeatus (H. Milne Edwards, 1834) [*Chorinus*]
= *Paramithrax* (*Chlorinoides*) *aculeatus* var. *armatus* Miers, 1884
Prismatopus albanyensis Ward, 1933
= *Chlorinoides barunai* Serène, 1969
Prismatopus brevispinosus (Yokoya, 1933) [*Chlorinoides*]
Prismatopus filholi (A. Milne-Edwards, 1876) [*Acanthophrys*]
Prismatopus goldsboroughi (Rathbun, 1906) [*Chlorinoides*]
Prismatopus halimoides (Miers, 1879) [*Paramithrax*]
= *Acanthophrys germaini* Bouvier, 1906
Prismatopus harmandi (Bouvier, 1906) [*Acanthophrys*]
Prismatopus longispinus (De Haan, 1839) [*Maja* (*Chorinus*)]
= *Paramithrax coppingeri* Haswell, 1882
= *Paramithrax* (*Chlorinoides*) *longispinus* var. *bituberculata* Miers, 1884
= *Paramithrax* (*Chlorinoides*) *longispinus* var. *bispinosus* Laurie, 1906
= *Paramithrax* (*Chlorinoides*) *longispinus* var. *spinossissima* Bouvier, 1906
Prismatopus occidentalis (Griffin, 1970) [*Chlorinoides*]
Prismatopus spatulifer (Haswell, 1882) [*Paramithrax*]
Prismatopus tosaensis (Sakai, 1969) [*Chlorinoides*]

Pseudomicippe Heller, 1861
= *Pseudomicippe* Heller, 1861 (type species *Pseudomicippe nodosa* Heller, 1861, by monotypy; gender feminine)
= *Zewa* MacCulloch, 1913 (type species *Zewa banfieldi* MacCulloch, 1913, by monotypy; gender feminine)
Pseudomicippe banfieldi (McCulloch, 1913) [*Zewa*]
Pseudomicippe eldredgei Griffin & Tranter, 1986
Pseudomicippe griffini Kazmi & Tirmizi, 1999
Pseudomicippe indonesica Griffin & Tranter, 1986
Pseudomicippe maccullochi Griffin & Tranter, 1986
Pseudomicippe maldivensis Griffin & Tranter, 1986
Pseudomicippe nipponica (Sakai, 1937) [*Zewa*]
Pseudomicippe nodosa Heller, 1861
Pseudomicippe okamotoi (Sakai, 1938) [*Zewa*]
Pseudomicippe philippinensis Griffin & Tranter, 1986
?*Pseudomicippe rosselii* (Audouin, 1826) [*Maja*] {6}
Pseudomicippe tenuipes A. Milne-Edwards, 1865
Pseudomicippe varians Miers, 1879

Schizophroida Sakai, 1933
= *Schizophroida* Sakai, 1933 (type species *Schizophrys hilensis* Rathbun, 1906, subsequent designation by Griffin & Tranter, 1986; gender feminine)
Schizophroida hilensis (Rathbun, 1906) [*Schizophrys*]
= *Schizophroida manazuruana* Sakai, 1933
Schizophroida simodaensis Sakai, 1933

Schizophrys White, 1847
= *Maja* (*Dione*) De Haan, 1839 (type species *Maja* (*Dione*) *affinis* De Haan, 1839, by monotypy; name pre-occupied by *Dione* Huebner, 1819 [Lepidoptera]; gender masculine)
= *Schizophrys* White, 1847 (type species *Mithrax asper* H. Milne Edwards, 1834, subsequent designation by Miers, 1879a; gender masculine)
Schizophrys aspera (H. Milne Edwards, 1834) [*Mithrax*]
= *Mithrax quadridentatus* MacLeay, 1838
= *Maja* (*Dione*) *affinis* De Haan, 1839
= ?*Schizophrys serratus* White, 1847
= *Mithrax spinifrons* A. Milne-Edwards, 1867
= *Mithrax affinis* Brito Capello, 1871
= *Mithrax triangularis* Kossmann, 1877
= *Mithrax* (*Schizophrys*) *triangularis* var. *indica* Richters, 1880
= ?*Inachus bifidus* Marion de Procé, 1822 {7}
Schizophrys dahlak Griffin & Tranter, 1986
Schizophrys dama (Herbst, 1804) [*Cancer*]
Schizophrys dichotomus (Latreille, 1831) [*Mithrax*]
Schizophrys pakistanensis Tirmizi & Kazmi, 1995
Schizophrys rufescens Griffin & Tranter, 1986

Seiitaoides Griffin & Tranter, 1986
= *Seiitaoides* Griffin & Tranter, 1986 (type species *Eurynome orientalis* Sakai, 1961, by original designation; gender masculine)
Seiitaoides orientalis (Sakai, 1961) [*Eurynome*]
Seiitaoides stimpsonii (Miers, 1884) [*Eurynome*]

Temnonotus A. Milne-Edwards, 1875
= *Temnonotus* A. Milne-Edwards, 1875 (type species *Temnonotus granulosus* A. Milne-Edwards, 1875, subsequent designation by Miers, 1879a; gender masculine)
Temnonotus granulosus A. Milne-Edwards, 1875
Temnonotus simplex A. Milne-Edwards, 1875

Teratomaia Griffin & Tranter, 1986
= Griffin & Tranter, 1986 (type species *Leptomithrax richardsoni* Dell, 1960, by original designation; gender feminine)
Teratomaia richardsoni (Dell, 1960) [*Leptomithrax*]

Thersandrus Rathbun, 1897
= *Sisyphus* Desbonne, in Desbonne & Schramm, 1867 (type species *Sisyphus compressus* Desbonne, in Desbonne & Schramm, 1867, by monotypy; name pre-occupied by *Sisyphus* Wiedemann, 1823 [Coleoptera]; gender masculine)
= *Thersandrus* Rathbun, 1897 (replacement name for *Sisyphus* Desbonne, in Desbonne & Schramm, 1867; gender masculine)
Thersandrus compressus (Desbonne, in Desbonne & Schramm, 1867) [*Sisyphus*]

Tumulosternum MacCulloch, 1913
= *Tumulosternum* MacCulloch, 1913 (type species *Micippoides longimanus* Haswell, 1880, by original designation; gender masculine)
Tumulosternum longimanus (Haswell, 1880) [*Micippoides*]
Tumulosternum parvispinosus (Ward, 1933) [*Paramithrax*]
Tumulosternum wardi Griffin & Tranter, 1986

Incertae sedis

Naxia sinope White, 1847 (nomen nudum)
Paramaya dehaanii White, 1847 (nomen nudum)
Paramithrax rotundatus White, 1847 (nomen nudum)

Subfamily Mithracinae MacLeay, 1838

Mithracidae MacLeay, 1838
Micippinae Dana, 1851
Paramicippinae Dana, 1851
Periceridae Dana, 1851
Stenociopinae Dana, 1851
Leptopisinae Stimpson, 1871[recte Leptopinae]
Cyphocarcininae Neumann, 1878
Ixioninae Neumann, 1878
Macrocoelominae Balss, 1929
Thoini Števčić, 1994
Coelocerini Števčić, 2005

Ala Lockington, 1877
= *Ala* Lockington, 1877 (type species *Ala spinosa* Lockington, 1877, by monotypy; gender feminine)
= *Anaptychus* Stimpson, 1860 (type species *Anaptychus cornutus* Stimpson, 1860, by monotypy; gender masculine)
= *Anaptychoides* Strand, 1928 (unnecessary replacement name for *Anaptychus* Stimpson, 1860; gender masculine)
Ala cornuta (Stimpson, 1860) [*Anaptychus*]
= *Ala spinosa* Lockington, 1877
= *Mitrax trigonopus* Cano, 1889

Coelocerus A. Milne-Edwards, 1875
= *Coelocerus* A. Milne-Edwards, 1875 (type species *Coelocerus spinosus* A. Milne-Edwards, 1875, by monotypy; gender masculine)
Coelocerus spinosus A. Milne-Edwards, 1875
= *Coelocerus grandis* Rathbun, 1893

Cyclocoeloma Miers, 1880
= *Cyclocoeloma* Miers, 1880 (type species *Cyclocoeloma tuberculata* Miers, 1880, by monotypy; gender feminine)
Cyclocoeloma tuberculata Miers, 1880

Cyphocarcinus A. Milne-Edwards, 1868
= *Cyphocarcinus* A. Milne-Edwards, 1868 (type species *Cyphocarcinus minutus* A. Milne-Edwards, 1868, by monotypy; gender masculine)
= *Ixion* Paul'son, 1875 (type species *Ixion capreolus* Paul'son, 1875, by monotypy; name pre-occupied by *Ixion* Reitter, 1873 [Coleoptera]; gender neuter)
= *Podohuenia* Cano, 1889 (type species *Podohuenia erythraea* Cano, 1889, by monotypy; gender feminine)
Cyphocarcinus alcocki Griffin & Tranter, 1986
Cyphocarcinus capreolus (Paul'son, 1875) [*Ixion*]
= *Podohuenia erythraea* Cano, 1889
= *Stenocarabus suspensus* Gravier, 1923
Cyphocarcinus minutus A. Milne-Edwards, 1868
Cyphocarcinus rathbunae Griffin & Tranter, 1986
Cyphocarcinus sargassumi Kazmi & Tirmizi, 1995
Cyphocarcinus suspensus (Gravier, 1923) [*Stenocarabus*]

Leptopisa Stimpson, 1871
= *Leptopisa* Stimpson, 1871 (type species *Tiarinia setirostris* Stimpson, 1871, by monotypy; gender feminine)
Leptopisa australis Griffin & Tranter, 1986
Leptopisa nipponensis Sakai, 1938
Leptopisa setirostris (Stimpson, 1871) [*Tiarinia*]
= *Macrocoeloma tenuirostra* Rathbun, 1892

Macrocoeloma Miers, 1879
= *Macrocoeloma* Miers, 1879 (type species *Pisa trispinosa* Latreille, 1825, by original designation; gender neuter)
Macrocoeloma camptocerum (Stimpson, 1871) [*Pericera*]
Macrocoeloma concavum Miers, 1886
Macrocoeloma diplacanthum (Stimpson, 1860) [*Pericera*]
Macrocoeloma eutheca (Stimpson, 1871) [*Pericera*]
Macrocoeloma heptacanthum (Bell, 1835) [*Pericera*]
Macrocoeloma intermedium Rathbun, 1901
Macrocoeloma laevigatum (Stimpson, 1860) [*Pericera*]
= *Pericera curvicorna* Desbonne, in Desbonne & Schramm, 1867
Macrocoeloma maccullochae Garth, 1940
Macrocoeloma nodipes (Desbonne, in Desbonne & Schramm, 1867) [*Pericera*]
Macrocoeloma septemspinosum (Stimpson, 1871) [*Pericera*]
Macrocoeloma subparellelum (Stimpson, 1860) [*Pericera*]
?*Macrocoeloma trigona* (Dana, 1852) [*Pericera*]
Macrocoeloma trispinosum (Latreille, 1825) [*Pisa*]
= *Pericera diacantha* A. Milne-Edwards, 1875
Macrocoeloma villosum (Bell, 1835) [*Pericera*]
= *Pericera fossata* Stimpson, 1860

Micippa Leach, 1817
= *Micippa* Leach, 1817 (type species *Cancer cristatus* Linnaeus, 1758, by monotypy; gender feminine)
= *Micippe* Desmarest, 1825 (incorrect spelling)
= *Paramicippa* H. Milne Edwards, 1834 (type species *Micippa platipes* Rüppell, 1830, subsequent designation by Desmarest, 1858; gender feminine) {8}
= *Lophomicippa* Rathbun, 1907 (type species *Lophomicippa limbata* Rathbun, 1907, by monotypy; gender feminine)
Micippa cristata (Linnaeus, 1758) [*Cancer*]
= *Cancer bilobus* Herbst, 1790
= *Micippa cristata* var. *granulipes* Zehntner, 1894
= *Micippa cristata* var. *laevimana* Zehntner, 1894
= ?*Micippa cristata spinatruncata* Manuel, Gonzales & Basmayor, 1991
Micippa curtispina Haswell, 1870
Micippa excavata Lanchester, 1900
Micippa margaritifera Henderson, 1893
Micippa parca Alcock, 1895
= *Lophomicippa limbata* Rathbun, 1907
Micippa philyra (Herbst, 1803) [*Cancer*]
= *Micippa philyra* var. *mascarenica* Kossmann, 1877
= *Micippa superciliosa* Haswell, 1879
= *Paramicippa asperimanus* Miers, 1884
= *Micippa mascarenica nodulifera* Baker, 1905
Micippa platipes Rüppell, 1830
= *Micippa bicarinata* Adams & White, 1848
= *Micippa hirtipes* Dana, 1851
= *Micippa spatulifrons* A. Milne-Edwards, 1872
= *Micippa philyra latifrons* Richters, 1880
= ?*Inachus inflexus* Marion de Procé, 1822 {7}
Micippa spinosa Stimpson, 1857
= *Paramicippe affinis* Miers, 1879
Micippa thalia (Herbst, 1803) [*Cancer*]
= *Micippa aculeata* Bianconi, 1851
= *Micippa pusilla* Bianconi, 1856
= *Micippa miliaris* Gerstaecker, 1856
= *Micippa haani* Stimpson, 1857
= *Micippa thalia* var. *caledonica* Kossmann, 1877
= *Micippa thalia* var. *indica* Kossmann, 1877
= *Micippa inermis* Haswell, 1879
Micippa xishaensis Chen, 1980

Microphrys H. Milne Edwards, 1851
= *Microphrys* H. Milne Edwards, 1851 (type species *Microphrys weddelli* H. Milne Edwards, 1851, by monotypy and original designation; gender masculine)
= *Milnia* Stimpson, 1860 (type species *Pisa bicornuta* Latreille, 1825, by monotypy; gender feminine)
= *Omalacantha* Streets, 1871 (type species *Omalacantha hirsuta* Streets, 1871, by monotypy; gender feminine)
= *Eumilnia* Kingsley, 1879 (type species *Microphrys error* Kingsley, 1879, by monotypy; gender feminine)
Microphrys aculeatus (Bell, 1835) [*Pisa*]
Microphrys antillensis Rathbun, 1901
Microphrys bicornutus (Latreille, 1825) [*Pisa*]
= *Pericera bicornis* Saussure, 1858
= *Pisa galibica* Desbonne, in Desbonne & Schramm, 1867
= *Pisa purpurea* Desbonne, in Desbonne & Schramm, 1867
= *Omalacantha hirsuta* Streets, 1871
Microphrys branchialis Rathbun, 1898
Microphrys garthi (Lemos de Castro, 1953) [*Eucinetops*]
Microphrys interruptus Rathbun, 1920
Microphrys platysoma (Stimpson, 1860) [*Milnia*]
= ?*Pisoides celatus* Lockington, 1877
= *Microphrys error* Kingsley, 1879

Microphrys triangulatus (Lockington, 1877) [*Mithraculus*]
Microphrys weddelli H. Milne Edwards, 1851

Mithraculus White, 1847
= *Mithraculus* White, 1847 (type species *Mithraculus coronatus* White, 1847, by monotypy; gender masculine)
Mithraculus cancasensis (Türkay, 1967) [*Mithrax* (*Mithraculus*)]
Mithraculus cinctimanus Stimpson, 1860
= *Mithrax affinis* Desbonne, in Desbonne & Schramm, 1867
= *Mithrax* (*Mithraculus*) *commensalis* Manning, 1970
Mithraculus coryphe (Herbst, 1801) [*Cancer*]
= *Cancer coronatus* Herbst, 1785 (pre-occupied name)
Mithraculus denticulatus (Bell, 1835) [*Mithrax*]
= *Mithrax areolatus* Lockington, 1877
Mithraculus forceps A. Milne-Edwards, 1875
= *Mithraculus hirsutipes* Kingsley, 1879
= *Mithraculus ochraceus* Gomez, 1933
Mithraculus nodosus (Bell, 1835) [*Mithrax*]
Mithraculus rostratus (Bell, 1835) [*Mithrax* (*Mithrax*)]
Mithraculus ruber Stimpson, 1871
= *Mithraculus nudus* A. Milne-Edwards, 1875
= *Mithrax humphreyi* Jones, 1969
Mithraculus sculptus (Lamarck, 1818) [*Maia*]
= *Mithrax minutus* Saussure, 1858
= *Mithraculus coronatus* White, 1847

Mithrax Desmarest, 1823
= *Mithrax* Desmarest, 1823 (type species *Cancer aculeatus* Herbst, 1790, subsequent designation by H. Milne Edwards, 1838; gender masculine) {9}
= *Mitrax* H. Milne Edwards, 1838 (incorrect spelling)
= *Trachonites* Desmarest, 1823 (type species *Cancer hispidus* Herbst, 1790, subsequent designation by Rathbun, 1925; gender masculine)
Mithrax aculeatus (Herbst, 1790) [*Cancer*] {10}
= *Cancer aculeatus* Fabricius, 1793
= *Mithrax pilosus* Rathbun, 1892
Mithrax armatus Saussure, 1853
= *Mithrax* (*Mithrax*) *orcutti* Rathbun, 1925
Mithrax bellii Gerstaecker, 1857
Mithrax besnardi Melo, 1990
Mithrax braziliensis Rathbun, 1892
Mithrax caboverdianus Türkay, 1986
Mithrax clarionensis Garth, 1940
Mithrax hemphilli Rathbun, 1892
Mithrax hispidus (Herbst, 1790) [*Cancer*]
= *Maia spinicincta* Lamarck, 1818
= *Mithrax laevimanus* Desbonne, in Desbonne & Schramm, 1867
= *Mithrax pleuracanthus* Stimpson, 1871
= *Mithrax depressus* A. Milne-Edwards, 1875
= *Mithrax carribbaeus* Rathbun, 1920
= *Mithrax tortugae* Rathbun, 1920
Mithrax holderi Stimpson, 1871
= *Mithrax bahamensis* Rathbun, 1892
Mithrax leucomelas Desbonne, in Desbonne & Schramm, 1867
Mithrax pygmaeus Bell, 1835
Mithrax sinensis Rathbun, 1892
Mithrax spinosissimus (Lamarck, 1818) [*Maia*]
Mithrax tuberculatus Stimpson, 1860
Mithrax verrucosus H. Milne Edwards, 1832
= *Mithrax trispinosus* Kingsley, 1879
= *Mithrax plumosus* Rathbuin, 1901

Nemausa A. Milne-Edwards, 1875
= *Nemausa* A. Milne-Edwards, 1875 (type species *Pisa spinipes* Bell, 1836, subsequent designation by Miers, 1879a; gender feminine)
Nemausa acuticornis (Stimpson, 1871) [*Mithrax*]
Nemausa cornuta (Saussure, 1857) [*Mithrax*]
= *Nemausa rostrata* A. Milne-Edwards, 1875
Nemausa spinipes (Bell, 1835) [*Pisa*]
= *Mithrax* (*Mithrax*) *mexicanus* Glassell, 1936

Paranaxia Rathbun, 1924
= *Paranaxia* Rathbun, 1924 (type species *Pisa serpulifera* Guérin, 1829, subsequent designation by Rathbun, 1924; gender feminine)
Paranaxia serpulifera (Guérin, 1829) [*Pisa*]

Picroceroides Miers, 1886
= *Picroceroides* Miers, 1886 (type species *Picroceroides tubularis* Miers, 1886, by monotypy; gender masculine)
Picroceroides tubularis Miers, 1886

Stenocionops Desmarest, 1823
= *Stenocionops* Desmarest, 1823 (type species *Maia taurus* Lamarck, 1818, by present designation; gender masculine). {11}
= *Pericera* Latreille, 1825 (type species *Cancer furcatus* Olivier, 1791, by monotypy; gender feminine)
= *Chlorilibinia* Lockington, 1877 (type species *Chlorilibinia angusta* Lockington, 1877, by monotypy; gender feminine)
Stenocionops contiguus (Rathbun, 1892) [*Pericera*]
Stenocionops coelatus (A. Milne-Edwards, 1878) [*Pericera*]
Stenocionops furcatus (Olivier, 1791) [*Cancer*]
= *Cancer cornudo* Herbst, 1804
= *Maia taurus* Lamarck, 1818
Stenocionops beebei Glassell, 1936
Stenocionops ovatus (Bell, 1835) [*Pericera*]
= *Libinia macdonaldi* Rathbun, 1892
= *Pericera triangulata* Rathbun, 1892
Stenocionops angustus (Lockington, 1877) [*Chlorilibinia*]
Stenocionops spinimanus (Rathbun, 1892) [*Libinia*]
= *Pericera atlantica* Rathbun, 1892
Stenocionops spinosissimus (Saussure, 1857) [*Pericera*]
= *Stenocionops polyacanthus* Moreira, 1903

Teleophrys Stimpson, 1860
= *Teleophrys* Stimpson, 1860 (type species *Teleophrys cristulipes* Stimpson, 1860, by monotypy; gender masculine)
Teleophrys cristulipes Stimpson, 1860
= *Teleophrys diana* Boone, 1927
Teleophrys ornatus Rathbun, 1901
Teleophrys pococki Rathbun, 1892
Teleophrys tumidus (Cano, 1889) [*Mitraculus*]

Thoe Bell, 1835
= *Thoe* Bell, 1835 (type species *Thoe erosa* Bell, 1835, by monotypy; gender feminine)
= *Platypes* Lockington, 1877 (type species *Platypes edentata* Lockington, 1877, by monotypy; gender feminine)
Thoe erosa Bell, 1835
Thoe panamensis Nobili, 1901
Thoe puella Stimpson, 1860
= *Pisa latipes* Desbonne, in Desbonne & Schramm, 1867
Thoe sulcata Stimpson, 1860
= *Platypes edentata* Lockington, 1877

Tiarinia Dana, 1851
= *Tiarinia* Dana, 1851 (type species *Pisa cornigera* Latreille, 1825, subsequent designation by Miers, 1879a; gender feminine)
Tiarinia alidae Griffin & Tranter, 1986
Tiarinia angusta Dana, 1851
= *Tiarinia spinosirostris* Haswell, 1882
Tiarinia cornigera (Latreille, 1825) [*Pisa*]

= *Tiarinia mammillata* Haswell, 1880
= *Pisa* (*Menaethius*) *tuberculata* De Haan, 1839
Tiarinia dana Griffin & Tranter, 1986
Tiarinia depressa Stimpson, 1857
Tiarinia garthi Griffin & Tranter, 1986
Tiarinia gracilis Dana, 1852
Tiarinia laevis A. Milne-Edwards, 1873
Tiarinia macrospinosa Buitendijk, 1939
Tiarinia mooloolah Griffin & Tranter, 1986
Tiarinia spinigera Stimpson, 1857
Tiarinia takedai Griffin & Tranter, 1986
Tiarinia tiarata (Adams & White, 1848) [*Pericera*]
?*Tiarinia verrucosa* Heller, 1865

Incertae sedis

Paramicippa subclivosa White, 1847 (nomen nudum)
Pericera setigera Adams & White, 1848
Mithrax dicotomus Desmarest, 1858 (nomen nudum)

Subfamily Planoterginae Števčić, 1991

Planoterginae Števčić, 1991

Hemus A. Milne-Edwards, 1875
= *Hemus* A. Milne-Edwards, 1875 (type species *Hemus cristulipes* A. Milne-Edwards, 1875, by monotypy; gender masculine)
Hemus cristulipes A. Milne-Edwards, 1875
Hemus analogus Rathbun, 1898
Hemus finneganae Garth, 1958

Planotergum Balss, 1935
= *Planotergum* Balss, 1935 (type species *Planotergum mirabile* Balss, 1935, by monotypy; gender neuter)
= *Anomalopisa* Johnson, 1965 (type species *Anomalopisa incongruens* Johnson, 1965, by original designation; gender feminine)
Planotergum mirabile Balss, 1935
= *Anomalopisa incongruens* Johnson, 1965

Notes

{1} There had been a period of time when there was some confusion over the correct spelling of this genus – *Maia* Lamarck, 1801, or *Maja* Lamarck, 1801. Miers (1879a: 655) had selected *Cancer squinado* Herbst, 1788, as the type species; but the ICZN eventually had to make a ruling on the correct spelling as well as fixing the type species as *Cancer squinado* Herbst, 1788 (ICZN, 1958, Opinion 511). In fact, Desmarest (1858: 14) had already selected *Cancer squinado* Herbst, 1788, as the type species of *Maja* but the ICZN ruling over-rides any other.

{2} Miers (1879a) stated that *Naxia serpulifera* is the type species of "*Naxia* M-Edw." but the genus was actually established earlier by Latreille (1828) who listed only one species, *Pisa aurita* Latreille, 1828. *Pisa serpulifera* Guérin, 1829, which was described a year later, therefore cannot be the type species. *Pisa serpulifera* Guérin, 1829, was designated the type species of *Paranaxia* Rathbun, 1924, by the original designation.

{3} The nomenclatural history of *Halimus* is confused. Although Rathbun (1897: 157–158) provided a discussion of the genus and argued that it was a junior synonym of *Hyastenus* White, 1847, the problem is not so straightforward. A detailed account of its history is necessary to understand why it is now regarded as a junior synonym of *Naxia* Latreille, 1825. The name *Halimus* was first used as "*Helimus*" in a footnote by Desmarest (1823) but it is a nomen nudum as there was no accompanying description, indication or information on species included. The name was used again by Latreille (1825a) and Berthold (1827) as "Halime" and "*Helimus*", respectively. As has been discussed in the introduction, Latreille's (1825a) paper poses a nomenclatural problem in that all the names inside are used in the French vernacular (often indicated by the French accenting), and are thus not available under the Code. However, Berthold (1827) while providing essentially a translation of Latreille (1825a), treats the names rather differently, using them as de facto scientific names. Latreille (1825a: 272) in a footnote on his "Halime", commented that "Formé sur deux espèces du Muséum d'Histoire naturelle, et dont une très-voisine du *cancer superciliosus* de Linné. Herbst, *Krabb*., tab. 14, fig. 89". As noted, Latreille's (1825a) names are not available. In his German translation of Latreille (1825a), Berthold (1827: 258), in a footnote under the name "*Helimus*", wrote "Nach zwei Arten, welche sich im Pariser naturhistorischen Cabinet befinden, und von denem eine dem Cancer superciliosus, Lin. (Herbst, Tab. 14, Fig. 89) sehr nahe steht, gebildet". Both Latreille's (1825a) and Berthold's (1827) comments may be translated as follows: "Established after two species which are in the Cabinet of natural History in Paris, and on which one is very close to *Cancer superciliosus*, Linnaeus (Herbst, Tab. 14, Fig. 89)". It is, however, clear that both names are also nomina nuda as there were no accompanying descriptions and no included species were indicated for "Halime" (viz. Latreille, 1825a) or "*Helimus*" (viz. Berthold, 1827). Latreille (1825a: 272) and Berthold (1827: 258) each provided a diagnosis for several groups or genera (*Parthenope*, *Eurynome*, *Mithrax*, *Hymenosoma*, *Pisa*, *Stenocionops*, *Micippa*, *Maja*, *Stenop*s, *Hyas* and *Helimus*, for Berthold, 1827), but as it is not specific for one genus, it cannot be regarded as a description or even indication of the genus in question. Both authors also mention *Cancer superciliosus* Linnaeus, 1767, in their discussion of this genus, but do so only to suggest that the species included in the genus are close to *Cancer superciliosus* but do not state that it is a member. In his Encyclopédie Méthodique, Latreille (1828: 700) uses the latinised name *Halimus* and writes essentially the same thing as earlier: "… this genus is established for two species in the collection of the Jardin du Roi [= Paris Museum], and of which one seems to be very close to *Cancer superciliosus* of Linné .." (translated from the French). The name *Halimus* Latreille, 1828, is thus a nomen nudum as well, as he neither mentions nor describes the two species he includes, and a third named species (*Cancer superciliosus*) is not definitely placed in the genus. Later, Latreille (1829: 60) writes nine lines to define *Halimus*, and there is a footnote on the same page which is similar to what has been said earlier, that is that the genus contains two species, of which one seems very close to *Cancer superciliosus*. Article 12.1 of the Code states that "to be available, every new name published

before 1931 must satisfy the provisions of Article 11 and must be accompanied by a description or a definition of the taxon that it denotes, or by an indication" with regards to indication, Article 12.2.5 adds that "in the case of a new genus-group name, the use of one or more available specific names in combination with it, or clearly referred to it by bibliographic reference, provided that the specific name or names can be unambiguously assigned to a nominal species group taxon or taxa". In the case of the above names - *Helimus* Desmarest, 1823, "Halime" Latreille, 1825a, *Helimus* Berthold, 1827, and *Halimus* Latreille, 1828, they are not accompanied by a description, indication or clear inclusion of a valid species. Latreille's (1825a) name is not Latin and as such not available. In any case, while Latreille (1825a), Berthold (1827) and Latreille (1828) mention *Cancer superciliosus* Linnaeus, 1767, they do not explicitly say it is a member of the genus. All four names are therefore nomina nuda. Latreille (1829) was therefore the first author to validate *Halimus* when he effectively provided a diagnosis of the genus, even though no included species were listed.

Interestingly, Griffith & Pidgeon (1833: 168) recognised a genus "*Kalimus*" with only the comments "Two species, one very near the *Cancer superciliosus* of Linnaeus", which is almost certainly copied from earlier texts. As there was no description, the name "*Kalimus*" is also a nomen nudum.

Both Rathbun (1897) and Calman (1913) note that Guérin-Méneville on his pl. 9, fig. 2, had provided a labelled figure of "*Halimus aries* Latreille" (the only member of the genus illustrated or mentioned) and regarded Guérin-Méneville as the first author after Latreille (1829) to identify a described species in *Halimus* Latreille, 1829. Neither provided dates although other authors have identified possible dates as 1829 or 1834. They are incorrect. Guérin-Méneville's "Iconographie" was published over a period of 15 years (1829–1844), and the date for the Crustacea volume is 1844, with 48 pages and 35 plates (see Cowan, 1971). As such, Guérin-Méneville's formal recognition of "*Halimus aries* Latreille" was actually in 1844. This means that there are at least two earlier reports by H. Milne Edwards that list "*Halimus aries* Latreille" in 1834 and 1838. In listing "*Halimus* Latreille", H. Milne Edwards (1834: 241) included two species, "*Halimus aries* Latreille" and "*Halimus auritus* (Latreille)" but did not indicate a type species. He placed Latreille's name in brackets for *H. auritus*, suggesting a generic transfer, and in a footnote on the same page, he commented that his *Halimus auritus* was the same as *Pisa aurita* Latreille, 1825 (from his Encyclopédie Méthodique, see later). Significantly, he did not place Latreille's name in brackets for *H. aries* or comment anywhere it was the same species as *Pisa aries* Latreille, 1825, but instead noted in a footnote that it was the same as "*Halimus aries* Latr. in Guérin-Méneville". Although H. Milne Edwards (1834) cites Guérin-Méneville's work which was actually published later in 1844, he probably had an unpublished draft copy. Subsequently, H. Milne Edwards (1838: pl. 28) listed and figured two species as belonging to *Halimus*, "*H. aries*. Latr." (partially figured) and "*Halimus auritus*. Milne Edwards. *Pisa aurita*. Latr." (which he figured in full in colour). Henri Milne Edwards (1834) was therefore the first subsequent author to identify described species in *Halimus* Latreille, 1829. According to Article 67.2.2 of the Code which states that "if a nominal genus or subgenus was established before 1931 … without nominal species [Art. 12], the nominal species that were first subsequently and expressly included in it are deemed to be the only originally included nominal species", H. Milne Edwards's (1834) action means that either "*Halimus aries*. Latr." or *Halimus auritus* (Latreille, 1825) can be the type species. Because H. Milne Edwards mentioned both species, and Guérin-Méneville (1844) just figured *Halimus aries*, and none of them stated which was the type species, the first person to validly choose a type species was actually Rathbun (1897) who selected *Halimus aries*. Herein lays a new problem. Whose species is H. Milne Edwards' (1834, 1838) and Guérin-Méneville's (1844) "*Halimus aries*"? Is the "*Halimus aries* Latreille" in H. Milne Edwards (1834, 1838) and Guérin-Méneville (1844) the same taxon as the species Latreille himself validly named in 1825 as *Pisa aries*?

From her discussion, it is apparent that Rathbun (1897) assumed that Guérin-Méneville's (1844) '*Halimus aries*?' (and that of H. Milne Edwards, 1834, 1838) is the same species as *Pisa aries* Latreille, 1825. After all, H. Milne Edwards and Guérin-Méneville had cited Latreille as the author of the species. However, as mentioned earlier, H. Milne Edwards (1834: 241) makes it obvious that he equates *Halimus auritus* with the *Pisa aurita* of Latreille (1825a), but regarded *Halimus aries* as a separate taxon and not the *Pisa aries* of Latreille (1825a). Alphonse Milne-Edwards (1872) argued that *Pisa aries* Latreille, 1825, is a member of *Hyastenus* White, 1847, and this was apparently followed by all subsequent workers. However, the specimen illustrated in H. Milne Edwards (1838: pl. 28) and Guérin-Méneville (1844: pl. 9 fig. 2) does not belong to *Hyastenus* as defined at present, but is a species of *Naxia* Latreille, 1825. Henri Milne Edwards (1838) himself was clear on this when he affiliated *Halimus* with *Naxia*. The available evidence thus strongly suggests that *Pisa aries* Latreille, 1825, is not the same species as *Halimus aries* H. Milne Edwards, 1834. Although H. Milne Edwards and Guérin-Méneville credit the species to Latreille, H. Milne Edwards (1834) was the first to validate the name "*Halimus aries*" and should therefore be regarded the author of this species. Calman (1913: 312–314) was the first to realize the confusion between the two species of "*aries*" and to challenge Rathbun's (1897) assumption that both taxa were the same.

Subsequent majid workers have generally followed Calman's arguments and placed *Halimus* Latreille, 1825, in the synonymy of *Naxia* Latreille, 1825 (see Griffin, 1966; Griffin & Tranter, 1986).

An additional note is needed. As has been discussed elsewhere, Latreille's Encyclopédie Méthodique was published in two parts, one in 1825, and another in 1828 (see Evenhuis, 2003: 36, 48). *Naxia* was first used on page 140, and as such it is in part 1, i.e. it was published in

1825. The names *Pisa aurita* Latreille and *Pisa aries* Latreille were also used on page 140, and as such their dates should also be 1825. Latreille's use of *Halimus*, however, is 1828, as the name first appears on page 700, in part 2 of the Encyclopédie Méthodique.

Summarising this confused history, we here follow Calman (1913) in regarding *Halimus aries* H. Milne Edwards, 1834, as the type species (through subsequent designation by Rathbun, 1897) of *Halimus* Latreille, 1829. This would make *Halimus* Latreille, 1829, a junior subjective synonym of *Naxia* Latreille, 1825, whose type species is *Pisa aurita* Latreille, 1825. With regards to *Cancer superciliosus* Linnaeus, 1767, it was referred to *Criocarcinus* H. Milne Edwards, 1834, and is the type of that genus by monotypy.

{4} In naming *Paramithrax*, H. Milne Edwards (1834) did not designate a type species. E. Desmarest (1858: 14) subsequently nominated *Pisa barbicornis* Latreille, 1825, as the type species. Miers (1879a) selected *Paramithrax peronii* H. Milne Edwards, 1834, as the type species, but his action is preceded by E. Desmarest (1858) and therefore invalid. This is fortunate as Griffin (1963) had established a new genus, *Notomithrax* Griffin, 1963, with *Paramithrax peronii* H. Milne Edwards, 1834, as the type species. As a result, both generic names can still be used.

{5} Ng et al. (2001) highlighted the fact that *Prismatopus* Ward, 1933, is a senior synonym of *Thacanophrys* Griffin & Tranter, 1986. Griffin & Tranter (1986) established *Thacanophrys* for many species previously placed in *Chlorinoides* Haswell, 1880, or *Acanthophrys* A. Milne-Edwards, 1865, and designated *Chorinus aculeatus* H. Milne Edwards, 1834, as its type species. Since *Chorinus aculeatus* H. Milne Edwards, 1834, and *Prismatopus albanyensis* Ward, 1933 (type species of *Prismatopus* Ward, 1933), are regarded as congeneric, *Prismatopus* Ward, 1933, has priority over *Thacanophrys* Griffin & Tranter, 1986.

{6} *Maja rosselii* Audouin, 1826, was described from the Red Sea, and the simple figure provided suggests it is a species of *Pseudomicippe*. It is very close to *P. nodosa* and may be conspecific. The types of *Maja rosselii*, however, are no longer extant and the figures are insufficient to make a clear decision on its status.

{7} Marion de Procé (1822) described the spider crab *Inachus inflexus* from Manila in the Philippines. On the basis of his description, *Inachus inflexus* fits best what is today known as *Micippa platipes* Rüppell, 1830, a relatively common species in the Indo-West Pacific, and we synonymise them. With regards to *Inachus bifidus* Marion de Procé, 1822, also from Manila, his description best fits the common *Schizophrys aspera* (H. Milne Edwards, 1834) and we also synonymise these. The types of both species are no longer extant (see discussion for *Portunus tropicalis* Marion de Procé, 1822).

{8} Most authors cite Miers (1879a) selection of *Micippa platipes* Rüppell, 1830, as the first designation of a type species for *Paramicippa* H. Milne Edwards, 1834. This was actually done earlier by E. Desmarest (1858: 14) with the same species selection. *Paramicippa* H. Milne Edwards, 1834, is currently regarded as a junior subjective synonym of *Micippa* Leach, 1817.

{9} The type species of *Mithrax* Desmarest, 1823, was selected as *Cancer aculeatus* Herbst, 1790, by H. Milne Edwards (1838: pl. 27). E. Desmarest (1858: 14) lists "*Mithrax dicotomus* Latr." as the type, but to our knowledge this name has never been published, and so must be regarded as a nomen nudum.

{10} The status of these three species is difficult to resolve. The lectotype of *Cancer aculeatus* Herbst, 1790, is probably conspecific with *Mithrax pilosus* Rathbun, 1892, and should have priority. *Cancer aculeatus* Fabricius, 1793, is also probably a junior synonym, but its type is no longer extant. The lectotype of *Cancer aculeatus* Herbst, 1790, is here regarded as the neotype of *Cancer aculeatus* Fabricius, 1793, making both names objective synonyms.

{11} Desmarest (1823: 266), in a footnote, validated the name *Stenocionops* first used in an unpublished manuscript by Leach that had been made available to him. He included *"maia taurus*" in the genus and provided a diagnosis. He also mentioned that "M. Latreille lui rapporte le *cancer corundo* [sic. = *cornuto*] d'Herbst." Therefore it must be considered that he included two species within *Stenocionops*. This necessitates the present selection of a type species for the genus, despite the fact that the two species mentioned are both junior subjective synonyms of *Stenocionops furcata* (Olivier, 1791). Later, Latreille (1829, footnote p. 60) commented that Desmarest had made a mistake in selecting *Maia taurus* as the type and designated *Cancer cervicornis* Herbst, 1803, as the type of *Stenocionops* instead. *Cancer cervicornis* Herbst, 1803, was not among the species identified by Desmarest (1823) as belonging to *Stenocionops* and is currently the type species of *Ophthalmias* Rathbun, 1897. Latreille's (1829) action thus has no validity.

Fig. 90. *Maja kominatoensis*, Philippines (photo: T. Y. Chan)

FAMILY OREGONIIDAE GARTH, 1958

Oregoniinae Garth, 1958
Macroregoniini Števčić, 2005

Chionoecetes Krøyer, 1838
= *Chionoecetes* Krøyer, 1838 (type species *Cancer opilio* Fabricius, 1788, by monotypy; gender masculine)
= *Peloplastus* Gerstaecker, 1856 (type species *Peloplastus pallasi* Gerstaecker, 1856, by monotypy; gender masculine)
Chionoecetes angulatus Rathbun, 1893
Chionoecetes bairdi Rathbun, 1893
Chionoecetes elongatus Rathbun, 1925
Chionoecetes japonicus Rathbun, 1932
= *Chionoecetes angulatus bathyalis* Derjugin & Kobjakowa, 1935
Chionoecetes opilio (Fabricius, 1788) [*Cancer*]
= *Peloplastus pallasi* Gerstaecker, 1856
= *Chionoecetes behringianus* Stimpson, 1857
= *Chionoecetes chilensis* Streets, 1870
Chionoecetes pacificus Sakai, 1978
Chionoecetes tanneri Rathbun, 1893

Hyas Leach, 1814
= *Hyas* Leach, 1814 (type species *Cancer araneus* Linnaeus, 1758, by monotypy; gender masculine)
Hyas alutaceus Brandt, 1851
= *Hyas latifrons* Stimpson, 1857
Hyas araneus (Linnaeus, 1758) {1}
= *Cancer bufo* Herbst, 1790
Hyas coarctatus Leach, 1815
= *Lissa fissirostra* Say, 1817
= *Hyas serratus* Hailstone, 1835
Hyas lyratus Dana, 1851
Hyas ursinus Rathbun, 1924

Macroregonia Sakai, 1978
= *Macroregonia* Sakai, 1978 (type species *Macroregonia macrochira* Sakai, 1978, by original designation; gender feminine)
Macroregonia macrochira Sakai, 1978

Oregonia Dana, 1851
= *Oregonia* Dana, 1851 (type species *Oregonia gracilis* Dana, 1851, subsequent designation by Miers, 1879a; gender feminine)
Oregonia bifurca Rathbun, 1902
Oregonia gracilis Dana, 1851
= *Oregonia hirta* Dana, 1851
= *Oregonia longimana* Spence Bate, 1866
= *Oregonia mutsuensis* Yokoya, 1933

Incertae sedis

Hyas bufonius White, 1847 (nomen nudum)

Notes

{1} *Hyas araneus* was recently reported from the Antarctic, a dramatic range increase for a species otherwise known only from the North Atlantic and Arctic Sea (see Tavares & Melo, 2004).


Fig. 91. *Hyas coarctatus*, North Sea (photo: H. Hillewaert)


Fig. 92. Huge model of *Chionoecetes* adorning a Japanese sushi house in central Tokyo, Japan (photo: B. Richer de Forges)

SUPERFAMILY ORITHYIOIDEA DANA, 1852

FAMILY ORITHYIIDAE DANA, 1852

Orithyiinae Dana, 1852

Remarks. – The recognition of a separate superfamily for the Orithyiidae which contains just one genus and one species is deemed necessary as it is a singularly unusual taxon (see also Števčić, 2005). It appears to have affinities with the Calappidae and Matutidae (Calappoidea), but nevertheless possesses so many other peculiar features, its relationships are by no means clear and they are probably not closely related (see Bellwood, 1996). Female specimens are also unusual in having a relatively narrow and short abdomen which expose the vulvae (see Guinot, 1979), a condition otherwise seen in the Cheiragonidae (see Ng, 1998).

Orithyia sinica has a very unusual distribution – it occurs along the continental waters of East Asia from Hong Kong up to South Korea, but is absent from the adjacent island systems of Taiwan, Ryukyus and Japan to the east (see Sakai, 1976; Miyake, 1983; Ng et al., 2001). This is despite the fact that the landmasses are very close, it is a shallow water species and the larvae are completely planktonic (see Hong, 1976). The absence of this species is not an artifact of sampling as it is a well known, easily recognised animal living in shallow waters and could not have been missed. The fact is that there are no known records of *Orithyia sinica* from these island systems in the 200 years of modern research, or any old documents that suggests its presence there. That it is well known and quite common on the continental waters just a few kilometers to the west is noteworthy.

Orithyia sinica is fished wherever it occurs and can command good prices in the local markets, although it is rarely harvested in large numbers. In mainland China, it is referred to as the "tiger face crab" while in South Korea, it is known as the "tiger crab", alluding to its striped legs and large eyes. Fishermen indicate that it prefers rocky areas and are usually caught with tangle nets. In the aquarium, they dig themselves partially into sand with their spatuliform feet but never deep enough to completely cover their bodies. They prefer to press themselves against rocks or under hard debri even when half-buried. They cannot swim like matutids or portunids, and the legs are clearly an adaptation for digging (P. K. L. Ng, unpublished data). Little else is known about its behaviour or biology.

Orithyia Fabricius, 1798
  = *Orithuja* Weber, 1795 (type species *Cancer mammillaris* Fabricius, 1793, by monotypy; gender feminine) {1}
  = *Orithyia* Fabricius, 1798 (type species *C mammillaris* Fabricius, 1793, by monotypy; gender feminine)
Orithyia sinica (Linnaeus, 1771) [*Cancer*]
  = *Cancer bimaculatus* Herbst, 1790
  = *Cancer mammillaris* Fabricius, 1793

Notes

{1} In using the name *Orithuja*, Weber (1795: 93) made it clear that he referred to *Cancer mammillaris* of Fabricius (1793: 465). Although there is no description, it is a valid indication under the Code, and the name *Orithuja* Weber, 1795, is available. Fabricius (1798: 363) subsequently used the genus name as new but spelt it as *Orithyia*. Both Weber (1795) and Fabricius (1798) have published similar generic names, taking them from the same manuscript notes of the naturalist Daldorff, and that explains the different spellings used by these two authors.

Etymologically, the genus is named for a daughter of Erechtheus, king of Athens, who was abducted by the Greek God of the northwind, Boreas, to whom she bore two daughters and three sons. Her name is variously written as Oreithuia, Orithyea, Orithyia, Orithye, Oreithyea and Oreithyia.

Not surprisingly, Fabricius, who was better known than Weber, was generally considered the author of the taxon in question, i.e. most workers used the name *Orithyia* of Fabricius. The spelling of the genus was often erroneous, however, the spelling *Orithuja* from Weber (1795) has not been used ever since. Only Latreille (1803: 150) wrote "*orithuia*" in the list of the names given by Daldorf (*sic*; see discussion of Weber versus Fabricius in Introduction), but (p. 155, 156) he indicated "orithyie" and *Orythyia.* Elsewhere and later, Latreille (1803: 129, 130; 1806: 42) changed the spelling to *Orithyia*, without mentioning any author name. Latreille (1811) also listed "*Orithyia*" in his later works (see Evenhuis, 2003: 36, Appendix 3, for dates of this tome), and was even incorrectly credited with the authorship of the genus, as comments Evenhuis (2003: 16, footnote): "Subsequent entries in this volume [vol. 8 of Olivier] credited to Latreille include the following genera: '*Orithyia*' (p. 537), …".

As discussed earlier, the question of authorship, Weber (1795) or Fabricius (1798), has been adequately resolved for almost all brachyuran cases, thanks to several nomenclatural acts submitted by L. B. Holthuis to the ICZN. The only unresolved case remains that of *Orithuja* Weber, 1795 versus *Orithyia* Fabricius, 1798. As discussed, the ICZN had considered the question of Weber's names, and one of the examples commented on was *Orithyia* (spelled as *Orithuja*), and this is worth quoting: "For instance, on p. 93, Weber gives the following: ORITHUJA mammillaris (Cancer F.). This clearly means that *mammillaris* is the *Cancer mammillaris* as given by Fabricius in his Entomologia systematica [see p. 465, no. 91], and as *Orithuja* is cited with only one type species, *Orithuja* is a monotypic genus, hence it is given with a definite "citation or designation of a type species", therefore it is published in accordance with the provisions of Art. 25 and must be considered. Similar cases are: *Symethis* (p. 92), *Euryala* (p. 94)." (ICZN, 1938, Opinion 17: 40–41). Clearly, the ICZN regarded *Orithuja* as a valid name, which it is. In fact, van Cleave (1943: 236), in his review of the opinions rendered by the Commission, listed *Orithuja* among the names for which the ICZN had made

a ruling. This is not the case, with Opinion 17 dealing primarily with the issue of whether Weber's names are valid, but accepting *Orithuja* Weber, 1795, as an available name. Consequently, and rightly so, neither names, *Orithuja* Weber, 1795, or *Orithyia* Fabricius, 1798, appear in the ICZN Official Lists of Names (ICZN, 1987).

In Weber (1795) and Fabricius (1798), the only included species, thus type species by monotypy, is the same, i.e. *Cancer mammillaris* Fabricius, 1793 (p. 465) (not Fabricius, 1798 (p. 363) as generally indicated by most carcinologists). Since *Cancer sinicus* Linnaeus, 1771, is only a subjective senior synonym of *O. mammillari*s, the type species remains as *Cancer mammillaris* Fabricius, 1793. A note on the spelling of the name of Fabricius' species is worthwhile. Latreille's (1810: 422) spelling of the species name, "*Orithyia memmillaris*", is clearly a mistake.

To revert to the name "*Orithuja*", however, will cause significant confusion, especially since the genus name is also the basis of the familial name Orithyiidae Dana, 1852. While it would have been convenient to invoke Articles 23.9.1 and 23.9.2 of the Code in having *Orithuja* Weber, 1795, suppressed in favour of the better known name *Orithyia* Fabricius, 1798, we find that this is not possible. Article 23.9.1.2. (i.e. "the junior synonym or homonym has been used for a particular taxon as its presumed valid name in at least 25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years") is easy to fulfil, and we append a list of 31 publications that have used the spelling *Orithyia* to support this case. A more detailed search of Chinese and Korean literature will certainly uncover even more references as the species is well known in East Asia and commercially harvested for food. The use of the name "*Orithuja*" by van Cleave (1943: 236), however, makes us unable to fulfil Article 23.9.1.1 which states that "the senior synonym or homonym has not been used as a valid name after 1899". The only course of action is therefore to ask the Commission to use its Plenary Powers to suppress *Orithuja* Weber, 1795. This is now being done.

Supporting documents: Balss, 1957; Bellwood, 1996; Cai et al., 1994; Chen, 1993; Chen & Sun, 2002; Chen et al., 2002; Cheng et al., 1997; Dai & Yang, 1991; Dai et al. 1986; Guinot, 1977a, 1978, 1979; Guinot & Bouchard, 1998; Holthuis & Sakai, 1975; Hong, 1976; Huang, 1989; Kim, 1962, 1970, 1973, 1983, 1988; Kim & Chung, 1990; Kim & Kim, 1982; Koo et al., 2004, 2005; Muraoka, 1998; Ng, 1998; Ng et al., 2001; Rice, 1980; Sakai, T., 1976; Sakai, K., 1999; Schweitzer & Feldmann, 2000a; Serène, 1965, 1968; Shen & Dai, 1964; Števčić, 1983, 2005; Takeda, 1982; Xu, 2002; Yang & Chang, 1996; Ye, 2004; Yuan & Lu, 2001.

Fig. 93. *Orithyia sinica*, Xiamen, China (photo: P. Ng)

Fig. 94. *Orithyia sinica*, face, Xiamen, China (photo: P. Ng)

Fig. 95. *Orithyia sinica*, Xiamen, China, female, showing exposed vulvae (photo: P. Ng)

SUPERFAMILY PALICOIDEA BOUVIER, 1898

Remarks. – This group is traditionally regarded as one family with two subfamilies, Palicinae Bouvier, 1898, and Crossotonotinae Moosa & Serène, 1981 (see Castro, 2000), but an ongoing study of the sternum, abdomen, gonopodal and penial structures of this group by one of the authors (D. Guinot), with M. Tavares and P. Castro (in prep.), shows that the two should be recognised as full families. Certainly, there is a sharp gap between the two groups morphologically, suggesting deep rooted lineages.

FAMILY CROSSOTONOTIDAE MOOSA & SERÈNE, 1981

Crossotonotinae Moosa & Serène, 1981

Crossotonotus A. Milne-Edwards, 1873
= *Crossotonotus* A. Milne-Edwards, 1873 (type species *Crossotonotus compressipes* A. Milne-Edwards, 1873, by monotypy; gender masculine)
= *Manella* Rathbun, 1906 (type species *Pleurophricus spinipes* De Man, 1888, by monotypy; gender feminine)
Crossotonotus ceramensis (Moosa & Serène, 1981) [*Manella*]
Crossotonotus compressipes A. Milne-Edwards, 1873
= *Crossotonotus taketomiensis* Sakai, 1974
Crossotonotus lophocheir Castro, 2000
Crossotonotus spinipes (De Man, 1888) [*Pleurophricus*]
= *Manella gardineri* Rathbun, 1911
= *Manella brevimana* Ward, 1933

Pleurophricus A. Milne-Edwards, 1873
= *Pleurophricus* A. Milne-Edwards, 1873 (type species *Pleurophricus cristatipes* A. Milne-Edwards, 1873 by monotypy; gender masculine)
Pleurophricus cristatipes A. Milne-Edwards, 1873
Pleurophricus longirostris (Moosa & Serène, 1981) [*Manella*]

FAMILY PALICIDAE BOUVIER, 1898

Cymopoliidae Faxon, 1895
Palicés Bouvier, 1897 (not in Latin, unavailable name)
Palici Bouvier, 1898a
Palicae Bouvier, 1898b
Palicidae Rathbun, 1898 [Opinion 712]

Remarks. – The correct authorship for this family has been confusing. The name Palicidae Rathbin, 1898, has been placed in the Official List of Valid Names, but in his revision of the family, Castro (2000: 444) cited comments by L. B. Holthuis which demonstrated that there was a senior name. Holthuis noted that Bouvier's (1898a) English translation of his 1897 paper had an additional footnote which used the name of a tribe, "Palici", for the first time. This paper was published in January 1898 and validated the name Palici. In another publication, Bouvier (1898b) formally used name Palicae, which is also valid, but as this paper was not dated, following the Code, the accepted date had to be 31st December 1898. As the name Palicidae Rathbun, 1898, was published in June 1898, it is junior to Palici Bouvier, 1898a. We follow Castro (2000) in recognising Bouvier (1898a) as the author of the family.

Exopalicus Castro, 2000
= *Exopalicus* Castro, 2000 (type species *Palicus maculatus* Edmondson, 1930, by monotypy, gender masculine)
Exopalicus maculatus (Edmondson, 1930) [*Palicus*]
= *Palicus tuberculatus* Edmondson, 1925 (pre-occupied name)
= *Cymopolia medipacifica* Edmondson, 1962

Micropalicus Castro, 2000
= *Micropalicus* Castro, 2000 (type species *Palicus vietnamensis* Zarenkov, 1968, by original designation; gender masculine)
Miropalicus vietnamensis (Zarenkov, 1968) [*Palicus*]

Neopalicus Moosa & Serène, 1981
= *Neopalicus* Moosa & Serène, 1981 (type species *Cymopolia jukesii* White, 1847, by original designation; gender masculine)
Neopalicus contractus (Rathbun, 1902) [*Palicus*]
= *Cymopolia robusta* Ward, 1942
Neopalicus jukesii (White, 1847) [*Cymopolia*]
= *Cymopolia carinipes* Paul'son, 1875

Palicoides Moosa & Serène, 1981
= *Palicoides* Moosa & Serène, 1981 (type species *Cymopolia whitei* Miers, 1884, by original designation; gender masculine)
Palicoides longimanus (Miyake, 1936) [*Cymopolia*]
Palicoides whitei (Miers, 1884) [*Cymopolia*]
= *Palicoides ternatensis* Moosa & Serène, 1981

Paliculus Castro, 2000
= *Paliculus* Castro, 2000 (type species *Palicus kyusyuensis* Yokoya, 1933, by original designation; gender masculine)
Paliculus foliatus Castro, 2000
Paliculus kyusyuensis (Yokoya, 1933) [*Palicus*]
= *Palicus hatusimaensis* Sakai, 1963

Palicus Philippi, 1838
= *Cymopolia* Roux, 1830 (type species *Cymopolia caronii* Roux, 1828, by monotypy; name pre-occupied by *Cymopolia* Lamouroux, 1816 [Algae], Opinion 712; gender feminine) [Opinion 712]
= *Palicus* Philippi, 1838 (type species *Palicus granulatus* Philippi, 1838, by monotypy; gender masculine)
Palicus acutifrons (A. Milne-Edwards, 1880) [*Cymopolia*]
Palicus affinis (A. Milne-Edwards & Bouvier, 1880) [*Cymopolia*]
= *Cymopolia agassizi* A. Milne-Edwards & Bouvier, 1902
Palicus alternatus Rathbun, 1897
= *Palicus blakei* A. Milne-Edwards & Bouvier, 1889
Palicus angustus Rathbun, 1897
Palicus bahamensis Rathbun, 1897
Palicus caronii (Roux, 1828) [*Cymopolia*]
= *Cymopolia rissoana* De Haan, 1844
= *Palicus granulatus* Philippi, 1838
Palicus cristatipes (A. Milne-Edwards, 1880) [*Cymopolia*]
Palicus cortezi (Crane, 1937) [*Cymopolia*]
Palicus cursor (A. Milne-Edwards, 1880) [*Cymopolia*]
= *Cymopolia dilatata* A. Milne-Edwards, 1880
Palicus dentatus (A. Milne-Edwards, 1880) [*Cymopolia*]
Palicus depressus Rathbun, 1897
Palicus faxoni Rathbun, 1897
Palicus fragilis (Rathbun, 1894) [*Cymopolia*]
Palicus gracilipes (A. Milne-Edwards, 1880) [*Cymopolia*]
Palicus gracilis (Smith, 1883) [*Cymopolia*]
Palicus isthmia Rathbun, 1897
Palicus lucasii Rathbun, 1898
Palicus obesus (A. Milne-Edwards, 1880) [*Cymopolia*]
Palicus rathbuni A. Milne-Edwards & Bouvier, 1899
Palicus sicus (A. Milne-Edwards, 1880) [*Cymopolia*]
Palicus tuberculata (Faxon, 1893) [*Cymopolia*]
Palicus velerae (Garth, 1939) [*Cymopolia*]
Palicus zonatus (Rathbun, 1894) [*Cymopolia*]

Parapalicus Moosa & Serène, 1981
= *Parapalicus* Moosa & Serène, 1981 (type species *Parapalicus marielae* Moosa & Serène, 1981, by original designation; gender masculine)
Parapalicus ambonensis Moosa & Serène, 1981
Parapalicus armatus Castro, 2000
Parapalicus clinodentatus Castro, 2000
Parapalicus denticulatus Castro, 2000
Parapalicus elaniticus (Holthuis, 1977) [*Palicus*]
Parapalicus inermis Castro, 2000
Parapalicus microphthalmus Castro, 2000
Parapalicus nanshaensis Dai & Xu, 1991
Parapalicus piruensis Moosa & Serène, 1981
Parapalicus trituberculatus (Chen, 1981) [*Palicus*]
= *Parapalicus marielae* Moosa & Serène, 1981
= *Palicus bidentatus* Sakai, 1983
Parapalicus unidentatus (Zarenkov, 1968) [*Palicus*]

Pseudopalicus Moosa & Serène, 1981
= *Pseudopalicus* Moosa & Serène, 1981 (type species *Palicus serripes* Alcock & Anderson, 1895, by original designation; gender masculine)
Pseudopalicus acanthodactylus Castro, 2000
Pseudopalicus amadaibai (Sakai, 1963) [*Palicus*]
Pseudopalicus declivis Castro, 2000
Pseudopalicus glaber Castro, 2000
Pseudopalicus investigatoris (Alcock, 1900) [*Palicus*]
= *Cymopolia fisheri* Rathbun, 1906
= *Cymopolia cyrenae* Ward, 1942
Pseudopalicus macromeles Castro, 2000
Pseudopalicus oahuensis (Rathbun, 1906) [*Palicus*]
Pseudopalicus pictus Castro, 2000
Pseudopalicus serripes (Alcock & Anderson, 1895) [*Palicus*]
Pseudopalicus sexlobatus (Kensley, 1969) [*Palicus*]
Pseudopalicus undulatus Castro, 2000

Rectopalicus Castro, 2000
= *Rectopalicus* Castro, 2000 (type species *Palicus woodmasoni* Alcock, 1900, by original designation; gender masculine)
Rectopalicus amphiceros Castro, 2000
Rectopalicus ampullatus Castro, 2000
Rectopalicus woodmasoni (Alcock, 1900) [*Palicus*]
= *Palicus microfrons* Sakai, 1963


Fig. 96. *Crossotonotus spinipes*, central Philippines (photo: P. Ng)


Fig. 97. *Pseudopalicus oahuensis*, Taiwan (photo: T. Y. Chan)


Fig. 98. *Paliculus kyusyuensis*, central Philippines (photo: P. Ng)


Fig. 99. *Parapalicus trituberculatus*, central Philippines (photo: T. Y. Chan)

SUPERFAMILY PARTHENOPOIDEA MACLEAY, 1838

FAMILY PARTHENOPIDAE MACLEAY, 1838

Parthenopidae MacLeay, 1838
Cryptopodiinae Stimpson, 1871
Lambrinae Neumann, 1878
Mimilambridae Williams, 1979
Daldorfiidae Ng & Rodríguez, 1986 [recte Daldorfidae]
Lambrachaeini Števčić, 1994

Subfamily Daldorfiinae Ng & Rodríguez, 1986

Daldorfiidae Ng & Rodríguez, 1986 [recte Daldorfidae]

Daldorfia Rathbun, 1904
= *Parthenope* Fabricius, 1798 (type species *Cancer horridus* Linnaeus, 1758, subsequent designation by H. Milne Edwards, 1838; name pre-occupied by *Parthenope* Weber, 1795; gender feminine) (see Holthuis, 1962b) [Opinion 696] {1}
= *Daldorfia* Rathbun, 1904 (type species *Cancer horridus* Linnaeus, 1758, by monotypy; gender feminine)
Daldorfia bouvieri (A. Milne-Edwards, 1869) [*Parthenope*]
Daldorfia calconopia S. H. Tan & Ng, 2007
Daldorfia dimorpha S. H. Tan & Ng, 2007
Daldorfia excavata (Baker, 1905) [*Thyrolambrus*]
Daldorfia glasselli (Garth, 1958) [*Thyrolambrus*]
= *Thyrolambrus erosus* Rathbun, 1898
Daldorfia horrida (Linnaeus, 1758) [*Cancer*]
= *Cancer cristata* Shaw & Nodder, 1802
Daldorfia investigatoris (Alcock, 1895) [*Parthenope*]
Daldorfia leprosa (Nobili, 1905) [*Lambrus* (*Thyrolambrus*)]
= *Parthenope acuta* Klunzinger, 1906
= *Parthenope semicircularis* Flipse, 1930
Daldorfia rathbunae (De Man, 1902) [*Thyrolambrus*]
Daldorfia spinosissima (A. Milne-Edwards, 1862) [*Parthenope*]
Daldorfia triangularis Sakai, 1974
Daldorfia trigona (A. Milne-Edwards, 1869) [*Parthenope*]
= *Daldorfia garthi* Glassell, in Garth, 1940

Niobafia S. H. Tan & Ng, 2007
= *Niobafia* S. H. Tan & Ng, 2007 (type species *Lambrus* (*Parthenopoides*) *erosus* Miers, 1879, by original designation; gender feminine)
Niobafia erosa (Miers, 1879) [*Lambrus* (*Parthenopoides*)]

Olenorfia S. H. Tan & Ng, 2007
= *Olenorfia* S. H. Tan & Ng, 2007 (type species *Parthenopoides cariei* Bouvier, 1914, by original designation; gender feminine)
Olenorfia cariei (Bouvier, 1914) [*Parthenopoides*]

Thyrolambrus Rathbun, 1894
= *Thyrolambrus* Rathbun, 1894 (type species *Thyrolambrus astroides* Rathbun, 1894, by monotypy; gender masculine)
= *Parthenope* (*Parthenomerus*) Alcock, 1895 (type species *Parthenope* (*Parthenomerus*) *efflorescens* Alcock, 1895, by monotypy; gender neuter)
Thyrolambrus asteroides Rathbun, 1894
Thyrolambrus efflorescens (Alcock, 1895) [*Parthenope* (*Parthenomerus*)]
Thyrolambrus verrucibrachium Zimmerman & Martin, 1999

Subfamily Parthenopinae MacLeay, 1838

Parthenopidae MacLeay, 1838
Cryptopodiinae Stimpson, 1871
Lambrinae Neumann, 1878
Mimilambridae Williams, 1979
Lambrachaeini Števčić, 1994

Agolambrus S. H. Tan & Ng, 2007 {2}
= *Agolambrus* S. H. Tan & Ng, 2007 (type species *Lambrus agonus* (Stimpson, 1871, by original designation; gender masculine)
Agolambrus agonus (Stimpson, 1871) [*Lambrus*]

Aulacolambrus Paul'son, 1875
= *Aulacolambrus* Paul'son, 1875 (type species *Lambrus pisoides* Adams & White, 1848, by monotypy; gender masculine)
= *Aulacolambrus* A. Milne-Edwards, 1878 (type species *Lambrus hoplonotus* Adams & White, 1849, by present designation; gender masculine)
Aulacolambrus curvispinus (Miers, 1879) [*Lambrus*]
Aulacolambrus diacanthus (De Haan, 1837) [*Parthenope* (*Lambrus*)] {3}
= *Lambrus pisoides* Adams & White, 1848
= *Lambrus sculptus* A. Milne-Edwards, 1872
= *Lambrus* (*Aulacolambrus*) *sibogae* Flipse, 1930
Aulacolambrus dentifrons (Ortmann, 1894) [*Lambrus* (*Aulacolambrus*)]
Aulacolambrus granulosus (Miers, 1879) [*Lambrus*]
= *Lambrus planifrons* Miers, 1879
= *Lambrus* (*Aulacolambrus*) *sulcatus* Flipse, 1930
= *Aulacolambrus brevibrachiatus* (Shen, Dai & Chen, 1982) [*Parthenope* (*Aulacolambrus*)]
Aulacolambrus hoplonotus (Adams & White, 1849) [*Lambrus*]
= *Lambrus* (*Aulacolambrus*) *hoplonotus typicus* Ortmann, 1894
Aulacolambrus hystricosus S. H. Tan & Ng, 2003
Aulacolambrus longioculis (Miers, 1879) [*Lambrus*]
= *Lambrus* (*Aulacolambrus*) *lecanora* Ortmann, 1894
Aulacolambrus whitei (A. Milne-Edwards, 1873) [*Lambrus*]
= *Parthenope* (*Aulacolambrus*) *nanshaensis* Chen & Xu, 1993

Celatopesia Chiong & Ng, 1998
= *Celatopesia* Chiong & Ng, 1998 (type species *Cryptopodia concava* Stimpson, 1871, by original designation; gender feminine)
Celatopesia concava (Stimpson, 1871) [*Cryptopodia*]
Celatopesia hassleri (Rathbun, 1925) [*Cryptopodia*]

Certolambrus S. H. Tan & Ng, 2003
= *Certolambrus* S. H. Tan & Ng, 2003 (type species *Lambrus pugilator* A. Milne-Edwards, 1873, by original designation; gender masculine)
Certolambrus pugilator (A. Milne-Edwards, 1873) [*Lambrus*]
= *Platylambrus ursus* Ward, 1939

Costalambrus S. H. Tan & Ng, 2007
= *Costalambrus* S. H. Tan & Ng, 2007 (type species *Heterocrypta tommasii* Rodrigues da Costa, 1959, by original designation; gender masculine)
Costalambrus tommasii (Rodrigues da Costa, 1959) [*Heterocrypta*]
= *Heterocrypta caledoniana* Garth in Holthuis, 1959 {4}

Cryptopodia H. Milne Edwards, 1834
= *Cryptopodia* H. Milne Edwards, 1834 (type species *Cancer fornicata* Fabricius, 1787, by monotypy; gender feminine)
Cryptopodia angulata H. Milne Edwards & Lucas, 1841
= *Cryptopodia angulata* var. *cippifer* Alcock, 1895
Cryptopodia collifer Flipse, 1930
Cryptopodia contracta Stimpson, 1857
= *Heterocrypta investigatoris* Alcock, 1895
= *Heterocrypta bivallata* Flipse, 1930
Cryptopodia dorsalis White, 1847
Cryptopodia echinosa Chiong & Ng, 1998
Cryptopodia fistulosa Chiong & Ng, 1994
Cryptopodia fornicata (Fabricius, 1787) [*Cancer*]
= *Calappa albicans* Bosc, 1802
= *Cryptopodia pentagona* Flipse, 1930
Cryptopodia laevimana Miers, 1879
Cryptopodia pan Laurie, 1906
= *Cryptopodia sinica* Chen & Xu, 1991
Cryptopodia patula Chiong & Ng, 1998
Cryptopodia queenslandi Rathbun, 1918
Cryptopodia spatulifrons Miers, 1879
Cryptopodia transitans (Ortmann, 1893) [*Heterocrypta*]
= *Cryptopodia angusta* Rathbun, 1916

Derilambrus S. H. Tan & Ng, 2007 {2}
= *Derilambrus* S. H. Tan & Ng, 2007 (type species *Parthenope angulifrons* Latreille, 1825, by original designation; gender masculine)
Derilambrus angulifrons Latreille, 1825
= *Lambrus montgrandis* Roux, 1830
= *Lambrus pumilus* Costa, in Hope, 1851

Distolambrus S. H. Tan & Ng, 2007
= *Distolambrus* S. H. Tan & Ng, 2007 (type species *Heterocrypta maltzani* Miers, 1881, by original designation; gender masculine)
Distolambrus maltzani (Miers, 1881) [*Heterocrypta*] {4}
= *Heterocrypta marionis* A. Milne-Edwards, 1881

Enoplolambrus A. Milne-Edwards, 1878 {5}
= *Enoplolambrus* A. Milne-Edwards, 1878 (type species *Lambrus carenatus* H. Milne Edwards, 1834, by monotypy; gender masculine)
= *Oncodolambrus* De Man, 1906 (type species *Lambrus* (*Oncodolambrus*) *praedator* De Man, 1906, by monotypy; gender masculine)
Enoplolambrus carinatus (Herbst, 1796) [*Cancer*]
Enoplolambrus carenatus (H. Milne Edwards, 1834) [*Lambrus*]
= *Lambrus serratus* var. *mossambicana* Bianconi, 1851
= *Lambrus edwardsii* Gerstaecker, 1856
= *Lambrus latirostris* Miers, 1879
= *Lambrus holdsworthi* Miers, 1879
= *Lambrus spinifer integrifrons* Haswell, 1880
= *Lambrus* (*Platylambrus*) *carinatus* var. *alcocki* Laurie, 1906
= *Platylambrus quemvis* (Stebbing, 1917) [*Platylambrus*]
Enoplolambrus echinatus (Herbst 1790) [*Cancer*]
= *Parthenope giraffa* Weber, 1795 (nomen nudum)
= *Parthenope giraffa* Fabricius, 1798
= *Lambrus tomentosus* White, 1847
= *Lambrus tuberculosus* Stimpson, 1857
= *Lambrus* (*Platylambrus*) *echinatus* var. *granulosus* Flipse, 1930
Enoplolambrus laciniatus (De Haan, 1839) [*Parthenope* (*Lambrus*)]
= *Lambrus laciniatus enoshimanus* Parisi, 1915
= *Lambrus intermedius* Miers, 1879
Enoplolambrus praedator (De Man, 1906) [*Oncodolambrus*]
Enoplolambrus pransor (Herbst, 1796) [*Cancer*] {6}
= *Parthenope regina* Weber, 1795 (nomen nudum)
= *Parthenope regina* Fabricius, 1798
= *Lambrus jourdainii* Brito Capello, 1871
= *Lambrus tumidus* Lanchester, 1900
Enoplolambrus validus (De Haan, 1837) [*Parthenope* (*Lambrus*)]

Furtipodia S. H. Tan & Ng, 2003
= *Furtipodia* S. H. Tan & Ng, 2003 (type species *Furtipodia gemma* S. H. Tan & Ng, 2003, by original designation; gender feminine)
Furtipodia gemma S. H. Tan & Ng, 2003
Furtipodia pterosa (Klunzinger, 1906) [*Heterocrypta*]

Garthambrus Ng, 1996
= *Garthambrus* Ng, 1996 (type species *Parthenope* (*Platylambrus*) *poupini* Garth, 1993, by original designation; gender masculine) [Opinion 712]
Garthambrus allisoni (Garth, 1993) [*Parthenope* (*Platylambrus*)]
Garthambrus cidaris (Garth & Davie, 1995) [*Parthenope* (*Platylambrus*)]
Garthambrus complanatus (Rathbun, 1906) [*Parthenope* (*Platylambrus*)]
Garthambrus epibranchialis (Zarenkov, 1990) [*Heterocrypta*]
Garthambrus lacunosus (Rathbun, 1906) [*Parthenope* (*Platylambrus*)]
Garthambrus mironovi (Zarenkov, 1990) [*Asterolambrus*]
Garthambrus posidon Ng, 1996
Garthambrus poupini (Garth, 1993) [*Parthenope* (*Platylambrus*)]
Garthambrus pteromerus (Ortmann, 1893) [*Lambrus* (*Parthenopoides*)] {7}
Garthambrus stellatus (Rathbun, 1906) [*Parthenope* (*Platylambrus*)]

Heterocrypta Stimpson, 1871
= *Heterocrypta* Stimpson, 1871 (type species *Cryptopodia granulata* Gibbes, 1850, by original designation; gender feminine) [Opinion 712]
Heterocrypta aloysioi Rodrigues da Costa, 1968
Heterocrypta colombiana Garth, 1940
Heterocrypta craneae Garth, 1959
Heterocrypta granulata (Gibbes, 1850) [*Cryptopodia*] [Opinion 712]
= *Cryptopodia granulata* Gibbes, 1849 [nomen nudum]
Heterocrypta lapidea Rathbun, 1901
Heterocrypta macrobrachia Stimpson, 1871

Hypolambrus S. H. Tan & Ng, 2007 {2}
= *Hypolambrus* S. H. Tan & Ng, 2007 (type species *Lambrus hyponcus* Stimpson, 1871, by original designation; gender masculine)
Hypolambrus hyponcus (Stimpson, 1871) [*Lambrus*]

Lambrachaeus Alcock, 1895 {8}
= *Lambrachaeus* Alcock, 1895 (type species *Lambracheus ramifer* Alcock, 1895, by monotypy; gender masculine)
Lambrachaeus ramifer Alcock, 1895

Latolambrus S. H. Tan & Ng, 2007 {4}
= *Latolambrus* S. H. Tan & Ng, 2007 (type species *Cryptopodia occidentalis* (Dana, 1854, by original designation; gender masculine)
Latolambrus occidentalis (Dana, 1854) [*Cryptopodia*]
= *Lambrus fronsacutis* Lockington, 1877

Leiolambrus A. Milne-Edwards, 1878
= *Leiolambrus* A. Milne-Edwards, 1878 (type species *Parthenope punctatissima* Owen, 1839, by original designation; gender masculine)
Leiolambrus nitidus Rathbun, 1901
Leiolambrus punctatissimus (Owen, 1839) [*Parthenope*]

Mesorhoea Stimpson, 1871
= *Mesorhoea* Stimpson, 1871 (type species *Mesorhoea sexpinosa* Stimpson, 1871, by original designation; gender feminine)
Mesorhoea bellii (A. Milne-Edwards, 1878) [*Solenolambrus*]
= *Mesorhoea gilli* Rathbun, 1894
Mesorhoea sexspinosa Stimpson, 1871
= *Solenolambrus fastigatus* A. Milne-Edwards, 1878

Mimilambrus Williams, 1979
= *Mimilambrus* Williams, 1979 (type species *Mimilambrus wileyi* Williams, 1979, by original designation; gender masculine)
Mimilambrus wileyi Williams, 1979

Neikolambrus S. H. Tan & Ng, 2003
= *Neikolambrus* S. H. Tan & Ng, 2003 (type species *Neikolambrus polemists* S. H. Tan & Ng, 2003, by original designation; gender masculine)
Neikolambrus polemistes S. H. Tan & Ng, 2003

Nodolambrus S. H. Tan & Ng, 2007 {2}
= *Nodolambrus* S. H. Tan & Ng, 2007 (type species *Lambrus nodosus* Jacquinot, in Jacquinot & Lucas, 1853, by original designation; gender masculine)
Nodolambrus nodosus (Jacquinot, in Jacquinot & Lucas, 1853) [*Lambrus*]

Ochtholambrus S. H. Tan & Ng, 2007 {9}
= *Ochtholambrus* S. H. Tan & Ng, 2007 (type species *Lambrus excavatus* Stimpson, 1871, by original designation; gender masculine)
Ochtholambrus excavatus (Stimpson, 1871) [*Lambrus*]
Ochtholambrus pulchellus (A. Milne-Edwards, 1868) [*Lambrus*]
Ochtholambrus stimpsoni (Garth, 1958) [*Parthenope* (*Pseudolambrus*)]

Parthenope Weber, 1795
= *Parthenope* Weber, 1795 (type species *Cancer longimanus* Linnaeus, 1758, subsequent designation by Rathbun, 1904; gender feminine) (see Holthuis, 1962b) [Opinion 696] {1}
= *Lambrus* Leach, 1815 (type species *Cancer longimanus* Linnaeus, 1758, by monotypy; gender masculine) [Opinion 696]
Parthenope chondrodes Davie & Turner, 1994
Parthenope longimanus (Linnaeus, 1758) [*Cancer*]
= *Lambrus laevicarpus* Miers, 1879
= *Lambrus* (*Lambrus*) *ornatus* Flipse, 1930
Parthenope sinensis Shen, Dai & Chen, 1982

Parthenopoides Miers, 1879 {9}
= *Parthenopoides* Miers, 1879 (type species *Lambrus massena* Roux, 1830, by original designation; gender masculine)
Parthenopoides massena (Roux, 1830) [*Lambrus*]
= *Parthenope contracta* Costa & Costa, 1840
= *Lambrus hexacanthus* Costa & Costa, 1840
= *Lambrus rugosus* Stimpson, 1857
= *Lambrus setubalensis* Brito Capello, 1867
= *Lambrus massena* var. *atlanticus* Miers, 1881
= *Lambrus massena* var. *goreensis* Miers, 1881
= *Lambrus massena* var. *spinifer* Miers, 1881
= *Lambrus* (*Parthenopoides*) *bicarinatus* Miers, 1881

Patulambrus S. H. Tan & Ng, 2007 {10}
= *Patulambrus* S. H. Tan & Ng, 2007 (type species *Lambrus* (*Platylambrus*) *petalophorus* Alcock, 1895, by original designation; gender masculine)
Patulambrus nummiferus (Rathbun, 1906) [*Parthenope* (*Platylambrus*)]
Patulambrus petalophorus (Alcock, 1895) [*Lambrus* (*Platylambrus*)]

Piloslambrus S. H. Tan & Ng, 2007 {5}
= *Piloslambrus* S. H. Tan & Ng, 2007 (type species *Lambrus depressiusculus* Stimpson, 1871, by original designation; gender masculine)
Piloslambrus depressiusculus (Stimpson, 1871) [*Lambrus*]
Piloslambrus guerini (Brito Capello, 1871) [*Lambrus*]
Piloslambrus triangulus (Stimpson, 1860) [*Lambrus*]

Platylambrus Stimpson, 1871 {5}
= *Platylambrus* Stimpson, 1871 (type species *Lambrus crenulatus* Saussure, 1858, subsequent designation by Rathbun, 1925; gender masculine)
Platylambrus granulatus (Kingsley, 1879) [*Lambrus*]
= *Parthenope* (*Platylambrus*) *punctata* Chace, 1942
Platylambrus serratus (H. Milne Edwards, 1834) [*Lambrus*]
= *Lambrus lupoides* White, 1847 (nomen nudum)
= *Lambrus crenulatus* Saussure, 1858
= *Lambrus melanodactylus* Desbonne, in Desbonne & Schramm, 1867

Pseudolambrus Paul'son, 1875 {9}
= *Pseudolambrus* Paul'son, 1875 (type species *Parthenope calappoides* Adams & White, 1849, by monotypy; gender masculine)
= *Parthenolambrus* A. Milne-Edwards, 1878 (type species *Parthenope tarpeuis* Adams & White, 1848, subsequent designation by Rathbun, 1925, gender masculine)
Pseudolambrus beaumonti (Alcock, 1895) [*Lambrus* (*Pseudolambrus*)]
Pseudolambrus bicornis (Flipse, 1930) [*Lambrus* (*Pseudolambrus*)]
Pseudolambrus bidentatus (Flipse, 1930) [*Lambrus* (*Pseudolambrus*)]
Pseudolambrus bispinosus (Rathbun, 1902) [*Lambrus* (*Rhinolambrus*)]
Pseudolambrus calappoides (Adams & White, 1849) [*Parthenope*]
Pseudolambrus confragosus (Calman, 1900) [*Lambrus* (*Parthenolambrus*)]
Pseudolambrus harpax (Adams & White, 1848) [*Parthenope*]
Pseudolambrus hepatoconus (Flipse, 1930) [*Lambrus* (*Pseudolambrus*)]
Pseudolambrus lobatus (Flipse, 1930) [*Lambrus* (*Pseudolambrus*)]
= *Parthenope* (*Pseudolambrus*) *ozakii* Sakai, 1969
Pseudolambrus longispinosus (Flipse, 1930) [*Lambrus* (*Pseudolambrus*)]
Pseudolambrus planus (Rathbun, 1911) [*Lambrus* (*Pseudolambrus*)]
Pseudolambrus saishoi Takeda, 1977
Pseudolambrus sandrockii (Haswell, 1880) [*Lambrus*]
Pseudolambrus sundaicus Ng & Rahayu, 2000
Pseudolambrus tarpeius (Adams & White, 1849) [*Parthenope*]
= *Lambrus* (*Pseudolambrus*) *calappoides alcocki* Laurie, 1906

Rhinolambrus A. Milne-Edwards, 1878
= *Rhinolambrus* A. Milne-Edwards, 1878 (type species *Cancer contrarius* Herbst, 1804, by original designation; gender masculine)
Rhinolambrus contrarius (Herbst, 1804) [*Cancer*]
= *Parthenope spinimana* Latreille, in Milbert, 1812 {11}
= *Lambrus spinimanus* Desmarest, 1823
= *Lambrus deflexifrons* Miers, 1879
= *Lambrus* (*Rhinolambrus*) *naso* Flipse, 1930
Rhinolambrus cybelis (Alcock, 1895) [*Rhynolambrus*]
= *Lambrus* (*Rhinolambrus*) *sternospinosus* Flipse, 1930
= *Rhinolambrus gracillimanus* Ward, 1942
Rhinolambrus hayamaensis (Sakai, 1965) [*Lambrus* (*Platylambrus*)]
Rhinolambrus lamelliger (White, 1847) [*Lambrus*]
= *Lambrus lamellifrons* Adams & White, 1848
= *Lambrus gracilis* Dana, 1852
= *Lambrus* (*Rhinolambrus*) *coronifer* Flipse, 1930
Rhinolambrus lippus (Lanchester, 1902) [*Lambrus*]
= *Lambrus* (*Rhinolambrus*) *montiger* Nobili, 1906
Rhinolambrus longispinus (Miers, 1879) [*Lambrus* (*Rhinolambrus*)]
= *Lambrus* (*Rhinolambrus*) *inconspicuus* Flipse, 1930
= *Lambrus* (*Rhinolambrus*) *armatus* Flipse, 1930
Rhinolambrus minimus Ward, 1942
Rhinolambrus parvus (Rathbun, 1916) [*Parthenope* (*Rhinolambrus*)]
Rhinolambrus pelagicus (Rüppell, 1830) [*Lambrus*]
= *Lambrus rhombicus* Dana, 1852
= *Lambrus affinis* A. Milne-Edwards, 1872
= *Lambrus affinis heraldicus* Paul'son, 1875
= *Parthenope* (*Parthenope*) *melana* Rathbun, 1907
= *Lambrus* (*Rhinolambrus*) *latifrons* Flipse, 1930
Rhinolambrus rudis (Rathbun, 1916) [*Parthenope* (*Rhinolambrus*)]
Rhinolambrus sisimanensis (Serène & Umali, 1972) [*Parthenope* (*Rhinolambrus*)]
Rhinolambrus spinifer (Haswell, 1880) [*Lambrus*]
Rhinolambrus turriger (White, 1847) [*Parthenope*]
= *Lambrus rumphii* Bleeker, 1856

Solenolambrus Stimpson, 1871
= *Solenolambrus* Stimpson, 1871 (type species *Solenolambrus typicus* Stimpson, 1871, by use of name "typicus", designation by Miers, 1879a; gender masculine)
= *Pisolambrus* A. Milne-Edwards, 1878 (type species *Pisolambrus nitidus* A. Milne-Edwards, 1878, by monotypy; gender masculine)
Solenolambrus arcuatus Stimpson, 1871
Solenolambrus brasiliensis Rodrigues da Costa, 1961
Solenolambrus decemspinosus Rathbun, 1894
Solenolambrus noordendei (Capart, 1951) [*Heterocrypta*]
Solenolambrus portoricensis Rathbun, 1924
Solenolambrus tenellus Stimpson, 1871
= *Pisolambrus nitidus* A. Milne-Edwards, 1878
Solenolambrus typicus Stimpson, 1871

Spinolambrus S. H. Tan & Ng, 2007 {5}
= *Spinolambrus* S. H. Tan & Ng, 2007 (type species *Cancer macrochelos* Herbst, 1790, by original designation; gender masculine)
Spinolambrus exilipes (Rathbun, 1894) [*Lambrus* (*Parthenolambrus*)]
= *Lambrus hassleri* Faxon, 1893
Spinolambrus macrochelos (Herbst, 1790) [*Cancer*]
= *Eurynome aldrovandi* Risso, 1827
= *Lambrus mediterraneus* Roux, 1828
= *Lambrus humbertii* Costa, 1838
= *Lambrus miersi* A. Milne-Edwards & Bouvier, 1898
Spinolambrus fraterculus (Stimpson, 1871) [*Lambrus*]
= *Lambrus aylthoni* Righi, 1965
Spinolambrus johngarthi (Hendrickx & Landa-Jaime, 1997) [*Parthenope* (*Platylambrus*)]
Spinolambrus meridionalis (Boschi, 1965) [*Lambrus*]
Spinolambrus notialis (Manning & Holthuis, 1981) [*Parthenope*]
Spinolambrus pourtalesii (Stimpson, 1871) [*Lambrus*]
= *Lambrus verrillii* Smith, 1881
Spinolambrus verrucosus (Studer, 1882) [*Lambrus*]

Tutankhamen Rathbun, 1925
= *Tutankhamen* Rathbun, 1925 (type species *Mesorhoea cristatipes* A. Milne-Edwards, 1880, by original designation; gender masculine)
Tutankhamen cristatipes (A. Milne-Edwards, 1880) [*Mesorhoea*]

Velolambrus S. H. Tan & Ng, 2007 {9}
= *Velolambrus* S. H. Tan & Ng, 2007 (type species *Lambrus* (*Pseudolambrus*) *tuberculatus* Flipse, 1930, by original designation; gender masculine)
Velolambrus expansus (Miers, 1879) [*Lambrus* (*Parthenopoides*)]
Velolambrus tuberculatus (Flipse, 1930) [*Lambrus* (*Pseudolambrus*)]

Incertae sedis

Lambrus gracilipes A. Milne-Edwards, 1873
Lambrus crenatus White, 1847 (nomen nudum)
Lambrus rapax White, 1847 (nomen nudum)
Lambrus segnis White, 1847 (nomen nudum)
Parthenope cygnus White, 1847 (nomen nudum)
Parthenope reticulata White, 1847 (nomen nudum)

Notes

{1} Henri Milne Edwards (1836: caption pl. 26, fig. 3) commented that under a figure of *Cancer horridus* Linnaeus, 1758: "Parthenope proprement dit" (see Cowan, 1976, for dates). While this statement is not really equivalent to a type species designation, as has been discussed earlier, the title of his series of papers makes it clear that type species are figured. The ICZN ruled in Opinion 696, that H. Milne Edwards' selection was valid, thereby fixing this type designation for *Parthenope* Fabricius, 1798, but not its senior homonym, *Parthenope* Weber, 1795. Rathbun (1904) established a new name, *Daldorfia*, to replace *Parthenope* Fabricius, 1798. Holthuis (1962b) provides a detailed discussion of the complexities of this problem (see also S. H. Tan & Ng, 2007a).

{2} S. H. Tan & Ng (2007b) established four new monotypic genera, *Agolambrus*, *Derilambrus*, *Nodolambrus*, *Derilambrus* and *Hypolambrus* for four atypical species previously classified in *Parthenope*, *P. agonus* (Stimpson, 1870), *P. angulifrons* Latreille, 1825, *P. nodosus* (Jacquinot, in Jacquinot & Lucas, 1853) and *P. hyponcus* (Stimpson, 1871), respectively.

{3} *Parthenope* (*Lambrus*) *diacanthus* De Haan, 1837 (now in *Aulacolambrus*), is a problem as the specimen

figured by De Haan (type locality Japan) and the supposed holotype figured by Yamaguchi & Baba (1993) are different. The figure by De Haan agrees with what is now generally regarded as this species, and indications are also that it is a senior synonym of *Lambrus pisoides* Adams & White, 1848, and *Lambrus sculptus* A. Milne-Edwards, 1872. The specimen figured by Yamaguchi & Baba (1993), however, does not look like any known *Aulacolambrus* species. In fact, it agrees extremely well with *Parthenopides massena* sensu lato, a species (and genus) known only from the Mediterranean and eastern Atlantic. It is thus clear in this case that somewhere during its history, a specimen of *P. massena* had been accidentally and incorrectly labelled as the "type" of *A. diacanthus*; and the present "holotype" is clearly not a type specimen. There is thus, no extant type for *Parthenope* (*Lambrus*) *diacanthus* De Haan, 1837. Interestingly, L. B. Holthuis writes "In the old days, it was the rule in the Rijksmuseum van Natuurlijke Historie, that all material of the museum (even types) was shown to the public. For this purpose, many of the crabs were preserved dry and mounted on pieces of cardboard. On either side of the specimen, a small hole was made in the cardboard and through these a thread was brought to tie the specimen to the cardboard. In this way, several specimens were attached to a single large piece of cardboard. The cardboards were placed in an oblique position so that the specimens were more easily viewed. A label with the information on the specimen was pasted below the specimen. After a long time, the threads would deteriorate and break, and the specimens would slither down the slope. Later, all dry specimens were placed in small boxes. But when that was done, it was often difficult to decide which label belonged to which animal, and sometimes, this was guessed wrongly and the labels came to a species which was different from that named on the label. I am sure that this also happened to *Parthenope diacanthus* De Haan, which probably (if still extant) will be found in the dry collection under the name *Parthenope massena*." (in litt, 24 May 2007).

{4} Three rather aberrant species: *Heterocrypta caledoniana* Garth in Holthuis, 1959, *H. maltzani* Miers, 1881, and *H. occidentalis* (Dana, 1854), were recently reappraised by S. H. Tan & Ng (2007b). Threee new monotypic genera, *Distolambrus*, *Costalambrus* and *Latolambrus*, were established for them.

{5} Ng (1996: 157, 158) noted that the Atlantic and Indo-West Pacific taxa differed in a number of carapace and pereiopodal characters, and the name should be restricted for the American species. That would mean the Indo-West Pacific taxa be transferred to *Enoplolambrus*. This classification is followed here. S. H. Tan & Ng (2007b) revised these species and transferred many of the American species to two new genera, *Spinolambrus* and *Piloslambrus*. *Lambrus triangulus* is now in *Piloslambrus*, the original assignment to *Ochtholambrus* being incorrect (see S. H. Tan, in press).

{6} P. K. L. Ng with S. H. Tan, has examined the types of *Parthenope regina* (Fabricius, 1798) in ZMUC, and we have no doubt that it is a senior synonym of the better known *Lambrus tumidus* Lanchester, 1900. Both names, however, are junior synonyms of *Enoplolambrus pransor* (Herbst, 1794) (unpublished data).

{7} Ng (1996) left the generic position of *Parthenopoides pteromerus* Ortmann, 1893, unresolved, though he hinted that it was close to *Garthambrus*. A good series of specimens in recent years have shown that it is no more than a slightly aberrant species of *Garthambrus* but should be referred there (McLay & S. H. Tan, in press).

{8} The strange looking genus *Lambrachaeus* Alcock, 1895, has always been difficult to classify. Alcock (1895) left it in the subfamily Inachinae, Majidae. Edmondson (1952) had his doubts and suggested that it should be moved to the Parthenopidae. Griffin & Tranter (1974) questioned its place in the Majidae, and finally stated emphatically that it was not a majid (Griffin & Tranter, 1986), although they did not decide where to put it. Hoover (1999) left the genus in the Parthenopidae without comment, probably following Edmondson (1952). Števčić (1994), however, argued that it was still a majid and felt that it needed to be classified in its own tribe in the Inachinae and established the Lambrachaeini. Ng et al. (2001) left the genus in the Parthenopidae in the subfamily Lambrachaeinae without comment. With a good series of specimens, Ng & McLay (2003) redescribed the genus and discussed its affinities in depth. They argued that *Lambrachaeus* was clearly a parthenopid, albeit with several unusual features, many superficially resembling majids. But they provided clear evidence that *Lambrachaeus* was closely related to parthenopids like *Rhinolambrus*. They commented that "it seems best to regard it as a distinct subfamily, Lambrachaeinae, in the Parthenopidae, for the time being" (Ng & McLay, 2003: 902). Števčić (2005: 6) cited Ng & McLay (2003) in his synopsis of the Brachyura, but he did not discuss or refute their arguments. Števčić (2005) nevertheless maintained that *Lambrachaeus* was a majoid in his work, and decided that it should be recognised as a family, Lambrachaeidae, in the Majoidea. Looking at the Parthenopidae as a whole, S. H. Tan has shown that *Lambrachaeus* merely represents the extreme end of a morphological cline already shown by many atypical *Rhinolambrus* species. The recognition of a Lambrachaeidae or Lambrachaeinae is unwarranted. *Lambrachaeus* is just an anomalous parthenopine (unpublished data).

{9} The genus *Pseudolambrus* is currently a "dumping ground" for any parthenopid species which has relatively short chelipeds and cannot be easily fitted into other genus. S. H. Tan & Ng (2007b) removed many of the more different members from the genus into the resurrected *Parthenopoides* and to two new genera *Ochtholambrus* and *Velolambrus*.

{10} *Parthenope nummiferus* Rathbun, 1906, and *Lambrus petalophorus* Alcock, 1895, have long been placed in *Rhinolambrus* but S. H. Tan & Ng (2007b) recently transferred them to *Patulambrus*.

{11} In naming *Parthenope spinimana* from Mauritius, Latreille (1812: 278) noted that Herbst (1804) had already named the species *Cancer contrarius*, although he did not explain why he offered a new name. Interestingly, Desmarest (1823), in naming *Lambrus spinimanus*, refers to Herbst's (1804: pl. 60 fig. 3) figure which also depicts *Cancer contrarius*. It would appear that all are referring to one species, and the oldest name by Herbst has priority.

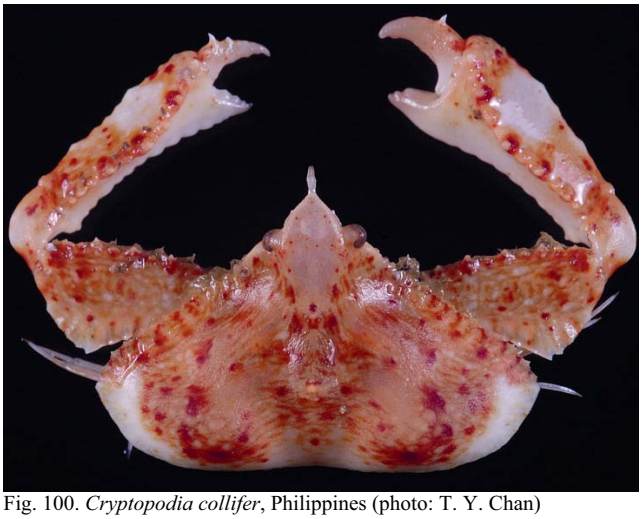

Fig. 100. *Cryptopodia collifer*, Philippines (photo: T. Y. Chan)

Fig. 101. *Heterocrypta* cf. *aloysioi*, Panama (photo: A. Anker)

Fig. 102. *Mesorhoea* sp., Panama (photo: A. Anker)

Fig. 103. *Patulambrus petalophorus*, Bohol, Philippines (photo: P. Ng)

Fig. 104. *Pseudolambrus*, new species, central Philippines, S. H. Tan, in press (photo: T. Y. Chan)

Fig. 105. *Thyrolambrus efflorescens*, central Philippines (photo: P. Ng)

Fig. 106. *Enoplolambrus validus*, Qingdao, China (photo: P. Ng)

SUPERFAMILY PILUMNOIDEA SAMOUELLE, 1819

Remarks. – Four key adult morphological characters clearly define the Pilumnoidea: all male abdominal segments freely articulating; a long sinuous and/or slender G1; a very short, sigmoidal G2; and a penis which protrudes from the condyle of the fifth ambulatory coxa (Guinot et al., in prep.). The known larval evidence strongly supports this classification, the zoeal characters being extremely conservative for the group (see Ng & Clark, 2000b, for review; and Clark & Ng, 2004, 2005a; Ng & Clark, in press). Within the Pilumnoidea, a few of the recognised subfamilies are so distinct that we are confident that they can be recognised as families. It seems best to discuss the status of the various subfamilies/families that we now refer to this superfamily.

In the first major change, Guinot (1969a–c, 1971, 1978), suggested that the subfamily Rhizopinae Stimpson, 1858, typically classified under the Goneplacidae, had what she called "pilumnien" tendencies. She also implied that genera like *Halimede*, *Galene* and *Parapanope* (which she placed in her "Rameau halimédien") were closely affiliated to the true pilumnids but did not propose a classification for them (see also Guinot, 1969a–c, 1971, 1985b; Guinot & Ng, 1988). In the first major reclassification of the Pilumnidae, Serène (1984) proposed a revised classification in which he recognised five subfamilies: Pilumninae Samoeulle, 1819, Heteropanopeinae Alcock, 1898, Halimedinae Alcock, 1898, Planopilumninae Serène, 1984, and Heteropilumninae Serène, 1984. Serène's (1984) book, however, dealt mainly with the Xanthidae sensu stricto and Menippidae, and specifically excluded a detailed treatment of the Pilumnidae. The book was put together after Dr. Serène had passed away, and Alain Crosnier, who saw the manuscript to completion, followed Serène's notes and decided to include his new classification, including that for the Pilumnidae. Crosnier briefly explained this in a footnote, and effectively provided the definitions of both the new subfamilies. Under the previous Code (1985), both of Serène's (1984) new subfamilies are valid taxa, although type genera were not formally designated.

It is pertinent to briefly discuss each of the subfamilies recognised by Serène (1984): Pilumninae, Heteropanopeinae, Halimedinae, Planopilumninae and Heteropilumninae. The type species of the type genus of the Planopilumninae Serène, 1984, *Planopilumnus spongiosus* Balss, 1933, is not a pilumnid. It is in fact a pseudoziid (see discussion for the Pseudozioidea). As such, taxa previously referred to the genus and the subfamily must be revised. Some species previously referred to *Planopilumnus* by Balss (1933) and later workers are clearly pilumnids and have been referred to a new genus (see later). These pilumnid taxa, however, are clearly referable to the Pilumninae sensu stricto as conceived at present. The Heteropilumninae Serène, 1984, is similarly, a heterogeneous grouping and the taxonomy of its many species is still far from settled (see Ng, 1987; Ng & L. W. H. Tan, 1988; Ng & Davie, 1991; Yeo et al., 2004). In any case, members of the genus *Heteropilumnus* De Man, 1895, are now placed in the subfamily Rhizopinae Stimpson, 1858 (see Ng, 1987; Davie, 2002), a subfamily not considered by Serène (1984), and as such, Heteropilumninae Serène, 1984, falls into its synonymy. Ng (1987) reviewed, partially revised, and formally transferred the Rhizopinae into the Pilumnidae. He, however, emphasised that a monophyletic origin of the Rhizopinae has not been demonstrated, although all are clearly pilumnids.

The Heteropanopioida Alcock, 1898, has in the recent past been treated as an Alliance within the Pilumninae, Xanthidae (Sakai, 1976), and more recently as a subfamily of the Pilumnidae by Serène (1984). It was recognised by the following combination of characters: carapace broadly ovate; dorsally convex; smooth or weakly granular; regions not, or only weakly, indicated; anterolateral margins with three broad teeth or lobes (never spinose); posterior margin narrow; chelipeds dissimilar, smooth or weakly granular. The generic composition of the group has varied considerably between authors, including genera as widely divergent as *Panopeus* H. Milne Edwards, 1834, *Glabropilumnus* Balss, 1932, and *Parapilumnus* Kossmann, 1877 (now in the Acidopsidae), all of which we now know to have no close relationship to *Heteropanope*. We considered retaining the taxon and restricting it for the following four genera: *Benthopanope* Davie, 1989, *Eurycarcinus* A. Milne-Edwards, 1867, *Heteropanope* Stimpson, 1858, and *Pilumnopeus* A. Milne-Edwards, 1863. The broadly oval, smooth carapaces of the species in these genera superficially seem to give the group a coherent appearance, but unfortunately we have been so far unable to find any strong characters that can be considered apomorphic for the Heteropanopinae. As shown by Davie (1989) the genus *Benthopanope* has a different shaped thoracic sternum which also belies a close relationship with *Heteropanope*, in which most of the *Benthopanope* species had previously been included. *Eurycarcinus* is also poorly defined and in need of characters to adequately separate it from *Heteropanope*. We therefore place all the "heteropanopine" genera back into the Pilumninae sensu stricto until future evidence proves otherwise.

The Halimedinae is an unusual grouping and we here treat it as a good family level grouping with several genera. There are several suprageneric names associated with this grouping – Galenoida Alcock, 1898, Halimedoida Alcock, 1898, Denthoxanthinae Števčić, 2005, and Parapanopini Števčić, 2005; with Galenoida and Halimedoida published in the same paper (Alcock, 1898). As first revisers, we select Galenoida Alcock, 1898, as having priority when these names are regarded as synonyms, and use Galenidae for this family. In using Halimedinae, Serène (1984) did not append any discussion, so it is not sure if he also includes *Galene*. This family grouping is discussed in greater detail under the family below.

It now remains to deal with the Pilumninae. In this treatise, we are regarding this as a separate family, the Pilumnidae, and we recognise four subfamilies in this new family grouping: Pilumninae, Rhizopinae, Calmaniinae and Eumedoninae. Admittedly, this classification is not ideal - the members are too diverse in form, and relationships between them are not well understood (e.g. see Takeda & Miyake, 1968, 1969a). It has been suggested that the Eumedoninae, previously classified in the Parthenopidae, are actually pilumnids (Ng & Rodríguez, 1986; Lim & Ng, 1988; Števčić & Ng, 1988), an idea first mooted by Serène (1968) but not followed up by almost all subsequent workers until the 1980s. Števčić et al. (1988) subsequently recognised the Eumedonidae, as a separate family, but allied it to the Pilumnidae (cf. Števčić et al., 1988; Mori et al., 1991). In the latest treatment, Ng & Clark (2000a), using larval and adult morphological data, argued that eumedonids were only highly derived pilumnids and treated it only as a subfamily of the Pilumnidae.

The Calmaniini Števčić, 1991, is a group of rather unusual small crabs with just two genera. Their carapace is somewhat atypical, and their G1s are relatively stouter than those of more typical pilumnids, although they still retain their sinuous form. Until more is known, recognising this group as a full family seems premature, although it seems reasonable to regard it as a subfamily.

Within the Pilumninae sensu stricto, things are far less clear. It is a huge subfamily with a great diversity of form and perhaps more subfamilies need to be recognised. However, the demarcation between groups is not at all easy. The Bathypilumnini Števčić, 2005, Danielini Števčić, 2005, Itampolinae Števčić, 2005, Peleianinae Števčić, 2005, and Priapilumnini Števčić, 2005, have all been established for single genera whose members have "atypical" G1s. The Bathypilumnini for example, have links with some species of *Actumnus*. We are not convinced they deserve subfamily status at the moment, and as we do not use tribes in our system, they are placed in the synonymy of the Pilumninae sensu stricto for the moment. The unusual genus *Xenophthalmodes* Richters, 1880, for which Števčić (2005) established the subfamily Xenophthalmodinae, merits comment. Having examined specimens, we feel it can be recognised as a separate subfamily as it has a suite of unusual male abdominal and gonopodal features (see also Ng, 1987).

Ng & Clark (2000b) recently showed that two taxa, *Tanaocheles stenochilus* Kropp, 1984 (placed in the Trapeziidae; see Kropp, 1984), and *Chlorodiella bidentata* (Nobili, 1901) (long placed in the Xanthidae; see Serène, 1984) are actually congeneric; and belong to the Pilumnidae, for which they established a new subfamily, Tanaochelinae. The tanaochelines are so different that in the framework of the Pilumnoidea here recognised, it is reasonable to regard it as a full family.

FAMILY GALENIDAE ALCOCK, 1898

Galenidés A. Milne-Edwards, 1862 (not in Latin, unavailable name)
Galenoida Alcock, 1898
Halimedoida Alcock, 1898
Denthoxanthinae Števčić, 2005
Parapanopini Števčić, 2005

Remarks. – This family contains a number of rather "atypical" pilumnoids in that they have traditionally been classified in the Goneplacidae and Xanthidae sensu stricto Even today, many workers still resist or are very "uncomfortable" that they are linked to the Pilumnidae. In general appearance and superficial features, *Galene* is a typical "goneplacid", with its rhomboidal carapace; while *Halimede*, *Parapanope* and *Dentoxanthus* look like typical xanthids or panopeids. All are relatively glabrous as compared to most pilumnids (which are generally setose). Howver as has been stated many times in this work, external appearances, especially carapace features, are extremely deceptive and do not always reflect a taxon's phylogenetic history.

Galene De Haan, 1833, has only one recognised species, *G. bispinosa* (Herbst, 1794) (type species) which is widely distributed in the Indo-West Pacific. Miers (1884) described *Galene granulosa*, and this name has been regarded as valid with doubt. His single specimen was a juvenile. Chopra (1935) had suggested that Miers' specimen was only a juvenile of *G. bispinosa* since all the specimens of *G. granulosa* that have ever been collected were all less than 20 mm in carapace width. Ng et al. (2001) commented that studies of specimens of different size groups suggest Chopra (1935) was right in suggesting that both names are synonyms. Guinot (1969a) provided a detailed taxonomic history of *Galene*, detailing the problems associated with its classification. She proposed that the genus be placed in a separate grouping - the "Rameau halimédien", together with the genera *Halimede* De Haan, 1825, and *Parapanope* De Man, 1895, on the basis of the thoracic sternal structures, general carapace shape and morphology of the G1s. She considered that *Parapanope* and *Halimede* to be more "xanthien" whereas *Galene* tended to be more "catometopien" (using H. Milne Edwards (1834) terminology for crabs with squarish appearances). In her later studies, Guinot (1978, 1979) indicated that *Galene* was allied with *Halimede* and *Parapanope* in her revised understanding of Pilumnidae. She however, did not formally transfer these genera into the Pilumnidae or formally place them in any infrafamilial grouping. Serène (1984) revived Guinot's ideas when he proposed dividing the family Pilumnidae Samouelle, 1819, sensu Guinot, 1978, into several subfamilies - the Halimedinae being among them. Serène, however, did not elaborate upon his classification.

The ambulatory coxae of *Galene* are unusual in possessing distinctly serrated edges, and these are evident even in small specimens. The presence of serrated coxal plates is a

character shared by only one other pilumnoid genus, the rhizopine *Cryptolutea* Ward, 1936 (= *Serratocoxa* Ng, 1987) (see Ng & Davie, 1991). Although the differences between *Cryptolutea* and *Galene* appear substantial, both genera may well be closely related. Larvae of *Cryptolutea* are not known. The larvae of *Galene* (see Mohan & Kannupandi, 1986) are pilumnid in every aspect, and are hardly distinguishable from those of *Pilumnus*.

Guinot (1969a) noted that *Halimede* De Haan, 1825 had several pilumnid-type characters (in her "Rameau halimédien"), and she figured the G1 of *Halimede ochtodes*, which was slender, long and very straight. Stephensen (1946) and Campbell & Stephenson (1970) also figured the G1 of *H. ochtodes* but not in any detail. The G2 is sigmoidal and very short. All the male abdominal segments of *H. ochtodes* are freely articulating, and the endophragmal skeleton and sternal structure conform with what has been defined for the Pilumnidae (fide Guinot, 1978). The carapace of *Halimede* is unusual in that it is very smooth and the margins nodular, and in many aspects, appears to be intermediate between *Parapanope* and *Galene*. The G1 of *Halimede*, however, differs markedly from these two genera, and is closer to *Bathypilumnus*. However the carapace of *Bathypilumnus*, is typically of the *Pilumnus* type, with sharp anterolateral teeth and numerous long, stiff hairs (see Ng & L. W. H. Tan, 1984b). The larvae of *Halimede fragifer* were described by Terada (1985), and they are of the typical pilumnid type, with short carapace spines. Terada (1985, 1990) allied its larvae together with the pilumnid-type in his keys, but nevertheless retained the older classification in which *Halimede* was left in the Xanthidae sensu stricto.

Parapanope De Man, 1895, is perhaps the most "xanthid" like of all the members of this group. The appearances are so strong that Alcock (1898) and other workers have closely allied *Parapanope* with *Cycloxanthops* Rathbun, 1897 (at present in Xanthinae, Xanthidae sensu stricto). Guinot (1969a, 1985b) had suggested that *Parapanope* was apparently closer to the Pilumnidae (in her "Rameau halimédien"). The form of the endophragmal skeleton, structure and position of the sternal grooves, presence of seven freely articulating male abdominal segments, a slender and sinuous G1, and a sigmoidal G2, clearly allies *Parapanope* with the Pilumnidae. The carapace of *Parapanope* closely resembles that of *Dentoxanthus*, with which *Parapanope* is probably most closely related. The male abdomen is similar in shape, as is the G1 of *Dentoxanthus*, although in *Dentoxanthus*, the G1 is proportionately stouter. The larvae (mentioned in Guinot, 1985b), have clear pilumnid characters, i.e. in the setation of the various mouthparts and the possession of an antennal exopod which is as long as the spinous process. The only unusual feature is the presence of very long rostral and lateral carapace spines, but these features are also present on several other pilumnid zoeae, namely *Heteropanope glabra* (see Lim et al., 1984) and *Heteropilumnus hirsutior* (unpublished data). These pilumnid larvae are now being described in detail by Paul Clark as part of his large-scale study of xanthid and pilumnid larval characters.

Dentoxanthus Stephensen, 1946, belongs to another small group in the Pilumnoidea. Stephensen (1946) established *Dentoxanthus* for a very unusual female specimen of a new species, *D. iranicus*, from the Iranian Gulf, and Tirmizi & Serène (1971) have since reported a second female from Karachi, Pakistan. The first two males were described by Tirmizi & Kazmi (1982) from Pakistan. Stephensen (1946), quoting a personal letter from Balss, discussed the relationship of *Dentoxanthus* with *Parapanope*, and placed both in the Xanthidae sensu lato. Serène et al. (1958) reported a suggestion by L. B. Holthuis (pers. comm.) to refer *Dentoxanthus* to the Eumedoninae. Serène et al. (1958) also suggested that members of the Eumedoninae were closer to the Xanthidae sensu lato than the Parthenopidae with which it had traditionally been classified. Števčić & Ng (1988) appraised the taxonomic position of *Dentoxanthus iranicus*, and indicated that the taxon was very close to the Pilumnidae. They suggested establishing a separate tribe for *Dentoxanthus* within the Pilumnidae, which was to be done later. Števčić (2005) subsequently established a new tribe, Dentoxanthini, regardless.

One species described by Serène (1971) from Indonesia, *Dentoxanthus komodoensis*, which was transferred to a new genus, *Otognathon*, by Ng & Števčić (1993), is more likely to be a varunid (see Notes under this species in the Varunidae). Although it has many "xanthoid" type features and superficially is close to *Dentoxanthus* and has long been associated with it, a recent study suggests that the similarities are merely superficial.

Subfamily Denthoxanthinae Števčić, 2005

Denthoxanthinae Števčić, 2005

Dentoxanthus Stephensen, 1946
= *Dentoxanthus* Stephensen, 1946 (type species *Dentoxanthus iranicus* Stephensen, 1946, by monotypy; gender masculine)
Dentoxanthus iranicus Stephensen, 1945

Subfamily Galeninae Alcock, 1898

Galenoida Alcock, 1898

Galene De Haan, 1833
= *Galene* De Haan, 1833 (type species *Cancer bispinosus* Herbst, 1783, by monotypy; gender feminine) [Opinion 85]
= *Podopilumnus* M'Coy, 1849 (type species *Podopilumnus fittoni* M'Coy, 1849, by monotypy; gender masculine)
Galene bispinosa (Herbst, 1783)
= *Podopilumnus fittoni* M'Coy, 1849
= *Gecarcinus trispinosus* Desmarest, 1822
= *Galene granulosa* Miers, 1884

Subfamily Halimedinae Alcock, 1898

Halimedoida Alcock, 1898

Halimede De Haan, 1833
= *Cancer* (*Halimede*) De Haan, 1825 (type species *Cancer* (*Halimede*) *fragifer* De Haan, 1835, by monotypy; gender feminine) [Opinion 85, Direction 37]

= *Polycremnus* Gerstaecker, 1856 (type species *Cancer ochtodes* Herbst, 1783, by monotypy; gender masculine)
Halimede coppingeri Miers, 1884
Halimede fragifer (De Haan, 1835) [*Cancer* (*Halimede*)] [Direction 36]
= *Medaeus nodosus* A. Milne-Edwards, 1867
= *Medaeus nodulosus* A. Milne-Edwards, 1873 (incorrect spelling)
= *Halimede dofleini* Balss, 1922
Halimede ochtodes (Herbst, 1783) [*Cancer*]
= *Polycremnus verrucifer* Stimpson, 1907
Halimede tyche (Herbst, 1801) [*Cancer*]
= *Halimede thurstoni* Henderson, 1895
= *Halimede hendersoni* Nobili, 1905

Subfamily Parapanopinae Števčić, 2005

Parapanopini Števčić, 2005

Parapanope De Man, 1895
= *Parapanope* De Man, 1895 (type species *Parapanope euagora* De Man, 1895, by monotypy; gender feminine) [Opinion 85, Direction 37]
= *Hoploxanthus* Alcock, 1898 (type species *Hoploxanthus hextii* Alcock, 1898, by present designation; gender masculine) {1}
Parapanope euagora De Man, 1895
= *Hoploxanthus hextii* Alcock, 1898
= *Parapanope singaporensis* Ng & Guinot, in Guinot, 1985
Parapanope cultripes (Alcock, 1898) [*Hoploxanthus*]
Parapanope hexacarapas Garth & Kim, 1983
Parapanope pagenstecheri (Neumann, 1878) [*Menippe*]
Parapanope serenei Guinot & Ng, in Guinot, 1985
Parapanope siamensis Guinot, 1985

Notes

{1} Alcock (1898) established *Hoploxanthus* for two new species, *H. hextii* Alcock, 1898, and *H. cultripes* Alcock, 1898. No type species was specified. In recent revisions *Hoploxanthus* Alcock, 1898, is regarded as a junior synonym of *Parapanope* De Man, 1895. Neither Guinot (1985b) who revised the genus, nor Guinot & Ng (1988), who made additional comments, selected a type species for *Hoploxanthus* Alcock, 1898. We here select *Hoploxanthus hextii* Alcock, 1898, as the type species.


Fig. 107. *Halimede fragifer*, Singapore (photo: P. Ng)

FAMILY PILUMNIDAE SAMOUELLE, 1819

Pilumnidae Samouelle, 1819 [Opinion 423]
Actumninae Dana, 1851
Eumedonidae Dana, 1852
Rhizopidae Stimpson, 1858
Typhlocarcinopsinae Stimpson, 1858
Heteropanopioida Alcock, 1898
Heteropilumninae Serène, 1984
Ceratocarcininae Števčić, Gore & Castro, 1988
Calmaniini Števčić, 1991
Bathypilumnini Števčić, 2005
Danielini Števčić, 2005
Garthopilumnidae Števčić, 2005 (nomen nudum) {1}
Hapalonotinae Števčić, 2005
Itampolinae Števčić, 2005
Peleianinae Števčić, 2005
Priapilumnini Števčić, 2005
Xenophthalmodinae Števčić, 2005

Incertae sedis

Cancer absconditus Herbst, 1783 {2}

Subfamily Calmaniinae Števčić, 1991

Calmaniini Števčić, 1991

Calmania Laurie, 1906
= *Calmania* Laurie, 1906 (type species *Calmania prima* Laurie, 1906, by monotypy; gender feminine)
= *Ralumia* Balss, 1933 (type species *Ralumia dahli* Balss, 1933, by monotypy; gender feminine)
Calmania balssi (Sakai, 1935) [*Ralumia*]
Calmania dahli (Balss, 1933) [*Ralumia*]
Calmania prima Laurie, 1906
= *Kraussia laevis* Yokoya, 1933
Calmania sculptimana (Tesch, 1918) [*Litocheira*]
Calmania simodaensis Sakai, 1939

Subfamily Eumedoninae Dana, 1852

Eumedonidae Dana, 1852
Ceratocarcininae Števčić, Gore & Castro, 1988
Hapalonotinae Števčić, 2005

Ceratocarcinus White, 1847
= *Ceratocarcinus* White, 1847 (type species *Ceratocarcinus longimanus* White, 1847, by monotypy; gender masculine)
Ceratocarcinus frontodentata (Shen, Dai & Chen 1982) [*Harrovia*]
Ceratocarcinus longimanus White, 1847
= *Ceratocarcinus dilatatus* A. Milne-Edwards, 1872
= *Ceratocarcinus intermedius* Zehntner, 1894
Ceratocarcinus trilobatus (Sakai, 1938) [*Harrovia*]

Echinoecus Rathbun, 1894
= *Echinoecus* Rathbun, 1894 (type species *Echinoecus pentagonus* Rathbun, 1894, by monotypy; gender masculine) {3}
= *Eumedon* A. Milne-Edwards, 1879 (incorrect spelling) {3}
= *Liomedon* Klunzinger, 1906 (type species *Liomedon pentagonus* Klunzinger, 1906, by monotypy; gender masculine)
= *Proechinoecus* Ward, 1934 (type species *Proechinoecus sculptus* Ward, 1934, by original designation; gender masculine)

Echinoecus nipponicus Miyake, 1939
Echinoecus pentagonus (A. Milne-Edwards, 1879) [*Eumedon*]
= *Eumedon pentagonus* A. Milne-Edwards, 1879
= *Eumedon convictor* Bouvier & Seurat, 1906
= *Liomedon pentagonus* Klunzinger, 1906
= *Eumedonus petiti* Gravier, 1922
= *Echinoecus rathbunae* Miyake, 1939
= *Echinoecus klunzingeri* Miyake, 1939
Echinoecus sculptus (Ward, 1934) [*Proechinoecus*]

Eumedonus H. Milne Edwards, 1834
= *Eumedonus* H. Milne Edwards, 1834 (type species *Eumedonus niger* H. Milne Edwards, 1834, by monotypy; gender masculine) {3}
Eumedonus brevirhynchus Chia & Ng, 2000
Eumedonus intermedius Chia & Ng, 2000
Eumedonus niger H. Milne Edwards, 1834
= *Gonatonotus crassimanus* Haswell, 1880
= *Eumedonus villosus* Rathbun, 1918
Eumedonus vicinus Rathbun, 1918
Eumedonus zebra Alcock, 1895

Gonatonotus White, 1847
= *Gonatonotus* White, 1847 (type species *Gonatonotus pentagonus* White, 1847, by monotypy; gender masculine)
Gonatonotus granulosus (MacGilchrist, 1905) [*Eumedonus*]
Gonatonotus nasutus Chia & Ng, 2000
Gonatonotus pentagonus White, 1847

Hapalonotus Rathbun, 1897
= *Malacosoma* De Man, 1879 (type species *Malacosoma reticulatus* De Man, 1879, by monotypy; name pre-occupied by *Malacosoma* Huebner, 1820 [Lepidoptera]; gender masculine)
= *Hapalonotus* Rathbun, 1897 (replacement name for *Malacosoma* De Man, 1879; gender masculine)
Hapalonotus reticulatus (De Man, 1879) [*Malacosoma*]

Harrovia Adams & White, 1849
= *Harrovia* Adams & White, 1849 (type species *Harrovia albolineata* Adams & White, 1849, by monotypy; gender feminine)
Harrovia albolineata Adams & White, 1849
Harrovia cognata Chia & Ng, 1998
Harrovia elegans De Man, 1887
Harrovia japonica Balss, 1921
Harrovia longipes Lanchester, 1900
= *Harrovia plana* Ward, 1936
Harrovia ngi Chen & Xu, 1992
= *Harrovia longipes* Chen & Xu, 1991 (pre-occupied name)
Harrovia tuberculata Haswell, 1880

Permanotus Chia & Ng, 1998
= *Permanotus* Chia & Ng, 1998 (type species *Harrovia purpurea* Gordon, 1934, by original designation; gender masculine)
Permanotus purpureus (Gordon, 1934) [*Harrovia*]
= *Harrovia bituberculata* Shen, Dai & Chen, 1982

Rhabdonotus A. Milne-Edwards, 1879
= *Rhabdonotus* A. Milne-Edwards, 1879 (type species *Rhabdonotus pictus* A. Milne-Edwards, 1879, by monotypy; gender masculine)
Rhabdonotus pictus A. Milne-Edwards, 1879
= *Caphyra archeri* Walker, 1887
Rhabdonotus pilipes Chia & Ng, 1995
Rhabdonotus xynon Chia & Ng, 1995

Tauropus Chia & Ng, 1998
= *Tauropus* Chia & Ng, 1998 (type species *Harrovia egeriae* Gordon, 1947, by original designation and monotypy; gender masculine)
Tauropus egeriae (Gordon, 1947) [*Harrovia*]

Tiaramedon Chia & Ng, 1998
= *Tiaramedon* Chia & Ng, 1998 (type species *Ceratocarcinus spinosus* Miers, 1879, by original designation and monotypy; gender masculine)
Tiaramedon spinosum (Miers, 1879) [*Ceratocarcinus*]

Zebrida White, 1847
= *Zebrida* White, 1847 (type species *Zebrida adamsii* White, 1847, by monotypy; gender feminine)
Zebrida adamsii White, 1847
= *Zebrida paucidentata* Flipse, 1930
Zebrida brevicarinata Ng & Chia, 1999
Zebrida longispina Haswell, 1880

Zebridonus Chia, Ng & Castro, 1995
= *Zebridonus* Chia, Ng & Castro, 1995 (type species *Zebridonus mirabilis* Chia, Ng & Castro, 1995, by original designation; gender masculine)
Zebridonus mirabilis Chia, Ng & Castro, 1995

Subfamily Pilumninae Samouelle, 1819

Pilumnidae Samouelle, 1819 [Opinion 423]
Actumninae Dana, 1851
Heteropanopioida Alcock, 1898
Bathypilumnini Števčić, 2005
Priapilumnini Števčić, 2005
Danielini Števčić, 2005
Garthopilumnidae Števčić, 2005 (unavailable name) {1}

Actumnus Dana, 1851
= *Actumnus* Dana, 1851 (type species *Actumnus tomentosus* Dana, 1852, subsequent designation by Rathbun, 1922; gender masculine) [Opinion 73, Direction 37]
Actumnus amirantensis Rathbun, 1911
Actumnus anthelmei Ward, 1942
Actumnus arbutum Alcock, 1898
Actumnus asper (Rüppell, 1830) [*Xantho*]
= *Pilumnus brachytrichus* Kossmann, 1877
= *Pilumnus schrenkii* Paul'son, 1875
= *Actumnus bonnieri* Nobili, 1905
Actumnus calypso (Herbst, 1801) [*Cancer*]
= *Actumnus verrucosus* Henderson, 1893
Actumnus davoensis Ward, 1941
Actumnus digitalis (Rathbun, 1907) [*Platypodia*]
= *Actumnus carinatus* Bouvier, 1914 (nomen nudum)
Actumnus dorsipes (Stimpson, 1858) [*Pilumnus*]
Actumnus elegans De Man, 1888
Actumnus fissifrons Alcock, 1898
Actumnus forficigerus (Stimpson, 1858) [*Pilumnus*]
Actumnus globulus Heller, 1861
Actumnus granotuberosus Garth & Kim, 1983
Actumnus griffini Takeda & Webber, 2006
Actumnus intermedius Balss, 1922
Actumnus margarodes MacGilchrist, 1905
Actumnus marissinicus Takeda & Miyake, 1977
Actumnus miliaris A. Milne-Edwards, 1865
Actumnus obesus Dana, 1852
Actumnus parvulus A. Milne-Edwards, 1869
Actumnus setifer (De Haan, 1835) [*Cancer* (*Pilumnus*)]
= *Actumnus tomentosus* Dana, 1852

Actumnus setosiareolatus Takeda, 1977
Actumnus similis Takeda & Miyake, 1969
Actumnus simplex Rathbun, 1911
Actumnus squamosus (De Haan, 1835) [*Cancer* (*Pilumnus*)]
= *Pilumnus dehaanii* Miers, 1879
= *Pilumnus lapillimanus* Stimpson, 1858
Actumnus taiwanicus Ho, Yu & Ng, 2001
?*Actumnus targionii* Cano, 1889
Actumnus tesselatus Alcock, 1898

Aniptumnus Ng, 2002
= *Aniptumnus* Ng, 2002 (type species, *Pilumnus* (*Parapilumnus*) *quadridentatus* De Man, 1895, by original designation; gender masculine)
Aniptumnus quadridentatus (De Man, 1895) [*Pilumnus* (*Parapilumnus*)]
Aniptumnus nefissurus (Garth & Kim, 1983) [*Parapilumnus*]

Bathypilumnus Ng & L. W. H. Tan, 1984
= *Bathypilumnus* Ng & L. W. H. Tan, 1984 (type species *Pilumnus sinensis* Gordon, 1930, by original designation; gender masculine)
Bathypilumnus nigrispinifer (Griffin, 1970) [*Pilumnus*]
Bathypilumnus pugilator (A. Milne-Edwards, 1873) [*Actumnus*]
Bathypilumnus sinensis (Gordon, 1930) [*Pilumnus*]

Benthopanope Davie, 1989
= *Benthopanope* Davie, 1989 (type species *Benthopanope estuarius* Davie, 1989, by original designation; gender feminine)
Benthopanope estuaria Davie, 1989
Benthopanope eucratoides (Stimpson, 1858) [*Pilumnopeus*]
Benthopanope indica (De Man, 1887) [*Heteropanope*]
Benthopanope pearsei (Rathbun, 1932) [*Heteropanope*]
Benthopanope pharaonica (Nobili, 1905) [*Heteropanope*]
Benthopanope sexangula (Rathbun, 1909) [*Heteropanope*]

Danielum Vázquez-Bader & Gracia, 1995
= *Danielum* Vázquez-Bader & Gracia, 1995 (type species *Danielum ixbauchac* Vázquez-Bader & Gracia, 1995, by original designation; gender neuter)
Danielum ixbauchac Vázquez-Bader & Gracia, 1995

Eurycarcinus A. Milne-Edwards, 1867
= *Eurycarcinus* A. Milne-Edwards, 1867 (type species *Eurycarcinus grandidierii* A. Milne-Edwards, 1867, by present designation; gender masculine)
Eurycarcinus integifrons De Man, 1879
Eurycarcinus natalensis (Krauss, 1843) [*Galene*]
= *Eurycarcinus grandidierii* A. Milne-Edwards, 1867
Eurycarcinus orientalis A. Milne-Edwards, 1867

Glabropilumnus Balss, 1932
= *Glabropilumnus* Balss, 1932 (type species *Xantho dispar* Dana, 1852, by original designation; gender masculine)
Glabropilumnus dispar (Dana, 1852) [*Xantho*]
= *Pilumnus nitidus* A. Milne-Edwards, 1873
Glabropilumnus edamensis (De Man, 1888) [*Pilumnus*]
Glabropilumnus gordonae Balss, 1935
Glabropilumnus laevimanus (Dana, 1852) [*Pilumnus*]
Glabropilumnus laevis (Dana, 1852) [*Pilumnus*]
Glabropilumnus seminudus (Miers, 1884) [*Pilumnus*]

Gorgonariana Galil & Takeda, 1988
= *Gorgonariana* Galil & Takeda, 1988 (type species *Liomera sodalis* Alcock, 1898, by original designation; gender feminine)
Gorgonariana sodalis (Alcock, 1898) [*Liomera*]
= *Liomera spinipes* Borradaile, 1902

Heteropanope Stimpson, 1858
= *Heteropanope* Stimpson, 1858 (type species *Heteropanope glabra* Stimpson, 1858, subsequent designation by Balss, 1933; gender feminine) [Opinion 712]
Heteropanope acanthocarpus Crosnier, 1967
Heteropanope changensis (Rathbun, 1909) [*Actumnus*]
Heteropanope glabra Stimpson, 1858
= *Pilumnopeus maculatus* A. Milne-Edwards, 1867
?*Heteropanope hilarula* (De Man, 1928) [*Pilumnus*]
Heteropanope longipedes Davie, 1989
Heteropanope tuberculidens Monod, 1956

Heteropilumnus De Man, 1895
= *Heteropilumnus* De Man, 1895 (type species *Heteropilumnus stormi* De Man, 1895, by original designation; gender masculine)
Heteropilumnus amoyensis Gordon, 1931
Heteropilumnus angustifrons (Alcock, 1900) [*Litochira*]
Heteropilumnus ciliatus (Stimpson, 1858) [*Pilumnoplax*]
= *Heteropanope cristadentatus* Shen, 1936
Heteropilumnus cristatus (Rathbun, 1909) [*Litocheira*]
Heteropilumnus fimbriatus (H. Milne Edwards, 1834) [*Pilumnus*]
= *Pilumnus pilosus* Fulton & Grant, 1906
Heteropilumnus granulimanus Ward, 1933
Heteropilumnus hirsutior (Lanchester, 1900) [*Carcinoplax*]
Heteropilumnus holthuisi Ng & L. W. H. Tan, 1988
Heteropilumnus lanuginosus (Klunzinger, 1913) [*Pilumnus*]
Heteropilumnus longipes (Stimpson, 1858) [*Pilumnoplax*]
Heteropilumnus longisetum Davie & Humpherys, 1997
Heteropilumnus mikawaensis Sakai, 1969
Heteropilumnus sasekumari Serène, 1971
Heteropilumnus satriai Yeo, Rahayu & Ng, 2004
Heteropilumnus setosus (A. Milne-Edwards, 1873) [*Carcinoplax*]
Heteropilumnus splendidus (De Man, 1929) [*Litocheira*]
Heteropilumnus stormi De Man, 1895
Heteropilumnus trichophoroides De Man, 1895
= *Pilumnus borradailei* Rathbun, 1909
Heteropilumnus trichophorus De Man, 1895

Latopilumnus Türkay & Schuhmacher, 1985
= *Latopilumnus* Türkay & Schuhmacher, 1985 (type species *Latopilumnus tubicolus* Türkay & Schuhmacher, 1985, by original designation; gender masculine)
Latopilumnus guinotae (Deb, 1987) [*Parapilumnus*]
= *Pilumnus debae* Ng, 2002, when regarded as species of *Pilumnus*, junior homonym of *Pilumnus guinotae* Takeda & Miyake, 1968
Latopilumnus malardi (De Man, 1914) [*Pilumnus*]
Latopilumnus truncatospinosus (De Man, 1914) [*Pilumnus*]
Latopilumnus tuberculosus (Garth & Kim, 1983) [*Parapilumnus*]
Latopilumnus tubicolus Türkay & Schuhmacher, 1985
Latopilumnus guinotae (Deb, 1987) [*Parapilumnus*]
= *Pilumnus debae* Ng, 2002 [when regarded as species of *Pilumnus*, junior hononym of *Pilumnus guinotae* Takeda & Miyake, 1968]

Lentilumnus Galil & Takeda, 1988
= *Lentilumnus* Galil & Takeda, 1988 (type species *Glabropilumnus latimanus* Gordon, 1934, by original designation; gender masculine)
Lentilumnus latimanus (Gordon, 1934) [*Glabropilumnus*]
Lentilumnus spinidentatus (Garth & Kim, 1983) [*Glabropilumnus*]

Lobopilumnus A. Milne-Edwards, 1880
= *Lobopilumnus* A. Milne-Edwards, 1880 (type species *Pilumnus agassizii* Stimpson, 1871, subsequent designation by Rathbun, 1930; gender masculine)
Lobopilumnus agassizii agassizii (Stimpson, 1871) [*Pilumnus*]
Lobopilumnus agassizii bermudensis Rathbun, 1898

Lobopilumnus agassizii pulchella A. Milne-Edwards, 1880
Lobopilumnus agassizii trinidadensis Rathbun, 1930

Lophopilumnus Miers, 1886
= *Lophopilumnus* Miers, 1886 (type species *Pilumnus dilatipes* Adams & White, 1849, by original designation and monotypy; gender masculine) [Opinion 85, Direction 37]
Lophopilumnus cristipes (Calman, 1900) [*Pilumnus*]
Lophopilumnus dilatipes (Adams & White, 1849) [*Pilumnus*]
Lophopilumnus globosus Davie, 1988

Nanopilumnus Takeda, 1974
= *Nanopilumnus* Takeda, 1974 (type species *Medaeus rouxi* Balss, 1936, by original designation; gender masculine)
= *Balssomedaeus* Števčić, 2005 (type species *Medaeus rouxi* Balss, 1936, by original designation; gender masculine) (unavailable name) {1}
Nanopilumnus barbatus (A. Milne-Edwards, 1873) [*Pilumnus*]
Nanopilumnus boletifer (Monod, 1956) [*Pilumnus*]
Nanopilumnus coralliophilus (Takeda & Miyake, 1969) [*Pilumnus*]
Nanopilumnus heterodon (Sakai, 1934) [*Pilumnus*]
Nanopilumnus hondai (Takeda & Miyake, 1969) [*Parapilumnus*]
Nanopilumnus rouxi (Balss, 1936) [*Medaeus*]

Neoactumnus Sakai, 1965
= *Neoactumnus* Sakai, 1965 (type species *Neoactumnus convexus* Sakai, 1965, by original designation and monotypy; gender masculine)
Neoactumnus convexus Sakai, 1965
Neoactumnus unispina Garth & Kim, 1983

Parapleurophrycoides Nobili, 1906
= *Parapleurophrycoides* Nobili, 1906 (type species *Parapleurophrycoides roseus* Nobili, 1906, by monotypy; gender masculine)
Parapleurophrycoides roseus Nobili, 1906

Pilumnopeus A. Milne-Edwards, 1867
= *Pilumnopeus* A. Milne-Edwards, 1867 (type species *Pilumnopeus crassimanus* A. Milne-Edwards, 1867, subsequent designation by Balss, 1933; gender masculine) [Opinion 712]
Pilumnopeus africanus (De Man, 1902) [*Heteropanope*]
Pilumnopeus caparti (Monod, 1956) [*Heteropanope* (*Pilumnopeus*)]
Pilumnopeus convexus (Maccagno, 1936) [*Heteropanope*]
Pilumnopeus granulatus Balss, 1933
?*Pilumnopeus laevimanus* Cano, 1889
Pilumnopeus makianus (Rathbun, 1931) [*Heteropanope*]
Pilumnopeus marginatus (Stimpson, 1858) [*Pilumnus*]
Pilumnopeus pereiodontus Davie & Ghani, 1993
Pilumnopeus salomonensis Ward, 1942
Pilumnopeus serratifrons (Kinahan, 1856) [*Ozius*]
= *Pilumnopeus crassimanus* A. Milne-Edwards, 1867
= *Heteropanope australiensis* Stimpson, 1858
Pilumnopeus riui Takeda, 2001
Pilumnopeus sinensis Balss, 1933
Pilumnopeus vauquelini (Audouin, 1826) [*Pilumnus*]

Pilumnus Leach, 1815
= *Pilumnus* Leach, 1815 (type species *Cancer hirtellus* Linnaeus, 1761, by monotypy; gender masculine) [Opinion 85, Direction 37]
= *Acanthus* Lockington, 1877 (type species *Acanthus spinohirsutus* Lockington, 1877, by monotypy; gender masculine)
= *Lazaropilumnus* Števčić, 2005 (type species *Planopilumnus minabensis* Sakai, 1969, by original designation; gender masculine) (unavailable name) {1, 5}
= *Garthopilumnus* Števčić, 2005 (type species *Pilumnus palmeri* Garth, 1986, by original designation; gender: masculine) (unavailable name) {1}
Pilumnus acanthosoma Ng, 2000
Pilumnus acer Rathbun, 1923
Pilumnus acutifrons Rathbun, 1906
Pilumnus aestuarii Nardo, 1869
Pilumnus affinis Brito Capello, 1875
Pilumnus alcocki Borradaile, 1902
Pilumnus annamensis Takeda & Miyake, 1968
Pilumnus australis Whitelegge, 1900
Pilumnus balssi Takeda & Miyake, 1972
= *Pilumnus longicornis spinosus* Balss, 1933 (pre-occupied name)
Pilumnus bleekeri Miers, 1880
Pilumnus braueri Balss, 1933
Pilumnus caerulescens A. Milne-Edwards, 1873
Pilumnus capillatus Ng, Dai & Yang, 1997
Pilumnus caribaeus Desbonne, in Desbonne & Schramm, 1867
= *Pilumnus brasiliensis* Miers, 1886
Pilumnus ceylonicus Deb, 1987
Pilumnus chani Ng & Ho, 2003
Pilumnus comatus Ng, Dai & Yang, 1997
Pilumnus contrarius Rathbun, 1923
Pilumnus cursor A. Milne-Edwards, 1873
Pilumnus danai Stimpson, 1907
Pilumnus dasypodus Kingsley, 1879
= *Pilumnus vinaceus* A. Milne-Edwards, 1880
Pilumnus deflexus A. Milne-Edwards, 1867
Pilumnus depressus Stimpson, 1871
Pilumnus digitalis Rathbun, 1923
Pilumnus diomedeae Rathbun, 1894
Pilumnus elegans De Man, 1888
Pilumnus etheridgei Rathbun, 1923
Pilumnus eudaemoneus Nobili, 1905
Pilumnus fernandezi Garth, 1973
Pilumnus fissifrons Stimpson, 1858
Pilumnus floridanus Stimpson, 1871
= *Pilumnus lacteus* A. Milne-Edwards, 1880 {4}
"*Pilumnus*" *fuscus* (Balss, 1933) [*Planopilumnus*] {5}
Pilumnus gemmatus Stimpson, 1860
Pilumnus gonzalensis Rathbun, 1894
Pilumnus gracilipes A. Milne-Edwards, 1880
Pilumnus granti Montogomery, 1931
Pilumnus guinotae Takeda & Miyake, 1968
Pilumnus habei Takeda & Miyake, 1972
Pilumnus haswelli De Man, 1888
Pilumnus hirtellus (Linnaeus, 1761) [*Cancer*]
= *Pilumnus hirtellus ponticus* Czerniavsky, 1868
Pilumnus holosericus Rathbun, 1898
Pilumnus humilis Miers, 1884
Pilumnus ikedai Takeda & Miyake, 1968
Pilumnus incanus (Forskål, 1775) [*Cancer*] {6}
= *Pilumnus forskalii* H. Milne Edwards, 1834
= *Pilumnus incanus* Klunzinger, 1913
?*Pilumnus indicus* (Deb, 1987) [*Parapilumnus*]
Pilumnus inermis A. Milne-Edwards & Bouvier, 1894
Pilumnus infraciliaris Ortmann, 1894
Pilumnus integifrons Shen, 1948
Pilumnus investigatoris Deb, 1987
Pilumnus izuogasawarensis Takeda & Ng, 1997
Pilumnus karachiensis Deb, 1987
Pilumnus kempi Deb, 1987
Pilumnus kingstoni (Rathbun, 1923) [*Actumnus*]
Pilumnus koepckei Türkay, 1967

Pilumnus lacteus Stimpson, 1871 {4}
"*Pilumnus*" *labyrinthicus* Miers, 1884 {5}
Pilumnus laevigatus (Rathbun, 1911) [*Actumnus*]
Pilumnus lanatus Latreille, 1825
Pilumnus limosus Smith, 1869
Pilumnus longicornis Hilgendorf, 1878
= *Pilumnus andersoni* De Man, 1887
Pilumnus longipes A. Milne-Edwards, 1873
Pilumnus longleyi Rathbun, 1930
Pilumnus lumpinus Bennett, 1964
= *Pilumnus confusa* Bennett, 1948 (nomen nudum, manuscript name)
Pilumnus maccullochi Montogomery, 1931
Pilumnus maldivensis Borradaile, 1902
Pilumnus marshi Rathbun, 1901
Pilumnus merodentatus Nobili, 1906
= *Pilumnus normani* De Man, 1888
"*Pilumnus*" *minabensis* (Sakai, 1969) [*Planopilumnus*] {5}
Pilumnus minutus De Haan, 1835
= *Pilumnus hirsutus* Stimpson, 1858
= *Pilumnus habererianus* Doflein, 1902
Pilumnus monilifera Haswell, 1882
Pilumnus murphyi Ng, 1988
Pilumnus neglectus Balss, 1933
= *Parapilumnus euryfrons* Garth & Kim, 1983 {7}
Pilumnus nobilii Garth, 1948
Pilumnus normani Miers, 1886
Pilumnus novaezealandiae Filhol, 1885
= *Pilumnus maori* Borradaile, 1906
Pilumnus nudimanus Rathbun, 1901
Pilumnus nuttingi Rathbun, 1906
Pilumnus oahuensis Edmondson, 1931
Pilumnus ohshimai Takeda & Miyake, 1970
Pilumnus orbitospinis Rathbun, 1911
?*Pilumnus palmeri* Garth, 1986
Pilumnus pannosus Rathbun, 1896
Pilumnus parapilumnoides Takeda & Miyake, 1970
Pilumnus parvulus Nobili, 1906
Pilumnus parableekeri Ng & L. W. H. Tan, 1984
"*Pilumnus*" *penicillatus* Gordon, 1931 {5}
Pilumnus peronii H. Milne Edwards, 1834
Pilumnus perrieri A. Milne-Edwards & Bouvier, 1898
Pilumnus pileiferus Ng & L. W. H. Tan, 1984
Pilumnus propinquus Nobili, 1905
Pilumnus prunosus Whitelegge, 1897
Pilumnus pulcher Miers, 1884
Pilumnus purpureus A. Milne-Edwards, 1873
Pilumnus pygmaeus Boone, 1927 {5}
"*Pilumnus*" *pygmaeus* (Takeda, 1977) [*Planopilumnus*] {5}
Pilumnus quoii H. Milne Edwards, 1834
= *Pilumnus quoyi* A. Milne-Edwards, 1880
Pilumnus ransoni Forest & Guinot, 1961
Pilumnus reticulatus Stimpson, 1860
= *Pilumnus tesselatus* A. Milne-Edwards, 1880
= *Pilumnus fragosus* A. Milne-Edwards, 1880
= *Pilumnus meridionalis* Nobili, 1901
Pilumnus rotumanus Borradaile, 1900
Pilumnus rotundus Borradaile, 1902
Pilumnus rubroseta Ng, Dai & Yang, 1997
Pilumnus rufopunctatus Stimpson, 1858
Pilumnus savignyi Heller, 1861
Pilumnus sayi Rathbun, 1923
= *Pilumnus aculeatus* Say, 1818 (pre-occupied name)
Pilumnus scabriusculus Adams & White, 1849
Pilumnus schellenbergi Balss, 1933
Pilumnus semilanatus Miers, 1884
Pilumnus semilunaris Ng, Dai & Yang, 1997
Pilumnus senahai Takeda & Miyake, 1968
Pilumnus serenei Ng, 1988
Pilumnus sluiteri De Man, 1892
Pilumnus spinicarpus Grant & McCulloch, 1906
Pilumnus spinifer H. Milne Edwards, 1834
Pilumnus spinifrons Ng & L. W. H. Tan, 1984
Pilumnus spinohirsutus (Lockington, 1877) [*Acanthus*]
Pilumnus spinosissimus Rathbun, 1898
Pilumnus spinosus Filhol, 1885
Pilumnus spinulus Shen, 1932
Pilumnus stebbingi Capart, 1951
Pilumnus stimpsonii Miers, 1886
= *Pilumnus marginatus* Stimpson, 1871 (pre-occupied name)
Pilumnus striatus De Man, 1888
Pilumnus taeniola Rathbun, 1906
Pilumnus tahitensis De Man, 1890
Pilumnus takedai Ng, 1988
Pilumnus tantulus Rathbun, 1923
Pilumnus tectus Rathbun, 1933
Pilumnus teixeiranus Brito Capello, 1875
Pilumnus tenellus Dana, 1852
Pilumnus terraereginae Haswell, 1882
Pilumnus thoe (Herbst, 1803) [*Cancer*]
Pilumnus tomentosus Latreille, 1825
= *Pilumnus major* Ortmann, 1893
Pilumnus townsendi Rathbun, 1923
?*Pilumnus trispinosus* (Sakai, 1965) [*Parapilumnus*]
Pilumnus tuantaoensis Shen, 1948
Pilumnus turgidulus Rathbun, 1911
?*Pilumnus verrucimanus* Klunzinger, 1913
Pilumnus vespertilio (Fabricius, 1793) [*Cancer*]
= *Pilumnus mus* Dana, 1825
= *Pilumnus ursulus* Adams & White, 1849
"*Pilumnus*" *vermiculatus* A. Milne-Edwards, 1873 {5}
Pilumnus vestitus Haswell, 1882
Pilumnus villosissimus (Rafinesque, 1814) [*Cancer*]
= *Pilumnus villosus* Risso, 1827
Pilumnus woodworthi Rathbun, 1902
Pilumnus xantusii Stimpson, 1860
Pilumnus zimmeri Balss, 1933

Priapipilumnus Davie, 1989
= *Priapipilumnus* Davie, 1989 (type species *Priapipilumnus nimbus* Davie, 1989, by original designation; gender masculine)
Priapipilumnus nimbus Davie, 1989

Pseudactumnus Balss, 1933
= *Pseudactumnus* Balss, 1933 (type species *Pseudactumnus pestae* Balss, 1933, by monotypy; gender masculine)
Pseudactumnus pestae Balss, 1933

Serenepilumnus Türkay & Schuhmacher, 1985
= *Leopoldius* Serène, 1971 (type species *Parapilumnus leopoldi* Gordon, 1934, by original designation; name pre-occupied by *Leopoldius* Rondani, 1843 [Diptera]; gender masculine)
= *Serenepilumnus* Türkay & Schuhmacher, 1985 (replacement name for *Leopoldius* Serène, 1971; gender masculine)
Serenepilumnus kuekenthali (De Man, 1902) [*Pilumnus*]
Serenepilumnus leopoldi (Gordon, 1934) [*Parapilumnus*]
Serenepilumnus pisifer (MacLeay, 1838) [*Halimede*]
= *Pilumnus verrucosipes* Stimpson, 1858
= *Halimede delagoeae* Barnard, 1954
Serenepilumnus velasquezi (Serène, 1971) [*Leopoldius*]

Serenolumnus Galil & Takeda, 1988
= *Serenolumnus* Galil & Takeda, 1988 (type species *Glabropilumnus kasijani* Serène, 1969, by original designation; gender masculine)
Serenolumnus kasijani (Serène, 1969) [*Glabropilumnus*]

Takedana Davie, 1989
= *Takedana* Davie, 1989 (type species *Takedana eriphioides* Davie, 1989, by original designation; gender feminine)
Takedana eriphioides Davie, 1989

Viaderiana Ward, 1942
= *Viaderiana* Ward, 1942 (type species *Viaderiana typica* Ward, 1942, by original designation; gender feminine)
Viaderiana affinis (Tesch, 1918) [*Litocheira*]
Viaderiana aranea (Tesch, 1918) [*Litocheira*]
Viaderiana beaumonti (Alcock, 1900) [*Litocheira*]
?*Viaderiana celebensis* (Tesch, 1918) [*Speocarcinus*]
Viaderiana demani (Ng & L. W. H. Tan, 1984) [*Pilumnus*]
Viaderiana incerta (Takeda & Miyake, 1969) [*Parapilumnus*]
Viaderiana kasei Takeda & Manuel, 2003
Viaderiana meseda Türkay, 1986
Viaderiana nandongensis (Chen, 1998) [*Litocheira*]
Viaderiana nanshensis (Dai, Cai & Yang, 1994) [*Litocheira*]
Viaderiana quadrispinosa (Zehntner, 1894) [*Litocheira*]
Viaderiana rotumana (Borradaile, 1900) [*Pilumnus*]
Viaderiana sentus Ng, Dai & Yang, 1997
Viaderiana striata (De Man, 1888) [*Pilumnus*]
Viaderiana typica Ward, 1942
Viaderiana woodmasoni (Deb, 1987) [*Pilumnus*]
Viaderiana xishaensis (Song, 1987) [*Litocheira*]

Xestopilumnus Ng & Dai, 1997
= *Xestopilumnus* Ng & Dai, 1997 (type species *Xestopilumnus cultripollex* Ng & Dai, 1997, by original designation; gender masculine)
Xestopilumnus cultripollex Ng & Dai, 1997

Xlumnus Galil & Takeda, 1988
= *Xlumnus* Galil & Takeda, 1988 (type species *Glabropilumnus nhatrangensis* Serène, 1971, by original designation; gender masculine)
Xlumnus nhatrangensis (Serène, 1971) [*Glabropilumnus*]

Incertae sedis

Xantho spinosa Gray, 1831
Pilumnus dioxippe White, 1847 (nomen nudum)
Pilumnus helia White, 1847 (nomen nudum)
Pilumnus merope White, 1847 (nomen nudum)
Pilumnus spinimanus White, 1847 (nomen nudum)

Subfamily Rhizopinae Stimpson, 1858

Rhizopidae Stimpson, 1858
Typhlocarcinopsinae Rathbun, 1909
Heteropilumninae Serène, 1984
Itampolinae Števčić, 2005
Peleianinae Števčić, 2005

Caecopilumnus Borradaile, 1903
= *Caecopilumnus* Borradaile, 1903 (type species *Caecopilumnus hirsutus* Borradaile, 1903, by monotypy; gender masculine)
Caecopilumnus crassipes (Tesch, 1918) [*Typhlocarcinodes*]
Caecopilumnus hirsutus Borradaile, 1903
Caecopilumnus piroculatus (Rathbun, 1911) [*Typhlocarcinops*]

Camptoplax Miers, 1884
= *Camptoplax* Miers, 1884 (type species *Camptoplax coppingeri* Miers, 1884, by monotypy; gender feminine) [Opinion 85, Direction 37]
Camptoplax coppingeri Miers, 1884

Ceratoplax Stimpson, 1858
= *Ceratoplax* Stimpson, 1858 (type species *Ceratoplax ciliatus* Stimpson, 1858, by monotypy; gender feminine) [Opinion 85, Direction 37]
Ceratoplax ciliata Stimpson, 1858
Ceratoplax fulgida Rathbun, 1914
Ceratoplax glaberrima (Haswell, 1881) [*Pilumnus*]
= *Ceratoplax punctata* Baker, 1907
Ceratoplax hispida Alcock, 1900
Ceratoplax inermis (Haswell, 1881) [*Pilumnus*]
Ceratoplax laevimarginata (Yokoya, 1933) [*Speocarcinus*]
Ceratoplax lutea (McNeill, 1929) [*Speocarcinus*]
Ceratoplax truncatifrons Rathbun, 1914

Cryptocoeloma Miers, 1884
= *Cryptocoeloma* Miers, 1884 (type species *Cryptocoeloma haswelli* Rathbun, 1923, subsequent designation by ICZN plenary powers; gender neuter) [Opinion 1554]
Cryptocoeloma haswelli Rathbun, 1923 [Opinion 1554]

Cryptolutea Ward, 1936
= *Cryptolutea* Ward, 1936 (type species *Cryptolutea lindemanensis* Ward, 1936, by original designation; gender feminine)
= *Serratocoxa* Ng, 1987 (type species *Lophoplax teschi* Serène, 1971, by original designation; gender feminine)
Cryptolutea arafurensis Davie & Humpherys, 1997
Cryptolutea granulosa (MacGilchrist, 1905) [*Ceratoplax*]
Cryptolutea lindemanensis Ward, 1936
Cryptolutea sagamiensis (Sakai, 1935) [*Ceratoplax*]
Cryptolutea teschi (Serène, 1971) [*Lophoplax*]

Itampolus Serène & Peyrot-Clausade, 1977
= *Itampolus* Serène & Peyrot-Clausade, 1977 (type species *Itampolus peresi* Serène & Peyrot-Clausade, 1977, by original designation and monotypy; gender masculine)
Itampolus peresi Serène & Peyrot-Clausade, 1977

Lophoplax Tesch, 1918
= *Lophoplax* Tesch, 1918 (type species *Lophoplax bicristata* Tesch, 1918, by original designation and monotypy; gender feminine) {8}
Lophoplax bicristata Tesch, 1918
Lophoplax sculpta (Stimpson, 1858) [*Pilumnoplax*]
Lophoplax sextuberculata Takeda & Kurata, 1984
Lophoplax takakurai Sakai, 1935

Luteocarcinus Ng, 1990
= *Luteocarcinus* Ng, 1990 (type species *Luteocarcinus sordidus* Ng, 1990, by original designation and monotypy; gender masculine)
Luteocarcinus sordidus Ng, 1990

Mertonia Laurie, 1906
= *Mertonia* Laurie, 1906 (type species *Mertonia lanka* Laurie, 1906, by monotypy; gender feminine)
Mertonia integra (Haswell, 1881)
Mertonia lanka Laurie, 1906

Paranotonyx Nobili, 1905
= *Paranotonyx* Nobili, 1905 (type species *Paranotonyx curtipes* Nobili, 1905, by monotypy; gender feminine)
Paranotonyx curtipes Nobili, 1905

Paraselwynia Tesch, 1918
= *Paraselwynia* Tesch, 1918 (type species *Paraselwynia ursina* Tesch, 1918, by monotypy; gender feminine)
Paraselwynia ursina Tesch, 1918

Peleianus Serène, 1971
= *Peleianus* Serène, 1971 (type species *Peleianus suluensis* Serène, 1971, by original designation; gender masculine)
Peleianus suluensis Serène, 1971

Pronotonyx Ward, 1936
= *Pronotonyx* Ward, 1936 (type species *Ceratoplax laevis* Miers, 1884, by monotypy; gender feminine)
Pronotonyx laevis (Miers, 1884) [*Ceratoplax*]

Pseudocryptocoeloma Ward, 1936
= *Pseudocryptocoeloma* Ward, 1936 (type species *Pseudocryptocoeloma parvus* Ward, 1936, by monotypy; gender masculine)
Pseudocryptocoeloma parvus Ward, 1936
Pseudocryptocoeloma symmetrinudus Edmondson, 1951

Pseudolitochira Ward, 1942
= *Pseudolitochira* Ward, 1942 (type species *Carcinoplax integer* Miers, 1884, by monotypy; gender feminine)
Pseudolitochira decharmoyi (Bouvier, 1915) [*Litocheira*]
Pseudolitochira integra (Miers, 1884) [*Carcinoplax*]
= *Carcinoplax subinteger* Lanchester, 1900

Rhizopa Stimpson, 1858
= *Rhizopa* Stimpson, 1858 (type species *Rhizopa gracilipes* Stimpson, 1858, by monotypy; gender feminine) [Opinion 85, Direction 37]
Rhizopa gracilipes Stimpson, 1858
= *Ceratoplax obtusignathus* Dai & Song, 1986

Rhizopoides Ng, 1987
= *Rhizopoides* Ng, 1987 (type species *Rhizopa yangae* Ng, 1985, by original designation; gender masculine)
Rhizopoides yangae (Ng, 1985) [*Rhizopa*]

Selwynia Borradaile, 1903
= *Selwynia* Borradaile, 1903 (type species *Selwynia laevis* Borradaile, 1903, by original designation; gender feminine)
Selwynia laevis Borradaile, 1903

Ser Rathbun, 1931
= *Ser* Rathbun, 1931 (type species *Ser fukiensis* Rathbun, 1931, by original designation; gender masculine)
Ser fukiensis Rathbun, 1931

Typhlocarcinops Rathbun, 1909
= *Typhlocarcinops* Rathbun, 1909 (type species *Typhlocarcinops canaliculata* Rathbun, 1909, by monotypy; gender masculine)
Typhlocarcinops angustipes Tesch, 1918
Typhlocarcinops arcuatus (Miers, 1884) [*Ceratoplax*]
Typhlocarcinops canaliculatus Rathbun, 1909
Typhlocarcinops decrescens Rathbun, 1914
Typhlocarcinops denticarpus Dai, Yang, Song & Chen, 1986
= *Typhlocarcinops denticarpes* Dai & Yang, 1991 (incorrect spelling)
Typhlocarcinops gallardoi Serène, 1964
Typhlocarcinops genkaiae Takeda & Miyake, 1972
Typhlocarcinops marginatus Rathbun, 1914
Typhlocarcinops ocularius Rathbun, 1914
Typhlocarcinops serenei Türkay, 1986
Typhlocarcinops stephenseni Serène, 1964
Typhlocarcinops takedai Ng, 1987
Typhlocarcinops tonsuratus Griffin & Campbell, 1969
Typhlocarcinops transversus Tesch, 1918
Typhlocarcinops yui Ng & Ho, 2003

Typhlocarcinus Stimpson, 1858
= *Typhlocarcinus* Stimpson, 1858 (type species *Typhlocarcinus villosus* Stimpson, 1858, by present designation; gender masculine)
Typhlocarcinus craterifer Rathbun, 1914
Typhlocarcinus dentatus Stephensen, 1945
Typhlocarcinus nudus Stimpson, 1858
Typhlocarcinus rubidus Alcock, 1900
Typhlocarcinus takedai Ng, 1987
Typhlocarcinus thorsoni Serène, 1964
Typhlocarcinus villosus Stimpson, 1858

Zehntneria Takeda, 1972
= *Zehntneria* Takeda, 1972 (type species *Zehntneria miyakei* Takeda, 1972, by original designation; gender feminine)
Zehntneria amakusae (Takeda & Miyake, 1969) [*Litocheira*]
Zehntneria miyakei Takeda, 1972
Zehntneria novaeinsulicola Takeda & Kurata, 1977
Zehntneria villosa (Zehntner, 1894) [*Ceratoplax*]

Subfamily Xenophthalmodinae Števčić, 2005

Xenophthalmodinae Števčić, 2005

Xenophthalmodes Richters, 1880
= *Xenophthalmodes* Richters, 1880 (type species *Xenophthalmodes moebii* Richters, 1880, subsequent designation under Article 68.2.1; gender masculine) [Opinion 85, Direction 37]
Xenophthalmodes brachyphallus Barnard, 1955
Xenophthalmodes dolichophallus Tesch, 1918
Xenophthalmodes moebii Richters, 1880
Xenophthalmodes morsei Rathbun, 1932
Xenophthalmodes semicylindrus (Fabricius, 1798) [*Cancer*] {9}
= *Alpheus semicylindrus* Weber, 1795 (nomen nudum)

Notes

{1} *Garthopilumnus* Števčić, 2005, and *Lazaropilumnus* Števčić, 2005, are both invalid nomina nuda as they were erected without diagnostic characters. Števčić (2005: 133) designated *Pilumnus palmeri* Garth, 1986, as the type species of *Garthopilumnus* Števčić, 2005, and commented that it may need to be assigned to its own family "Garthopilumnidae" – the family name also being unavailable. The genus should be re-evaluated and described only when specimens can be examined. *Planopilumnus minabensis* Sakai, 1969, was the designated type species of *Lazaropilumnus* Števčić, 2005. *P. minabensis* does require a new genus, and this is part of an upcoming revision of *Planopilumnus* Balss, 1933, by P. K. L. Ng (see point 5). In the case of *Balssomedaeus* Števčić, 2005, another nomen nuda, there is no problem as *Nanopilumnus* Takeda, 1974, and *Balssomedaeus* Števčić, 2005, are objective synonyms because they share the same type species, *Medaeus rouxi* Balss, 1936. Takeda (1974) validly described *Nanopilumnus*.

{2} *Cancer absconditus* Herbst, 1783, was briefly described without figures, and there are no known types (K. Sakai, 1999). Herbst (1783: 138) compared it with *Cancer occultus* Herbst, 1783, which he said was very close, differing mainly in having short bristles all over its

carapace and appendages. We can only guess that this is a species of *Pilumnus* or *Actumnus*.

{3} The names *Eumedonus*, *Eumedon* and *Echinoecus* have a rather confused history because of the way they have been used. Henri Milne Edwards (1834: 349) established a new genus, *Eumedonus*, for one new species, *E. niger*, from China (H. Milne Edwards, 1834: 350) (see also H. Milne Edwards, 1837: plate 15: figure 7). In H. Milne Edwards' (1834) descriptions, he always provided a vernacular name before the scientific name for each genus and species, and for *Eumedonus*, he introduced the genus as "Eumedon *Eumedonus*" (H. Milne Edwards: 349). Subsequently, Alphonse Milne-Edwards (1879) described a species he named as *Eumedon pentagonus* from Mauritius. The use of the spelling of the genus name '*Eumedon*' by A. Milne-Edwards (1879), however, should not be regarded as the establishment of a new genus. Alphonse Milne-Edwards (1879) quite obviously incorrectly used the spelling '*Eumedon*' in place of '*Eumedonus*', because in this paper, whenever he established a new genus (e.g. *Goniothorax* and *Rhabdonotus*), he made sure that it was introduced as such (i.e. adding the suffix 'nov. gen.') and provided a diagnosis for each. But in the case of "*Eumedon pentagonus*", he introduced the species as new (as a 'nov. sp.') but without any comments on the genus. The use of the spelling '*Eumedon*' by A. Milne-Edwards (1879) should thus be regarded as an incorrect spelling of *Eumedonus* (see Chia & Ng, 2000). Rathbun (1894b) was the first to establish a new name, *Echinoecus*, for A. Milne-Edwards (1869) species, i.e. *Echinoecus pentagonus* (A. Milne-Edwards, 1869). Many workers (e.g. Laurie, 1915; Balss, 1922a), however, continued to use the generic name *Eumedonus*, apparently accepting that A. Milne-Edwards (1869) had merely used an incorrect spelling. Ward (1934) was the first to follow Rathbun (1894) in regarding *Echinoecus* as a distinct genus from *Eumedonus* sensu stricto, differentiated by the form of the carapace, angle of the antennule, and structures of the eye and G1. This has been followed by most subsequent authors (e.g. Miyake, 1939; Serène et al., 1958) (see Chia et al., 1999, for review).

{4} *Pilumnus lacteus* A. Milne-Edwards, 1880, is a subjective junior synonym of *Pilumnus floridanus* Stimpson, 1871, which is also a junior homonym of *Pilumnus lacteus* Stimpson, 1871. As such, there is no nomenclatural problem at the moment. But if *Pilumnus lacteus* A. Milne-Edwards, 1880, was to be later shown to be a distinct species, a replacement name will be needed.

{5} As has been discussed earlier under the family Planopilumnidae, if *Planopilumnus* (here restricted to *P. spongiosus* and *P. orientalis*) is a pseudoziid, the rest of the species which have been placed in *Planopilumnus* by many authors need to reappraised. The problem is that of the remaining six species of "*Planopilumnus*", *Planopilumnus fuscus* Balss, 1933, is also quite different from the rest. In his synopsis of the Brachyura, Števčić (2005) appended a list of new genera he recognised towards the end of the work which he could not place in any of his superfamilies, and designated type species for each. One of these genera was "*Lazaropilumnus*" for which the selected type species was *Planopilumnus minabensis* Sakai, 1969 (Števčić, 2005: 133). However, as he did not provide any description, diagnosis or indication, "*Lazaropilumnus*" is a nomen nudum and not an available name. In any case, the first author has been revising *Planopilumnus* for many years and the manuscript is almost finished (Ng, in prep.). In this paper, *Pilumnus labyrinthicus* Miers, 1884, *Pilumnus vermiculatus* A. Milne-Edwards, 1873, *Pilumnus penicillatus* Gordon, 1931, *Planopilumnus minabensis* Sakai, 1969, and *Planopilumnus pygmaeus* Takeda, 1977, all characterised by having oval carapaces, three low but visible lobiform anterolateral teeth, and a labyrinth-like pattern of setae on their carapace, will be referred to a new genus. *Planopilumnus fuscus* Balss, 1933, with its anterolateral margin armed only with two strong teeth, the carapace with dense, short wool-like pubescence not arranged in any patterns, and a very characteristic suborbital margin, will be referred to its own genus. For the purposes of this synopsis, we transfer all of them to *Pilumnus* sensu lato for the moment. *Pilumnus pygmaeus* Boone, 1927, is a senior homonym of *Pilumnus pygmaeus* (Takeda, 1977) because of the latter's temporary transfer from *Planopilumnus*. This homonymy will be resolved when *Pilumnus pygmaeus* (Takeda, 1977) is referred to a new genus by P. K. L. Ng (in prep.) and there is thus no reason to establish a replacement name.

{6} *Cancer incanus* Forskål, 1775, was only briefly diagnosed, and the name has not been used subsequently. However, it seems likely that what is known at present as *Pilumnus incanus* Klunzinger, 1913, from the Red Sea, was actually based on Forskål's (1775) name. Certainly their descriptions match well. The latter name, however, is generally regarded as a junior synonym of *Pilumnus forskalii* H. Milne Edwards, 1834. As this species has rarely been reported, we apply the Principle of Priority in synonymising *Pilumnus forskalii* H. Milne Edwards, 1834, with *Cancer incanus* Forskål, 1775, having clear priority.

{7} *Parapilumnus euryfrons* Garth & Kim, 1983, is actually a junior synonym of *Pilumnus neglectus* Balss, 1933. One of the authors (P. K. L. Ng) has examined types of both species, and they are clearly conspecific (see also Ng, 2002a).

{8} P. J. F. Davie is currently revising the composition of *Lophoplax* Tesch, 1918, and some of its members will need to be separated into a distinct genus.

{9} *Cancer semicylindrus* Fabricius, 1798, has been referred to various genera and families, but P. K. L. Ng has examined a syntype specimen in the Copenhagen Museum, and it is clearly a member of the genus *Xenophthalmodes*. It may be a senior synonym of a better known species, but until the genus is revised, it is here regarded as a distinct species.


Fig. 108. *Actumnus intermedius*, central Philippines (photo: P. Ng)


Fig. 109. *Eumedonus brevirhynchus*, Santo, Vanuatu (photo: R. Cleva)


Fig. 110. *Rhabdonotus xynon*, Santo, Vanuatu (photo: R. Cleva)


Fig. 111. *Lophoplax sculpta*, central Philippines (photo: T. Y. Chan)


Fig. 112. *Pilumnus dofleini*, central Philippines (photo: P. Ng)


Fig. 113. *Viaderiana quadrispinosa*, central Philippines (photo: P. Ng)

FAMILY TANAOCHELIDAE NG & CLARK, 2000

Tanaochelinae Ng & Clark, 2000

Tanaocheles Kropp, 1984
= *Tanaocheles* Kropp, 1984 (type species *Tanaocheles stenochilus* Kropp, 1984, by original designation; gender feminine)
Tanaocheles bidentata (Nobili, 1901) [*Chlorodius*]
Tanaocheles stenochilus Kropp, 1984


Fig. 114. *Tanaocheles bidentata*, Sulawesi (photo: P. Ng)

SUPERFAMILY PORTUNOIDEA RAFINESQUE, 1815

FAMILY GERYONIDAE COLOSI, 1923

Geryonidae Colosi, 1923

Chaceon Manning & Holthuis, 1989
= *Chaceon* Manning & Holthuis, 1989 (type species *Geryon fenneri* Manning & Holthuis, 1984, by orginal designation; gender masculine)
Chaceon affinis (A. Milne-Edwards & Bouvier, 1894) [*Geryon*]
Chaceon albus Davie, Ng & Dawson, 2007
Chaceon alcocki Ghosh & Manning, 1993
Chaceon australis Manning, 1993
Chaceon bicolor Manning & Holthuis, 1989
Chaceon chilensis Chirino-Gálvez & Manning, 1989
Chaceon collettei Manning, 1992
Chaceon crosnieri Manning & Holthuis, 1989
Chaceon erytheiae (Macpherson, 1984) [*Geryon*]
Chaceon fenneri (Manning & Holthuis, 1984) [*Geryon*]
Chaceon gordonae (Ingle, 1985) [*Geryon*]
Chaceon goreni Galil & Manning, 2001
Chaceon granulatus (Sakai, 1978) [*Geryon*]
Chaceon imperialis Manning, 1992
Chaceon inglei Manning & Holthuis, 1989
Chaceon karubar Manning, 1993
Chaceon macphersoni (Manning & Holthuis, 1988) [*Geryon*]
Chaceon manningi Ng, Lee & Yu, 1994
Chaceon maritae (Manning & Holthuis, 1981) [*Geryon*]
Chaceon mediterraneus Manning & Holthuis, 1989
Chaceon micronesicus Ng & Manning, 1998
Chaceon paulensis (Chun, 1903) [*Geryon*]
Chaceon poupini Manning, 1992
Chaceon quinquedens (Smith, 1879) [*Geryon*]
Chaceon ramosae Manning, Tavares & Albuquerque, 1989
Chaceon somaliensis Manning, 1993
Chaceon yaldwyni Manning, Dawson & Webber, 1989

Geryon Krøyer, 1837
= *Geryon* Krøyer, 1837 (type species *Geryon tridens* Krøyer, 1837, by original designation; gender masculine) [Opinion 85, Direction 37]
= *Chalaepus* Gerstaecker, 1856 (type species *Cancer trispinosus* Herbst, 1803, by monotypy; gender masculine)
Geryon chuni Macpherson, 1983
Geryon inghami Manning & Holthuis, 1986
Geryon longipes A. Milne-Edwards, 1882
Geryon trispinosus (Herbst, 1803) [*Cancer*]
Geryon tridens Krøyer, 1837 [Direction 36]
= *Cancer tridens* Herbst, 1790 (suppressed by ICZN) [Opinion 712]
= *Cancer tridens* Fabricius, 1798 (homonym of *Cancer tridens* Herbst, 1790) [Opinion 712]

Zariquieyon Manning & Holthuis, 1989
= *Zaraquieyon* Manning & Holthuis, 1989 (type species *Zaraquieyon inflatus* Manning & Holthuis, 1989, by original designation; gender masculine)
Zariquieyon inflatus Manning & Holthuis, 1989

FAMILY PORTUNIDAE RAFINESQUE, 1815

Portunidia Rafinesque, 1815 [Opinion 394]
Megalopidae Haworth, 1825
Carcinidae MacLeay, 1838
Lupinae Dana, 1851
Arenaeinae Dana, 1851
Platyonychidae Dana, 1851
Podophthalmidae Dana, 1851
Thalamitinae Paul'son, 1875
Caphyrinae Paul'son, 1875
Carupinae Paul'son, 1875
Neptuniden Nauck, 1880 (not in Latin, unavailable name)
Lissocarcinidae Ortmann, 1893
Polybiinae Ortmann, 1893
Lupocycloida Alcock, 1899
Portumninae Ortmann, 1899
Catoptrinae Borradaile, 1900
Goniocaphyrinae Borradaile, 1900
Xaividae Berg, 1900
Liocarcininae Rathbun, 1930
Macropipinae Stephenson & Campbell, 1960
Brusiniini Števčić, 1991
Atoportunini Števčić, 2005
Coelocarcinini Števčić, 2005

Subfamily Caphyrinae Paul'son, 1875

Caphyrinae Paul'son, 1875
Lissocarcinidae Ortmann, 1893
Coelocarcinini Števčić, 2005

Caphyra Guérin, 1832
= *Caphyra* Guérin, 1832 (type species *Caphyra rouxii* Guérin, 1832, by monotypy; gender feminine)
= *Camptonyx* Heller, 1861 (type species *Camptonyx politus* Heller, 1861, by monotypy; gender masculine)
= *Sphaerocarcinus* Zehntner, 1894 (type species *Sphaerocarcinus bedoti* Zehntner, 1894, by monotypy; gender masculine) [Opinion 73]
Caphyra acheronae Takeda & Webber, 2006
Caphyra alata Richters, 1880
= *Caphyra carinata* Stephenson & Rees, 1968
Caphyra alcyoniophila Monod, 1938
Caphyra bedoti (Zehntner, 1894) [*Sphaerocarcinus*] [Direction 36]
Caphyra curtipes Stephenson & Rees, 1968
Caphyra fulva Stephenson & Campbell, 1960
Caphyra hemisphaerica Rathbun, 1911
Caphyra holocarinata Stephenson & Rees, 1968
Caphyra loevis (A. Milne-Edwards, 1869) [*Goniosoma*]
= *Caphyra octodentata* Haswell, 1882
= *Caphyra semigranosa* De Man, 1888
= *Caphyra natatrix* Zehntner, 1894
= *Caphyra suvaensis* Edmondson, 1935
Caphyra minabensis Sakai, 1983
Caphyra polita (Heller, 1861) [*Camptonyx*]
= ?*Caphyra monticellii* Nobili, 1901
Caphyra rotundifrons (A. Milne-Edwards, 1869) [*Camptonyx*]
Caphyra rouxii Guérin, 1832 [Direction 36]
Caphyra tricostata Richters, 1880
Caphyra tridens Richters, 1880
Caphyra unidentata Lenz, 1910
Caphyra yookadai Sakai, 1933

Coelocarcinus Edmondson, 1930
= *Coelocarcinus* Edmondson, 1930 (type species *Coelocarcinus foliatus* Edmondson, 1930, by monotypy; gender masculine)
Coelocarcinus foliatus Edmondson, 1930
Coelocarcinus marindicus Ng, 2002

Lissocarcinus Adams & White, 1849
= *Lissocarcinus* White, 1847 (nomen nudum) [Direction 37]
= *Lissocarcinus* Adams & White, 1849 (type species *Lissocarcinus polybiodes* Adams & White, 1849, by monotypy; gender masculine) [Opinion 73, Direction 37]
= *Assecla* Streets, 1877 (type species *Assecla holothuricola* Streets, 1877, by present designation; gender feminine)
Lissocarcinus arkati Kemp, 1923
Lissocarcinus boholensis Semper, 1880
Lissocarcinus echinodisci Derijard, 1968
Lissocarcinus elegans Boone, 1934
Lissocarcinus holothuricola (Streets, 1877) [*Assecla*]
Lissocarcinus laevis Miers, 1886
Lissocarcinus orbicularis Dana, 1852
= *Lissocarcinus pulchellus* Müller, 1887
Lissocarcinus ornatus Chopra, 1931
Lissocarcinus polybiodes Adams & White, 1849 [Direction 36]

Incertae sedis

Caphyra pectenicola White, 1847 (nomen nudum)

Subfamily Carcininae MacLeay, 1838

Carcinidae MacLeay, 1838
Megalopidae Haworth, 1825
Platyonychidae Dana, 1851
Portumninae Ortmann, 1899
Xaividae Berg, 1900

Carcinus Leach, 1814
= *Carcinus* Leach, 1814 (type species *Cancer maenas* Linnaeus, 1758, by monotypy; gender masculine) [Opinion 330] {1}
= *Ligia* Weber, 1795 (type species *Cancer granarius* Herbst, 1783, by monotypy; gender feminine; name suppressed by ICZN)
= *Megalopa* Leach, 1814 (type species *Cancer granarius* Herbst, 1783, subsequent designation by Manning & Holthuis, 1981; gender feminine)
= *Macropa* Latreille, 1822 (type species *Megalopa montagui* Leach, 1817, by monotypy; gender feminine)
= *Sympractor* Gistel, 1848 (unnecessary replacement name for *Megalopa* Leach, 1814; gender feminine)
= *Carcinides* Rathbun, 1897 (unnecessary replacement name for *Carcinus* Leach, 1814; gender masculine)
Carcinus aestuarii Nardo, 1847
= *Portunus menoides* Rafinesque, 1817
= *Carcinus mediterraneus* Czerniavsky, 1884
Carcinus maenas (Linnaeus, 1758) [*Cancer*] [Opinion 330] {1}
= *Cancer granarius* Herbst, 1783
= *Cancer viridis* Herbst, 1783
= *Cancer pygmeus* Fabricius, 1787
= *Cancer rhomboidalis* Montagu, 1804
= *Megalopa montagui* Leach, 1817
= *Cancer granulatus* Say, 1817

Echinolatus Davie & Crosnier, 2006
= *Echinolatus* Davie & Crosnier, 2006 (type species *Nectocarcinus bullatus* Balss, 1924, by original designation; gender masculine)
Echinolatus bullatus (Balss, 1924) (*Nectocarcinus*)
Echinolatus caledonicus (Moosa, 1996) (*Nectocarcinus*)
Echinolatus poorei Davie & Crosnier, 2006
Echinolatus proximus Davie & Crosnier, 2006

Nectocarcinus A. Milne-Edwards, 1860
= *Nectocarcinus* A. Milne-Edwards, 1860 (type species *Portunus integrifrons* Latreille, 1825, designation by Dell, Griffin & Yaldwyn, 1970; gender masculine)
Nectocarcinus antarcticus (Hombron & Jacquinot, 1846) [*Portunus*]
Nectocarcinus bennetti Takeda & Miyake, 1969
Nectocarcinus integrifrons (Latreille, 1825) [*Portunus*]
= *Nectocarcinus melanodactylus* A. Milne-Edwards, 1860
Nectocarcinus pubescens Moosa, 1996
Nectocarcinus spinifrons Stephenson, 1961
Nectocarcinus tuberculosus A. Milne-Edwards, 1860

Portumnus Leach, 1814
= *Portumnus* Leach, 1814 (type species *Cancer latipes* Pennant, 1777, by monotypy; gender masculine) [Opinion 73]
= *Platyonichus* Latreille, 1825 (unnecessary replacement name for *Portumnus* Leach, 1814; gender masculine)
= *Platyonychus* Desmarest, 1825 (incorrect spelling)
Portumnus latipes (Pennant, 1777) [*Cancer*] [Direction 36]
= *Portumnus variegatus* Leach, 1814
Portumnus lysianassa (Herbst, 1801) [*Cancer*]
= *Portumnus pestai* Forest, 1967
Portumnus pestai Forest, 1967

Xaiva MacLeay, 1838
= *Xaiva* MacLeay, 1838 (type species *Xaiva pulchella* MacLeay, 1838, by monotypy; gender feminine) [Opinion 712]
= *Portumnoides* Bohn, 1901 (type species *Portumnus garstangi* Bohn, 1901, by monotypy; gender masculine)
Xaiva biguttata (Risso, 1816) [*Portunus*] [Opinion 712]
= *Portumnoides garstangi* Bohn, 1901
= *Platyonichus nasutus* Latreille, 1828
Xaiva mcleayi (Barnard, 1947) [*Portumnus*]
Xaiva pulchella MacLeay, 1838

Incertae sedis

Ligia inflexa Weber, 1795 (nomen nudum)
Ligia tricuspitata Weber, 1795 (nomen nudum)

Subfamily Carupinae Paul'son, 1875

Carupinae Paul'son, 1875
Catoptrinae Borradaile, 1900
Goniocaphyrinae Borradaile, 1900

Carupa Dana, 1851
= *Carupa* Dana, 1851 (type species *Carupa tenuipes* Dana, 1852, by subsequent monotypy; gender feminine) [Opinion 73]
Carupa tenuipes Dana, 1852 [Direction 36]
= *Carupa laeviuscula* Heller, 1862
Carupa ohashii Takeda, 1993

Catoptrus A. Milne-Edwards, 1870
= *Catoptrus* A. Milne-Edwards, 1870 (type species *Catoptrus nitidus* A. Milne-Edwards, 1870, by monotypy; gender masculine) [Opinion 85, Direction 37]
= *Goniocaphyra* De Man, 1888 (type species *Goniocaphyra truncatifrons* De Man, 1888, by monotypy; gender feminine)
Catoptrus nitidus A. Milne-Edwards, 1870 [Direction 36]
= *Goniocaphyra truncatifrons* De Man, 1888
Catoptrus inaequalis (Rathbun, 1906) [*Goniocaphyra*]
Catoptrus quinquedentatus Yang, Chen & Tang, 2006
Catoptrus rathbunae Serène, 1965
Catoptrus undulatipes Yang, Chen & Tang, 2006

Libystes A. Milne-Edwards, 1867
= *Libystes* A. Milne-Edwards, 1867 (type species *Libystes nitidus* A. Milne-Edwards, 1867, by monotypy; gender masculine) [Opinion 85, Direction 37]
= *Carcinoplacoides* Kesling, 1958 (type species *Carcinoplacoides flottei* Kesling, 1958, by monotypy; gender masculine) [fossil genus]
Libystes edwardsi Alcock, 1899
Libystes lepidus Takeda & Miyake, 1970
Libystes nitidus A. Milne-Edwards, 1867 [Direction 36]
= ?*Libystes alphonsi* Alcock, 1899
= *Carcinoplacoides flottei* Kesling, 1958 [fossil species]
Libystes paucidentatus Stephenson & Campbell, 1960
Libystes vietnamensis Tien, 1969
Libystes villosus Rathbun, 1924 {2}

Richerellus Crosnier, 2003
= *Richerellus* Crosnier, 2003 (type species *Richerellus moosai* Crosnier, 2003, by original designation; gender masculine)
Richerellus moosai Crosnier, 2003

Subfamily Podophthalminae Dana, 1851

Podophthalmidae Dana, 1851

Euphylax Stimpson, 1860
= *Euphylax* Stimpson, 1860 (type species *Euphylax dovii* Stimpson, 1860, by monotypy; gender masculine) [Opinion 73]
Euphylax dovii Stimpson, 1860
Euphylax robustus A. Milne-Edwards, 1874

Podophthalmus Lamarck, 1801
= *Podophthalmus* Lamarck, 1801 (type species *Podophthalmus spinosus* Lamarck, 1801, by monotypy; gender masculine) [Opinion 73]
= *Podoptalmus* Lamarck, 1801 (incorrect spelling) [Direction 37]
Podophthalmus minabensis Sakai, 1961
Podophthalmus nacreus Alcock, 1899
Podophthalmus vigil (Fabricius, 1798) [*Portunus*] [Direction 36]
= *Portunus vigil* Weber, 1795 (nomen nudum)
= *Podophthalmus spinosus* Lamarck, 1801

Subfamily Polybiinae Ortmann, 1893

Polybiinae Ortmann, 1893
Liocarcininae Rathbun, 1930
Macropipinae Stephenson & Campbell, 1960
Brusiniini Števčić, 1991

Remarks. – An ongoing study of this subfamily by C. D. Schubart and his colleagues suggest that the Polybiinae as presently understood will need to be redefined as well as recognised as a distinct family.

Bathynectes Stimpson, 1871
= *Bathynectes* Stimpson, 1871 (type species *Bathynectes longispina* Stimpson, 1871, subsequent designation by Fowler, 1912; gender masculine) [Opinion 73, Direction 37] {3}
= *Thranites* Bovallius, 1876 (type species *Thranites velox* Bovallius, 1876, by monotypy; gender masculine)
= *Thranistes* A. Milne-Edwards, 1881 (incorrect spelling)
?*Bathynectes brevispina* Stimpson, 1871 {3}
Bathynectes longipes (Risso, 1816) [*Portunus*]
Bathynectes longispina Stimpson, 1871
= *Geryon incertus* Miers, 1886
Bathynectes maravigna (Prestandrea, 1839)
= *Thranites velox* Bovallius, 1876
= *Portunus superbus* Costa, in Costa & Costa, 1853 [Direction 36]
Bathynectes piperitus Manning & Holthuis, 1981

Benthochascon Alcock & Anderson, 1899
= *Benthochascon* Alcock & Anderson, 1899 (type species *Benthochascon hemingi* Alcock & Anderson, 1899, subsequent designation under Article 68.2.1; gender masculine) [Opinion 73]
= *Carcinonectes* Stephenson, 1972 (type species *Carcinonectes pacificus* Stephenson, 1972, by original designation; gender masculine)
Benthochascon hemingi Alcock & Anderson, 1899 [Direction 36]
= *Carcinonectes pacificus* Stephenson, 1972

Brusinia Števčić, 1991
= *Brusinia* Števčić, 1991 (type species *Brusinia brucei* Števčić, 1991, by original designation; gender feminine)
Brusinia brucei Števčić, 1991
Brusinia elongata (Sakai, 1969) [*Benthochascon*]
Brusinia piriformis Crosnier & Moosa, 2002
Brusinia profunda Moosa, 1996

Coenophthalmus A. Milne-Edwards, 1879
= *Coenophthalmus* A. Milne-Edwards, 1879 (type species *Coenophthalmus tridentatus* A. Milne-Edwards, 1879, by monotypy; gender masculine) [Opinion 73]
Coenophthalmus tridentatus A. Milne-Edwards, 1879 [Direction 36]

Liocarcinus Stimpson, 1871
= *Liocarcinus* Stimpson, 1871 (type species *Portunus holsatus* Fabricius, 1798, by original designation; gender masculine)
Liocarcinus bolivari (Zariquiey Alvarez, 1948) [*Portunus*] {4}
Liocarcinus corrugatus (Pennant, 1777) [*Cancer*] [nomen protectum]
= *Cancer pellitus* Forskål, 1775 [suppressed under Article 23.9] [nomen oblitum] {5}
= *Portunus leachii* Risso, 1827
= *Portunus strigilis* Stimpson, 1858
= ?*Portunus borradailei* Bennett, 1930
Liocarcinus depurator (Linnaeus, 1758) [*Cancer*] [Direction 84]
= *Portunus plicatus* Risso, 1816
Liocarcinus holsatus (Fabricius, 1798) [*Portunus*] [Direction 84]
= *Portunus lividus* Leach, 1814
Liocarcinus maculatus (Risso, 1827) [*Portunus*]
Liocarcinus marmoreus (Leach, 1814) [*Portunus*]
Liocarcinus navigator (Herbst, 1794) [*Cancer*]
= *Portunus arcuatus* Leach, 1814
= *Portunus emarginatus* Leach, 1814
= *Portunus guttatus* Risso, 1816
= *Portunus infractus* Otto, 1828

Liocarcinus pusillus (Leach, 1815) [*Portunus*]
= *Portunus parvulus* Parisi, 1915
Liocarcinus rondeletii (Risso, 1816) [*Portunus*]
Liocarcinus subcorrugatus (A. Milne-Edwards, 1861) [*Portunus*]
Liocarcinus vernalis (Risso, 1816) [*Portunus*]
= *Portunus barbarus* Lucas, 1846
= *Portunus valentieni* Cocco, 1833
= *Portunus dubius* Rathke, 1837
Liocarcinus zariquieyi Gordon, 1968

Macropipus Prestandrea, 1833 {4}
= *Macropipus* Prestandrea, 1833 (type species *Portunus macropipus* Prestandrea, 1833, by monotypy; gender masculine) [Opinion 394]
= *Elliptodactylus* Doflein, 1904 (type species *Elliptodactylus rugosus* Doflein, 1904, by monotypy; gender masculine)
Macropipus australis Guinot, 1961
Macropipus guadulpensis (Saussure, 1858) [*Portunus*] {6}
Macropipus rugosus (Doflein, 1904) [*Elliptodactylus*]
Macropipus tuberculatus (Roux, 1830) [*Portunus*] [Opinion 394]
= *Portunus macropipus* Prestandrea, 1833

Necora Holthuis, 1987 {4}
= *Necora* Holthuis, 1987 (type species *Cancer puber* Linnaeus, 1767, by original designation; gender feminine)
Necora puber (Linnaeus, 1767) [*Cancer*]
= *Cancer velutinus* Pennant, 1777

Ovalipes Rathbun, 1898
= *Ovalipes* Rathbun, 1898 (type species *Cancer ocellatus* Herbst, 1799, by original designation; gender masculine)
= *Anisopus* De Haan, 1833 (type species [*Corystes* (*Anisopus*) *punctata* De Haan, 1833, by monotypy; name pre-occupied by *Anisopus* Meigen, 1803 [Diptera]; gender masculine)
= *Aeneacancer* Ward, 1933 (type species *Aeneacancer molleri* Ward, 1933, by original designation; gender masculine)
Ovalipes australiensis Stephenson & Rees, 1968
Ovalipes catharus (White, in White & Doubleday, 1843) [*Portunus*]
Ovalipes elongatus Stephenson & Rees, 1968
Ovalipes georgei Stephenson & Rees, 1968
Ovalipes floridanus Hay & Shore, 1918 {6}
Ovalipes iridescens (Miers, 1886) [*Platyonychus*]
Ovalipes molleri (Ward, 1933) [*Aeneacancer*]
Ovalipes ocellatus (Herbst, 1799) [*Cancer*]
= *Portunus pictus* Say, 1817
Ovalipes punctatus (De Haan, 1833) [*Corystes* (*Anisopus*)]
= *Platyonichus bipustulatus* H. Milne Edwards, 1834
Ovalipes stephensoni Williams, 1976
Ovalipes trimaculatus (De Haan, 1833) [*Corystes* (*Anisopus*)]
= *Platyonychus purpureus* Dana, 1852
= *Platyonychus africanus* A. Milne-Edwards, 1861

Parathranites Miers, 1886
= *Lupocyclus* (*Parathranites*) Miers, 1886 (type species *Lupocyclus* (*Parathranites*) *orientalis* Miers, 1886, by monotypy; gender masculine) [Opinion 73]
Parathranites granosus Crosnier, 2002
Parathranites hexagonus Rathbun, 1906
Parathranites intermedius Crosnier, 2002
Parathranites orientalis (Miers, 1886) [*Lupocyclus* (*Parathranites*)] [Direction 36]
Parathranites parahexagonus Crosnier, 2002
Parathranites ponens Crosnier, 2002
Parathranites tuberogranosus Crosnier, 2002
Parathranites tuberosus Crosnier, 2002

Polybius Leach, 1820 {4}
= *Polybius* Leach, 1820 (type species *Polybius henslowii* Leach, 1820, by monotypy; gender masculine) [Opinion 73]
Polybius henslowii Leach, 1820

Raymanninus Ng, 2000
= *Raymanninus* Ng, 2000 (type species *Benthochascon schmitti* Rathbun, 1931, by original designation; gender masculine)
Raymanninus schmitti (Rathbun, 1931) [*Benthochascon*]

Subfamily Portuninae Rafinesque, 1815

Portunidia Rafinesque, 1815
Arenaeinae Dana, 1851
Lupinae Dana, 1851
Neptuniden Nauck, 1880 (not in Latin, unavailable name)
Lupocycloida Alcock, 1899
Atoportunini Števčić, 2005

Arenaeus Dana, 1851
= *Arenaeus* Dana, 1851 (type species *Portunus cribrarius* Lamarck, 1818, by monotypy; gender masculine) [Opinion 73]
= *Euctenota* Gerstaecker, 1856 (type species *Euctenota mexicana* Gerstaecker, 1856, by monotypy; gender feminine)
Arenaeus cribrarius (Lamarck, 1818) [*Portunus*] [Opinion 73]
= *Lupa maculata* Say, 1818
Arenaeus mexicanus (Gerstaecker, 1856) [*Euctenota*]
= *Arenaeus bidens* Smith, 1869

Atoportunus Ng & Takeda, 2003
= *Atoportunus* Ng & Takeda, 2003 (type species *Atoportunus gustavi* Ng & Takeda, 2003, by original designation; gender masculine)
Atoportunus dolichopus Takeda, 2003
Atoportunus gustavi Ng & Takeda, 2003
Atoportunus pluto Ng & Takeda, 2003

Callinectes Stimpson, 1860
= *Callinectes* Stimpson, 1860 (type species *Callinectes sapidus* Rathbun, 1896, subsequent designation by Rathbun, 1896, under plenary powers; gender masculine) [Opinion 712]
Callinectes affinis Fausto, 1980
Callinectes amnicola (Rochebrune, 1883) [*Neptunus*]
= *Neptunus edwardsi* Rochebrune, 1883
= *Neptunus marginatus* var. *truncata* Aurivillius, 1898
= *Callinectes latimanus* Rathbun, 1897
Callinectes arcuatus Ordway, 1863
= *Callinectes pleuriticus* Ordway, 1863
= *Callinectes dubia* Kingsley, 1879
= *Callinectes nitidus* A. Milne-Edwards, 1879
Callinectes bellicosus Stimpson, 1859
= *Callinectes ochoterenai* Contreras, 1930
Callinectes bocourti A. Milne-Edwards, 1879
= *Callinectes diacanthus* var. *cayennensis* A. Milne-Edwards, 1879
Callinectes danae Smith, 1869
Callinectes exasperatus (Gerstaecker, 1856) [*Lupea*]
= ?*Lupa trispinosa* Leach, 1815
= *Callinectes tumidus* Ordway, 1863
Callinectes gladiator Benedict, 1893
= *Lupa smythiana* White, 1847 (nomen nudum)
Callinectes maracaiboensis Taissoun, 1962
Callinectes marginatus (A. Milne-Edwards, 1861) [*Neptunus*]
= *Callinectes diacanthus* var. *africanus* A. Milne-Edwards, 1879
= *Callinectes larvatus* Ordway, 1863
Callinectes ornatus Ordway, 1863
= ?*Callinectes humphreyi* Jones, 1968

?*Callinectes pallidus* (Rochebrune, 1883) [*Neptunus*]
Callinectes rathbunae Contreras, 1930
Callinectes sapidus Rathbun, 1896 [Opinion 712]
= *Portunus diacantha* Latreille, 1825 [name suppressed, Opinion 712]
= *Callinectes sapidus acutidens* Rathbun, 1896
Callinectes similis Williams, 1966
Callinectes toxotes Ordway, 1863
= *Callinectes diacanthus* var. *robustus* A. Milne-Edwards, 1879

Carupella Lenz & Strunck, 1914
= *Carupella* Lenz & Strunck, 1914 (type species *Carupella natalensis* Lenz & Strunck, 1914, by monotypy; gender feminine)
Carupella banlaensis Tien, 1969
Carupella epibranchialis Zarenkov, 1970
Carupella natalensis Lenz & Strunck, 1914

Cronius Stimpson, 1860
= *Cronius* Stimpson, 1860 (type species *Portunus ruber* Lamarck, 1818, by monotypy; gender masculine)
= *Charybdella* Rathbun, 1897 (unnecessary replacement name for *Cronius* Stimpson, 1860; gender feminine)
Cronius ruber (Lamarck, 1818) [*Portunus*]
= *Goniosoma millerii* A. Milne-Edwards, 1868
= *Amphitrite edwardsii* Lockington, 1877
Cronius tumidulus (Stimpson, 1871) [*Acheloüs*]
= *Cronius bispinosus* Miers, 1886

Laleonectes Manning & Chace, 1990
= *Laleonectes* Manning & Chace, 1990 (type species *Neptunus vocans* A. Milne-Edwards, 1878, by original designation; gender masculine)
Laleonectes nipponensis (Sakai, 1938) [*Neptunus* (*Hellenus*)]
= *Portunus oahuensis* Edmondson, 1954
Laleonectes stridens Crosnier & Moosa, 2002
Laleonectes vocans (A. Milne-Edwards, 1878) [*Neptunus*]

Lupella Rathbun, 1897
= *Lupella* Rathbun, 1897 (type species *Cancer forceps* Fabricius, 1793, by monotypy; gender feminine)
Lupella forceps (Fabricius, 1793) [*Cancer*]
= *Lupa leachii* De Haan, 1833

Lupocyclus Adams & White, 1849
= *Lupocyclus* White, 1847 (nomen nudum) [Opinion 73, Direction 37]
= *Lupocyclus* Adams & White, 1849 (type species *Lupocyclus rotundatus* Adams & White, 1849, by monotypy; gender masculine) [Opinion 73, Direction 37]
Lupocyclus inaequalis (Walker, 1887) [*Goniosoma*]
Lupocyclus mauriciensis Ward, 1942
Lupocyclus philippinensis Semper, 1880
= *Lupocyclus strigosus* Alcock, 1899
= ?*Lupocyclus sexspinosus* Leene, 1940
Lupocyclus quinquedentatus Rathbun, 1906
Lupocyclus rotundatus Adams & White, 1849 [Direction 36]
Lupocyclus tugelae Barnard, 1950
= *Lupocyclus granulatus* Leene & Buitendijk, 1951

Portunus Weber, 1795
Portunus (*Achelous*) De Haan, 1833
= *Portunus* (*Achelous*) De Haan, 1833 (type species *Portunus spinimanus* Latreille, 1819, by monotypy; gender masculine)
= *Cycloachelous* Ward, 1942 (type species *Lupa granulatus* H. Milne Edwards, 1834, by original designation; gender masculine)
Portunus (*Achelous*) *angustus* Rathbun, 1898
Portunus (*Achelous*) *brevimanus* (Faxon, 1895) [*Achelous*]
Portunus (*Achelous*) *depressifrons* (Stimpson, 1859) [*Amphitrite*]
= *Portunus bahamensis* Rathbun, 1930 {7}
Portunus (*Achelous*) *dubius* (Laurie, 1906) [*Neptunus* (*Achelous*)]
Portunus (*Achelous*) *elongatus* A. Milne-Edwards, 1861
Portunus (*Achelous*) *floridanus* Rathbun, 1930
Portunus (*Achelous*) *granulatus granulatus* (H. Milne Edwards, 1834) [*Lupea*]
Portunus (*Achelous*) *granulatus unispinosus* (Miers, 1884) [*Achelous*]
Portunus (*Achelous*) *guaymasensis* Garth & Stephenson, 1966
Portunus (*Achelous*) *iridescens* (Rathbun, 1894) [*Neptunus* (*Hellenus*)]
Portunus (*Achelous*) *isolamargaritensis* Türkay, 1968
Portunus (*Achelous*) *orbicularis* (Richters, 1880) [*Achelous*]
Portunus (*Achelous*) *orbitosinus* Rathbun, 1911
Portunus (*Achelous*) *octodentatus* (Gordon, 1938) [*Neptunus*]
Portunus (*Achelous*) *ordwayi* (Stimpson, 1860) [*Achelous*]
= *Neptunus cruentatus* A. Milne-Edwards, 1861
= *Portunus aurimanus* Forns, in Gundlach & Torralbas, 1900
Portunus (*Achelous*) *sebae* (H. Milne Edwards, 1834) [*Lupea*]
= *Lupa biocellata* Forns, in Gundlach & Torralbas, 1900
Portunus (*Achelous*) *spinicarpus* (Stimpson, 1871) [*Acheloüs*]
Portunus (*Achelous*) *spinimanus* Latreille, 1819
= ?*Lupa banksii* Leach, 1815
= *Achelous spinimanus smithii* Verrill, 1908
= *Portunus* (*Achelous*) *vossi* Lemaitre, 1991 {7}
Portunus (*Achelous*) *stanfordi* Rathbun, 1902
Portunus (*Achelous*) *suborbicularis* Stephenson, 1975
Portunus (*Achelous*) *tuberculatus* (Stimpson, 1860) [*Achelous*]
Portunus (*Achelous*) *yoronensis* Sakai, 1974 [*Portunus* (*Cycloachelous*)]

Portunus (*Lupocycloporus*) Alcock, 1899
= *Portunus* (*Lupocycloporus*) Alcock, 1899 (type species *Achelous whitei* A. Milne-Edwards, 1861, by monotypy; gender masculine)
Portunus (*Lupocycloporus*) *aburatsubo* (Balss, 1922) [*Neptunus*]
Portunus (*Lupocycloporus*) *gracilimanus* (Stimpson, 1858) [*Amphitrite*]
= *Achelous whitei* A. Milne-Edwards, 1861
Portunus (*Lupocycloporus*) *innominatus* (Rathbun, 1909) [*Neptunus* (*Lupocycloporus*)]
Portunus (*Lupocycloporus*) *laevis* (A. Milne-Edwards, 1861)
Portunus (*Lupocycloporus*) *minutus* (Shen, 1937) [*Neptunus* (*Lupocycloporus*)]
Portunus (*Lupocycloporus*) *sinuosodactylus* Stephenson, 1967
Portunus (*Lupocycloporus*) *wilsoni* Moosa, 1981

Portunus (*Monomia*) Gistel, 1848
= *Portunus* (*Amphitrite*) De Haan, 1833 (type species *Portunus gladiator* Fabricius, 1798, subsequent designation by Miers, 1886; name pre-occupied by *Amphitrite* Mueller, 1771 [Polychaeta]; gender feminine) {8}
= *Portunus* (*Monomia*) Gistel, 1848 (replacement name for *Amphitrite* De Haan, 1833; gender feminine)
Portunus (*Monomia*) *argentatus argentatus* (A. Milne- Edwards, 1861) [*Neptunus*] {9}
= *Amphitrite argentata* White, 1847 [nomen nudum]
Portunus (*Monomia*) *argentatus glareosus* (Alcock, 1899) [*Neptunus* (*Amphitrite*)]
Portunus (*Monomia*) *australiensis* Stephenson & Cook, 1973
Portunus (*Monomia*) *curvipenis* Stephenson, 1961
Portunus (*Monomia*) *euglyphus* (Laurie, 1906) [*Neptunus* (*Amphitrite*)]
Portunus (*Monomia*) *gladiator* Fabricius, 1798 {8}
= *Amphitrite haanii* Stimpson, 1858 {8}

Portunus (*Monomia*) *lecromi* Moosa, 1996
Portunus (*Monomia*) *petreus* (Alcock, 1899) [*Neptunus* (*Amphitrite*)]
Portunus (*Monomia*) *ponticus* (Fabricius, 1798) [*Portunus*] {10}
= *Portunus ponticus* Weber, 1795 (nomen nudum)
Portunus (*Monomia*) *pseudoargentatus* Stephenson, 1961
Portunus (*Monomia*) *rubromarginatus* (Lanchester, 1900) [*Achelous*]
Portunus (*Monomia*) *samoensis* (Ward, 1939) [*Monomia*]

Portunus (*Portunus*) Weber, 1795
= *Portunus* Weber, 1795 (type species *Cancer pelagicus* Linnaeus, 1758, designation by Rathbun, 1926; gender masculine) [Opinion 394] (see Holthuis, 1952) {11}
= *Portunus* (*Portunus*) Fabricius, 1798 (type species *Cancer pelagicus* Linnaeus, 1758, designation by Rathbun, 1926; gender masculine) [Opinion 394]
= *Lupa* Leach, 1814 (type species *Cancer pelagicus* Linnaeus, 1758, by monotypy; gender feminine) [Opinion 394]
= *Lima* Leach, 1814 (type species *Cancer pelagicus* Linnaeus, 1758, by monotypy; gender feminine; possible misspelling of *Lupa* Leach, 1814)
= *Lupania* Rafinesque, 1818 (unnecessary replacement name for *Lupa* Leach, 1814; gender feminine) [Opinion 522]
= *Lupa* De Haan, 1833 (junior homonym of *Lupa* Leach, 1814) [Opinion 394]
= *Portunus* (*Neptunus*) De Haan, 1833 (type species *Cancer pelagicus* Linnaeus, 1758, subsequent designation by Miers, 1886; gender masculine)
= *Portunus* (*Pontus*) De Haan, 1833 (type species *Portunus* (*Portunus*) *convexus* De Haan, 1833, by monotypy; gender masculine)
Portunus (*Portunus*) *acuminatus* (Stimpson, 1871) [*Achelous*]
Portunus (*Portunus*) *affinis* (Faxon, 1893) [*Achelous*]
Portunus (*Portunus*) *anceps* (Saussure, 1858) [*Lupea*]
= *Lupea duchassagni* Desbonne, in Desbonne & Schramm, 1867
= *Neptunus sulcatus* A. Milne-Edwards, 1879
Portunus (*Portunus*) *armatus* (A. Milne-Edwards, 1861) [*Neptunus*] {12}
Portunus (*Portunus*) *asper* (A. Milne-Edwards, 1861) [*Neptunus*]
= *Achelous panamensis* Stimpson, 1871
= *Achelous transversus* Stimpson, 1871
= *Amphitrite paucispinis* Lockington, 1877
Portunus (*Portunus*) *convexus* De Haan, 1835
= *Neptunus sieboldi* A. Milne-Edwards, 1861
Portunus (*Portunus*) *gibbesii* (Stimpson, 1859) [*Lupa*]
Portunus (*Portunus*) *hastatus* (Linnaeus, 1767) [*Cancer*]
= *Cancer ponticus* Herbst, 1790
= *Portunus dufourii* Latreille, 1819
= *Eriphia prismaticus* Risso, 1827
= *Neptunus hastatus rubromaculatus* Steinitz, 1932
Portunus (*Portunus*) *inaequalis* (Miers, 1881) [*Neptunus* (*Amphitrite*)]
Portunus (*Portunus*) *madagascariensis* (Hoffman, 1877) [*Neptunus*]
Portunus (*Portunus*) *mauricianus* Ward, 1942
Portunus (*Portunus*) *minimus* Rathbun, 1898
= *Portunus pichilinquei* Rathbun, 1930
Portunus (*Portunus*) *mokyevskii* Zarenkov, 1970
Portunus (*Portunus*) *pelagicus* (Linnaeus, 1758) [*Cancer*] [Opinion 394] {12}
= *Cancer pelagicus* Forskål, 1775 (pre-occupied name)
= *Cancer cedonulli* Herbst, 1794
= *Portunus denticulatus* Marion de Procé, 1822 {13}
= *Portunus pelagicus* var. *sinensis* Shen, 1932
Portunus (*Portunus*) *pubescens* (Dana, 1852) [*Lupa*]
= *Neptunus tomentosus* Haswell, 1882
Portunus (*Portunus*) *reticulatus* (Herbst, 1799) [*Cancer*] {12}
Portunus (*Portunus*) *rufiarcus* Davie, 1987
Portunus (*Portunus*) *rufiremus* Holthuis, 1959
Portunus (*Portunus*) *sanguinolentus hawaiiensis* Stephenson, 1968
Portunus (*Portunus*) *sanguinolentus sanguinolentus* (Herbst, 1783) [*Cancer*]
= *Cancer gladiator* Fabricius, 1793 {8}
= *Callinectes alexandri* Rathbun, 1907
Portunus (*Portunus*) *sayi* (Gibbes, 1850) [*Lupa*]
= *Portunus tropicalis* Marion de Procé, 1822 {14}
= *Lupea pudica* Gerstaecker, 1857
= *Lupa parvula* Desbonne, in Desbonne & Schramm, 1867
Portunus (*Portunus*) *segnis* (Forskål, 1775) [*Cancer*] {12}
= *Portunus mauritianus* Ward, 1942
Portunus (*Portunus*) *serratifrons* (Montrouzier, 1865) [*Neptunus*]
Portunus (*Portunus*) *trituberculatus* (Miers, 1876) [*Neptunus*]
Portunus (*Portunus*) *ventralis* (A. Milne-Edwards, 1879) [*Neptunus*]
Portunus (*Portunus*) *xantusii* (Stimpson, 1860) [*Achelous*]

Portunus (*Xiphonectes*) A. Milne-Edwards, 1873
= *Xiphonectes* A. Milne-Edwards, 1873 (type species *Amphitrite vigilans* Dana, 1852, subsequent designation by Rathbun, 1930; gender masculine) {15}
= *Portunus* (*Hellenus*) A. Milne-Edwards, 1874 (type species *Achelous spinicarpus* Stimpson, 1871, subsequent designation by Rathbun, 1930; gender masculine)
Portunus (*Xiphonectes*) *alcocki* (Nobili, 1905) [*Neptunus* (*Hellenus*)]
Portunus (*Xiphonectes*) *andersoni* (De Man, 1887) [*Neptunus* (*Hellenus*)]
Portunus (*Xiphonectes*) *arabicus* (Nobili, 1905) [*Neptunus* (*Hellenus*)]
= *Portunus* (*Hellenus*) *acerbiterminalis* Stephenson & Rees, 1967
Portunus (*Xiphonectes*) *brockii* (De Man, 1887) [*Neptunus*]
Portunus (*Xiphonectes*) *dayawanensis* Chen, 1986
Portunus (*Xiphonectes*) *gracillimus* (Stimpson, 1858) [*Amphitrite*]
Portunus (*Xiphonectes*) *guinotae* Stephenson & Rees, 1961
Portunus (*Xiphonectes*) *hainanensis* Chen, 1986
Portunus (*Xiphonectes*) *hastatoides* Fabricius, 1798
= *Portunus hastatoides* Weber, 1795 (nomen nudum)
= *Neptunus* (*Hellenus*) *hastatoides unidens* Laurie, 1906
Portunus (*Xiphonectes*) *iranjae* Crosnier, 1962
Portunus (*Xiphonectes*) *latibrachium* (Rathbun, 1906) [*Parathranites*]
Portunus (*Xiphonectes*) *longispinosus bidens* (Laurie, 1906) [*Neptunus* (*Hellenus*)]
Portunus (*Xiphonectes*) *longispinosus longimerus* Spiridonov, 1994
Portunus (*Xiphonectes*) *longispinosus longispinosus* (Dana, 1852) [*Amphitrite*]
= *Amphitrite vigilans* Dana, 1852
= *Portunus* (*Xiphonectes*) *leptocheles* A. Milne-Edwards, 1873
Portunus (*Xiphonectes*) *longispinosus obtusidentatus* (Miers, 1884) [*Xiphonectes*]
Portunus (*Xiphonectes*) *macrophthalmus* Rathbun, 1906
Portunus (*Xiphonectes*) *mariei* Guinot, 1957
Portunus (*Xiphonectes*) *paralatibrachium* Crosnier, 2002
Portunus (*Xiphonectes*) *pseudohastatoides* Yang & Tang, 2006 {16}
Portunus (*Xiphonectes*) *pseudotenuipes* Spiridonov, 1999
Portunus (*Xiphonectes*) *pulchricristatus* (Gordon, 1931) [*Neptunus* (*Hellenus*)]
= *Neptunus* (*Hellenus*) *alcocki* Gordon, 1930 (pre-occupied name)

Portunus (*Xiphonectes*) *rugosus* (A. Milne-Edwards, 1861) [*Neptunus*]
Portunus (*Xiphonectes*) *spiniferus* Stephenson & Rees, 1967
Portunus (*Xiphonectes*) *spinipes* (Miers, 1886) [*Neptunus* (*Amphitrite*)]
Portunus (*Xiphonectes*) *stephensoni* Moosa, 1981
= *Portunus* (*Hellenus*) *emarginatus* Stephenson & Campbell, 1959 (pre-occupied name)
Portunus (*Xiphonectes*) *tenuicaudatus* Stephenson, 1961
Portunus (*Xiphonectes*) *tenuipes* (De Haan, 1835) [*Amphitrite*]
Portunus (*Xiphonectes*) *tridentatus* Yang, Dai & Song, 1979
Portunus (*Xiphonectes*) *trilobatus* Stephenson, 1972
Portunus (*Xiphonectes*) *tuberculosus* (A. Milne-Edwards, 1861) [*Neptunus*]
Portunus (*Xiphonectes*) *tweediei* (Shen, 1937) [*Neptunus* (*Hellenus*)]

Sanquerus Manning, 1989
= *Portunus* (*Posidon*) Herklots, 1851 (type species *Portunus* (*Posidon*) *validus* Herklots, 1851, by monotypy; name pre-occupied by *Posidon* Illiger, 1801 [Crustacea]; gender masculine)
= *Sanquerus* Manning, 1989 (replacement name for *Portunus* (*Posidon*) Herklots, 1851; gender masculine)
Sanquerus validus (Herklots, 1851) [*Portunus* (*Posidon*)]

Scylla De Haan, 1833
= *Scylla* De Haan, 1833 (type species *Cancer serratus* Forskål, 1775, subsequent designation by Rathbun, 1922; gender feminine) [Opinion 73, Direction 37]
Scylla olivacea (Herbst, 1796) [*Cancer*]
Scylla paramamosain Estampador, 1949
Scylla serrata (Forskål, 1775) [*Cancer*] [Direction 36]
= *Achelous crassimanus* MacLeay, 1838
= *Scylla tranquebarica* var. *oceanica* Dana, 1852
= *Lupa lobifrons* H. Milne Edwards, 1834
Scylla tranquebarica (Fabricius, 1798) [*Cancer*]
= *Portunus tranquebaricus* Weber, 1795 (nomen nudum)
= *Portunus tranquebaricus* Latreille, in Milbert, 1812

Incertae sedis

Neptunus hespera White, 1847 (nomen nudum)
Cancer menestho Herbst, 1803 {17}
Amphitrite media Stimpson, 1858 {18}
Callinectes platei Chen, 1933
Callinectes alcocki Chen, 1933
Lupa hirsuta Heller, 1862
Cancer defensor Fabricius, 1787 {19}
Cancer armiger Fabricius, 1787 {19}

Subfamily Thalamitinae Paul'son, 1875

Thalamitinae Paul'son, 1875

Charybdis De Haan, 1833
Charybdis (*Charybdis*) De Haan, 1833
= *Charybdis* De Haan, 1833 (type species *Cancer sexdentatus* Herbst, 1783, subsequent designation by Glaessner, 1929; gender feminine) [Opinion 712]
= *Portunus* (*Oceanus*) De Haan, 1833 (type species *Cancer crucifer* Fabricius, 1792, by monotypy; name pre-occupied by *Oceanus* Montfort, 1808 [Mollusca]; gender masculine)
= *Goniosoma* A. Milne-Edwards, 1861 (substitute name for *Charybdis* De Haan, 1833; gender feminine) [Opinion 712]
Charybdis (*Charybdis*) *acuta* (A. Milne-Edwards, 1869) [*Goniosoma*]
Charybdis (*Charybdis*) *acutidens* Türkay, 1986
Charybdis (*Charybdis*) *affinis* Dana, 1852
= ?*Charybdis barneyi* Gordon, 1931
Charybdis (*Charybdis*) *amboinensis* Leene, 1938
= ?*Goniosoma sexdentatum* De Man, 1879
Charybdis (*Charybdis*) *anisodon* (De Haan, 1850) [*Portunus* (*Thalamita*)]
Charybdis (*Charybdis*) *annulata* (Fabricius, 1798) [*Portunus*]
= *Portunus annulatus* Weber, 1795 (nomen nudum)
Charybdis (*Charybdis*) *beauforti* Leene & Buitendijk, 1949
Charybdis (*Charybdis*) *brevispinosa* Leene, 1937
Charybdis (*Charybdis*) *callianassa* (Herbst, 1789) [*Cancer*]
Charybdis (*Charybdis*) *cookei* Rathbun, 1923
Charybdis (*Charybdis*) *crosnieri* Spiridonov & Türkay, 2001
Charybdis (*Charybdis*) *curtilobus* Stephenson & Rees, 1967
Charybdis (*Charybdis*) *demani* Leene, 1937
Charybdis (*Charybdis*) *feriata* (Linnaeus, 1758) [*Cancer*] [Opinion 712]
= *Cancer sexdentatus* Herbst, 1783
= *Cancer crucifer* Fabricius, 1792
= *Cancer cruciata* Herbst, 1794
Charybdis (*Charybdis*) *gordonae* Shen, 1934 {20}
Charybdis (*Charybdis*) *granulata* (De Haan, 1833) [*Portunus* (*Charybdis*)]
= *Charybdis* (*Charybdis*) *moretonensis* Rees & Stephenson, 1966
Charybdis (*Charybdis*) *hawaiensis* Edmondson, 1954
Charybdis (*Charybdis*) *hellerii* (A. Milne-Edwards, 1867) [*Goniosoma*]
= ?*Charybdis merguiensis* De Man, 1887
Charybdis (*Charybdis*) *heterodon* Nobili, 1905
Charybdis (*Charybdis*) *holosericus* (Fabricius, 1787) [*Cancer*] {21}
Charybdis (*Charybdis*) *incisa* Rathbun, 1923
Charybdis (*Charybdis*) *ihlei* Leene & Buitendijk, 1949
Charybdis (*Charybdis*) *japonica* (A. Milne-Edwards, 1861) [*Goniosoma*]
= *Charybdis sowerbyi* Rathbun, 1931
= *Charybdis peitchihiliensis* Shen, 1932
Charybdis (*Charybdis*) *jaubertensis* Rathbun, 1924
Charybdis (*Charybdis*) *javaensis* Zarenkov, 1970
Charybdis (*Charybdis*) *lucifera* (Fabricius, 1798) [*Portunus*]
= *Portunus lucifer* Weber, 1795 (nomen nudum)
= *Goniosoma quadrimaculatum* A. Milne-Edwards, 1861
Charybdis (*Charybdis*) *meteor* Spiridonov & Türkay, 2001
Charybdis (*Charybdis*) *miles* (De Haan, 1835) [*Portunus* (*Charybdis*)]
= *Charybdis investigatoris* Alcock, 1899
Charybdis (*Charybdis*) *natator* (Herbst, 1794) [*Cancer*]
Charybdis (*Charybdis*) *orientalis* Dana, 1852
= *Charybdis* (*Charybdis*) *dubium* Hoffman, 1877
Charybdis (*Charybdis*) *padadiana* Ward, 1941
Charybdis (*Charybdis*) *philippinensis* Ward, 1941
Charybdis (*Charybdis*) *rathbuni* Leene, 1938
Charybdis (*Charybdis*) *riversandersoni* Alcock, 1899
Charybdis (*Charybdis*) *rosea* (Hombron & Jacquinot, 1846) [*Thalamita*]
Charybdis (*Charybdis*) *rostrata* (A. Milne-Edwards, 1861) [*Goniosoma*]
Charybdis (*Charybdis*) *rufodactylus* Stephenson & Rees, 1968
Charybdis (*Charybdis*) *sagamiensis* Parisi, 1916
Charybdis (*Charybdis*) *salehensis* Leene, 1938
Charybdis (*Charybdis*) *seychellensis* Crosnier, 1984
Charybdis (*Charybdis*) *spinifera* (Miers, 1884) [*Goniosoma*]
Charybdis (*Charybdis*) *vannamei* Ward, 1941
Charybdis (*Charybdis*) *variegata* (Fabricius, 1798) [*Portunus*]
Charybdis (*Charybdis*) *yaldwyni* Rees & Stephenson, 1967

Charybdis (*Goniohellenus*) Alcock, 1899
= *Charybdis* (*Goniohellenus*) Alcock, 1899 (type species *Goniosoma hoplites* Wood-Mason, 1877, subsequent designation by present action; gender masculine)
= *Archias* Paul'son, 1875 (type species *Archias sexdentatus* Paul'son, 1875, by monotypy; gender masculine) [name should have priority over *Goniohellenus*]
Charybdis (*Goniohellenus*) *curtidentata* Stephenson, 1967
Charybdis (*Goniohellenus*) *hongkongensis* Shen, 1934
Charybdis (*Goniohellenus*) *hoplites* (Wood-Mason, 1877) [*Goniosoma*]
= ?*Archias sexdentatus* Paul'son, 1875
Charybdis (*Goniohellenus*) *longicollis* Leene, 1938
Charybdis (*Goniohellenus*) *omanensis omanensis* Leene, 1938
Charybdis (*Goniohellenus*) *omanensis septentrionalis* Türkay & Spiridonov, 2007 {22}
Charybdis (*Goniohellenus*) *ornata* (A. Milne-Edwards, 1861) [*Goniosoma*]
Charybdis (*Goniohellenus*) *padangensis* Leene & Buitendijk, 1952
Charybdis (*Goniohellenus*) *philippinensis* Ward, 1941
Charybdis (*Goniohellenus*) *pusilla* Alcock, 1899
Charybdis (*Goniohellenus*) *smithii* MacLeay, 1838
Charybdis (*Goniohellenus*) *truncata* (Fabricius, 1798) [*Portunus*]
= *Portunus truncatus* Weber, 1795 (nomen nudum)
Charybdis (*Goniohellenus*) *vadorum* Alcock, 1899
= *Charybdis sinensis* Gordon, 1931

Charybdis (*Gonioneptunus*) Ortmann, 1894
= *Charybdis* (*Gonioneptunus*) Ortmann, 1894 (type species *Charybdis* (*Gonioneptunus*) *subornata* Ortmann, 1894, by original designation; gender masculine)
Charybdis (*Gonioneptunus*) *africana* Shen, 1935
Charybdis (*Gonioneptunus*) *bimaculata* (Miers, 1886) [*Goniosoma*]
= ?*Charybdis* (*Gonioneptunus*) *subornata* Ortmann, 1894
= ?*Gonioneptunus whiteleggei* Ward, 1933
Charybdis (*Gonioneptunus*) *orlik* Zarenkov, 1970

Charybdis (*Goniosupradens*) Leene, 1938
= *Charybdis* (*Goniosupradens*) Leene, 1938 (type species *Portunus erythrodactylus* Lamarck, 1818, by present designation; gender feminine)
Charybdis (*Goniosupradens*) *acutifrons* (De Man, 1879) [*Goniosoma*]
Charybdis (*Goniosupradens*) *erythrodactyla* (Lamarck, 1818) [*Portunus*]
= *Thalamita teschoiraei* A. Milne-Edwards, 1859
= *Thalamita pulchra* Randall, 1840
Charybdis (*Goniosupradens*) *obtusifrons* Leene, 1937

Gonioinfradens Leene, 1938
= *Gonioinfradens* Leene, 1938 (type species *Goniosoma paucidentata* A. Milne-Edwards, 1861, by original designation; gender masculine) {23}
Gonioinfradens paucidentatus (A. Milne-Edwards, 1861) [*Goniosoma*]
= *Thalamita giardi* Nobili, 1905

Thalamita Latreille, 1829
= *Thalamita* Latreille, 1829 (type species *Cancer admete* Herbst, 1803, by monotypy; gender feminine) [Opinion 73]
= *Thalamonyx* A. Milne-Edwards, 1873 (type species *Goniosoma danae* A. Milne-Edwards, 1869, subsequent designation by Rathbun, 1922; gender masculine) [Opinion 73, Direction 37]
Thalamita admete (Herbst, 1803) [*Cancer*] [Direction 36]
= *Thalamita dispar* Rathbun, 1914
= *Thalamita admete* var. *edwardsi* Borradaile, 1900
= ?*Portunus integifrons* Marion de Procé, 1822 {13}
Thalamita anomala Stephenson & Hudson, 1957
Thalamita annulipes Stephenson & Hudson, 1957
Thalamita auauensis Rathbun, 1906
Thalamita bacboensis Tien, 1969
Thalamita bandusia Nobili, 1905
Thalamita bilobata De Man, 1926
Thalamita bouvieri Nobili, 1906
= *Thalamita inhacae* Barnard, 1950
Thalamita carinata Zarenkov, 1970
Thalamita cerasma Wee & Ng, 1995
= *Thalamita cerasma rectifrons* Crosnier & Moosa, 2002 {24}
Thalamita chaptalii (Audouin, 1826) [*Portunus*]
Thalamita coeruleipes Hombron & Jacquinot, 1846
Thalamita cooperi Borradaile, 1902
Thalamita corrugata Stephenson & Rees, 1961
Thalamita crenata Rüppell, 1830 [*Talamita*, sic]
Thalamita crosnieri Vannini, 1983
Thalamita dakini Montgomery, 1931
= *Thalamita medipacifica* Edmondson, 1954
Thalamita danae Stimpson, 1858
= *Thalamita stimpsoni* A. Milne-Edwards, 1861
Thalamita delagoae Barnard, 1950
Thalamita demani Nobili, 1905
= ?*Thalamita trilineata* Stephenson & Hudson, 1957
= ?*Thalamita invicta* Thallwitz, 1891
Thalamita difficilis Crosnier, 2002
Thalamita dytica Crosnier, 2002
Thalamita exetastica Alcock, 1899
Thalamita foresti Crosnier, 1962
Thalamita gatavakensis Nobili, 1906
Thalamita gloriensis Crosnier, 1962
Thalamita gracilipes (A. Milne-Edwards, 1873) [*Thalamonyx*] {25}
Thalamita granosimana Borradaile, 1902
Thalamita gurjanovae Tien, 1969
Thalamita hanseni Alcock, 1899
Thalamita holthuisi Stephenson, 1975
Thalamita huayangensis Dai, Cai & Yang, 1996
Thalamita imparimana Alcock, 1899
Thalamita indistincta Apel & Spiridonov, 1998
Thalamita integra integra Dana, 1852
Thalamita integra africana Miers, 1881
Thalamita intermedia Miers, 1886
Thalamita iranica Stephensen, 1946
Thalamita kagosimensis Sakai, 1939
Thalamita koepangensis Stephenson, 1975
Thalamita kotoensis Tien, 1969
Thalamita kukenthali De Man, 1902
Thalamita loppenthini Apel & Spiridonov, 1998
Thalamita macropus Montgomery, 1931
Thalamita macrospinifera Rathbun, 1911
Thalamita malaccensis Gordon, 1938
Thalamita margaritimana Rathbun, 1911
Thalamita miniscula Nobili, 1906
Thalamita mitsiensis Crosnier, 1962
Thalamita multispinosa Stephenson & Rees, 1967
Thalamita murinae Zarenkov, 1971
Thalamita muusi Serène & Soh, 1976
Thalamita nanshensis Dai, Cai & Yang, 1996
Thalamita occidentalis Crosnier, 1984
Thalamita oculea Alcock, 1899
Thalamita parvidens (Rathbun, 1907) [*Thalamonyx*]
Thalamita pelsarti Montgomery, 1931
Thalamita philippinensis Stephenson & Rees, 1967
Thalamita picta Stimpson, 1858
= *Thalamita lineata* A. Milne-Edwards, 1861
= *Thalamita gardineri* Borradaile, 1902

= *Thalamita roosevelti* Schmitt, 1939
= *Thalamita alcocki* De Man, 1902
= ?*Thalamita investigatoris* Alcock, 1899
Thalamita pilumnoides Borradaile, 1902
Thalamita platypenis Stephenson, 1975
Thalamita platypodis Dai, Yang, Song & Chen, 1986
= *Thalamita platypedis* Dai & Yang, 1991 (incorrect spelling)
Thalamita poissonii (Audouin, 1826) [*Portunus*]
Thalamita procorrugata Dai, Yang, Song & Chen, 1986
Thalamita prymna (Herbst, 1803) [*Cancer*]
= *Thalamita crassimana* Dana, 1852
= *Thalamita pyrmna* var. *annectans* Laurie, 1906
Thalamita pseudoculea Crosnier, 1984
Thalamita pseudopelsarti Crosnier, 2002
Thalamita pseudopoissoni Stephenson & Rees, 1967
Thalamita quadridentata Dai, Cai & Yang, 1996
Thalamita quadrilobata Miers, 1884
= *Thalamita borradailei* Wee & Ng, 1995
Thalamita rubridens Apel & Spiridonov, 1998
Thalamita sankarankuttyi Crosnier & Thomassin, 1974
Thalamita savignyi A. Milne-Edwards, 1861
Thalamita seurati Nobili, 1906
= *Thalamita wakensis* Edmondson, 1925 {26}
Thalamita sexlobata Miers, 1886
= *Thalamita sexlobata* var. *plicatifrons* De Man, 1902
= ?*Thalamita macrodonta* Borradaile, 1902
Thalamita sima H. Milne Edwards, 1834
= *Portunus* (*Thalamita*) *arcuatus* De Haan, 1833 (pre-occupied name)
Thalamita simillima Crosnier, 2002
Thalamita spiceri Edmondson, 1954
Thalamita spinicarpa Wee & Ng, 1995
Thalamita spinimana Dana, 1852
Thalamita spinifera Borradaile, 1902
Thalamita spinimera Stephenson & Rees, 1967
Thalamita squamosa Stephenson & Hudson, 1957
Thalamita starobogatovi Tien, 1969
Thalamita stephensoni Crosnier, 1962
Thalamita taprobanica Alcock, 1899
Thalamita tenuipes Borradaile, 1902
Thalamita woodmasoni Alcock, 1899
Thalamita yoronensis Sakai, 1969

Thalamitoides A. Milne-Edwards, 1869
= *Thalamitoides* A. Milne-Edwards, 1869 (type species *Thalamitoides quadridens* A. Milne-Edwards, 1869, subsequent designation by Rathbun, 1922; gender masculine) [Opinion 73, Direction 37]
= *Hedrophthalmus* Nauck, 1880 (type species *Hedrophthalmus thalamithoides* Nauck, 1880, by monotypy; gender masculine)
= *Neothalamita* Deb, 1985 (type species *Neothalamita triangularis* Deb, 1985, by original designation; gender feminine)
Thalamitoides quadridens A. Milne-Edwards, 1869 [Direction 36]
= *Thalamitoides alphonsei* Ward, 1939
Thalamitoides tridens tridens A. Milne-Edwards, 1869
= *Hedrophthalmus thalamithoides* Nauck, 1880
= ?*Neothalamita triangularis* Deb, 1985
Thalamitoides tridens spiniger Nobili, 1905

Incertae sedis

Portunus affinis Weber, 1795 (nomen nudum) {27}
Charybdis dura Adams & White, 1849
Cancer lancifer Fabricius, 1787 {28}

Notes

{1} The nomenclatural situation with *Carcinus* and its type species, *Cancer maenas* Linnaeus, 1758, was clarified in Opinion 330 (ICZN, 1955).

{2} *Libystes villosus* Rathbun, 1924, was described from a single female from Samoa, with Edmondson (1951) recording it from Hawaii. Stephenson (1972) synonymised *L. villosus* with *L. nitidus* A. Milne-Edwards, 1867 (type locality Zanzibar), and this has been followed by most subsequent workers (e.g. Vannini & Innocenti, 2000). Apel & Spiridonov (1998: 176) discussed the taxonomy of *Libystes nitidus* in detail and indicates that in lieu of a revision of the genus, most of the existing synonymies of species are questionable. In the case of *L. villosus*, Apel & Spiridonov (1998: 179) commented that the G1 of the Hawaiian male figured by Edmondson (1951) differed markedly from the specimens of *L. nitidus* from the Arabian Gulf and Red Sea, suggesting that they are not congeneric. Consequently, Apel & Spiridonov (1998: 176) placed *L. villosus* in the synonymy of *L. nitidus* with doubt. The types and preferably topotypic material of *L. nitidus* and *L. villosus* will need to be re-examined. As such, we prefer to recognise both as separate species.

{3} When Stimpson (1871) established *Bathynectes*, he named two species, *B. longispina* and *B. brevispina*, but did not specifically designate a type species. Fowler (1912) was the first to formally designate *B. longispina* as the type species. The ICZN subsequently ratified this in Opinion 73, Direction 37. However, one may argue that Stimpson (1871) himself had selected *B. longispina* as the type species. In his comments on the second species, *B. brevispina*, he wrote: "This species greatly resembles the typical form in color and other characters …" (Stimpson, 1871: 147). His use of the word "typical" can be construed to mean that he recognised *B. longispina* as the type species, although Article 67.5.2 of the Code expressly states that this is not acceptable.

There is also a problem with *B. brevispina* Stimpson, 1871. Although Stimpson argued that it was morphologically very close to *B. longispina*, the fact is that *B. longispina* was described from the Straits of Florida in the Gulf of Mexico (Atlantic), whereas *B. brevispina* was from the Marquesas in the Pacific. It is difficult to believe that both are conspecific (e.g. see Tavares, 2003), or even congeneric, unless the original labels are wrong. Certainly, the only specimen of *B. brevispina*, a large female, needs to be re-examined.

{4} The taxonomy of *Polybius* and its allies was reappraised by d'Udekem d'Acoz (1999: 218–224) who proposed a somewhat radical classification. Without much discussion, he placed the polybiine genera *Liocarcinus*, *Macropipus* and *Necora* under the synonymy of *Polybius*, and as well, transferred into it a species of *Xaiva* (from the subfamily Carcininae). He, however, recognised *Polybius*, *Macropipus* and *Necora* as subgenera of *Polybius*. He also

recognised an unnamed "sous-genre nouveau" (under *Polybius*) in his compilation (p. 222) in which he includes three species: *Portunus maculatus* Risso, 1827 (now in *Liocarcinus*), *Portunus pusillus* Leach, 1815 (now in *Liocarcinus*), and *Portumnus mcleayi* Barnard, 1947 (now in *Xaiva*). It is difficult to accept his actions, at least on the basis of what was stated. The various genera as they have been recognised, are all relatively distinct, and we revert to the older system for now. Similarly *Portunus bolivari* Zarquiey Alvarez, 1948, which was transferred to *Polybius* by d'Udekem d'Acoz (1999) should be retained in *Liocarcinus* as is currently accepted by most authors (L. B. Holthuis, in litt.. 7 June 2007). That being said, genera like *Liocarcinus* and *Macropipus* probably require a revision. The subfamilial system now utilised for the Portunidae also seems rather artificial, and some like the Polybiinae especially, need reappraisal.

{5} *Cancer pellitus* Forskål, 1775, is a name not used since its original description. P. K. L. Ng has examined the original description with L. B. Holthuis, and we are sure that it is conspecific with *Liocarcinus corrugatus* (Pennant, 1777) (unpublished data). We here invoke Article 23.9.2 of the Code to conserve the better known name.

{6} The identities of *Portunus guadulpensis* Saussure, 1858, and *Ovalipes ocellatus floridanus* Hay & Shore, 1918, were substantially clarified by Türkay (1971) when he redescribed and figured their types. It leaves no doubt that Saussure's species is not a species of *Ovalipes* as had been presumd by some authors but belonging to *Macropipus* instead. Williams (1976) agreed, and elaborated on the taxonomy of the American species of *Ovalipes*.

{7} Using molecular and morphological data, Mantelatto et al. (2007) recently synonymised *Portunus bahamensis* Rathbun, 1930, with *Portunus depressifrons* (Stimpson, 1859) ; and *Portunus vossi* Lemaitre, 1991, with *Portunus spinimanus* Latreille, 1819.

{8} The identities of the two names, *Cancer gladiator* Fabricius, 1793, and *Portunus gladiator* Fabricius, 1798, is interesting. Stephenson & Cook (1973) regarded *Cancer gladiator* Fabricius, 1793, as a separate taxon from *Portunus gladiator* Fabricius, 1798. Davie (2002) commented that perhaps Fabricius had simply misidentified the later material, and that the 1798 name could be simply treated as a secondary synonym rather than being intended as a new taxon. However, as we explain further here, this now seems unlikely. Fabricius (1793: 449) described *Cancer gladiator* as: "*gladiator*. 35. C. thorace laevi: lateribus octodentatis, postico maximo, minibus angulatis. Cancer hastatus. Mant. Ins. I. 319.34. Habitat in nova Hollandia Mus. Dom. Banks. Minutus nullo modo Cancer hastatus Linnaei. Palmae anticae bidentatae, chelae angulatae. Palmae posticae ovatae.". However, later Fabricius (1798: 368) described *Portunus gladiator* as: "*gladiator*. 19. P. thorace tomentoso utrinque novemdentato: dente postico maiore, minibus sanguineo maculates. Habitat in Oceano Asiatico Dom. Daldorff. Praecedentibus affinis at minor. Thorax holosericeus, parum inaequalis, hine inde scaber. Chelae sanguineo maculatae digitis apice dentibusque albis." These differing descriptions strongly suggest Fabricius intended them to refer to two different species, especially as the 1793 name was for Australian material, and the later 1798 specimens were from "Oceano Asiatico Dom. Daldorff" (= Tranquebar, India), and the earlier Australian record was not mentioned. It is significant that of the 22 species Fabricius (1798) treated in *Portunus*, he credited *puber*, *depurator*, *feriatus*, *pelagicus*, *hastatus* to Linnaeus; *sanguinolentus* to Herbst; and cross-refered *holosericus*, *lancifer*, *defensor*, *armiger* and *forceps* to his 1793 paper. He did not, however, make any cross-reference to *vigil*, *crucifer*, *lucifer*, *annulatus*, *variegatus*, *truncatus*, *holsatus*, *tranquebaricus*, *gladiator*, *hastatoides* and *ponticus*. As such, these names should be treated as new. Zimsen's (1964) catalogue of Fabricius' types also lists the two names separately. Under *Cancer gladiator* Fabricius, 1793, Zimsen (1964: 648) noted that the types are lost, but under *Portunus gladiator* Fabricius, 1798, four type specimens are recorded (Zimsen, 1964: 651). This has been confirmed following the examination of these specimens by P. K. L. Ng. Stephenson & Cook (1973) agreed with Latreille (1825) that *Cancer gladiator* Fabricius, 1793, should be a junior subjective synonym of *Portunus* (*Portunus*) *sanguinolentus* (Herbst, 1783), and because the types of *Cancer gladiator* Fabricius, 1793, are lost, they designated a specimen of *P. sanguinolentus* as the neotype for *C. gladiator* Fabricius, 1793, to ensure this synonymy.

Miers (1886) designated *Portunus gladiator* Fabricius, 1798, as the type species for *Portunus* (*Amphitrite*) De Haan, 1833. However, Gistel (1848) had earlier provided a replacement name, *Monomia*, because the subgeneric name *Amphitrite* De Haan, 1833, is pre-occupied by a polychaete genus, *Amphitrite* Mueller, 1771. The type species for *Portunus* (*Monomia*) Gistel, 1848, remains as *Portunus gladiator* Fabricius, 1798. *Cancer gladiator* Fabricius, 1793, is by contrast, now a member of *Portunus* (*Portunus*), but as a junior synonym of *Portunus sanguinolentus* (Herbst, 1783).

The four syntypes of *Portunus gladiator* Fabricius, 1798, in the Zoological Museum of the University of Copenhagen are from Tranquebar in southern India, and conform with how the species is defined by Stephenson & Cook (1973) under the name of *Portunus haani* Stimpson, 1858. Stephenson & Cook (1973) commented that as *Cancer gladiator* Fabricius, 1793 (= *Portunus sanguinolentus* (Herbst, 1783)), is now in the same genus as *Portunus gladiator* Fabricius, 1798, then the two Fabricius names are secondary homonyms. That they are in separate subgenera does not affect the nomenclatural rules pertaining to secondary homonymy. Stephenson & Cook (1973) further argued that as *Portunus gladiator* Fabricius, 1798, is the junior homonym, it cannot be used, and must be replaced by the next available name, *Amphitrite haanii* Stimpson, 1858. This is the name now used by most workers (e.g. see Davie, 2002). However, as *Cancer gladiator* Fabricius, 1793, is regarded as a junior synonym of

Portunus sanguinolentus (Herbst, 1783), the name "*Portunus gladiator* (Fabricius, 1793)" has not been recognised or used anywhere. This being the case, there is no homonymy with *Portunus gladiator* Fabricius, 1798, and this name should remain available for use under the Code. The issue of secondary homonymy will only arise if *Cancer gladiator* Fabricius, 1793, is regarded as a valid species of *Portunus* distinct from *Portunus sanguinolentus* (Herbst, 1783). If this were to happen (for example if the widespread *P. sanguinolentus* was to prove to be a complex of several cryptic species), then the name *Portunus gladiator* Fabricius, 1798, would have to be replaced by the next available name, *Portunus haanii* (Stimpson, 1858).

{9} *Amphitrite argentata* White, 1847, is a nomen nudum, and is not an available name (see also Clark & Presswell, 2001). The name "*argentatus*" was first made available by A. Milne-Edwards (1861: 332, pl. 31 fig. 4) who published a description and figure of it under the name *Neptunus argentatus* (see Davie, 2002). He based this on White's (1847) material in the Brtish Museum (Natural History) in London (present Natural History Museum), and this is possibly the reason why many carcinologists still incorrectly attribute the name to White.

{10} *Portunus ponticus* Fabricius, 1798, was described from Indian Seas, and the types (two specimens) are in the Zoological Museum of the University of Copenhagen (Zimsen, 1964: 652). P. K. L. Ng examined the specimens and it is similar to *P. gladiator* in many respects, and as such, is referred to the subgenus *Portunus* (*Monomia*) for the moment.

{11} The selection of a type species for the commercially important genus *Portunus* Weber, 1795, has been discussed in detail by Holthuis (1952).

{12} It has become clear for some time that what is now called *Portunus pelagicus* is actually a complex of four cryptic species. Ongoing studies by Joelle C. Y. Lai, P. K. L. Ng and P. J. F. Davie using morphological, morphometric and molecular characters have shown that four species can in fact be recognised (unpublished data), for which the names *Portunus pelagicus* (Linnaeus, 1758), *P. reticulatus* (Herbst, 1799), *P. segnis* (Forskål, 1775) and *P. armatus* (A. Milne-Edwards, 1861), will be used Lai et al., in prep.). A few clarifications are necessary. The true identity of *Cancer segnis* Forskål, 1775, has never been established, and the name has always been regarded as a nomen dubium. Nevertheless, on the basis of Forskål's description, albeit rather brief, there is little doubt in our opinion that it is close to *Portunus pelagicus* sensu stricto, and we now reuse this name for one of the cryptic species we recognise from the Indian Ocean. We use one of Herbst's names, *Cancer reticulatus* Herbst, 1799, for the second Indian Ocean species. The name of the Australian species is *Portunus armatus* (A. Milne-Edwards, 1861), a name which has been missed by most brachyuran workers, including Stephenson (1972).

{13} *Portunus denticulatus* Marion de Procé, 1822 (p. 133), and *Portunus integifrons* Marion de Procé, 1822 (p. 134) require comment. Both names have not been used since they were described from Manila in the Philippines. As far as we know, there is no type material remaining. From the description, we are confident *P. denticulatus* Marion de Procé, 1822, is synonymous with *Portunus pelagicus* (Linnaeus, 1758). The description of *Portunus integifrons* Marion de Procé, 1822, agrees well with a common reef species, *Thalamita admete* (Herbst, 1803), and in the absence of specimens, we synonymise the two names with doubt.

{14} On the basis of the description provided of *Portunus tropicalis* by Marion de Procé (1822: 133) (from among sargassum beds near the Azores), we have little doubt that it is the same as the well known sargassum swimming crab *Portunus sayi* (Gibbes, 1850). While *P. tropicalis* has priority, the name itself has not been used since it was described, and it would serve no purpose to have it replaced. Following Article 23.9.1.1 of the Code, *Lupa sayi* Gibbes, 1850 (at present in *Portunus*) is given priority over *Portunus tropicalis* Marion de Procé, 1822, as they are regarded as synonyms. The name *Lupa sayi* Gibbes, 1850, is therefore a nomen protectum, while *Portunus tropicalis* Marion de Procé, 1822, is here regarded as a nomen oblitum. Marion de Procé's material does not appear to be extant, though it seems at least some of his material arrived back in France. For example, his specimens of one species of fiddler crab (Ocypodidae) were passed to Desmarest (1823) who described (p. 243) it as a new species, *Gelasimus marionis*. In naming this crab, Desmarest noted (in French) (as Gélasime de Marion): "Cette espèce... est de Manille. Elle m'a été communiquée par M. Marion de Procé de Nantes, à qui je la dédie" (see also Desmarest, 1825: 125). *Gelasimus marionis* Desmarest, 1823, is currently a junior synonym of *Uca vocans* (Linnaeus, 1758). The Paris Museum does not have any of Marion de Procé's material.

{15} Many authors follow Stephenson (1972) in using *Portunus* (*Hellenus*) A. Milne-Edwards, 1874, as the name for this subgenus, but *Xiphonectes* A. Milne-Edwards, 1873, has priority since both their type species are currently regarded as congeneric.

{16} *Portunus pseudohastatoides* Yang & Tang, 2006, was described without assignment to a subgenus. On the basis of their description and the very close affinities their species has with *P. hastatoides*, it is clear that it should be referred to the subgenus *Portunus* (*Xiphonectes*).

{17} The identity of *Cancer menestho* Herbst, 1803, is problematic. Latreille (1825) suggests that *Cancer menestho* may be a synonym of *Portunus gladiator* but Stephenson & Cook (1973) indicate that it was more likely to be affiliated with *P. rubromarginatus* (Lanchester, 1900).

{18} *Amphitrite media* Stimpson, 1858, is a problem. Some authors regard this as a junior synonym of *P. gladiator* (e.g. Alcock, 1899) but Stephenson & Cook

(1973) suggest that it was closest to *Portunus orbitosinus* Rathbun, 1911, and may even be synonyms. The absence of types means that the matter may need to be resolved with the judicious selection of a neotype of *Amphitrite media* Stimpson, 1858, from Hong Kong.

{19} The identities of *Cancer defensor* Fabricius, 1787, and *Cancer armiger* Fabricius, 1787, are uncertain. The types of *C. defensor* and *C. armiger* are lost (Zimsen, 1964: 647) and is problematic. Both were described from Australia, and on the basis of the original descriptions, are likely to be species of *Portunus*. These two were among four species of poorly known portunids (the other two being *C. lancifer* and *C. holosericus*) described by Fabricius (1787) for which the types are no longer extant. Fabricius (1793) later treated all four species but did not cross-refer them to his 1787 paper (see points 8, 21, 28).

{20} Shen (1934) named *Charybdis gordoni* for Isabella Gordon, a woman, so the ending must be amended to "*gordonae*".

{21} The types of *Cancer holosericus* Fabricius, 1787, are lost (Zimsen, 1964: 647). Fabricius (1787: 326) described the species from Australia, but later (Fabricius, 1798: 365, as *Portunus holosericus*) reported more specimens from Indian Seas. This Indian Ocean material (four specimens, not types), is still in the Zoological Museum of the University of Copenhagen (Zimsen, 1964: 648). P. K. L. Ng has examined them and it closely resembles *Charybdis* (*Charybdis*) *granulata* (De Haan, 1833), and may be conspecific. It is here referred to the subgenus *Charybdis*.

{22} In a recent study, Türkay & Spiridonov (2006) recognised two subspecies in *Charybdis* (*Goniohellenus*) *omanensis* Leene, 1938; the nominal subspecies, and a new one from the western Indian Ocean, *C.* (*G.*) *omanensis septentrionalis*.

{23} The gender of *Gonioinfradens* Leene, 1938, should be masculine, as the gender of "*dens*" (or tooth) is masculine.

{24} Naruse & Shokita (2003), in reporting a second specimen of *T. cerasma* Wee & Ng, 1995, from Japan (cf. Takeda & Marumura, 1997), argued that the differences given by Crosnier & Moosa (2002) to separate *T. cerasma rectifrons* from *T. cerasma cerasma* are slight, and likely to be due to variation. Although they deferred synonymising both names, we concur with their observations and regard the two taxa as synonymous.

{25} Crosnier (1978) placed *Thalamita gracilipes* (A. Milne-Edwards, 1873) in *Thalamonyx* A. Milne-Edwards, 1873 (type species *Thalamita danae* Stimpson, 1858), the genus in which it was originally described. However, *T. danae* is now considered to belong to *Thalamita*, thus if *T. gracilipes* is considered generically distinct from *T. danae*, then it must be referred to its own as yet unnamed genus. Alain Crosnier (pers. comm.) feels that it is better to retain *T. gracilipes* in *Thalamita* for the moment.

{26} Crosnier (2002) recently synonymised *Thalamita wakensis* Edmondson, 1925, with *T. seurati* Nobili, 1906.

{27} The name *Portunus affinis* Weber, 1795, was based on information from Daldorff, and it is likely that it may be based on a species from southern India (see discussion of Weber versus Fabricius in Introduction). There are no types, so its identity cannot be determined.

{28} *Cancer lancifer* Fabricius, 1787, was described from somewhere in the Pacific, and from the original description, is likely to be a species of *Thalamita*. The lack of types (Zimsen, 1964: 647) makes its identity impossible to ascertain.

Fig. 115. *Benthochascon hemingi*, central Philippines (photo: T. Y. Chan)

Fig. 116. *Libystes* cf. *villosus*, central Philippines (photo: T. Y. Chan)

Fig. 117. *Laleonectes nipponensis*, central Philippines (photo: P. Ng)

SUPERFAMILY POTAMOIDEA ORTMANN, 1896

FAMILY POTAMIDAE ORTMANN, 1896

Thelphusidae MacLeay, 1838 (priority suppressed, ICZN plenary powers) [Opinion 712]
Potamoninae Ortmann, 1896
Potamidae Ortmann, 1896 (spelling corrected from Potamonidae Ortmann, 1896, and name given priority over Thelphusidae under ICZN plenary powers) [Opinion 712]
Potamiscinae Bott, 1970
Sinopotamidae Bott, 1970
Isolapotamidae Bott, 1970

Remarks. – The taxonomic situation with the family Potamidae is difficult due to its large number of species. Bott (1970) had recognised four separate families in his Potamoidea: Potamidae Ortmann, 1896, Potamonautidae Bott, 1970, Sinopotamidae Bott, 1970, and Isolapotamidae Bott, 1970; all of which had discrete distributions. Members of the Potamonautidae were African (south of the Sahara), members of the Sinopotamidae primarily Chinese, while those of the Isolapotamidae were mainly Southeast Asian with some East Asian representatives (Bott, 1970). The rest of the Asia was occupied by Potamidae species. Ng (1988) synonymised the Sinopotamidae and Isolapotamidae with the Potamidae, commenting that there were no good characters except perhaps distribution (see also Ng & Tan, 1998; Cumberlidge, 1999; Dai, 1999; Yeo & Ng, 1999, 2003; Yeo et al., 2008). Brandis (2002), however, using mainly the detailed structure of the G2, argued that both Sinopotamidae and Isolapotamidae were valid families, although he slightly rearranged the Bott's (1970) generic composition. On the basis of the G2 structure, he also noted that some genera should be synonymised. A recent detailed DNA analysis of a large number of potamid genera (sensu Ng, 1988) by Shih et al. (in prep.) found no support for the Sinopotamidae, only weak resolution (though not at the family level) for a clade corresponding to Brandis' (2002) "Isolapotamidae" (though not with the same generic composition), and that most of the genera currently recognised were genetically distant. It thus seems best to recognise one Asian family for the Potamoidea, Potamidae.

Subfamily Potaminae Ortmann, 1896

Thelphusidae MacLeay, 1838 (priority suppressed, ICZN plenary powers) [Opinion 712]
Potamoninae Ortmann, 1896
Potamidae Ortmann, 1896 (spelling corrected and name given priority over Thelphusidae under ICZN plenary powers) [Opinion 712]

Acanthopotamon Kemp, 1918
= *Acanthopotamon* Kemp, 1918 (type species *Paratelphusa martensi* Wood-Mason, 1875, by original designation; gender neuter)
= *Potamon* (*Spinopotamon*) Bott, 1966 (type species *Paratelphusa martensi* Wood-Mason, 1875, by original designation; gender neuter)
Acanthopotamon fungosum (Alcock, 1909) [*Potamon* (*Paratelphusa*)]
Acanthopotamon martensi (Wood-Mason, 1875) [*Paratelphusa*]
Acanthopotamon panningi (Bott, 1966) [*Potamon* (*Spinopotamon*)]

Alcomon Yeo & Ng, 2007 {1}
= *Alcomon* Yeo & Ng, 2007 (type species *Potamon* (*Geothelphusa*) *superciliosum* Kemp, 1913, by original designation; gender neuter)
Alcomon lophocarpus (Kemp, 1913) [*Potamon* (*Geotelphusa*)]
Alcomon superciliosum (Kemp, 1913) [*Potamon* (*Geotelphusa*)]

Himalayapotamon Pretzmann, 1966
= *Potamon* (*Himalayapotamon*) Pretzmann, 1966 (type species *Telphusa atkinsonianum* Wood-Mason, 1871, by original designation; gender neuter)
Himalayapotamon ambivium (Alcock, 1909) [*Potamon*]
Himalayapotamon atkinsonianum (Wood-Mason, 1871) [*Telphusa*]
= *Potamon atkinsonianum janetschekii* Pretzmann, 1966
Himalayapotamon babaulti (Bouvier, 1918) [*Potamon* (*Potamon*)]
Himalayapotamon bifarium (Alcock, 1909) [*Potamon*]
Himalayapotamon emphyseteum (Alcock, 1909) [*Potamon*]
= *Potamon* (*Potamon*) *atkinsonianum ventriosum* Alcock, 1909
= *Potamon* (*Himalayapotamon*) *atkinsonianum gordonae* Pretzmann, 1966 {2}
Himalayapotamon kausalis (Pretzmann, 1966) [*Potamon*]
Himalayapotamon koolooense (Rathbun, 1904) [*Potamon*]
Himalayapotamon marinelli (Pretzmann, 1963) [*Potamon*]
Himalayapotamon monticola (Alcock, 1910) [*Potamon* (*Potamon*)]

Lobothelphusa Bouvier, 1917 {3}
= *Hydrothelphusa* (*Lobothelphusa*) Bouvier, 1917 (type species *Paratelphusa crenulifera* Wood-Mason, 1875, subsequent designation by Bott, 1970; gender feminine)
Lobothelphusa barbouri (Rathbun, 1910) [*Parathelphusa*]
Lobothelphusa calva (Alcock, 1909) [*Potamon* (*Paratelphusula*)]
Lobothelphusa crenulifera (Wood-Mason, 1875) [*Paratelphusa*]
Lobothelphusa floccosa (Alcock, 1910) [*Potamon* (*Acanthotelphusa*)]
Lobothelphusa woodmasoni (Rathbun, 1905) [*Potamon* (*Parathelphusa*)]
= *Paratelphusa edwardsi* Wood-Mason, 1875 (pre-occupied name)
= *Paratelphusula milneedwardsi* Alcock, 1909

Paratelphusula Alcock, 1909 {3}
= *Paratelphusula* Alcock, 1909 (type species *Telphusa* (*Paratelphusa*) *dayana* Wood-Mason, 1871, by original designation; gender feminine)
Paratelphusula burmensis (Bott, 1966) [*Potamon* (*Spinopotamon*)]
Paratelphusula dayana (Wood-Mason, 1871) [*Telphusa* (*Paratelphusa*)]
Paratelphusula gibbosa (Ng & Kosuge, 1997) [*Lobothelphusa*]
Paratelphusula peguensis (Rathbun, 1905) [*Potamon* (*Parathelphusa*)]

Potamon Savigny, 1816
= *Potamon* Savigny, 1816 (type species *Potamon fluviatile* Savigny, 1816, by monotypy; gender neuter) [Opinion 712]

= *Thelphusa* Latreille, 1819 (type species *Cancer fluviatilis* Herbst, 1785, by monotypy; gender feminine)
= *Potamon* (*Euthelphusa*) Pretzmann, 1962 (type species *Cancer fluviatilis* Herbst, 1785, by original designation; gender feminine)
= *Potamon* (*Pontipotamon*) Pretzmann, 1962 (type species *Thelphusa fluviatilis taurica* Czerniavsky, 1884, by original designation; gender neuter)
= *Potamon* (*Orientopotamon*) Pretzmann, 1962 (type species *Potamon gedrosianum* Alcock, 1910, by original designation; gender neuter)
= *Potamon* (*Centropotamon*) Pretzmann, 1962 (type species *Potamon magnum magnum* Pretzmann, 1962, by original designation; gender neuter)
Potamon algeriense Bott, 1967
= *Potamon fluviatilis berghetripsorum* Pretzmann, 1976
Potamon bileki Pretzmann, 1971
Potamon bilobatum Brandis, Storch & Türkay, 2000 [*Potamon* (*Pontipotamon*)]
Potamon fluviatile (Herbst, 1785) [*Cancer*]
= *Potamophilus edule* Latreille, 1818
= *Potamon* (*Telphusa*) *fluviatilis fluviatilis* Natio *tarantium* Pretzmann, 1983
= *Potamon* (*Telphusa*) *fluviatilis fluviatilis* Natio *thessalonis* Pretzmann, 1983
= *Potamon* (*Telphusa*) *fluviatilis fluviatilis* Natio *kuhnelti* Pretzmann, 1983
= *Potamon* (*Telphusa*) *fluviatilis fluviatilis* Natio *leucosis* Pretzmann, 1983
= *Potamon* (*Telphusa*) *fluviatilis fluviatilis* Natio *laconis* Pretzmann, 1983
= *Potamon fluviatile lanfrancoi* Capolongo & Cilia, 1990
Potamon gedrosianum Alcock, 1909
= *Potamon gedrosianum waziristanis* Pretzmann, 1965
= *Potamon gedrosianum torbenwolffi* Bott, 1967
Potamon hueceste Pretzmann, 1983
= *Potamon* (*Centropotamon*) *hueceste hueceste* Natio *agris* Pretzmann, 1983
= *Potamon* (*Centropotamon*) *hueceste hueceste* Natio *gaziantepis* Pretzmann, 1983
Potamon ibericum (Bieberstein, 1808) [*Cancer*]
= *Thelphusa fluviatilis taurica* Czerniavsky, 1884
= *Potamon ibericum meandris* Pretzmann, 1963
= *Potamon albanicum* Starobogatov & Vassilenko, 1979
= *Potamon* (*Pontipotamon*) *ibericum tauricum* Natio *trojensis* Pretzmann, 1983
= *Potamon* (*Pontipotamon*) *ibericum tauricum* Natio *troijensis* Pretzmann, 1983
= *Potamon* (*Pontipotamon*) *ibericum tauricum* Natio *cappadociensis* Pretzmann, 1983
= *Potamon* (*Pontipotamon*) *ibericum tauricum* Natio *bithyniensis* Pretzmann, 1983
Potamon magnum Pretzmann, 1962
Potamon mesopotamicum Brandis, Storch & Türkay, 1998
Potamon monticola Alcock, 1910
Potamon persicum Pretzmann, 1962 [*Potamon* (*Centropotamon*)]
= *Potamon* (*Centropotamon*) *magnum elbrusi* Pretzmann, 1962
= *Potamon magnum armenicum* Pretzmann, 1962
= *Potamon* (*Centropotamon*) *magnum vangoelium* Pretzmann, 1976
= *Potamon* (*Centropotamon*) *persicum kermanshahi* Pretzmann, 1976
= *Potamon* (*Centropotamon*) *hueceste armenicum* Pretzmann, 1983
Potamon potamios (Olivier, 1804) [*Cancer*]
= *Potamon fluviatile* Savigny, 1816
= *Potamon potamios kretaion* Ghiavarini, 1934
= *Potamon potamios karpathos* Ghiavarini, 1934
= *Potamon potamios cyprion* Pretzmann, 1962
= *Potamon potamios karamani* Pretzmann, 1962
= *Potamon potamios palaestinense* Bott, 1967
= *Potamon* (*Potamon*) *potamios potamios* Natio *antiochiensis* Pretzmann, 1984
= *Potamon potamios schoenmanni* Pretzmann, 1986
Potamon rhodium Parisi, 1913
= *Potamon potamios hippocratis* Ghighi, 1929
= *Potamon* (*Potamon*) *potamios hippocratis* Natio *egerdiri* Pretzmann, 1962
= *Potamon* (*Potamon*) *potamios hippocratis* Natio *antalyensis* Pretzmann, 1962
= *Potamon* (*Potamon*) *potamios rhodium* Natio *wettsteini* Pretzmann, 1983
= *Potamon potamios aspoecki* Pretzmann, 1986
Potamon ruttneri Pretzmann, 1962
= *Potamon gedrosianum lindbergi* Pretzmann, 1966
= *Potamon gedrosianum linberglundi* Bott, 1967
Potamon setigerum Rathbun, 1904 {4}
= *Potamon* (*Potamon*) *potamios setiger* Natio *sendschirili* Pretzmann, 1984
= *Potamon potamios ghab* Kinzelbach, 1985
Potamon strouhali Pretzmann, 1962 [*Potamon* (*Orientopotamon*)]
= *Potamon* (*Orientopotamon*) *eiselti* Pretzmann, 1976
= *Potamon strouhali shurium* Pretzmann, 1976
Potamon transcaspicum Pretzmann, 1962 [*Potamon* (*Orientopotamon*)]
= *Potamon* (*Orientopotamon*) *turkmenicum* Pretzmann, 1962
= *Potamon* (*Potamon*) *zarudnyi* Starobogatov & Vassilenko, 1979

Socotra Cumberlidge & Wranik, 2002
= *Socotra* Cumberlidge & Wranik, 2002 (type species *Socotra pseudocardisoma* Cumberlidge & Wranik, 2002, by original designation; gender feminine)
Socotra pseudocardisoma Cumberlidge & Wranik, 2002

Socotrapotamon Apel & Brandis, 2000
= *Socotrapotamon* Apel & Brandis, 2000 (type species *Telphusa socotrensis* Hilgendorf, 1883, by original designation; gender neuter)
Socotrapotamon nojidense Apel & Brandis, 2000
Socotrapotamon socotrense (Hilgendorf, 1883) [*Telphusa*]
= *Telphusa granosa* Koelbel, 1884

Subfamily Potamiscinae Bott, 1970

Potamiscinae Bott, 1970
Sinopotamidae Bott, 1970
Isolapotamidae Bott, 1970

Acartiapotamon Dai, 1999
= *Acartiapotamon* Dai, 1999 (type species *Tenuilapotamon inflatum* Dai, Song, Li, Chen, Wang & Hu, 1985, by original designation; gender neuter)
Acartiapotamon inflatum (Dai, Song, Li, Chen, Wang & Hu, 1985) [*Tenuilapotamon*]

Allopotamon Ng, 1988
= *Allopotamon* Ng, 1988 (type species *Potamon* (*Potamon*) *tambelanense* Rathbun, 1904, by original designation; gender neuter)
Allopotamon tambelanense (Rathbun, 1904) [*Potamon* (*Potamon*)]

Amamiku Naruse, Segawa & Shokita, 2004
= *Amamiku* Naruse, Segawa & Shokita, 2004 (type species *Candidiopotamon amamense* Minei, 1973, by original designation; gender feminine)
Amamiku amamensis (Minei, 1973) [*Candidiopotamon*]
Amamiku occulta Naruse, Segawa & Aotsuka, 2007

Aparapotamon Dai & Chen, 1985
= *Aparapotamon* Dai & Chen, 1985 (type species *Potamon* (*Potamon*) *grahami* Rathbun, 1931, by original designation; gender neuter)
Aparapotamon arcuatum Dai & Chen, 1985
Aparapotamon emineoforaminum Dai & Chen, 1985
Aparapotamon gracilipedum (Chen & Chang, 1982) [*Parapotamon*]
Aparapotamon grahami (Rathbun, 1931) [*Potamon* (*Potamon*)]
Aparapotamon huiliense Dai & Chen, 1985
Aparapotamon inflomanum Dai & Chen, 1985
Aparapotamon molarum Dai & Chen, 1985
Aparapotamon muliense Dai, Chen, Liu, Luo, Yi, Liu, Gu & Liu, 1990
Aparapotamon protinum Dai & Chen, 1985
Aparapotamon similium Dai & Chen, 1985
Aparapotamon tholosum Dai & Chen, 1985

Apotamonautes Dai, 1993
= *Apotamonautes* Dai, 1993 (type species *Potamonautes hainanensis* Parisi, 1916, by original designation; gender masculine)
Apotamonautes hainanensis hainanensis (Parisi, 1916) [*Potamonautes*]
Apotamonautes hainanensis banshuiensis Dai & Xing, 1993
Apotamonautes hainanensis bawanglingensis Dai & Xing, 1993
Apotamonautes hainanensis nanlinensis Dai & Xing, 1993

Artopotamon Dai & Chen, 1984
= *Artopotamon* Dai & Chen, 1984 (type species *Artopotamon compressum* Dai & Chen, 1984, by original designation; gender neuter)
Artopotamon compressum Dai & Chen, 1984

Aspermon Yeo & Ng, 2007 {1}
= *Aspermon* Yeo & Ng, 2007 (type species *Parathelphusa feae* De Man, 1898, by original designation; gender neuter)
Aspermon feae (De Man, 1898) [*Parathelphusa*]

Badistemon Yeo & Ng, 2007 {1}
= *Badistemon* Yeo & Ng, 2007 (type species *Potamon* (*Potamon*) *turgidulum* Alcock, 1909, by original designation; gender neuter)
Badistemon turgidulum (Alcock, 1909) [*Potamon* (*Potamon*)]

Beccumon Yeo & Ng, 2007 {1}
= *Beccumon* Yeo & Ng, 2007 (type species *Potamon jarujini* Ng & Naiyanetr, 1993, by original designation; gender neuter)
Beccumon alcockianum (Kemp, 1923) [*Potamon* (*Potamon*)]
Beccumon jarujini (Ng & Naiyanetr, 1993) [*Potamon*]
Beccumon maesariang (Ng & Naiyanetr, 1993) [*Potamon*]
Beccumon namlang (Ng & Naiyanetr, 1993) [*Potamon*]

Bottapotamon Dai & Türkay, 1997
= *Bottapotamon* Dai & Türkay, 1997 (type species *Parapotamon engelhardti* Bott, 1967, by original designation; gender neuter)
Bottapotamon engelhardti (Bott, 1967) [*Parapotamon*]
Bottapotamon fukiense (Dai, Chen, Song, Fan, Lin & Zeng, 1979) [*Malayopotamon*]
Bottapotamon lingchuanense Dai & Türkay, 1997
Bottapotamon yonganense (Cheng, Lin & Luo, 1993) [*Malayopotamon*]

Candidiopotamon Bott, 1967
= *Candidiopotamon* Bott, 1967 (type species *Potamon rathbunae* De Man, 1914, by original designation; gender neuter)
Candidiopotamon guangdongense Dai, 1999
Candidiopotamon kumejimense Minei, 1973
Candidiopotamon okinawense Minei, 1973
Candidiopotamon rathbunae (De Man, 1914) [*Potamon*]
= *Thelphusa rubra* Nakagawa, 1915 (nomen nudum)
Candidiopotamon tokashikense Naruse, Segawa & Aotsuka, 2007

Carpomon S. H. Tan & Ng, 1998
= *Carpomon* S. H. Tan & Ng, 1998 (type species *Carpomon pomulum* S. H. Tan & Ng, 1998, by original designation; gender neuter)
Carpomon pomulum S. H. Tan & Ng, 1998

Cerberusa Holthuis, 1979
= *Cerberusa* Holthuis, 1979 (type species *Cerberusa caeca* Holthuis, 1979, by original designation; gender feminine)
Cerberusa caeca Holthuis, 1979
Cerberusa tipula Holthuis, 1979

Chinapotamon Dai & Naiyanetr, 1994
= *Chinapotamon* Dai & Naiyanetr, 1994 (type species *Tiwaripotamon depressum* Dai, Song, Li & Liang, 1980, by original designation; gender neuter)
Chinapotamon anglongense Dai & Naiyanetr, 1994
Chinapotamon depressum (Dai, Song, Li & Liang, 1980) [*Tiwaripotamon*]
Chinapotamon glabrum (Dai, Song, Li & Liang, 1980) [*Tiwaripotamon*]
Chinapotamon longlinense Dai & Naiyanetr, 1994
Chinapotamon pusillum (Song, 1984) [*Tiwaripotamon*]
Chinapotamon xingrenense Dai & Naiyanetr, 1994

Cryptopotamon Ng, 1992
= *Cryptopotamon* Ng, 1992 (type species *Potamon* (*Potamon*) *anacoluthon* Kemp, 1918, by original designation; gender neuter)
Cryptopotamon anacoluthon (Kemp, 1918) [*Potamon* (*Potamon*)]

Daipotamon Ng & Trontelj, 1996
= *Daipotamon* Ng & Trontelj, 1996 (type species *Daipotamon minos* Ng & Trontelj, 1996, by original designation; gender neuter)
Daipotamon minos Ng & Trontelj, 1996

Demanietta Bott, 1966
= *Ranguna* (*Demanietta*) Bott, 1966: 99 (type species: *Potamon* (*Potamon*) *manii* Rathbun, 1904, by original designation; gender feminine)
Demanietta huahin Yeo, Naiyanetr & Ng, 1999
Demanietta khirikhan Yeo, Naiyanetr & Ng, 1999
Demanietta lansak Yeo, Naiyanetr & Ng, 1999
Demanietta manii (Rathbun, 1904) [*Potamon* (*Potamon*)]
Demanietta merguensis (Bott, 1966) [*Potamiscus* (*Demanietta*)]
Demanietta nakhonsi Yeo, Naiyanetr & Ng, 1999
Demanietta renongensis (Rathbun, 1904) [*Potamon* (*Potamon*)]
= *Potamon* (*Ranguna*) *tenasserimensis smalleyi* Bott, 1966
Demanietta suanphung Yeo, Naiyanetr & Ng, 1999
Demanietta thagatensis (Rathbun, 1904) [*Potamon* (*Potamon*)]
Demanietta tritrungensis (Naiyanetr, 1986) [*Ranguna*]

Doimon Yeo & Ng, 2007 {1}
= *Doimon* Yeo & Ng, 2007 (type species *Potamon doisutep* Naiyanetr & Ng, 1990, by original designation; gender neuter)
Doimon doichiangdao (Naiyanetr & Ng, 1990) [*Potamon*]
Doimon doisutep (Naiyanetr & Ng, 1990) [*Potamon*]
Doimon maehongsonense (Naiyanetr, 1992) [*Potamon*]

Donopotamon Dang & Hai, 2005
= *Donopotamon* Dang & Hai, 2005 (type species *Donopotamon haii* Dang & Hai, 2005, by original designation; gender neuter)
Donopotamon haii Dang & Hai, 2005

Dromothelphusa Naiyanetr, 1992
= *Dromothelphusa* Naiyanetr, 1992 (type species *Thelphusa longipes* A. Milne-Edwards, 1869, by original designation; gender feminine)
Dromothelphusa longipes (A. Milne-Edwards, 1869) [*Thelphusa*]

Eosamon Yeo & Ng, 2007 {1}
= *Eosamon* Yeo & Ng, 2007 (type species *Potamon* (*Potamon*) *smithianum* Kemp, 1923, by by original designation; gender neuter)
Eosamon boonyaratae (Naiyanetr, 1987) [*Potamon*]
Eosamon brousmichei (Rathbun, 1904) [*Potamon* (*Potamon*)]
Eosamon hafniense (Bott, 1966) [*Potamiscus* (*Ranguna*)]
Eosamon lushuiense (Dai & Chen, 1985) [*Potamon*]
Eosamon paludosum (Rathbun, 1904) [*Potamon* (*Potamon*)]
Eosamon phuphanense (Naiyanetr, 1992) [*Potamon*]
Eosamon smithianum (Kemp, 1923) [*Potamon* (*Potamon*)]
Eosamon tengchongense (Dai & Chen, 1985) [*Potamon*]
Eosamon tumidum (Wood-Mason, 1871) [*Telphusa*]
Eosamon yotdomense (Naiyanetr, 1984) [*Potamiscus*]

Erebusa Yeo & Ng, 1999
= *Erebusa* Yeo & Ng, 1999 (type species *Erebusa calobates* Yeo & Ng, 1999, by original designation; gender feminine)
Erebusa calobates Yeo & Ng, 1999

Esanpotamon Naiyanetr & Ng, 1997
= *Esanpotamon* Naiyanetr & Ng, 1997 (type species *Esanpotamon namsom* Naiyanetr & Ng, 1997, by original designation; gender neuter)
Esanpotamon namsom Naiyanetr & Ng, 1997

Flabellamon Ng, 1996
= *Flabellamon* Ng, 1996 (type species *Flabellamon pretzmanni* Ng, 1996, by original designation; gender neuter)
Flabellamon kuehnelti (Pretzmann, 1963) [*Potamon*]
= *Flabellamon pretzmanni* Ng, 1996

Geothelphusa Stimpson, 1858
= *Geothelphusa* (type species *Geothelphusa obtusipes* Stimpson, 1858, subsequent designation by Rathbun, 1898; gender feminine)
Geothelphusa albogilva Shy, Ng & Yu, 1994
Geothelphusa ancylophallus Shy, Ng & Yu, 1994
Geothelphusa aramotoi Minei, 1973
Geothelphusa bicolor Shy, Ng & Yu, 1994
Geothelphusa caesia Shy, Ng & Yu, 1994
Geothelphusa candidiensis Bott, 1967
Geothelphusa chiui Minei, 1974
Geothelphusa cinerea Shy, Ng & Yu, 1994
Geothelphusa dehaani (White, 1847) [*Thelphusa*] {5}
= *Thelphusa japonica* Herklots, 1861
Geothelphusa dolichopodes Shy, Ng & Yu, 1994
Geothelphusa eucrinodonta Shy, Ng & Yu, 1994
Geothelphusa eurysoma Shy, Ng & Yu, 1994
Geothelphusa exigua Suzuki & Tsuda, 1994
Geothelphusa ferruginea Shy, Ng & Yu, 1994
Geothelphusa fulva Naruse, Shokita & Shy, 2004
Geothelphusa gracilipes Shy, Ng & Yu, 1994
Geothelphusa grandiovata Naruse, Shokita & Ng, 2006
Geothelphusa haituan Chen, Hsu & Cheng, 2007
Geothelphusa hirsuta S. H. Tan & Liu, 1998
Geothelphusa iheya Naruse, Shokita & Ng, 2006
Geothelphusa ilan Shy, Ng & Yu, 1994
Geothelphusa kumejima Naruse, Shokita & Ng, 2006
Geothelphusa lanyu Shy, Ng & Yu, 1994
Geothelphusa leeae Shy, 2005
Geothelphusa levicervix (Rathbun, 1898) [*Potamon* (*Geothelphusa*)]
Geothelphusa lili Chen, Cheng & Shy, 2005
Geothelphusa lutao Shy, Ng & Yu, 1994
Geothelphusa marginata Naruse, Shokita & Shy, 2004
Geothelphusa marmorata Suzuki & Okano, 2000
Geothelphusa minei Shy & Ng, 1998
Geothelphusa miyakoensis Shokita, Naruse & Fuji, 2002
Geothelphusa miyazakii (Miyake & Chiu, 1965) [*Potamon* (*Geothelphusa*)]
Geothelphusa monticola Shy, Ng & Yu, 1994
Geothelphusa nanao Shy, Ng & Yu, 1994
Geothelphusa nanhsi Shy, Ng & Yu, 1994
Geothelphusa obtusipes Stimpson, 1858
Geothelphusa olea Shy, Ng & Yu, 1994
Geothelphusa pingtung S. H. Tan & Liu, 1998
= *Geothelphusa neipu* Chen, Cheng & Shy, 1998
Geothelphusa sakamotoanus (Rathbun, 1905) [*Potamon* (*Geothelphusa*)]
Geothelphusa shernshan Chen, Cheng & Shy, 2005
Geothelphusa shokitai Shy & Ng, 1998
Geothelphusa takuan Shy, Ng & Yu, 1994
Geothelphusa tali Shy, Ng & Yu, 1994
Geothelphusa tawu Shy, Ng & Yu, 1994
Geothelphusa tenuimanus (Miyake & Minei, 1965) [*Potamon* (*Geothelphusa*)]
Geothelphusa tsayae Shy, Ng & Yu, 1994
Geothelphusa taroko Shy, Ng & Yu, 1994
Geothelphusa wangi Shy, Ng & Yu, 1994
Geothelphusa wutai Shy, Ng & Yu, 1994
Geothelphusa yangmingshan Shy, Ng & Yu, 1994

Hainanpotamon Dai, 1995 {6}
= *Hainanpotamon* Dai, 1995 (type species *Potamon* (*Potamon*) *orientale* Parisi, 1916, by original designation; gender neuter)
= *Orientalia* Dang, 1995 (type species *Potamon* (*Potamon*) *orientale* Parisi, 1916, by original designation; name pre-occupied by *Orientalia* Radoman, 1972 [Mollusca]; gender feminine)
Hainanpotamon fuchengense Dai, 1995
Hainanpotamon glabrum (Dang, 1967) [*Potamon* (*Geothelphusa*)]
Hainanpotamon helense Dai, 1995
Hainanpotamon orientale (Parisi, 1916) [*Potamon* (*Potamon*)]
Hainanpotamon rubrum (Dang & Tran, 1992) [*Orientalia*]
Hainanpotamon vietnamicum (Dang & Ho, 2002) [*Geothelphusa*]

Heterochelamon Dai & Türkay, 1997
= *Heterochelamon* Dai & Türkay, 1997 (type species *Potamon* (*Geothelphusa*) *purpureomanualis* Wu, 1934, by original designation; gender neuter)
Heterochelamon guangxiense Türkay & Dai, 1993
Heterochelamon purpureomanuale (Wu, 1934) [*Potamon* (*Geothelphusa*)]
Heterochelamon yangshuoense Dai & Türkay, 1997

Huananpotamon Dai & Ng, 1994
= *Huananpotamon* Dai & Ng, 1994 (type species *Nanhaipotamon angulatum* Dai, Chen, Song, Fan, Lin & Zeng, 1979, by original designation; gender neuter)
Huananpotamon angulatum (Dai, Chen, Song, Fan, Lin & Zeng, 1979) [*Nanhaipotamon*]
Huananpotamon chongrenense Dai, Zhou & Peng, 1995
Huananpotamon guixiense Dai, Zhou & Peng, 1995
Huananpotamon lichuanense Dai, Zhou & Peng, 1995
Huananpotamon medium Dai, Zhou & Peng, 1995
Huananpotamon nanchengense Dai, Zhou & Peng, 1995
Huananpotamon obtusum (Dai & Chen, 1979) [*Nanhaipotamon*]
Huananpotamon planopodum (Dai & Chen, 1987) [*Nanhaipotamon*]
Huananpotamon ramipodum (Dai & Chen, 1987) [*Nanhaipotamon*]
Huananpotamon ruijinense Dai, Zhou & Peng, 1995
Huananpotamon yiyangense Dai, Zhou & Peng, 1995

Ibanum Ng, 1995
= *Ibanum* Ng, 1995 (type species *Ibanum aethes* Ng, 1995, by original designation; gender neuter)
Ibanum aethes Ng, 1995
Ibanum bicristatum (De Man, 1899) [*Potamon* (*Geothelphusa*)]
Ibanum pilimanus Ng & Jongkar, 2004

Indochinamon Yeo & Ng, 2007 {1}
= *Indochinamon* Yeo & Ng, 2007 (type species *Potamon villosum* Yeo & Ng, 1998, by original designation: gender neuter)
Indochinamon andersonianum (Wood-Mason, 1871) [*Telphusa*]
Indochinamon asperatum (Alcock, 1909) [*Potamon* (*Potamon*)]
Indochinamon beieri (Pretzmann, 1966) [*Potamon*]
Indochinamon bhumibol (Naiyanetr, 2001) [*Potamon*]
Indochinamon boshanense (Dai & Chen, 1985) [*Potamon*]
Indochinamon changpoense (Dai, 1995) [*Potamon*]
Indochinamon chinghungense (Dai, Song, He, Cao, Xu & Zhong, 1975) [*Potamon*]
Indochinamon cua (Yeo & Ng, 1998) [*Potamon*]
Indochinamon daweishanense (Dai, 1995) [*Potamon*]
Indochinamon edwardsi (Wood-Mason, 1871) [*Telphusa*]
Indochinamon flexum (Dai, Song, Li & Liang, 1980) [*Potamon*]
Indochinamon gengmaense (Dai, 1995) [*Potamon*]
Indochinamon guttum (Yeo & Ng, 1998) [*Potamon*]
Indochinamon hirtum (Alcock, 1909) [*Potamon* (*Potamon*)]
Indochinamon hispidum (Wood-Mason, 1871) [*Telphusa*]
Indochinamon jianchuanense (Dai & Chen, 1985) [*Potamon*]
Indochinamon jinpingense (Dai, 1995) [*Potamon*]
Indochinamon kimboiense (Dang, 1975) [*Ranguna* (*Ranguna*)]
Indochinamon lipkei (Ng & Naiyanetr, 1993) [*Potamon*]
Indochinamon manipurense (Alcock, 1909) [*Potamon* (*Potamon*)]
Indochinamon menglaense (Dai & Cai, 1998) [*Potamon*]
Indochinamon mieni (Dang, 1967) [*Potamon* (*Potamon*)]
Indochinamon orleansi (Rathbun, 1904) [*Potamon* (*Potamon*)]
Indochinamon ou (Yeo & Ng, 1998) [*Potamon*]
Indochinamon prolatum (Brandis, 2000) [*Potamiscus*]
Indochinamon tannanti (Rathbun, 1904) [*Potamon* (*Potamon*)]
= *Potamon hokuoense* Tai, Song, He, Cao, Xu & Zhong, 1975
Indochinamon tritum (Alcock, 1909) [*Potamon* (*Potamon*)]
Indochinamon villosum (Yeo & Ng, 1998) [*Potamon*]
Indochinamon xinpingense (Dai & Bo, 1994) [*Potamon*]
Indochinamon yunlongense (Dai, 1995) [*Potamon*]

Inlethelphusa Yeo & Ng, 2007 {1}
= *Inlethelphusa* Yeo & Ng, 2007 (type species *Potamon* (*Potamon*) *acanthicum* Kemp, 1918, by original designation: gender feminine)
Inlethelphusa acanthica (Kemp, 1918) [*Potamon* (*Potamon*)]

Insulamon Ng & Takeda, 1992
= *Insulamon* Ng & Takeda, 1992 (type species *Insulamon unicorn* Ng & Takeda, 1992, by original designation; gender neuter)
Insulamon unicorn Ng & Takeda, 1992

Iomon Yeo & Ng, 2007 {1}
= *Iomon* Yeo & Ng, 2007 (type species *Potamon nan* Ng & Naiyanetr, 1993, by original designation: gender neuter)
Iomon nan (Ng & Naiyanetr, 1993) [*Potamon*]
Iomon luangprabangense (Rathbun, 1904) [*Potamon* (*Potamon*)]

Isolapotamon Bott, 1968
= *Isolapotamon* (*Isolapotamon*) Bott, 1968 (type species *Potamon anomalus* Chace, 1938, by original designation; gender neuter)
Isolapotamon anomalum (Chace, 1938) [*Potamon*]
Isolapotamon bauense Ng, 1987
Isolapotamon beeliae Ng, 1986
Isolapotamon borneense Ng & S. H. Tan, 1998
Isolapotamon collinsi Holthuis, 1979
Isolapotamon consobrinum (De Man, 1899) [*Potamon* (*Potamon*)]
Isolapotamon doriae (Nobili, 1900) [*Potamon* (*Potamon*)]
Isolapotamon griswoldi (Chace, 1938) [*Potamon*]
Isolapotamon grusophallus Ng & Yang, 1986
Isolapotamon ingeri Ng & S. H. Tan, 1998
Isolapotamon kinabaluense (Rathbun, 1904) [*Potamon* (*Potamon*)]
Isolapotamon mahakkamense (De Man, 1899) [*Potamon* (*Potamon*)]
Isolapotamon mindanaoense (Rathbun, 1904) [*Potamon* (*Potamon*)]
Isolapotamon naiadis Ng, 1986
Isolapotamon nimboni Ng, 1987
= *Isolapotamon stuebingi* Ng, 1995
Isolapotamon sinuatifrons (H. Milne Edwards, 1853) [*Thelphusa*]
Isolapotamon spatha Ng & Takeda, 1992

Johora Bott, 1966
= *Potamiscus* (*Johora*) Bott, 1966 (type species *Potamon* (*Potamon*) *johorense* Roux, 1936, by original designation; gender feminine)
Johora aipooae (Ng, 1986) [*Terrapotamon*]
Johora counsilmani (Ng, 1985) [*Stoliczia* (*Johora*)]
Johora gapensis (Bott, 1966) [*Stoliczia* (*Johora*)]
Johora grallator Ng, 1988
Johora gua Yeo, 2001
Johora hoiseni Ng & Takeda, 1992
Johora intermedia (Ng, 1986) [*Stoliczia* (*Johora*)]
Johora johorensis (Roux, 1936) [*Potamon* (*Potamon*)]
Johora murphyi (Ng, 1986) [*Stoliczia* (*Johora*)]
Johora punicea (Ng, 1985) [*Stoliczia* (*Johora*)]
Johora singaporensis (Ng, 1986) [*Stoliczia* (*Johora*)]
Johora tahanensis (Bott, 1966) [*Stoliczia* (*Johora*)]
Johora thaiana Leelawathanagoon, Lheknim & Ng, 2005
Johora thoi Ng, 1990
Johora tiomanensis (Ng & L. W. H. Tan, 1984) [*Stoliczia* (*Johora*)]

Kanpotamon Ng & Naiyanetr, 1993
= *Kanpotamon* Ng & Naiyanetr, 1993 (type species *Kanpotamon duangkhaei* Ng & Naiyanetr, 1993, by original designation; gender neuter)
Kanpotamon duangkhaei Ng & Naiyanetr, 1993
Kanpotamon simulum (Alcock, 1909) [*Potamon* (*Potamon*)]

Kempamon Yeo & Ng, 2007 {1}
= *Kempamon* Yeo & Ng, 2007 (type species *Potamon* (*Geotelphusa*) *loxophrys* Kemp, 1923, by original designation: gender neuter)
Kempamon laevior (Kemp, 1923) [*Potamon* (*Geotelphusa*)]
Kempamon loxophrys (Kemp, 1923) [*Potamon* (*Geotelphusa*)]

Kukrimon Yeo & Ng, 2007 {1}
= *Kukrimon* Yeo & Ng, 2007 (type species *Potamiscus cucphuongensis* Dang, 1975, by original designation: gender neuter)
Kukrimon cucphuongensis (Dang, 1975) [*Potamiscus*]

Lacunipotamon Tai, Song, He, Cao, Xu & Zhong, 1975
= *Lacunipotamon* Tai, Song, He, Cao, Xu & Zhong, 1975 (type species *Lacunipotamon albusorbitum* Dai, Song, He, Cao, Xu & Zhong, 1975, by original designation; gender neuter)
Lacunipotamon albusorbitum Dai, Song, He, Cao, Xu & Zhong, 1975
Lacunipotamon klossianum (Kemp, 1923) [*Potamon* (*Potamon*)]

Laevimon Yeo & Ng, 2005
= *Laevimon* Yeo & Ng, 2005 (type species *Laevimon kottelati* Yeo & Ng, 2005, by original designation; gender neuter)
Laevimon kottelati Yeo & Ng, 2005
Laevimon tankiense (Dang & Tran, 1992) [*Orientalia*]

Larnaudia Bott, 1966
= *Potamiscus* (*Larnaudia*) Bott, 1966 (type species *Thelphusa larnaudii* A. Milne-Edwards, 1869, by monotypy; gender feminine) [Opinion 1640]
Larnaudia beusekomae (Bott, 1970) [*Tiwaripotamon*]
Larnaudia chaiyaphumi (Naiyanetr, 1982) [*Larnaudia*]
Larnaudia larnaudii (A. Milne-Edwards, 1869) [*Thelphusa*] [Opinion 1640]

Latopotamon Dai & Türkay, 1997
= *Latopotamon* Dai & Türkay, 1997 (type species *Isolapotamon obtortum* Dai, Song, Li, Chen, Wang & Hu, 1984, by original designation; gender neuter)
Latopotamon obtortum (Dai, Song, Li, Chen, Wang & Hu, 1984) [*Isolapotamon*]

Lophopotamon Dai, 1999
= *Lophopotamon* Dai, 1999 (type species *Trichopotamon yenyuanense* Dai, Chen, Liu, Luo, Yi, Liu, Gu & Liu, 1990, by original designation; gender neuter)
Lophopotamon yenyuanense (Dai, Chen, Liu, Luo, Yi, Liu, Gu & Liu, 1990) [*Trichopotamon*]

Malayopotamon Bott, 1968
= *Isolapotamon* (*Malayopotamon*) Bott, 1968 (type species *Telphusa larnaudi brevimarginata* De Man, 1892, by original designation; gender neuter)
Malayopotamon batak Ng & Wowor, 1991
Malayopotamon brevimarginatum (De Man, 1892) [*Telphusa*]
Malayopotamon gestroi (Nobili, 1900) [*Potamon* (*Potamon*)]
Malayopotamon granulatum (De Man, 1892) [*Telphusa*]
Malayopotamon granulosum (Balss, 1937) [*Potamon*]
Malayopotamon javanense (Bott, 1968) [*Isolapotamon* (*Malayopotamon*)]
= *Malayopotamon holthuisi* Ng & Yang, 1985
Malayopotamon similis Ng & S. H. Tan, 1999
Malayopotamon sumatrense (Miers, 1880) [*Telphusa*]
Malayopotamon tobaense (Bott, 1968) [*Isolapotamon* (*Malayopotamon*)]
Malayopotamon turgeo Ng & S. H. Tan, 1999

Mediapotamon Türkay & Dai, 1997
= *Mediapotamon* Türkay & Dai, 1997 (type species *Malayopotamon angustipedum* Dai & Song, 1982, by original designation; gender neuter)
Mediapotamon angustipedum (Dai & Song, 1982) [*Malayopotamon*]
Mediapotamon leishanense (Dai, 1995) [*Tenuilapotamon*]

Megacephalomon Yeo & Ng, 2007 {1}
= *Megacephalomon* Yeo & Ng, 2007 (type species *Thaipotamon kittikooni* Yeo & Naiyanetr, 1999, by original designation: gender neuter)
Megacephalomon kittikooni (Yeo & Naiyanetr, 1999) [*Thaipotamon*]

Mindoron Ng & Takeda, 1992
= *Mindoron* Ng & Takeda, 1992 (type species *Mindoron pala* Ng & Takeda, 1992, by original designation; gender neuter)
Mindoron balssi (Bott, 1968) [*Isolapotamon* (*Nanhaipotamon*)]
Mindoron pala Ng & Takeda, 1992

Minpotamon Dai & Türkay, 1997
= *Minpotamon* Dai & Türkay, 1997 (type species *Isolapotamon nasicum* Dai, Chen, Song, Fan, Lin & Zeng, 1979, by original designation; gender neuter)
Minpotamon nasicum (Dai, Chen, Song, Fan, Lin & Zeng, 1979) [*Isolapotamon*]

Nanhaipotamon Bott, 1968
= *Isolapotamon* (*Nanhaipotamon*) Bott, 1968 (type species *Potamon* (*Geothelphusa*) *formosana* Parisi, 1916, by original designation; gender neuter)
Nanhaipotamon aculatum Dai, 1997
Nanhaipotamon dongyinense Shih, Chen & Wang, 2005
Nanhaipotamon formosanum (Parisi, 1916) [*Potamon* (*Geothelphusa*)]
Nanhaipotamon globosum (Parisi, 1916) [*Potamon* (*Geothelphusa*)]
Nanhaipotamon guangdongense Dai, 1997
Nanhaipotamon hepingense Dai, 1997
Nanhaipotamon hongkongense (Shen, 1940) [*Potamon* (*Potamon*)]
Nanhaipotamon huaanense Dai, 1997
Nanhaipotamon nanriense Dai, 1997
Nanhaipotamon pinghense Dai, 1997
Nanhaipotamon pingyuanense Dai, 1997
Nanhaipotamon wenzhouense Dai, 1997
Nanhaipotamon yongchuense Dai, 1997

Neilupotamon Dai & Türkay, 1997
= *Neilupotamon* Dai & Türkay, 1997 (type species *Isolapotamon sinense* Tai & Sung, 1975, by original designation; gender neuter)
Neilupotamon papilionaceum (Dai, Song, He, Cao, Xu & Zhong, 1975) [*Isolapotamon*]
Neilupotamon physalisum (Dai, Song, Li, Chen, Wang & Hu, 1984) [*Isolapotamon*]
Neilupotamon sinense (Tai & Sung, 1975) [*Isolapotamon*]
Neilupotamon xinganense Dai & Türkay, 1997

Nemoron Ng, 1996
= *Nemoron* Ng, 1996 (type species *Nemoron nomas* Ng, 1996, by original designation; gender neuter)
Nemoron nomas Ng, 1996

Neolarnaudia Türkay & Naiyanetr, 1987
= *Neolarnaudia* Türkay & Naiyanetr, 1987 (type species *Neolarnaudia botti* Türkay & Naiyanetr, 1987, by original designation; gender feminine)
Neolarnaudia botti Türkay & Naiyanetr, 1987
Neolarnaudia phymatodes (Kemp, 1923) [*Potamon* (*Potamon*)]

Neotiwaripotamon Dai & Naiyanetr, 1994
= *Neotiwaripotamon* Dai & Naiyanetr, 1994 (type species *Potamon* (*Potamon*) *whiteheadi* Parisi, 1916, by original designation; gender neuter)
Neotiwaripotamon jianfengense Dai & Naiyanetr, 1994
Neotiwaripotamon whiteheadi (Parisi, 1916) [*Potamon* (*Potamon*)]

Ovitamon Ng & Takeda, 1992
= *Ovitamon* Ng & Takeda, 1992 (type species *Ovitamon arcanum* Ng & Takeda, 1992, by original designation; gender neuter)
Ovitamon arcanum Ng & Takeda, 1992
Ovitamon artifrons (Bürger, 1884) [*Telphusa*]
Ovitamon cumingii (Miers, 1884) [*Telphusa*]
= *Thelphusa cumingii* White, 1847 (nomen nudum)
Ovitamon tomaculum Ng & Takeda, 1992

Parapotamon De Man, 1907
= *Parapotamon* De Man, 1907 (type species *Parathelphusa spinescens* Calman, 1905, by original designation; gender neuter)
Parapotamon spinescens (Calman, 1905) [*Parathelphusa*]
Parapotamon hsingyiense Tai & Sung, 1975

Parapotamonoides Dai, 1990
= *Parapotamonoides* Dai, 1990 (type species *Potamon* (*Parathelphusa*) *endymion* De Man, 1906; by original designation; gender masculine)
Parapotamonoides endymion (De Man, 1906) [*Potamon* (*Parathelphusa*)]

Pararanguna Dai & Chen, 1984
= *Ranguna* (*Pararanguna*) Dai & Chen, 1984 (type species *Ranguna* (*Pararanguna*) *semilunatum* Dai & Chen, 1984, by original designation; gender neuter)
Pararanguna semilunata (Dai & Chen, 1984) [*Ranguna* (*Pararanguna*)]

Parvuspotamon Dai & Bo, 1994
= *Parvuspotamon* Dai & Bo, 1994 (type species *Parvuspotamon* Dai & Bo, 1994, by original designation; gender neuter)
Parvuspotamon yuxiense Dai & Bo, 1994

Phaibulamon Ng, 1992
= *Phaibulamon* Ng, 1992 (type species *Phaibulamon stilipes* Ng, 1992, by monotypy; gender neuter)
Phaibulamon stilipes Ng, 1992

Pilosamon Ng, 1996
= *Pilosamon* Ng, 1996 (type species *Potamon* (*Potamon*) *laosensis* Rathbun, 1904, by original designation; gender neuter)
Pilosamon laosense (Rathbun, 1904) [*Potamon* (*Potamon*)]
Pilosamon palustre (Rathbun, 1904) [*Potamon* (*Potamon*)]

Planumon Yeo & Ng, 2007 {1}
= *Planumon* Yeo & Ng, 2007 (type species *Potamon* (*Potamon*) *cochinchinense* De Man, 1898, by original designation: gender neuter)
Planumon cochinchinense (De Man, 1898) [*Potamon* (*Potamon*)]

Potamiscus Alcock, 1909
= *Potamon* (*Potamiscus*) Alcock, 1909 (type species *Potamon* (*Potamiscus*) *annandali* Alcock, 1909, by original designation; gender masculine)
= *Ranguna* Bott, 1966 (type species *Potamon* (*Potamon*) *rangoonense* Rathbun, 1904, by original designation; gender feminine) [Opinion 1640]
Potamiscus annandali (Alcock, 1909) [*Potamon* (*Potamiscus*)]
Potamiscus cangyuanensis Dai, 1999
Potamiscus decourcyi (Kemp, 1913) [*Potamon* (*Potamiscus*)]
?*Potamiscus elaphrius* Dai, Chen, Liu, Luo, Yi, Liu, Gu & Liu, 1990
?*Potamiscus loshingensis* (Wu, 1934) [*Potamon* (*Potamiscus*)]
Potamiscus montosus Tai, Song, He, Cao, Xu & Zhong, 1975
Potamiscus motuoensis Dai, 1990
Potamiscus pealianus (Wood-Mason, 1871) [*Telphusa*]
= *Potamon* (*Potamon*) *pealianum* var. *antennarium* Alcock, 1909
Potamiscus rangoonensis (Rathbun, 1904) [*Potamon* (*Potamon*)] [Opinion 1640]
Potamiscus rongjingensis Dai, Chen, Liu, Luo, Yi, Liu, Gu & Liu, 1990
Potamiscus tumidulus (Alcock, 1909) [*Potamon* (*Potamon*)]
Potamiscus yiwuensis Dai & Cai, 1998
?*Potamiscus yongshengensis* Dai & Chen, 1985
?*Potamiscus yunnanensis* (Kemp, 1923) [*Potamon* (*Potamiscus*)]

Pudaengon Ng & Naiyanetr, 1995
= *Pudaengon* Ng & Naiyanetr, 1995 (type species *Pudaengon mukdahan* Ng & Naiyanetr, 1995, by original designation; gender neuter)
Pudaengon arnamicai Ng & Naiyanetr, 1995
Pudaengon hinpoon Ng & Naiyanetr, 1995
Pudaengon inornatum (Rathbun, 1904) [*Potamon* (*Potamon*)]
Pudaengon khammouan Ng & Naiyanetr, 1995
Pudaengon mukdahan Ng & Naiyanetr, 1995
Pudaengon sakonnakorn Ng & Naiyanetr, 1995
Pudaengon thatphanom Ng & Naiyanetr, 1995
Pudaengon wanonniwat Ng & Naiyanetr, 1995

Pupamon Yeo & Ng, 2007 {1}
= *Pupamon* Yeo & Ng, 2007 (type species *Dromothelphusa namuan* Naiyanetr, 1993, by original designation: gender neuter)
Pupamon lao (Yeo & Naiyanetr, 1999) [*Potamon*]
Pupamon namuan (Naiyanetr, 1993) [*Dromothelphusa*]
Pupamon nayung (Naiyanetr, 1993) [*Dromothelphusa*]
Pupamon pealianoides (Bott, 1966) *Potamiscus* (*Ranguna*)
Pupamon phrae (Naiyanetr, 1984) [*Ranguna*]
Pupamon prabang (Yeo & Naiyanetr, 1999) [*Dromothelphusa*]
Pupamon sangwan (Naiyanetr, 1997) [*Dromothelphusa*]

Qiangpotamon Dai, 1995
= *Qiangpotamon* Dai, 1995 (type species *Qiangpotamon wulingense* Dai, 1995, by original designation; gender neuter)
Qiangpotamon wulingense Dai, 1995

Quadramon Yeo & Ng, 2007 {1}
= *Quadramon* Yeo & Ng, 2007 (type species *Potamon* (*Potamiscus*) *aborense* Kemp, 1913, by original designation: gender neuter)
Quadramon aborense (Kemp, 1913) [*Potamon* (*Potamiscus*)]
Quadramon mooleyitense (Rathbun, 1904) [*Potamon* (*Potamon*)]
Quadramon obliteratum (Kemp, 1913) [*Potamon* (*Potamiscus*)]

Rathbunamon Ng, 1996
= *Rathbunamon* Ng, 1996 (type species *Potamon* (*Potamon*) *lacunifer* Rathbun, 1904, by original designation; gender neuter)
Rathbunamon lacunifer (Rathbun, 1904) [*Potamon* (*Potamon*)]

Ryukyum Ng & Shokita, 1995
= *Ryukyum* Ng & Shokita, 1995 (type species *Nanhaipotamon yaeyamense* Minei, 1973, by original designation; gender neuter)
Ryukyum yaeyamense (Minei, 1973) [*Nanhaipotamon*]

Setosamon Yeo & Ng, 2007 {1}
= *Setosamon* Yeo & Ng, 2007 (type species *Potamon ubon* Ng & Naiyanetr, 1993, by original designation: gender neuter)
Setosamon somchaii (Ng & Naiyanetr, 1993) [*Potamon*]
Setosamon ubon (Ng & Naiyanetr, 1993) [*Potamon*]

Shanphusa Yeo & Ng, 2007 {1}
= *Shanphusa* Yeo & Ng, 2007 (type species *Potamon* (*Potamon*) *browneanum* Kemp, 1918, by original designation: gender feminine)
Shanphusa browneana (Kemp, 1918) [*Potamon* (*Potamon*)]
Shanphusa curtobates (Kemp, 1918) [*Potamon* (*Potamon*)]

Sinolapotamon Tai & Sung, 1975
= *Sinolapotamon* Tai & Sung, 1975 (type species *Potamon* (*Geothelphusa*) *patellifer* Wu, 1934, by original designation; gender neuter)
Sinolapotamon patellifer (Wu, 1934) [*Potamon* (*Geothelphusa*)]

Sinopotamon Bott, 1968
= *Sinopotamon* Bott, 1968 (type species *Potamon* (*Potamon*) *davidi* Rathbun, 1904, by original designation; gender neuter)
Sinopotamon acutum Dai, 1997
Sinopotamon anhuiense Dai & Fan, in Dai, Chen, Song, Fan, Lin & Zeng, 1979
Sinopotamon anyuanense Dai, Zhou & Peng, 1995
Sinopotamon baiyanense N. K. Ng & Dai, 1997
Sinopotamon bilobatum Dai & Jiang, 1991
Sinopotamon chalingense Dai, 1999
Sinopotamon changanense Dai, 1999
Sinopotamon chekiangense Tai & Sung, 1975
Sinopotamon chengkuense Huang, Luo & Liu, 1986
Sinopotamon chishuiense Dai & Yuan, 1988
Sinopotamon cladopodum Dai, Chen, Zhang & Lin, 1986
Sinopotamon cochlearidigitum Dai, Chen, Zhang & Lin, 1986
Sinopotamon convexum Dai, 1995
Sinopotamon davidi (Rathbun, 1904) [*Potamon* (*Potamon*)]
Sinopotamon decrescentum Dai, Chen, Zhang & Lin, 1986
Sinopotamon denticulatum (A. Milne-Edwards, 1853) [*Thelphusa*]
Sinopotamon depressum depressum Dai, Chen, Song, Fan, Lin & Zeng, 1979
Sinopotamon depressum shangchengense Dai, 1999
Sinopotamon depressum tongshanense Dai, 1999
Sinopotamon ebianense Huang, Luo & Liu, 1986
Sinopotamon emeiense Dai, 1990
Sinopotamon exiguum Dai, 1997
Sinopotamon fukienense Dai & Chen, 1979
Sinopotamon fuxingense Dai & Liu, 1994
Sinopotamon hanyangense Dai, 1995
Sinopotamon honanense Dai, Song, He, Cao, Xu & Zhong, 1975
Sinopotamon huitongense Dai, 1995
Sinopotamon introdigitum Dai, Chen, Zhang & Lin, 1986
Sinopotamon jiangkuoense Dai, 1995
Sinopotamon jianglenense Dai, Chen & Cai, 1993
Sinopotamon jiangsianense Dai, 1999
Sinopotamon jichiense Du, Lai, Deng & Shen, 1978
Sinopotamon jiujiangense Dai, Zhou & Peng, 1995
Sinopotamon kenliense Dai, 1997
Sinopotamon koatenense (Rathbun, 1904) [*Potamon* (*Potamon*)]
Sinopotamon kwanhsienense Tai & Sung, 1975
Sinopotamon lansi (Doflein, 1902) [*Potamon*]
Sinopotamon lingxiangense Dai, 1997
Sinopotamon linhuaense Dai, Zhou & Peng, 1995
Sinopotamon liuyangense Dai, 1995
Sinopotamon longlinense Dai, 1997
Sinopotamon loudiense Dai, 1995
Sinopotamon nanlingense Dai & Chiang, 1991
Sinopotamon nanum Dai, Chen, Liu, Luo, Yi, Liu, Gu & Liu, 1990
Sinopotamon ningangense Dai, Zhou & Peng, 1995
Sinopotamon obliquum Dai, 1990
Sinopotamon parvum Dai, Song, Li, Chen, Wang & Hu, 1985
Sinopotamon pingshanense Dai & Liu, 1994
Sinopotamon planum Dai, 1992
Sinopotamon quadratapodum Dai, Chen, Zhang & Lin, 1986
Sinopotamon rongshuiense Dai, 1995
Sinopotamon shaoyangense Dai, 1997
Sinopotamon shensiense (Rathbun, 1904) [*Potamon* (*Potamon*)]
Sinopotamon siguqiaoense Dai, Zhou & Peng, 1995
Sinopotamon styxum Dai, 1990
Sinopotamon taoyuanense Dai, 1995
Sinopotamon teritisum Dai, Chen, Zhang & Lin, 1986
Sinopotamon turgidum Dai, Chen, Zhang & Lin, 1986
Sinopotamon tinghsiangense Bott, 1967
Sinopotamon unaequum Dai & Jiang, 1991
Sinopotamon wanzaiense Dai, Zhou & Peng, 1995
Sinopotamon weiyuanense Dai, Chen, Liu, Luo, Yi, Liu, Gu & Liu, 1990
Sinopotamon wushanense Dai, Chen, Liu, Luo, Yi, Liu, Gu & Liu, 1990
Sinopotamon xiangtangense Dai, 1999
Sinopotamon xiangxiense Dai, 1995
Sinopotamon xingningense Dai, 1997
Sinopotamon xiuningense Dai, 1999
Sinopotamon xingshanense Dai, Chen, Zhang & Lin, 1986
Sinopotamon xuishuiense Dai, Zhou & Peng, 1995
Sinopotamon yaanense (Chung & Tsao, 1962) [*Potamon*]
Sinopotamon yangsekiense yangsekiense Bott, 1967
Sinopotamon yangtsekiense tongbaiense Dai & Chen, 1981
Sinopotamon yangtsekiense shanxianense Dai & Chen, 1981
Sinopotamon yichangense Dai, 1999
Sinopotamon yixianense Du, Lai, Deng, Shen & Chen, 1981
Sinopotamon yonganense Dai, 1999
Sinopotamon yueyangense Dai, 1995
Sinopotamon yushanense Dai, Zhou & Peng, 1995
Sinopotamon zunyiense Dai, 1997

Stelomon Yeo & Naiyanetr, 2000
= *Stelomon* Yeo & Naiyanetr, 2000 (type species *Potamon kanchanaburiense* Naiyanetr, 1992, by original designation; gender neuter)
Stelomon erawanense (Naiyanetr, 1992) [*Potamon*]
Stelomon kanchanaburiense (Naiyanetr, 1992) [*Potamon*]

Stelomon pruinosum (Alcock, 1909) [*Potamon* (*Potamon*)]
Stelomon tharnlod Yeo & Naiyanetr, 2000
Stelomon turgidulimanum (Alcock, 1910) [*Potamon* (*Potamon*)]

Stoliczia Bott, 1966
= *Potamiscus* (*Stoliczia*) Bott, 1966 (type species *Telphusa stoliczkana* Wood-Mason, 1871, by original designation; gender feminine)
Stoliczia bella Ng & Ng, 1987
Stoliczia changmanae Ng, 1988
Stoliczia chaseni (Roux, 1934) [*Potamon* (*Potamiscus*)]
Stoliczia cognata (Roux, 1936) [*Potamon* (*Potamiscus*)]
Stoliczia ekavibhathai Ng & Naiyanetr, 1986
Stoliczia goal Ng, 1993
Stoliczia karenae Ng, 1993
Stoliczia kedahensis Ng, 1992
Stoliczia leoi (Ng & Yang, 1985) [*Potamiscus*]
Stoliczia pahangensis (Roux, 1936) [*Potamon* (*Potamiscus*)]
Stoliczia panhai Ng & Naiyanetr, 1986
Stoliczia perlensis (Bott, 1966) [*Potamiscus* (*Stoliczia*)]
Stoliczia rafflesi (Roux, 1936) [*Potamon* (*Potamiscus*)]
Stoliczia stoliczkana (Wood-Mason, 1871) [*Potamiscus* (*Stoliczia*)]
Stoliczia tweediei (Roux, 1934) [*Potamon* (*Potamiscus*)]

Takpotamon Brandis, 2002
= *Takpotamon* Brandis, 2002 (type species *Potamon maesotense* Naiyanetr, 1992, by original designation; gender neuter)
Takpotamon galyaniae (Naiyanetr, 2001) [*Potamon*]
Takpotamon maesotense (Naiyanetr, 1992) [*Potamon*]

Tenuilapotamon Dai, Song, Li, Chen, Wang & Hu, 1984
= *Tenuilapotamon* Dai, Song, Li, Chen, Wang & Hu, 1984 (type species *Potamon joshueinse* Dai, Song, He, Cao, Xu & Zhong, 1975, by original designation; gender neuter)
Tenuilapotamon inflexum Dai, Song, Li, Chen, Wang & Hu, 1984
Tenuilapotamon joshuiense (Dai, Song, He, Cao, Xu & Zhong, 1975) [*Sinopotamon*]
Tenuilapotamon latilum latilum (Chen, 1980) [*Sinopotamon*]
Tenuilapotamon latilum anshunense Dai, Song, Li, Chen, Wang & Hu, 1985
Tenuilapotamon latilum bijiense Dai, Song, Li, Chen, Wang & Hu, 1985
Tenuilapotamon latilum huishuiense Dai, Song, Li, Chen, Wang & Hu, 1985
Tenuilapotamon latilum kaiyangense Dai, Song, Li, Chen, Wang & Hu, 1985
Tenuilapotamon latilum shuichengense Dai, Song, Li, Chen, Wang & Hu, 1985

Tenuipotamon Dai, 1990
= *Tenuipotamon* Dai, 1990 (type species *Tenuipotamon purpura* Dai, 1990, by original designation; gender neuter)
Tenuipotamon baishuiense Chen, 1993
Tenuipotamon huaningense Dai & Bo, 1994
Tenuipotamon panxiense Chen, 1993
Tenuipotamon purpura Dai, 1990
Tenuipotamon tonghaiense Chen, 1993
Tenuipotamon xinpingense Chen, 1993
Tenuipotamon yuxiense Chen, 1993

Teretamon Yeo & Ng, 2007 {1}
= *Teretamon* Yeo & Ng, 2007 (type species *Potamon* (*Geotelphusa*) *adiatretum* Alcock, 1909, by original designation: gender neuter)
Teretamon adiatretum (Alcock, 1909) [*Potamon* (*Geotelphusa*)]

Terrapotamon Ng, 1986
= *Terrapotamon* Ng, 1986 (type species *Potamon abbotti* Rathbun, 1898, by original designation; gender neuter)
Terrapotamon abbotti (Rathbun, 1898) [*Potamon* (*Potamon*)]
Terrapotamon palian Ng & Naiyanetr, 1998

Thaiphusa Ng & Naiyanetr, 1993
= *Thaiphusa* Ng & Naiyanetr, 1993 (type species *Demanietta sirikit* Naiyanetr, 1992, by original designation; gender feminine)
Thaiphusa chantaburiensis (Chuensri, 1973) [*Ranguna* (*Demanietta*)]
Thaiphusa sirikit (Naiyanetr, 1992) [*Demanietta*]
Thaiphusa tenasserimensis (De Man, 1898) [*Potamon* (*Potamonautes*)]

Thaipotamon Ng & Naiyanetr, 1993
= *Thaipotamon* Ng & Naiyanetr, 1993 (type species *Thaipotamon lomkao* Ng & Naiyanetr, 1993, by original designation; gender neuter)
Thaipotamon chulabhorn Naiyanetr, 1993
Thaipotamon dansai Ng & Naiyanetr, 1993
Thaipotamon lomkao Ng & Naiyanetr, 1993
Thaipotamon siamense (A. Milne-Edwards, 1869) [*Thelphusa*]
Thaipotamon smitinandi (Naiyanetr & Türkay, 1984) [*Ranguna*]
Thaipotamon varoonphornae Ng & Naiyanetr, 1993

Tiwaripotamon Bott, 1970
= *Tiwaripotamon* Bott, 1970 (type species *Geothelphusa annamensis* Balss, 1914, by original designation; gender neuter)
Tiwaripotamon annamense (Balss, 1914) [*Geothelphusa*]
Tiwaripotamon araneum (Rathbun, 1904) [*Potamon* (*Geothelphusa*)]
Tiwaripotamon austenianum (Wood-Mason, 1871) [*Telphusa*]
Tiwaripotamon edostilus Ng & Yeo, 2001
Tiwaripotamon pingguoense Dai & Naiyanetr, 1994
Tiwaripotamon xiurenense Dai & Naiyanetr, 1994

Tomaculamon Yeo & Ng, 1997
= *Tomaculamon* Yeo & Ng, 1997 (type species *Tomaculamon stenixys* Yeo & Ng, 1997, by original designation; gender neuter)
Tomaculamon pygmaeus Yeo & Ng, 1997
Tomaculamon stenixys Yeo & Ng, 1997

Trichopotamon Dai & Chen, 1984
= *Trichopotamon* Dai & Chen, 1984 (type species *Trichopotamon daliense* Dai & Chen, 1984, by original designation; gender neuter)
Trichopotamon daliense Dai & Chen, 1984
Trichopotamon sikkimense (Rathbun, 1905) [*Potamon* (*Geothelphusa*)]

Vadosapotamon Dai & Türkay, 1997
= *Vadosapotamon* Dai & Türkay, 1997 (type species *Isolapotamon sheni* Dai, Chen, Liu, Luo, Yi, Liu, Gu & Liu, 1990, by original designation; gender neuter)
Vadosapotamon sheni (Dai, Chen, Liu, Luo, Yi, Liu, Gu & Liu, 1990) [*Isolapotamon*]

Vietopotamon Dang & Ho, 2002
= *Vietopotamon* Dang & Ho, 2002 (type species *Vietopotamon aluoiensis* Dang & Ho, 2002, by original designation; gender neuter)
Vietopotamon aluoiense Dang & Ho, 2002
Vietopotamon phuluangense (Bott, 1970) [*Ranguna* (*Ranguna*)] {1}

Villopotamon Dang & Ho, 2003
= *Villopotamon* Dang & Ho, 2003 (type species *Villopotamon thaii* Dang & Ho, 2003, by original designation; gender neuter)
Villopotamon fruehstorferi (Balss, 1914) [*Potamon* (*Potamonautes*)]
Villopotamon klossianum (Kemp, 1923) [*Potamon* (*Potamon*)]
Villopotamon sphaeridium (Kemp, 1923) [*Potamon* (*Potamon*)]
Villopotamon thaii Dang & Ho, 2003
Villopotamon ungulatum (Dang & Ho, 2003) [*Potamon*] {1}

Yarepotamon Dai & Türkay, 1997
= *Yarepotamon* Dai & Türkay, 1997 (type species *Yarepotamon breviflagellum* Dai & Türkay, 1997, by original designation; gender neuter)
Yarepotamon aflagellum (Dai, Song, Li & Liang, 1980) [*Isolapotamon*]
Yarepotamon breviflagellum Dai & Türkay, 1997
Yarepotamon gracillipa (Dai, Song, Li & Liang, 1980) [*Malayopotamon*]
Yarepotamon guangdongense Dai & Türkay, 1997

Nomen nudum

Thelphusa gracilipes White, 1847 (nomen nudum)

Notes

{1} In a preliminary reappraisal of the 91 species which have been placed in or allied to *Potamon* sensu lato from Indochina, parts of India and China at one time or another, Yeo & Ng (2007) assigned them to various recognised as well as many new genera.

{2} In describing *Potamon* (*Himalayapotamon*) *atkinsonianum gordoni*, Pretzmann (1966: 5) stated that it was dedicated to "Frau Dr. Isabella GORDON gewidmet". And as such, the name should be corrected to "*gordonae*". In any case, at the moment, Pretzmann's species is regarded as a subjective junior synonym of *Himalayapotamon emphyseteum* (Alcock, 1909).

{3} Bouvier (1917) established *Lobothelphusa* as a subgenus of *Hydrothelphusa*, commenting that the Asian species that Alcock (1900, 1910a, b) had classified in *Acanthothelphusa* Ortmann, 1897, did not belong there as there were a number of distinct morphological differences. As the name was accompanied by a clear indication to Alcock as well as stated the characters he felt were diagnostic, *Lobothelphusa* Bouvier, 1917, is an available name, although no type species was designated. The Asian species treated by Alcock were: *Potamon* (*Paratelphusula*) *calvum* Alcock, 1909, *Paratelphusa crenulifera* Wood-Mason, 1875, *Potamon* (*Acanthotelphusa*) *crenuliferum floccosum* Alcock, 1910, *Telphusa* (*Paratelphusa*) *dayana* Wood-Mason, 1871, *Paratelphusa feae* De Man, 1898, *Potamon* (*Paratelphusa*) *fungosum* Alcock, 1909, *Paratelphusa martensi* Wood-Mason, 1875, and *Potamon* (*Parathelphusa*) *woodmasoni* Rathbun, 1905. The first valid designation of a type species was Bott (1970: 146) who selected *Paratelphusa crenulifera* Wood-Mason, 1875, as the type species (see also Yeo & Ng, 2007).

{4} The relatively well known freshwater crab, *Potamon setiger* Rathbun, 1904, should have its specific name corrected to "*setigerum*". The word "*setiger*" is an adjective (meaning bristles), and as the gender of *Potamon* is neuter, it should be "*setigerum*".

{5} The name "*Cancer* (*Thelphusa*) *berardii* De Haan, 1835", is sometimes cited as a junior synonym of *Thelphusa dehaani* White, 1847, currently *Geothelphusa*), but this is incorrect. It is not a new name but an incorrect usage of Audouin's (1826) name "*Thelphusa berardi*". *Thelphusa berardi* Audouin, 1826, is a valid species of *Potamonautes* MacLeay, 1838 (Potamonautidae).

{6} *Hainanpotamon* was recently revised by Yeo & Naruse (2007), with the generic placements of some species clarified and new species added.


Fig. 118. *Ovitamon artifrons*, Cavite, Philippines (photo: P. Ng)


Fig. 119. *Ibanum*, new species, Sawarak, Malaysia, currently under study by P.K.L. Ng (photo: P. Ng)


Fig. 120. *Johora punicea*, Tioman, Malaysia (photo: P. Ng)

FAMILY POTAMONAUTIDAE BOTT, 1970

Deckenini Ortmann, 1897 (priority suppressed because of broader usage of junior name Potamonautidae Bott, 1970; Code, Article 35.5)
Platythelphusinae Colosi, 1920 (priority suppressed because of broader usage of junior name Potamonautidae Bott, 1970; Code, Article 35.5)
Hydrothelphusinae Bott, 1955 (priority suppressed because of broader usage of junior name Potamonautidae Bott, 1970; Code, Article 35.5)
Globonautinae Bott, 1969 (priority suppressed because of broader usage of junior name Potamonautidae Bott, 1970; Code, Article 35.5)
Potamonautidae Bott, 1970
Seychellinae Števčić, 2005

Remarks. – Cumberlidge et al. (2008) did a substantial reappraisal of the classification of the Potamonautidae, and that is followed here (see also Daniels et al., 2006). The synonymisations of the Deckeniidae and Globonautinae (previously in the Gecarcinucidae) in the Hydrothelphusinae, and the Platytelphusidae with the Potamonautinae, are radical. While their revision makes the distributional patterns of the crabs far more parsimonious, the classification challenges several important characters previously used to define freshwater crabs. Key among these is the value of the structure of the mandibular palp. It is consistently bilobed in both the Pseudothelphusoidea and Gecarcinucoidea, but in their redefined Potamonautidae, the condition varies. A group in West Africa, the Globonautinae, traditionally linked with the gecarcinucoids was referred to the Potamonautidae for the first time, based on morphological and DNA datasets. Interestingly, the G1 of "globonautines" is typically like most potamonautids and potamoids, with two well demarcated segments. Most gecarcinucoids on the other hand (but not all), have simple undifferentiated G1s. Their revised system also synonymises the Deckeniidae with the Hydrothelphusinae despite the fact that *Deckenia* is a highly apomorphic. It may be better to recognise *Deckenia* and *Seychellum* as a separate subfamily in the Potamonautidae. Števčić (2005) established a new subfamily, Seychellinae Števčić, 2005, in his Potamidae sensu lato, taking into account the characters discussed in Ng et al. (1995) when the genus *Seychellum* was first established. However, the characters of this genus are very apomorphic, and placing it in its own subfamily is unnecessary in view of the unreliability of the mandibular palp structure in African taxa. The system of Cumberlidge et al. (2008), while unorthodox, still appears to be the best proposal thus far (see also Yeo et al., 2008). Their overall datasets, notably the molecular ones, are convincing.

Subfamily Hydrothelphusinae Bott, 1955

Hydrothelphusinae Bott, 1955
Deckenini Ortmann, 1897
Deckenina Ortmann, 1897
Globonautinae Bott, 1969
Seychellinae Števčić, 2005

Afrithelphusa Bott, 1969
= *Afrithelphusa* Bott, 1969 (type species *Afrithelphusa gerhildae* Bott, 1969, by original designation; gender feminine)
Afrithelphusa afzelli (Colosi, 1924) [*Parathelphusa* (*Barythelphusa*)]
Afrithelphusa gerhildae Bott, 1969
Afrithelphusa leonensis (Cumberlidge, 1987)[*Globonautes*]
Afrithelphusa monodosa (Bott, 1959) [*Globonautes*]

Boreas Cumberlidge & von Sternberg, 2002
= *Boreas* Cumberlidge & von Sternberg, 2002 (type species *Boreas uglowi* Cumberlidge & von Sternberg, 2002, by original designation; gender masculine)
Boreas uglowi Cumberlidge & von Sternberg, 2002

Deckenia Hilgendorf, 1869
= *Deckenia* Hilgendorf, 1869 (type species *Deckenia imitatrix* Hilgendorf, 1869, by monotypy; gender feminine) [Opinion 73]
Deckenia imitatrix Hilgendorf, 1869
Deckenia mitis Hilgendorf, 1898

Globonautes Bott, 1959
= *Globonautes* Bott, 1959 (type species *Potamon* (*Geothelphusa*) *macropus* Rathbun, 1898, by original designation; gender masculine)
Globonautes macropus (Rathbun, 1898) [*Potamon* (*Geothelphusa*)]

Louisea Cumberlidge, 1994
= *Louisea* Cumberlidge, 1994 (type species *Globonautes macropus edeaensis* Bott, 1969, by original designation; gender feminine)
Louisea balssi (Bott, 1959) [*Globonautes*]
Louisea edeaensis (Bott, 1969) [*Globonautes*]

Hydrothelphusa A. Milne-Edwards, 1872
= *Hydrothelphusa* A. Milne-Edwards, 1872 (type species *Hydrothelphusa agilis* A. Milne-Edwards, 1872, by monotypy; gender feminine) [Direction 36]
= *Bottia* Pretzmann, 1961 (type species *Thelphusa madagascariensis* A. Milne-Edwards, 1872, by original designation; gender feminine)
Hydrothelphusa agilis A. Milne-Edwards, 1872 [Direction 36]
Hydrothelphusa bombetokensis (Rathbun, 1904) [*Potamon* (*Potamon*)]
Hydrothelphusa goudoti (H. Milne Edwards, 1853) [*Thelphusa*]
= *Potamon* (*Geothelphusa*) *methueni* Calman, 1913
Hydrothelphusa madagascariensis (A. Milne-Edwards, 1872) [*Thelphusa*]
= *Potamon* (*Potamon*) *grandidieri* Rathbun, 1904
= *Potamon* (*Potamon*) *humbloti* Rathbun, 1904
= *Bottia madagascariensis reticulata* Pretzmann, 1961
Hydrothelphusa vencesi Cumberlidge, Marijnissen, & Thompson, 2007

Madagapotamon Bott, 1965
= *Madagapotamon* Bott, 1965 (type species *Madagapotamon humberti* Bott, 1965, by original designation; gender neuter)
?*Madagapotamon ankaraharae* (Nobili, 1906) [*Potamon* (*Geothelphusa*)]
Madagapotamon humberti Bott, 1965

Malagasya Cumberlidge & von Sternberg, 2002
= *Malagasya* Cumberlidge & von Sternberg, 2002 (type species *Potamon* (*Parathelphusa*) *antongilensis* Rathbun, 1905, by original designation; gender feminine)
Malagasya antongilensis (Rathbun, 1905) [*Potamon* (*Parathelphusa*)]
= *Gecarcinautes antongilensis vondrozi* Bott, 1965
Malagasya goodmani (Cumberlidge, Boyko & Harvey, 2002) [*Gecarcinautes*]

Marojejy Cumberlidge, Boyko & Harvey, 2002
= *Marojejy* Cumberlidge, Boyko & Harvey, 2002 (type species *Marojejy longimerus* Cumberlidge, Boyko & Harvey, 2002, by monotypy; gender neuter)
Marojejy longimerus Cumberlidge, Boyko & Harvey, 2002

Seychellum Ng, Števčić & Pretzmann, 1994
= *Seychellum* Ng, Števčić & Pretzmann, 1994 (type species *Deckenia alluaudi* A. Milne-Edwards & Bouvier, 1893, by original designation; gender neuter)
Seychellum alluaudi (A. Milne-Edwards & Bouvier, 1893) [*Deckenia*]
= *Deckenia cristata* Rathbun, 1894

Skelosophusa Takeda & Ng, 1994
= *Skelosophusa* Takeda & Ng, 1994 (type species *Madagapotamon gollhardi* Bott, 1965, by original designation; gender feminine)
Skelosophusa eumeces Takeda & Ng, 1994
Skelosophusa gollhardi (Bott, 1965) [*Madagapotamon*]
Skelosophusa prolixa Takeda & Ng, 1994

Subfamily Potamonautinae Bott, 1970

Potamonautidae Bott, 1970
Platythelphusinae Colosi, 1920

Erimetopus Rathbun, 1894
= *Erimetopus* Rathbun, 1894 (type species *Erimetopus spinosus* Rathbun, 1894, by monotypy; gender masculine) [Opinion 73]
Erimetopus brazzae brazzae (A. Milne-Edwards, 1886) [*Parathelphusa*]
= *Erimetopus spinosus* Rathbun, 1894 [Direction 36]
Erimetopus brazzae frontospinulosus (Bott, 1955) [*Potamonautes* (*Erimetopus*)]
Erimetopus vandenbrandeni (Balss, 1936) [*Potamonautes*]

Foza Reed & Cumberlidge, 2006
= *Foza* Reed & Cumberlidge, 2006 (type species *Foza raimundi* Reed & Cumberlidge, 2006; by original designation; gender feminine)
Foza raimundi Reed & Cumberlidge, 2006

Liberonautes Bott, 1955
= *Liberonautes* Bott, 1955 (type species *Potamon* (*Potamonautes*) *latidactylum* De Man, 1903, by original designation; gender masculine)
Liberonautes chaperi (A. Milne-Edwards, 1887) [*Parathelphusa*]
Liberonautes grandbassa Cumberlidge, 1999
Liberonautes latidactylus (De Man, 1903) [*Potamon* (*Potamonautes*)]
Liberonautes lugbe Cumberlidge, 1999
Liberonautes nanoides Cumberlidge & Sachs, 1989
Liberonautes nimba Cumberlidge, 1999
Liberonautes paludicolis Cumberlidge & Sachs, 1989
Liberonautes rubigimanus Cumberlidge & Sachs, 1989

Platythelphusa A. Milne-Edwards, 1887
= *Platythelphusa* A. Milne-Edwards, 1887 (type species *Platythelphusa armata* A. Milne-Edwards, 1887, by monotypy; gender feminine)
= *Limnothelphusa* Cunnington, 1899 (type species *Limnothelphusa maculata* Cunnington, 1899, by monotypy; gender feminine)
Platythelphusa armata A. Milne-Edwards, 1887
Platythelphusa conculcata (Cunnington, 1907) [*Limnothelphusa*]
Platythelphusa denticulata Capart, 1952
Platythelphusa echinata (Capart, 1952) [*Limnothelphusa*]
Platythelphusa immaculata Marijnissen, Schram, Cumberlidge & Michel, 2004
Platythelphusa maculata (Cunnington, 1899) [*Limnothelphusa*]
Platythelphusa polita (Capart, 1952) [*Limnothelphusa*]
Platythelphusa praelongata Marijnissen, Schram, Cumberlidge & Michel, 2004
Platythelphusa tuberculata (Capart, 1952) [*Limnothelphusa*]

Potamonautes MacLeay, 1838
= *Potamonautes* MacLeay, 1838 (type species *Thelphusa perlata* H. Milne Edwards, 1837, by monotypy; gender masculine) [Opinion 73]
= *Potamonautes* (*Platypotamonautes*) Bott, 1955 (type species *Potamon* (*Potamonautes*) *platynotus* Cunnington, 1907, by original designation; gender masculine)
= *Potamonautes* (*Longipotamonautes*) Bott, 1955 (type species *Thelphusa ballayi* A. Milne-Edwards, 1886, by original designation; gender masculine)
= *Potamonautes* (*Isolapotamonautes*) Bott, 1955 (type species *Thelphusa anchietae* Brito Capello, 1871, by original designation; gender masculine)
= *Potamonautes* (*Obesopotamonautes*) Bott, 1955 (type species *Potamon* (*Potamonautes*) *langi* Rathbun, 1921, by original designation; gender masculine)
= *Potamonautes* (*Acanthothelphusa*) Ortmann, 1897 (type species *Thelphusa nilotica* H. Milne Edwards, 1837, by original designation; gender feminine)
= *Potamonautes* (*Gerdalopotamonautes*) Bott, 1955 (type species *Potamonautes* (*Gerdalopotamonautes*) *gerdalensis* Bott, 1955, by original designation; gender masculine)
= *Potamonautes* (*Tripotamonautes*) Bott, 1955 (type species *Potamon* (*Potamonautes*) *walderi* Colosi, 1924, by original designation; gender masculine)
= *Potamonautes* (*Lirrangopotamonautes*) Bott, 1955 (type species *Potamon* (*Potamonautes*) *lirrangensis* Rathbun, 1904, by original designation; gender masculine)
= *Potamonautes* (*Arcopotamonautes*) Bott, 1955 (type species *Telphusa suprasulcata* Hilgendorf, 1898, by original designation; gender masculine)
= *Potamonautes* (*Orthopotamonautes*) Bott, 1955 (type species *Thelphusa depressa* Krauss, 1843, by original designation; gender masculine)
= *Potamonautes* (*Lobopotamonautes*) Bott, 1955 (type species *Potamon* (*Potamonautes*) *aloysiiabaudiae* Nobili, 1906, by original designation; gender masculine)
= *Potamonautes* (*Rotundopotamonautes*) Bott, 1955 (type species *Thelphusa berardi* Audouin, 1826, by original designation; gender masculine)
= *Gecarcinautes* Bott, 1960 (type species *Gecarcinautes brincki* Bott, 1960, by original designation; gender masculine)
Potamonautes adeleae Bott, 1968
Potamonautes alluaudi (Bouvier, 1921) [*Potamon* (*Potamonautes*)]
Potamonautes aloysiisabaudiae (Nobili, 1906) [*Potamon* (*Potamonautes*)]
Potamonautes amalerensis (Rathbun, 1935) [*Potamon* (*Geothelphusa*)] {1}
Potamonautes antheus (Colosi, 1920) [*Potamon* (*Geothelphusa*)] {1}
Potamonautes anchietae (Brito Capello, 1871) [*Thelphusa*]
= *Potamon* (*Potamonautes*) *biballensis* Rathbun, 1905
Potamonautes ballayi ballayi (A. Milne-Edwards, 1886) [*Thelphusa*]
Potamonautes ballayi adentatus Bott, 1955
Potamonautes ballayi acristatus Bott, 1955

Potamonautes bayonianus (Brito Capello, 1864) [*Telphusa*]
= *Thelphusa dubia* var. *jallae* Nobili, 1896
= *Potamon* (*Potamonautes*) *capelloanus* Rathbun, 1905
Potamonautes berardi (Audouin, 1826) [*Thelphusa*] {2}
= *Thelphusa difformis* H. Milne Edwards, 1853
Potamonautes congoensis (Rathbun, 1921) [*Potamon* (*Geothelphusa*)] {1}
Potamonautes dubius (Brito Capello, 1864) [*Telphusa*]
Potamonautes ignestii (Parisi, 1923) [*Potamon* (*Geotelphusa*)]
Potamonautes bipartitus (Hilgendorf, 1898) [*Telphusa*]
Potamonautes brincki (Bott, 1960) [*Gecarcinautes*]
Potamonautes calcaratus (Gordon, 1929) [*Potamon* (*Potamonautes*)]
Potamonautes clarus Gouws, Stewart & Coke, 2000
Potamonautes depressus (Krauss, 1843) [*Thelphusa*]
= *Thelphusa inflata* H. Milne Edwards, 1853
Potamonautes dybowskii (Rathbun, 1905) [*Potamon* (*Potamonautes*)]
Potamonautes dentatus Stewart, Coke & Cook, 1995
Potamonautes didieri (Rathbun, 1904) [*Potamon* (*Potamonautes*)]
= *Potamon* (*Geothelphusa*) *neumanni* var. *laetabilis* De Man, 1914
Potamonautes ecorssei (Marchand, 1902) [*Potamon* (*Potamonautes*)]
= *Potamon* (*Potamon*) *nigrensis* Rathbun, 1904
Potamonautes emini (Hilgendorf, 1892) [*Telphusa*]
Potamonautes gerdalensis Bott, 1955
Potamonautes granularis Daniels, Stewart & Gibbons, 1998
Potamonautes idjwiensis (Chace, 1942) [*Potamon* (*Geothelphusa*)] {1}
Potamonautes infravallatus (Hilgendorf, 1898) [*Telphusa*]
= *Potamon* (*Potamonautes*) *usambarae* Rathbun, 1933
Potamonautes jeanneli (Bouvier, 1921) [*Potamon* (*Geothelphusa*)] {1}
Potamonautes johnstoni (Miers, 1885) [*Thelphusa*]
= *Potamon* (*Potamonautes*) *ambiguus* Rathbun, 1904
Potamonautes kensleyi Cumberlidge & Tavares, 2006
Potamonautes langi (Rathbun, 1921) [*Potamon* (*Potamonautes*)]
Potamonautes lirrangensis (Rathbun, 1904) [*Potamon* (*Potamonautes*)]
= *Potamon* (*Potamonautes*) *orbitospinus* Cunnington, 1907
Potamonautes lividus Gouws, Stewart & Reavell, 2001
Potamonautes loashiensis Bott, 1955
Potamonautes loveni (Colosi, 1924) [*Potamon* (*Geothelphusa*)]
= *Potamon* (*Geothelphusa*) *granviki* Colosi, 1924
= *Potamon* (*Geothelphusa*) *harvardi* Rathbun, 1935
= *Potamon* (*Geotelphusa*) *loveni longimerus* Roux, 1935
Potamonautes loveridgei (Rathbun, 1933) [*Potamon* (*Potamonautes*)]
= *Potamon* (*Potamonautes*) *johnstoni stappersi* Balss, 1936
Potamonautes lueboensis (Rathbun, 1904) [*Potamon* (*Potamonautes*)] {1}
Potamonautes machadoi Bott, 1964
Potamonautes macrobrachii Bott, 1953
Potamonautes margaritarius (A. Milne-Edwards, 1869) [*Thelphusa*]
Potamonautes montivagus (Chace, 1953) [*Potamon* (*Potamonautes*)]
Potamonautes mutandensis (Chace, 1953) [*Potamon*]
Potamonautes neumanni (Hilgendorf, 1898) [*Telphusa*]
Potamonautes niloticus (H. Milne Edwards, 1837) [*Thelphusa*]
Potamonautes obesus (A. Milne-Edwards, 1868) [*Thelphusa*]
= *Potamon* (*Potamonautes*) *bottegoi* De Man, 1898
Potamonautes odhneri (Colosi, 1924) [*Potamon* (*Potamonautes*)]
Potamonautes paecilei (A. Milne-Edwards, 1886) [*Thelphusa*]
= *Potamon* (*Acanthothelphusa*) *campi* Rathbun, 1897
Potamonautes parvicorpus Daniels, Stewart & Burmeister, 2001
Potamonautes parvispina Stewart, 1997
Potamonautes perlatus (H. Milne Edwards, 1837) [*Thelpheusa*] [Direction 36]
= *Thelphusa cristata* A. Milne-Edwards, 1869
Potamonautes perparvus perparvus (Rathbun, 1921) [*Potamon* (*Geothelphusa*)]
Potamonautes perparvus minor Bott, 1955
Potamonautes perparvus gonocristatus Bott, 1955
Potamonautes pilosus (Hilgendorf, 1898) [*Telphusa*]
Potamonautes platycentron Hilgendorf, 1897 [*Telphusa*]
Potamonautes platynotus (Cunnington, 1907) [*Potamon* (*Potamonautes*)]
Potamonautes punctatus Bott, 1955
Potamonautes raybouldi Cumberlidge & Vannini, 2004
Potamonautes reidi Cumberlidge, 1999
Potamonautes rodolphianus (Rathbun, 1909) [*Potamon* (*Potamonautes*)]
Potamonautes rothschildi (Rathbun, 1909) [*Potamon* (*Potamonautes*)]
Potamonautes rukwanzi Corace, Cumberlidge & Garms, 2001
Potamonautes schubotzi (Balss, 1914) [*Geothelphusa*]
Potamonautes semilunaris Bott, 1955
Potamonautes senegalensis Bott, 1970
Potamonautes sidneyi (Rathbun, 1904) [*Potamon* (*Potamonautes*)]
Potamonautes stanleyensis (Rathbun, 1921) [*Potamon* (*Potamonautes*)]
Potamonautes suprasulcatus (Hilgendorf, 1898) [*Telphusa*]
= *Telphusa reichardi* Hilgendorf, 1898
= *Telphusa suprasulcata pseudoperlata* Hilgendorf, 1898
= *Telphusa mrogoroensis* Hilgendorf, 1898
Potamonautes triangulus Bott, 1959
Potamonautes unispinus Stewart & Cook, 1998
Potamonautes unisulcatus (Rathbun, 1933) [*Potamon* (*Potamonautes*)]
Potamonautes walderi (Colosi, 1924) [*Potamon* (*Potamonautes*)]
Potamonautes warreni (Calman, 1918) [*Thelphusa*]
Potamonautes xiphoidus Reed & Cumberlidge, 2006

Potamonemus Cumberlidge & Clark, 1992
= *Potamonemus* Cumberlidge & Clark, 1992 (type species *Potamonemus mambilorum* Cumberlidge & Clark, 1992, by original designation; gender neuter)
Potamonemus asylos Cumberlidge, 1993
Potamonemus mambilorum Cumberlidge & Clark, 1992
Potamonemus sachsi Cumberlidge, 1993

Sudanonautes Bott, 1955
= *Sudanonautes* Bott, 1955 (type species *Thelphusa africana* A. Milne-Edwards, 1869, by original designation; gender masculine)
= *Sudanonautes* (*Convexonautes*) Bott, 1955 (type species *Thelphusa aubryi* H. Milne Edwards, 1853, by original designation; gender masculine)
Sudanonautes africanus (A. Milne-Edwards, 1869) [*Thelphusa*]
Sudanonautes aubryi (H. Milne Edwards, 1853) [*Thelphusa*]
= *Thelphusa aurantia* Herklots, 1851
= *Thelphusa pelii* Herklots, 1861
= *Thelphusa emarginata* Kingsley, 1880
= *Thelphusa decazei* A. Milne-Edwards, 1886
= *Potamonautes decazei granulata* Balss, 1929
= *Potamon* (*Potamonautes*) *pobeguini* Rathbun, 1904
= *Potamon* (*Potamonautes*) *regnieri* Rathbun, 1904

Sudanonautes chaperi (A. Milne-Edwards, 1887) [*Parathelphusa*]
Sudanonautes chavanesii (A. Milne-Edwards, 1886) [*Thelphusa*]
Sudanonautes faradjensis (Rathbun, 1921) [*Potamon* (*Acanthotehlphusa*)]
Sudanonautes floweri (De Man, 1901) [*Potamon* (*Potamonautes*)]
Sudanonautes granulatus (Balss, 1929) [*Potamonautes*]
Sudanonautes kagoroensis Cumberlidge, 1991
Sudanonautes monodi (Balss, 1929) [*Potamonautes*]
Sudanonautes nigeria Cumberlidge, 1999
Sudanonautes orthostylis Bott, 1955
Sudanonautes sangha Cumberlidge & Boyko, 2000

Incertae sedis

"*Potamon* (*Potamon*)" *pittarellii* Nobili, 1905

Notes

{1} These names have been synonymised under different taxa by workers, but have been recognised as valid by Neil Cumberlidge (pers. comm.) as part of his unpublished studies (see also Cumberlidge et al., 2008).

{2} The proper spelling of the species name is *Thelphusa berardi* and not *T. berardii*. The first edition (1826) of Audouin gives the spelling "*berardi*", which is modified to "*Berardii*" in the second edition (1827). The first spelling has priority (see Guinot & Cleva, 2008).

Fig. 121. *Deckenia mitis*, Tanzania (photo: S. Marijnissen)

Fig. 122. *Hydrothelphusa vencesi*, Madagascar (photo: S. Marijnissen)

Fig. 123. *Platythelphusa armata*, Lake Tanganyika, Tanzania (photo: S. Marijnissen)

Fig. 124. *Platythelphusa praelongata*, Lake Tanganyika, Tanzania (photo: S. Marijnissen)

Fig. 125. *Potamonautes emini*, Tanzania (photo: S. Marijnissen)

Fig. 126. *Potamonautes lividus*, South Africa (photo: W. Emmerson)

SUPERFAMILY PSEUDOTHELPHUSOIDEA ORTMANN, 1893

FAMILY PSEUDOTHELPHUSIDAE ORTMANN, 1893

Bosciacaea H. Milne Edwards, 1853 (family level name unavailable because type genus *Boscia* H. Milne Edwards, 1837, is a pre-occupied name; under current ICZN rules)
Bosciadae Stimpson, 1858 (family level name unavailable because type genus *Boscia* H. Milne Edwards, 1837, is a pre-occupied name; under current ICZN rules)
Pseudothelphusidae Ortmann, 1893
Potamocarcinini Ortmann, 1897
Epilobocerinae Smalley, 1964
Kingsleyini Bott, 1970
Guinotini Pretzmann, 1971
Hypolobocerini Pretzmann, 1971
Strengerianini Rodríguez, 1982

Subfamily Epilobocerinae Smalley, 1964

Epilobocerinae Smalley, 1964

Epilobocera Stimpson, 1860
= *Epilobocera* Stimpson, 1860 (type species *Epilobocera cubensis* Stimpson, 1860, by monotypy; gender feminine) [Opinion 73]
Epilobocera armata Smith, 1870
Epilobocera capolongoi Pretzmann, 2000
Epilobocera cubensis Stimpson, 1860 [Direction 36]
= *Epilobocera cubensis cubensis* Natio *baracoensis* Capolongo & Pretzmann, 2002
= *Epilobocera cubensis cubensis* Natio *guisensis* Capolongo & Pretzmann, 2002
Epilobocera diazbeltrani Capolongo, 2005
Epilobocera gilmanii (Smith, 1870) [*Opisthocera*]
Epilobocera haytensis Rathbun, 1893
Epilobocera najasensis Capolongo & Pretzmann, 2002
Epilobocera placensis Capolongo & Pretzmann, 2002
Epilobocera sinuatifrons (A. Milne-Edwards, 1866) [*Boscia*]
Epilobocera synoecia Capolongo & Pretzmann, 2002
= ?*Epilobocera cuevanensis* Capolongo & Pretzmann, 2002 (nomen nudum)
Epilobocera wetherbeei Rodríguez & Williams, 1995

Neoepilobocera Capolongo & Pretzmann, 2002
= *Epilobocera* (*Neoepilobocera*) Capolongo & Pretzmann, 2002 (type species *Epilobocera gertraudae* Pretzmann, 1965, by original designation; gender feminine)
Neoepilobocera gertraudae (Pretzmann, 1965) [*Epilobacera* (sic)]

Subfamily Pseudothelphusinae Ortmann, 1893

Bosciacaea H. Milne Edwards, 1853 (subfamily level name unavailable because type genus *Boscia* H. Milne Edwards, 1837, is a pre-occupied name; under current ICZN rules)
Bosciadae Stimpson, 1858 (subfamily level name unavailable because type genus *Boscia* H. Milne Edwards, 1837, is a pre-occupied name; under current ICZN rules)
Pseudothelphusidae Ortmann, 1893
Potamocarcinini Ortmann, 1897
Kingsleyini Bott, 1970
Guinotini Pretzmann, 1971
Hypolobocerini Pretzmann, 1971

Subfamily Strengerianini Rodríguez, 1982

Allacanthos Smalley, 1964
= *Allacanthos* Smalley, 1964 (type species *Pseudothelphusa pittieri* Rathbun, 1898, by original designation; gender masculine)
Allacanthos pittieri (Rathbun, 1898) [*Pseudothelphusa*]

Anchlidon Smalley, 1964
= *Pseudothelphusa* (*Anchlidon*) Smalley, 1964 (type species *Pseudothelphusa agrestis* Rathbun, 1898, by original designation; gender neuter)
Anchlidon agrestis (Rathbun, 1898) [*Pseudothelphusa* (*Anchlidon*)]

Brasiliothelphusa Magalhães & Türkay, 1986
= *Brasiliothelphusa* Magalhães & Türkay, 1986 (type species *Brasiliothelphusa tapajoense* Magalhães & Türkay, 1986, by original designation; gender feminine)
Brasiliothelphusa tapajoensis Magalhães & Türkay, 1986

Camptophallus Smalley, 1965
= *Camptophallus* Smalley, 1965 (type species *Pseudothelphusa* (*Camptophallus*) *botti* Smalley, 1965, by original designation; gender masculine)
Camptophallus botti (Smalley, 1965) [*Pseudothelphusa* (*Camptophallus*)]

Chaceus Pretzmann, 1965
= *Pseudothelphusa* (*Chaceus*) Pretzmann, 1965 (type species *Pseudothelphusa pearsei* Rathbun, 1915, by original designation; gender masculine)
Chaceus caecus Rodríguez & Bosque, 1990
Chaceus cesarensis Rodríguez & Vilosia, 1992
Chaceus curumanensis Campos & Valencia, 2004
Chaceus davidi Campos & Rodríguez, 1984
Chaceus ibiricensis Campos & Valencia, 2004
Chaceus motiloni Rodríguez, 1980
Chaceus nasutus Rodríguez, 1980
Chaceus pearsei (Rathbun, 1915) [*Pseudothelphusa*]
= *Pseudothelphusa martensis* Rathbun, 1919
Chaceus turikensis Rodríguez & Herrera, 1994

Disparithelphusa Smalley & Adkinson, 1984
= *Disparithelphusa* Smalley & Adkinson, 1984 (type species *Disparithelphusa pecki* Smalley & Adkinson, 1984, by original designation; gender feminine)
Disparithelphusa pecki Smalley & Adkinson, 1984

Eidocamptophallus Rodríguez & Hobbs, 1989
= *Eidocamptophallus* Rodríguez & Hobbs, 1989 (type species *Potamocarcinus* (*Potamocarcinus*) *chacei* Pretzmann, 1967, by original designation; gender masculine)
Eidocamptophallus chacei (Pretzmann, 1967) [*Potamocarcinus* (*Potamocarcinus*)]

Elsalvadoria Bott, 1967
= *Elsalvadoria* Bott, 1967 (type species *Pseudothelphusa zurstrasseni* Bott, 1956, by original designation; gender feminine)
Elsalvadoria tomhaasi Bott, 1970
Elsalvadoria zurstrasseni (Bott, 1956) [*Pseudothelphusa*]
= *Pseudothelphusa zurstrasseni tridentata* Bott, 1956

Epithelphusa Rodríguez & Smalley, 1969
= *Epithelphusa* Rodríguez & Smalley, 1969 (type species *Epithelphusa mixtepensis* Rodríguez & Smalley, 1969, by original designation; gender feminine)
Epithelphusa chiapensis (Rodríguez & Smalley, 1969) [*Spirothelphusa*]
Epithelphusa mixtepensis Rodríguez & Smalley, 1969

Eudaniela Pretzmann, 1971
= *Eudaniela* Pretzmann, 1971 (type species *Guinotia* (*Guinotia*) *pestai* Pretzmann, 1965, by original designation; gender feminine)
= *Achagua* Campos, 2001 (type species *Achagua casanarensis* Campos, 2001, by original designation; gender feminine)
Eudaniela casanarensis (Campos, 2001) [*Achagua*]
Eudaniela pestai (Pretzmann, 1965) [*Guinotia* (*Guinotia*)]

Fredius Pretzmann, 1967
= *Guinotia* (*Fredius*) Pretzmann, 1967 (type species *Potamocarcinus dunooensis* Rathbun, 1919, by original designation; gender masculine)
Fredius adpressus adpressus Rodríguez & Pereira, 1992
Fredius adpressus piaroensis Rodríguez & Pereira, 1992
Fredius beccarii (Coifmann, 1939) [*Pseudothelphusa*]
= *Pseudothelphusa contorta* Rodríguez, 1966
Fredius chaffanjoni (Rathbun, 1905) [*Potamocarcinus*]
= *Pseudothelphusa orinoccensis* Rodríguez, 1966
Fredius convexa (Rathbun, 1898) [*Pseudothelphusa*]
Fredius denticulatus (H. Milne Edwards, 1853) [*Boscia*]
= *Pseudothelphusa carsevennensis* Rathbun, 1904
= *Pseudothelphusa geayi* Nobili, 1904
= *Pseudothelphusa angusta* Rathbun, 1905
Fredius estevisi estevisi (Rodríguez, 1966) [*Pseudothelphusa*]
Fredius estevisi siapensis Rodríguez & Pereira, 1992
Fredius fittkaui (Bott, 1967) [*Potamocarcinus* (*Kingsleya*)]
Fredius granulatus Rodríguez & Campos, 1998
Fredius platyacanthus Rodríguez & Pereira, 1992
Fredius reflexifrons (Ortmann, 1897) [*Potamocarcinus*]
= *Pseudothelphusa agassizii* Rathbun, 1898
= *Potamocarcinus dunooensis* Rathbun, 1919
= *Pseudothelphusa colisii* Coifmann, 1939
Fredius stenolobus Rodríguez & Suárez, 1994

Guinotia Pretzmann, 1965
= *Boscia* H. Milne Edwards, 1837 (type species *Thelphusa dentata* Latreille, 1825, by monotypy; name pre-occupied by *Boscia* Leach, 1814 [Crustacea]; gender feminine)
= *Guinotia* Pretzmann, 1965 (type species *Thelphusa dentata* Latreille, 1825, by original designation; gender feminine)
Guinotia dentata (Latreille, 1825) [*Thelphusa*]
= *Pseudothelphusa tenuipes* Pocock, 1889

Hypolobocera Ortmann, 1897
= *Hypolobocera* Ortmann, 1897 (type species *Potamia chilensis* Lucas, in H. Milne Edwards & Lucas, 1844, by monotypy; gender feminine)
= *Strengeria* (*Strengeria*) Pretzmann, 1965 (type species *Pseudothelphusa conradi* Rathbun, 1905, by original designation; gender feminine)
Hypolobocera aequatorialis (Ortmann, 1897) [*Pseudothelphusa*]
= *Hypolobocera* (*Hypolobocera*) *aequatorialis delsolari* forma *delsolari* Pretzmann, 1978
= *Hypolobocera* (*Hypolobocera*) *aequatorialis delsolari* forma *isabella* Pretzmann, 1978
= *Hypolobocera* (*Hypolobocera*) *aequatorialis nigra* Pretzmann, 1968
Hypolobocera alata Campos, 1989
Hypolobocera andagoensis (Pretzmann, 1965) [*Strengeria* (*Strengeria*)]
Hypolobocera barbacensis Campos, Malgahães & Rodríguez, 2002
Hypolobocera beieri Pretzmann, 1968
Hypolobocera bouvieri bouvieri (Rathbun, 1898) [*Pseudothelphusa*]
Hypolobocera bouvieri angulata (Rathbun, 1915) [*Pseudothelphusa*]
Hypolobocera bouvieri monticola (Zimmer, 1912) [*Pseudothelphusa*]
Hypolobocera bouvieri stenolobata Rodríguez, 1980
Hypolobocera buenaventurensis (Rathbun, 1905) [*Pseudothelphusa*]
Hypolobocera cajambrensis von Prahl, 1988
Hypolobocera canaensis Pretzmann, 1968
Hypolobocera caputii (Nobili, 1901) [*Pseudothelphusa*]
= *Hypolobocera quevedensis* Rodríguez & Diaz, 1980
Hypolobocera chilensis (Lucas, in H. Milne Edwards & Lucas, 1844) [*Potamia*] {1}
= *Pseudothelphusa dentata* Ortmann, 1893
= *Strengeria* (*Strengeria*) *eigenmanni* Pretzmann, 1965
Hypolobocera chocoensis Rodríguez, 1980
Hypolobocera conradi (Rathbun, 1905) [*Pseudothelphusa*]
= *Pseudothelphusa dubia* Colosi, 1920
Hypolobocera dantae Rodríguez & Suárez, 2004
Hypolobocera delsolari Pretzmann, 1978
= *Hypolobocera* (*Hypolobocera*) *aequatorialis delsolari* forma *isabella* Pretzmann, 1978
Hypolobocera dentata von Prahl, 1987
Hypolobocera emberara Campos & Rodríguez, 1995
Hypolobocera esmeraldensis Rodríguez & von Sternberg, 1998
Hypolobocera exuca Pretzmann, 1977
= *Hypolobocera riveti* Rodríguez, 1980
Hypolobocera gibberimana Pretzmann, 1968
Hypolobocera gorgonensis von Prahl, 1983
Hypolobocera gracilignatha Pretzmann, 1972
Hypolobocera guayaquilensis Bott, 1967
Hypolobocera kamsara Campos & Rodríguez, 1995
Hypolobocera konstanzae Rodríguez & von Sternberg, 1998
Hypolobocera lamercedes lamercedes Pretzmann, 1978 [*Hypolobocera* (*Lindacatalina*)]
Hypolobocera lamercedes maytai Pretzmann, 1978 [*Hypolobocera* (*Lindacatalina*)]
Hypolobocera latipenis latipenis Pretzmann, 1968
Hypolobocera latipenis puyensis Pretzmann, 1978 [*Hypolobocera* (*Lindacatalina*)]
Hypolobocera lloroensis Campos, 1989
Hypolobocera malaguena von Prahl, 1988
Hypolobocera martelathani (Pretzmann, 1965) [*Strengeria* (*Strengeria*)]
= *Hypolobocera merenbergeriensis* von Prahl & Giraldo, 1985
Hypolobocera meineli von Prahl, 1988
Hypolobocera mindonensis Rodríguez & von Sternberg, 1998
Hypolobocera muisnensis Rodríguez & von Sternberg, 1998
Hypolobocera murindensis Campos, 2003
Hypolobocera mutisi von Prahl, 1988
Hypolobocera noanamensis Rodríguez, Campos & López, 2002
Hypolobocera orcesi Pretzmann, 1978 [*Hypolobocera* (*Lindacatalina*)]
Hypolobocera peruviana (Rathbun, 1898) [*Pseudothelphusa*]
Hypolobocera rathbunae Pretzmann, 1968 {2}
Hypolobocera rotundilobata Rodríguez, 1994
Hypolobocera smalleyi Pretzmann, 1968
Hypolobocera solimani Ramos-Tafur, 2006
Hypolobocera steindachneri Pretzmann, 1968
Hypolobocera triangula Ramos-Tafur, 2006
Hypolobocera ucayalensis Rodríguez & Suárez, 2004
Hypolobocera velezi Campos, 2003

Kingsleya Ortmann, 1897
= *Kingsleya* Ortmann, 1897 (type species *Potamia latifrons* Randall, 1840, by monotypy; gender feminine)
Kingsleya besti Magãlhaes, 1986
Kingsleya gustavoi Malgahães, 2004
Kingsleya junki Malgahães, 2003
Kingsleya latifrons (Randall, 1840) [*Potamia*]
= *Potamia schomburgkii* White, 1847
= *Potamocarcinus* (*Kingsleya*) *latifrons macrodentis* Bott, 1969
Kingsleya siolii (Bott, 1967) [*Potamocarcinus* (*Kingsleya*)]
Kingsleya ytupora Magãlhaes, 1986

Lindacatalina Pretzmann, 1977
= *Lindacatalina* Pretzmann, 1977 (type species *Hypolobocera* (*Lindacatalina*) *hauserae* Pretzmann, 1977, by original designation; gender feminine)
Lindacatalina brevipenis (Rodríguez & Diaz, 1980) [*Hypolobocera*]
Lindacatalina hauserae (Pretzmann, 1977) [*Hypolobocera* (*Lindacatalina*)]
Lindacatalina latipenis (Pretzmann, 1968) [*Hypolobocera*]
Lindacatalina orientalis Pretzmann, 1968 [*Hypolobocera*]
= *Hypolobocera* (*Lindacatalina*) *plana plana* Pretzmann, 1977
= ?*Hypolobocera* (*Lindacatalina*) *plana olallai* Pretzmann, 1977
Lindacatalina puyensis (Pretzmann, 1978) [*Hypolobocera* (*Lindacatalina*)]
Lindacatalina sinuensis Rodríguez, Campos & López, 2002
Lindacatalina sumacensis Rodríguez & von Sternberg, 1998

Lobithelphusa Rodríguez, 1982
= *Lobithelphusa* Rodríguez, 1982 (type species *Lobithelphusa mexicana* Rodríguez, 1982, by original designation; gender feminine)
Lobithelphusa mexicana Rodríguez, 1982

Martiana Rodríguez, 1980
= *Martiana* Rodríguez, 1980 (type species *Pseudothelphusa clausa* Rathbun, 1915, by original designation; gender feminine)
Martiana clausa (Rathbun, 1915) [*Pseudothelphusa*]

Microthelphusa Pretzmann, 1968
= *Guinotia* (*Microthelphusa*) Pretzmann, 1968 (type species *Guinotia* (*Microthelphusa*) *rodriguezi* Pretzmann, 1968, by original designation; gender feminine)
Microthelphusa barinensis Rodríguez, 1980
Microthelphusa bolivari Rodríguez, 1980
Microthelphusa forcarti (Pretzmann, 1967) [*Guinotia* (*Neopseudothelphusa*)]
Microthelphusa ginesi Rodríguez & Esteves, 1972
Microthelphusa odaelkae (Bott, 1970) [*Kingsleya*]
Microthelphusa meansi Cumberlidge, 2007
Microthelphusa racenisi (Rodríguez, 1966) [*Pseudothelphusa*]
Microthelphusa rodriguezi (Pretzmann, 1968) [*Guinotia* (*Microthelphusa*)]
Microthelphusa somanni (Bott, 1967) [*Potamocarcinus* (*Kingsleya*)]
Microthelphusa sucreensis Rodríguez & Campos, 2000
Microthelphusa turumikiri Rodríguez, 1980
Microthelphusa viloriai Suárez, 2006
Microthelphusa wymanni (Rathbun, 1905) [*Pseudothelphusa*]

Moritschus Pretzmann, 1965
= *Moritschus* Pretzmann, 1965 (type species *Pseudothelphusa ecuadorensis* Rathbun, 1897, by original designation; gender masculine)
Moritschus altaquerensis Rodríguez, Campos & López, 2002
Moritschus caucasensis Campos, Malgahães & Rodríguez, 2002
Moritschus ecuadorensis (Rathbun, 1897) [*Pseudothelphusa*]
Moritschus henrici (Nobili, 1897) [*Pseudothelphusa*]
= *Hypolobocera* (*Hypolobocera*) *henrici henrici* forma *nora* Pretzmann, 1978
Moritschus narinnensis Campos & Rodríguez, 1988

Neopseudothelphusa Pretzmann, 1965
= *Neopseudothelphusa* Pretzmann, 1965 (type species *Pseudothelphusa fossor* Rathbun, 1898, by original designation; gender feminine)
Neopseudothelphusa fossor (Rathbun, 1898) [*Pseudothelphusa*]
= *Kingsleya fossor aulae* Bott, 1970
Neopseudothelphusa simoni (Rathbun, 1905) [*Pseudothelphusa*]
= *Pseudothelphusa chacei* Crane, 1949

Neostrengeria Pretzmann, 1965
= *Strengeria* (*Neostrengeria*) Pretzmann, 1965 (type species *Boscia macropa* H. Milne Edwards, 1853, by original designation; gender feminine)
= *Strengeria* (*Phyllothelphusa*) Pretzmann, 1965 (type species *Pseudothelphusa lindigiana* Rathbun, 1897, by original designation; gender feminine)
Neostrengeria appressa Campos, 1992
Neostrengeria aspera Campos, 1992
Neostrengeria binderi Campos, 2000
Neostrengeria botti Rodríguez & Türkay, 1978
Neostrengeria boyacensis Rodríguez, 1980
Neostrengeria charalensis Campos & Rodríguez, 1985
Neostrengeria gilberti Campos, 1992
Neostrengeria guenteri (Pretzmann, 1965) [*Strengeria* (*Neostrengeria*)]
Neostrengeria lasallei Rodríguez, 1980
Neostrengeria lemaitrei Campos, 2004
Neostrengeria libradensis Rodríguez, 1980
Neostrengeria lindigiana (Rathbun, 1897) [*Pseudothelphusa*]
= *Potamocarcinus* (*Hypolobocera*) *macropus hartschi* Bott, 1967
Neostrengeria lobulata Campos, 1992
Neostrengeria macarenae Campos, 1992
Neostrengeria macropa (H. Milne Edwards, 1853) [*Boscia*]
= *Potamocarcinus principessae* Doflein, 1900
Neostrengeria monterrodendoensis (Bott, 1967) [*Potamocarcinus* (*Hypolobocera*)]
Neostrengeria niceforoi (Schmitt, 1969) [*Hypolobocera* (*Phyllothelphusa*)]
Neostrengeria perijaensis Campos & Lemaitre, 1998
Neostrengeria sketi Rodríguez, 1985
Neostrengeria tencalanensis Campos, 1992
Neostrengeria tonensis Campos, 1992

Odontothelphusa Rodríguez, 1982
= *Odontothelphusa* Rodríguez, 1982 (type species *Pseudothelphusa maxillipes* Rathbun, 1898, by original designation; gender feminine)
Odontothelphusa lacandona Alvarez & Villalobos, 1998
Odontothelphusa lacanjaensis Alvarez & Villalobos, 1998
Odontothelphusa maxillipes (Rathbun, 1898) [*Pseudothelphusa*]
Odontothelphusa monodontis Rodríguez & Hobbs, 1989
Odontothelphusa palenquensis Alvarez & Villalobos, 1998
Odontothelphusa toninae Alvarez & Villalobos, 1991

Oedothelphusa Rodríguez, 1980
= *Oedothelphusa* Rodríguez, 1980 (type species *Oedothelphusa orientalis* Rodríguez, 1980, by original designation; gender feminine)
Oedothelphusa orientalis Rodríguez, 1980

Orthothelphusa Rodríguez, 1980
= *Orthothelphusa* Rodríguez, 1980 (type species *Pseudothelphusa holthuisi* Rodríguez, 1967; by original designation; gender feminine)
Orthothelphusa holthuisi (Rodríguez, 1967) [*Pseudothelphusa*]
Orthothelphusa roberti (Bott, 1967) [*Potamocarcinus* (*Kingsleya*)]
Orthothelphusa venezuelensis (Rathbun, 1905) [*Pseudothelphusa*]

Phallangothelphusa Pretzmann, 1965
= *Strengeria* (*Phallangothelphusa*) Pretzmann, 1965 (type species *Pseudothelphusa dispar* Zimmer, 1912, by original designation; gender feminine)
Phallangothelphusa dispar (Zimmer, 1912) [*Pseudothelphusa*]
Phallangothelphusa magdalenensis Campos, 1998

Phrygiopilus Smalley, 1970
= *Phrygiopilus* Smalley, 1970 (type species *Phrygiopilus chuacusensis* Smalley, 1970, by original designation; gender masculine) {3}
= ?*Gordonia* Pretzmann, 1965 (type species *Gordonia longipes* Pretzmann, 1965, by original designation; gender feminine) {3}
= ?*Isabellagordonia* (*Isabellagordonia*) Pretzmann, 1965 (type species *Gordonia longipes* Pretzmann, 1965, by original designation; gender feminine) {3}
= *Isabellagordonia* (*Pseudospirothelphusa*) Pretzmann, 1965 (type species *Strengeria* (*Spirothelphusa*) *strengerae* Pretzmann, 1965, by original designation; gender feminine)
Phrygiopilus acanthophallus Smalley, 1970
Phrygiopilus chuacusensis Smalley, 1970
Phrygiopilus ibarrai (Pretzmann, 1978) [*Isabellagordonia* (*Phrygiopilus*)]
?*Phrygiopilus longipes* (Pretzmann, 1965) [*Gordonia*]
Phrygiopilus montebelloensis Alvarez & Villalobos, 1998
Phrygiopilus strengerae (Pretzmann, 1965) [*Strengeria* (*Spirothelphusa*)]
Phrygiopilus yoshibensis Alvarez & Villalobos, 1998

Potamocarcinus H. Milne Edwards, 1853
= *Potamocarcinus* H. Milne Edwards, 1853 (type species *Potamocarcinus armatus* H. Milne Edwards, 1853, by monotypy; gender masculine) [Opinion 73]
= *Pseudothelphusa* (*Megathelphusa*) Smalley, 1964 (type species *Pseudothelphusa magna* Rathbun, 1895, by original designation; gender feminine)
= *Pseudothelphusa* (*Zilchia*) Pretzmann, 1968 (type species *Pseudothelphusa zilchi* Bott, 1956, by original designation; gender feminine)
Potamocarcinus armatus H. Milne Edwards, 1853 [Direction 36]
= *Potamocarcinus* (*Megathelphusa*) *nicaraguensis aequipinosus* Pretzmann, 1971
Potamocarcinus aspoekorum (Pretzmann, 1968) [*Pseudothelphusa* (*Zilchia*)]
Potamocarcinus chajulensis Alvarez & Villalobos, 1998
Potamocarcinus colombiensis von Prahl & Ramos, 1987
Potamocarcinus falcatus (Rodríguez & Hobbs, 1989) [*Zilchia*]
Potamocarcinus hartmanni Pretzmann, 1975
Potamocarcinus leptomelus Rodríguez & Hobbs, 1989
Potamocarcinus lobulatus Campos & Lemaitre, 2002
Potamocarcinus magnus (Rathbun, 1895) [*Pseudothelphusa*]
= *Potamocarcinus guatemalensis* Rathbun, 1905
= ?*Potamocarcinus* (*Megathelphusa*) *magnus hondurensis* Pretzmann, 1978
Potamocarcinus nicaraguensis Rathbun, 1893
Potamocarcinus pinzoni Campos, 2003
Potamocarcinus poglayeneuwalli Pretzmann, 1978
Potamocarcinus roatensis Rodríguez & López, 2003
Potamocarcinus richmondi (Rathbun, 1893)
= *Pseudothelphusa masimbari* Rathbun, 1912
= *Potamocarcinus* (*Megathelphusa*) *richmondi zilchiosus* Bott, 1967
Potamocarcinus vulcanensis Rodríguez, 2001
Potamocarcinus zilchi zilchi (Bott, 1956) [*Pseudothelphusa*]
Potamocarcinus zilchi garmani Pretzmann, 1978
Potamocarcinus zilchi ivis Pretzmann, 1978

Prionothelphusa Rodríguez, 1980
= *Prionothelphusa* Rodríguez, 1980 (type species *Prionothelphusa eliasi* Rodríguez, 1980, by original designation; gender feminine)
Prionothelphusa eliasi Rodríguez, 1980

Pseudothelphusa Saussure, 1857
= *Pseudothelphusa* Saussure, 1857 (type species *Pseudothelphusa americana* Saussure, 1857, by monotypy; gender feminine) [Opinion 73]
Pseudothelphusa americana Saussure, 1857 [Direction 36]
= *Pseudothelphusa dugesi* Rathbun, 1893
Pseudothelphusa ayutlaensis Alvarez & Villalobos, 1997
Pseudothelphusa belliana Rathbun, 1898
= *Pseudothelphusa nelsoni* Rathbun, 1905
Pseudothelphusa dilatata dilatata Rathbun, 1898
= *Pseudothelphusa* (*Pseudothelphusa*) *digueti* Rathbun, 1905
Pseudothelphusa dilatata morelosis Pretzmann, 1968
Pseudothelphusa dilatata sulcifrons Rathbun, 1898
Pseudothelphusa doenitzi Bott, 1968
Pseudothelphusa galloi Alvarez & Villalobos, 1990
Pseudothelphusa granatensis Rodríguez & Smalley, 1969
Pseudothelphusa hoffmannae Alvarez & Villalobos, 1996
Pseudothelphusa jouyi Rathbun, 1893
Pseudothelphusa leiophrys Rodríguez & Smalley, 1969
Pseudothelphusa lophophallus Rodríguez & Smalley, 1969
Pseudothelphusa mexicana Alvarez-Noguera, 1987
Pseudothelphusa montana Rathbun, 1898
Pseudothelphusa nayaritae Alvarez & Villalobos, 1994
Pseudothelphusa parabelliana Alvarez, 1989
Pseudothelphusa peyotensis Rodríguez & Smalley, 1969
Pseudothelphusa punctarenas Hobbs, 1991
Pseudothelphusa rechingeri Pretzmann, 1965
Pseudothelphusa seiferti Hobbs, 1980
Pseudothelphusa sonorae Rodríguez & Smalley, 1969
= *Pseudothelphusa sonorensis* Miles, 1967
Pseudothelphusa terrestris Rathbun, 1893

Ptychophallus Smalley, 1964
= *Ptychophallus* Smalley, 1964 (type species *Pseudothelphusa tristani* Rathbun, 1896, by original designation; gender masculine)
= *Ptychophallus* (*Semiptychophallus*) Pretzmann, 1965 (type species *Pseudothelphusa xantusi* Rathbun, 1893, by original designation; gender masculine)
= *Ptychophallus* (*Microptychophallus*) Pretzmann, 1965 (type species *Ptychophallus* (*Microptychophallus*) *goldmanni* Pretzmann, 1965, by original designation; gender masculine)
Ptychophallus barbillaensis Rodríguez & Hedström, 2000
Ptychophallus cocleensis Pretzmann, 1965
Ptychophallus colombianus (Rathbun, 1893) [*Pseudothelphusa*]
Ptychophallus coastaricensis Villalobos, 1974
Ptychophallus exilipes (Rathbun, 1898) [*Pseudothelphusa*]
Ptychophallus goldmanni Pretzmann, 1965
Ptychophallus kuna Campos & Lemaitre, 1999
Ptychophallus lavallensis Pretzmann, 1978
Ptychophallus micracanthus Rodríguez, 1994
Ptychophallus montanus (Rathbun, 1898) [*Pseudothelphusa*]

Ptychophallus osaensis Rodríguez, 2001
Ptychophallus paraxantusi (Bott, 1968) [*Pseudothelphusa* (*Ptychophallus*)]
Ptychophallus tristani (Rathbun, 1896) [*Pseudothelphusa*]
= ?*Ptychophallus campylos* Pretzmann, 1965
Ptychophallus tumimanus tumimanus (Rathbun, 1898) [*Pseudothelphusa*]
Ptychophallus tumimanus ingae Pretzmann, 1978
Ptychophallus uncinatus Campos & Lemaitre, 1999
?*Ptychophallus xantusi* (Rathbun, 1893) [*Pseudothelphusa*]

Raddaus Pretzmann, 1965
= *Potamocarcinus* (*Raddaus*) Pretzmann, 1965 (type species *Pseudothelphusa similis* Rathbun, 1905, by original designation; gender masculine)
= *Pseudothelphusa* (*Anaphyrmos*) Smalley, 1965 (type species *Pseudothelphusa* (*Anaphyrmos*) *orestrius* Smalley, 1965, by original designation; gender masculine)
Raddaus bocourti (A. Milne-Edwards, 1866) [*Boscia*]
= *Pseudothelphusa similis* Rathbun, 1905
= *Pseudothelphusa cobanensis* Rathbun, 1905
= *Pseudothelphusa grallator* Rathbun, 1905
= ?*Potamocarcinus* (*Anaphrymos*) *bocourti parazilchi* Bott, 1967
= ?*Potamocarcinus* (*Raddaus*) *parazilchi mexicanus* Pretzmann, 1978
Raddaus mertensi (Bott, 1956) [*Pseudothelphusa*]
Raddaus orestrius (Smalley, 1965) [*Pseudothelphusa* (*Anaphyrmos*)]
Raddaus tuberculatus (Rathbun, 1897) [*Pseudothelphusa*]

Rodriguezus Campos & Magalhães, 2005
= *Rodriguezus* Campos & Magalhães, 2005 (type species *Pseudothelphusa garmani* Rathbun, 1898, by original designation; gender masculine)
Rodriguezus garmani (Rathbun, 1898) [*Pseudothelphusa*]
Rodriguezus iturbei (Rathbun, 1919) [*Pseudothelphusa*]
Rodriguezus ranchograndensis (Rodríguez, 1966) [*Pseudothelphusa*]
Rodriguezus trujillensis (Rodríguez, 1967) [*Pseudothelphusa*]

Smalleyus Alvarez, 1989
= *Smalleyus* Alvarez, 1989 (type species *Smalleyus tricristatus* Alvarez, 1989, by original designation; gender masculine)
Smalleyus tricristatus Alvarez, 1989

Spirothelphusa Pretzmann, 1965
= *Strengeria* (*Spirothelphusa*) Pretzmann, 1965 (type species *Pseudothelphusa verticalis* Rathbun, 1893, by original designation; gender feminine)
Spirothelphusa verticalis (Rathbun, 1893) [*Pseudothelphusa*]

Strengeriana Pretzmann, 1971
= *Strengeriana* Pretzmann, 1971 (type species *Epilobocera fuhrmanni* Zimmer, 1912, by original designation; gender feminine)
Strengeriana antioquensis von Prahl, 1987
Strengeriana bolivarensis Rodríguez & Campos, 1989
Strengeriana cajaensis Campos & Rodríguez, 1993
Strengeriana casallasi Campos, 1999
Strengeriana chaparralensis Campos & Rodríguez, 1984
Strengeriana flagellata Campos & Rodríguez, 1993
Strengeriana florenciae Campos, 1995
Strengeriana foresti Rodríguez, 1980
Strengeriana fuhrmanni (Zimmer, 1912) [*Epilobocera*]
Strengeriana huilensis Rodríguez & Campos, 1989
Strengeriana maniformis Campos & Rodríguez, 1993
Strengeriana restrepoi Rodríguez, 1980
Strengeriana risaraldensis Rodríguez & Campos, 1989
Strengeriana taironae Rodríguez & Campos, 1989
Strengeriana tolimensis Rodríguez & Diaz, 1980
Strengeriana villaensis Campos & Pedraza, 2006

Tehuana Rodríguez & Smalley, 1969
= *Tehuana* Rodríguez & Smalley, 1969 (type species *Pseudothelphusa lamellifrons* Rathbun, 1893, by original designation; gender feminine)
Tehuana chontalpaensis Villalobos & Alvarez, 2003
Tehuana complanata (Rathbun, 1905) [*Pseudothelphusa*]
= *Pseudothelphusa* (*Pseudothelphusa*) *lamellifrons gruneri* Pretzmann, 1968
Tehuana diabolis (Pretzmann, 1978) [*Pseudothelphusa* (*Tehuana*)]
Tehuana guerreroensis (Rathbun, 1933) [*Pseudothelphusa*]
Tehuana jacatepecensis Villalobos & Alvarez, 2003
Tehuana lamellifrons (Rathbun, 1893) [*Pseudothelphusa*]
Tehuana lamothei Alvarez & Villalobos, 1994
Tehuana poglayenora (Pretzmann, 1978) [*Pseudothelphusa* (*Tehuana*)]
Tehuana veracruzana Rodríguez & Smalley, 1969

Typhlopseudothelphusa Rioja, 1952
= *Typhlopseudothelphusa* Rioja, 1952 (type species *Typhlopseudothelphusa mocinoi* Rioja, 1952, by monotypy; gender feminine)
Typhlopseudothelphusa acanthochela Hobbs, 1986
Typhlopseudothelphusa hyba Rodríguez & Hobbs, 1989
Typhlopseudothelphusa juberthiei Delamare Debouteville, 1976
Typhlopseudothelphusa mitchelli Delamare Debouteville, 1976
Typhlopseudothelphusa mocinoi Rioja, 1952

Villalobosus Ng & Alvarez, 2000
= *Stygothelphusa* Alvarez & Villalobos, 1991 (type species *Stygothelphusa lopezformenti* Alvarez & Villalobos, 1991, by original designation; name pre-occupied by *Stygothelphusa* Ng, 1989 [Crustacea]; gender feminine)
= *Villalobosus* Ng & Alvarez, 2000 (replacement name for *Stygothelphusa* Alvarez & Villalobos, 1991; gender masculine)
Villalobosus lopezformenti (Alvarez & Villalobos, 1991) [*Stygothelphusa*]

Incertae sedis

Pseudothelphusa affinis Rathbun, 1898
Pseudothelphusa bisuturalis Rathbun, 1897
Pseudothelphusa nobilii Rathbun, 1898
Pseudothelphusa plana Smith, 1870
Pseudothelphusa propinqua Rathbun, 1905
Pseudothelphusa proxima Rathbun, 1905
Pseudothelphusa ruthveni Rathbun, 1915
Rathbunia festae Nobili, 1896
Potamocarcinus (*Spirocarcinus*) *garthi* Pretzmann, 1972
Boscia gracilipes A. Milne-Edwards, 1866
Eudaniela (*Kunziana*) *irengis* Pretzmann, 1971

Notes

{1} The authorship for this species should be "Lucas, in H. Milne Edwards & Lucas, 1844", rather than just "H. Milne Edwards & Lucas, 1843" (Guinot & Cleva, 2002).

{2} In naming *Hypolobocera rathbuni*, Pretzmann (1968: 6) noted that it was "In memoriam Mary J. Rathbun". As

such, the species name should be corrected to "*rathbunae*".

{3} Most modern workers regard *Gordonia* Pretzmann, 1965, and *Isabellagordonia* (*Isabellagordonia*) Pretzmann, 1965, as possible synonyms of *Phrygiopilus* Smalley, 1970 (see Rodríguez, 1982), but keep using the latter name even though it is junior to both of Pretzmann's names. If these taxa are indeed synonymous, then *Phrygiopilus* Smalley, 1970, will need to be replaced with one of Pretzmann's names.

Fig. 127. *Fredius stenolobus*, Erebato River, Caura River Basin, State of Bolívar, Venezuela (photo: C. Magalhães)

Fig. 128. *Pseudothelphusa dilatata morelosis*, Rio Las Estacas Basin, Morelos State, Mexico (photo: J.L.B. Rosales)

Fig. 129. *Guinotia dentata*, Puerto Rico; in tree hole (photo: Father A.J.S. Muñoz)

Fig. 130. *Epilobocera haytensis*, Puerto Rico (photo: Father A.J.S. Muñoz)

Fig. 131. Unidentified pseudothelphusid, Volcan Baru, Panama (photo: A. Anker)

SUPERFAMILY PSEUDOZIOIDEA ALCOCK, 1898

Remarks. – This superfamily is recognised because its members possess a suite of characters that preclude their classification elsewhere. There have been numerous conflicting views over the relationships of its included families, and thus its monotypy will need further testing. Members of this superfamily have at one time or another been classified with the present Carpilioidea, Xanthoidea, Pilumnoidea or Goneplacoidea (see Alcock, 1898; Serène, 1984; Ng & Wang, 1994; Ng & Liao, 2002; Ng, 2003b; Ng et al., 2001). Ng & Wang resurrected the Pseudozioida Alcock, 1898, as a subfamily but referred it to the Goneplacidae. Ng & Liao (2002) later recognised it as a distinct family and included the genera *Euryozius* Miers, 1886, *Flindersoplax* Davie, 1989, *Planopilumnus* Balss, 1933, and *Platychelonion* Crosnier & Guinot, 1969.

Števčić (2005) was the first to recognise the superfamily Pseudozioidea with two families, Pseudoziidae and Flindersoplacidae Števčić, 2005, each with only its type genus. *Euryozius* was not treated. In his Goneplacoidea, he recognised the Planopilumnidae Serène, 1984, as a distinct family; and placed *Platychelonion* in its own tribe, Platycheloniini Števčić, 2005, in the subfamily Geryoninae, (Geryonidae). As is typical of this work, no discussion or justification was provided. We do not agree with the need for a separate family for *Flindersoplax*; its affinities with *Pseudozius* are clear (Davie, 1989; Ng & Liao, 2002). The arguments for placing the genera *Planopilumnus* and *Platychelonion* together, close to *Pseudozius*, have also been summarised by Ng & Liao (2002) and Ng (2003b). It makes no sense to classify *Planopilumnus* and *Platychelonion* in separate families; and in a distinct superfamily from *Pseudozius*.

Karawasa & Schweitzer (2006) disagreed with Števčić (2005) that a superfamily for Pseudoziidae was necessary and instead classified it in their Eriphioidea. While we agree that the Pseudoziidae may be related to the Eriphioidea, they do possess several characters (notably their characteristic G1 and G2 structures), and therefore should be separated.

With regards to the unusual genus *Pilumnoides* Lucas, in H. Milne Edwards & Lucas, 1844, Guinot & Macpherson (1987) established the subfamily Pilumnoidinae for it but without assigning it to any particular family. Several subsequent authors have treated it as a distinct family (e.g. Türkay, 2001; Števčić, 2005; Karawasa & Schweitzer, 2006). Števčić (2005) classified it in the Eriphioidea, but Karawasa & Schweitzer (2006) recognised a superfamily Pilumnoidoidea for it. While the carapace features of this genus are unusual, its male abdominal and gonopodal characters are similar to other pseudozioids and we prefer to place it there.

FAMILY PILUMNOIDIDAE GUINOT & MACPHERSON, 1987

Pilumnoidinae Guinot & Macpherson, 1987

Pilumnoides Lucas, in H. Milne Edwards & Lucas, 1844 {1}
= *Pilumnoides* Lucas, in H. Milne Edwards & Lucas, 1844 (type species *Hepatus perlatus* Poeppig, 1836, by monotypy; gender masculine) [Opinion 85, Direction 37]
Pilumnoides coelhoi Guinot & Macpherson, 1987
Pilumnoides hassleri A. Milne-Edwards, 1880
Pilumnoides inglei Guinot & Macpherson, 1987
Pilumnoides monodi Guinot & Macpherson, 1987
Pilumnoides nudifrons (Stimpson, 1871) [*Pilumnus*]
Pilumnoides perlatus (Poeppig, 1836) [*Hepatus*] [Direction 36]
= *Pilumnoides danai* Kinahan, 1857
Pilumnoides rotundus Garth, 1940
Pilumnoides rubus Guinot & Macpherson, 1987

Notes

{1} The authorship of this genus should be "Lucas, in H. Milne Edwards & Lucas, 1844", rather than just "H. Milne Edwards & Lucas, 1843" (Guinot & Cleva, 2002).

FAMILY PLANOPILUMNIDAE SERÈNE, 1984

Planopilumninae Serène, 1984
Platycheloniini Števčić, 2005

Remarks. – *Planopilumnus* Balss, 1933, was originally established for five species, *Pilumnus spongiosus* Nobili, 1905 (designated type species), *Planopilumnus orientalis* Balss, 1933, *Planopilumnus fuscus* Balss, 1933, *Pilumnus vermiculatus* A. Milne-Edwards, 1873, and *Pilumnus labyrinthicus* Miers, 1884. At the same time, Ward (1933) established a new genus, *Rathbunaria*, for a new species, *Rathbunaria sculptissima* from Australia. Balss (1938b) commented that his (1933) paper preceded Ward's (1933) publication by two months. This is difficult to verify. While Ward's paper had a date of publication, Balss' did not, and we will have to take Balss at his word that this is correct, and *Planopilumnus* is the older name. Balss (1938) also synonymised *Rathbunaria sculptissima* Ward, 1933, with *Planopilumnus orientalis* Balss, 1933.

In proposing a revised classification of the Pilumnidae, Serène (1984) five subfamilies: Pilumninae Samouelle, 1819, Halimedinae Alcock, 1898, Heteropanopeinae Alcock, 1898, and two new subfamilies, Planopilumninae and Heteropilumninae. This, however, was done in a footnote. Serène (1984) included these subfamilies in his key to the Xanthoidea but did not elaborate on them. The problem here is that neither *P. spongiosus* nor *P. orientalis* are pilumnids as understood at present. Their G1s are relatively stout and straight, and the distal parts are lined

with numerous short, stout spines, with the G2 basal segments distinctly longer. Ng & Clark (2000a, b) have commented on this and indicated that the Planopilumninae must be excluded from the Pilumnidae. Ng et al. (2001: 33) subsequently commented that with "… regards to the Planopilumninae, the type species of the type genus, *Planopilumnus spongiosus* (Nobili, 1905), is actually not a pilumnid at all but closer to goneplacids like the Pseudoziinae instead. The genus *Planopilumnus* as currently understood, is heterogeneous." Davie (2002) most recently commented that "The type-species of *Planopilumnus*, *P. spongiosus* (Nobili, 1905) is clearly not a pilumnid at all, because of the very different form of the gonopods, and therefore the Planopilumninae is tentatively recognised but removed to the Goneplacidae, with its closest relatives probably with the Pseudoziinae genera. *Planopilumnus labyrinthicus* (Miers, 1884) is however a typical pilumnid, and is here treated as a *Pilumnus* species until a new genus is described to receive it (P.K.L. Ng in prep.)." Števčić (2005) recognised the family Planopilumnidae in his Goneplacoidea, but Ng & Manuel-Santos (2007) disagreed and referred it back to the Pseudoziidae (see also Ng, 2003b; Ng & Liao, 2002).

Haemocinus Ng, 2003
  = *Haemocinus* Ng, 2003 (type species *Pilumnus elatus* A. Milne-Edwards, 1873, by original designation; gender masculine)
Haemocinus elatus (A. Milne-Edwards, 1873) [*Pilumnus*]

Planopilumnus Balss, 1933
  = *Planopilumnus* Balss, 1933 (type species *Pilumnus spongiosus* Nobili, 1905, by original designation; gender masculine)
  = *Rathbunaria* Ward, 1933 (type species *Rathbunaria sculptissima* Ward, 1933, by original designation; gender feminine)
Planopilumnus orientalis Balss, 1933
  = *Rathbunaria sculptissima* Ward, 1933
Planopilumnus spongiosus (Nobili, 1906) [*Pilumnus*]

Platychelonion Crosnier & Guinot, 1969
  = *Platychelonion* Crosnier & Guinot, 1969 (type species *Platychelonion plannissimum* Crosnier & Guinot, 1969, by monotypy; gender neuter)
Platychelonion planissimum Crosnier & Guinot, 1969

Fig. 132. *Haemocinus elatus*, central Philippines (photo: P. Ng)

FAMILY PSEUDOZIIDAE ALCOCK, 1898

Pseudozioida Alcock, 1898
Flindersoplacidae Števčić, 2005

Euryozius Miers, 1886
  = *Pseudozius* (*Euryozius*) Miers, 1886 (type species *Xantho bouvieri* A. Milne-Edwards, 1869, by monotypy; gender masculine)
  = *Gardineria* Rathbun, 1911 (type species *Gardineria canora* Rathbun, 1911, by monotypy; gender feminine; pre-occupied name)
Euryozius bouvieri (A. Milne-Edwards, 1869) [*Xantho*]
  = *Ozius edwardsi* Barrois, 1888
Euryozius camachoi Ng & Liao, 2002
Euryozius canorus (Rathbun, 1911) [*Gardineria*]
Euryozius danielae Davie, 1992
Euryozius pagalu Manning & Holthuis, 1981
Euryozius sanguineus (Linnaeus, 1767) [*Cancer*]
  = *Pseudozius mellissi* Miers, 1881

Flindersoplax Davie, 1989
  = *Flindersoplax* Davie, 1989 (type species *Heteropanope vincentiana* Rathbun, 1929, by original designation; gender feminine)
Flindersoplax vincentiana (Rathbun, 1929) [*Heteropanope*]

Pseudozius Dana, 1851
  = *Pseudozius* Dana, 1851 (type species *Pseudozius planus* Dana, 1852, subsequent designation by Ward, 1932; gender masculine)
Pseudozius caystrus (Adams & White, 1849) [*Panopeus*]
  = *Pseudozius planus* Dana, 1852
  = *Pseudozius microphthalmus* Stimpson, 1858
Pseudozius inornatus Dana, 1852
Pseudozius pacificus Balss, 1938

Fig. 133. *Euryozius pagalu*, Sao Tome (photo: A. Anker)

Fig. 134. *Euryozius camachoi*, central Philippines (photo: P. Ng)

SUPERFAMILY RETROPLUMOIDEA GILL, 1894

FAMILY RETROPLUMIDAE GILL, 1894

Retroplumidae Gill, 1894
Ptenoplacidae Alcock, 1899

Bathypluma Saint Laurent, 1989
= *Bathypluma* Saint Laurent, 1989 (type species *Bathypluma spinifer* Saint Laurent, 1989, by original designation; gender feminine)
Bathypluma chuni (Doflein, 1904) [*Retropluma*]
= *Retropluma dentata* MacGilchrist, 1905
Bathypluma forficula Saint Laurent, 1989
Bathypluma spinifer Saint Laurent, 1989

Retropluma Gill, 1894
= *Archaeoplax* Alcock & Anderson, 1894 (type species *Archaeoplax notopus* Alcock & Anderson, 1894, by monotypy; name pre-occupied by *Archaeoplax* Stimpson, 1863 [Crustacea]; gender feminine)
= *Retropluma* Gill, 1894 (replacement name for *Archaeoplax* Alcock & Anderson, 1894; gender feminine)
= *Ptenoplax* Alcock & Anderson, 1895 (unnecessary replacement name for *Archaeoplax* Alcock & Anderson, 1894; gender feminine)
Retropluma denticulata Rathbun, 1932
Retropluma quadrata Saint Laurent, 1989
Retropluma notopus (Alcock & Anderson, 1894) [*Archaeoplax*]
Retropluma planiforma Kensley, 1969
Retropluma plumosa Tesch, 1918
Retropluma serenei Saint Laurent, 1989
Retropluma solomonensis McLay, 2006
= *Retropluma laurentae* McLay, 2006 (pre-occupied name, fossil species)


Fig. 135. *Retropluma denticulata*, Philippines (photo: T. Y. Chan)


Fig. 136. *Retropluma denticulata*, Philippines (photo: P. Ng)

SUPERFAMILY THIOIDEA DANA, 1852

Remarks. – The genus *Thia* Leach, 1815, and family Thiidae Dana, 1852, have long been associated with the Atelecyclidae Ortmann, 1893, but recent studies suggest that it may not be a member of that family, or even of the superfamily Cancroidea. Major changes are about to take place with genera previously assigned to the Atelecyclidae (Cleva & Tavares, in prep.; Guinot et al., 2008). Interestingly, recent molecular studies suggest that the Thiidae should be aligned with members of the Portunoidea (C. D. Schubart, unpublished data) and should eventually be transferred there. For the moment, and we tentatively refer it to its own superfamily.

FAMILY THIIDAE DANA, 1852

Thiidae Dana, 1852 [Opinion 693]
Nautilocorystidae Ortmann, 1893

Subfamily Nautilocorystinae Ortmann, 1893

Nautilocorystidae Ortmann, 1893

Remarks. – The transfer of *Nautilocorystes* H. Milne Edwards, 1837, to the Thiidae is necessitated by the structure of the male abdomen (segments 3–5 fused), and the short, stout G1, and short G2. These characters mean that its traditional placement in the Corystidae is untenable, despite their superficially similar carapace shapes, and somewhat setose antennae.

Nautilocorystes H. Milne Edwards, 1837
= *Nautilocorystes* H. Milne Edwards, 1837 (type species *Nautilocorystes ocellatus* H. Milne Edwards, 1837, by monotypy; gender masculine)
= *Corystes* (*Dicera*) De Haan, 1833 (type species *Corystes* (*Dicera*) *8-dentata* De Haan, 1833, by monotypy; name pre-occupied by *Dicera* Germar, 1817 [Hymenoptera]; gender feminine)
= *Alyptes* Gistel, 1848 (replacement name for *Corystes* (*Dicera*) De Haan, 1833; gender masculine)
Nautilocorystes ocellatus (Gray, 1831) [*Corystes*]
= *Corystes* (*Dicera*) *octodentata* De Haan, 1833
= *Nautilocorystes ocellatus* H. Milne Edwards, 1837
Nautilocorystes investigatoris Alcock, 1899

Subfamily Thiinae Dana, 1852

Thiidae Dana, 1852

Thia Leach, 1815
= *Thia* Leach, 1815 (type species *Thia polita* Leach, 1815, by monotypy; gender feminine)
Thia scutellata (Fabricius, 1793) [*Cancer*]
= *Cancer residuus* Herbst, 1799
= *Thia polita* Leach, 1815
= *Thia blainvillii* Risso, 1822

Fig. 137. *Thia scutellata*, Belgium; two different colour forms (photos: H. Hillewaert)

SUPERFAMILY TRAPEZIOIDEA MIERS, 1886

Remarks. – Števčić (2005: 39) used Trapezioidea for the first time and recognised just one family, Trapeziidae, with three subfamilies, Domeciinae, Tetraliinae and Trapeziinae. Karasawa & Schweitzer (2006) disagreed and placed the Trapeziidae sensu lato in the Xanthoidea. In this synopsis, we have recognised a superfamily as Števčić (2005) did , but with three distinct families, Trapeziidae, Tetraliidae and Domeciidae.

Schweitzer (2005) argued that there were no clear grounds to recognise the Tetraliidae as distinct from Trapeziidae as proposed by Castro et al. (2003). Among the arguments she presented was that the external features of trapeziids and tetraliids, notably the fronto-orbital margins (and carapace), were too similar to justify separating them. While carapace proportions may be a useful generic or specific character, its value as a familial character is contentious. In many Xanthoidea, Pilumnoidea and Goneplacoidea, the width varies substantially between genera that are otherwise clearly linked via gonopodal and abdominal features. Those of us working of modern (vs fossil) crabs know that the carapace is a poor indicator of relationships, and there is a good body of literature to support this. An obvious recent case illustrating this regards *Tanaocheles* and its two species, long either associated with the Trapeziidae sensu stricto or Xanthidae sensu stricto Externally, the two species of *Tanaocheles* are identical to many species of *Chlorodiella*, and one of the species (*C. bidentata*) was in fact placed there for over a century. A close analysis of the male abdominal condition and gonopods, complemented by larval data, showed conclusively that *Tanaocheles* was actually a pilumnoid, originally assigned to a new subfamily, Tanaochelinae by Ng & Clark (2000) (here regarded as a distinct family). If the abdomen and gonopods were not considered, it would have been impossible to justify the removal of *Tanaocheles* to the Pilumnoidea.

With regards to the key character of fusion of male abdominal segments highlighted by Castro et al. (2003), Schweitzer (2005) disregarded it as an important character. While this can be debated, it is nevertheless true that in many groups, especially within the xanthoids, there is a consistency in abdominal fusion patterns that is useful at the family or subfamily level. Whether the male abdominal segments 3 to 5 are fused (immobile) or free in the Trapeziidae and Tetraliidae, is a strong character unequivocally splitting the genera into two groups. There are no other well defined monophyletic brachyuran families in which members have male abdomens of both conditions. It may be argued that the tetraliids are no more than a subfamily of the Trapeziidae (Števčić, 2005, argues it is only deserving of tribe level), but there is little doubt that they form a monophyletic group. The emphasis on carapace characters in paleontological studies is understandable as fossils are rarely complete, and this discipline certainly has more problems than those who work with living species. Nevertheless, the value of a character must be independent of its "availability". Also interesting is that that all tetraliids of both sexes exhibit extreme heterochely, with one of the chelipeds greatly enlarged compared to the other. In contrast, heterochely in trapeziids is less pronounced. However, we concur with Schweitzer (2005) in that some of the trapeziid genera (like *Calocarcinus* and allies) might belong elsewhere (see below).

With the reclassification of the traditional Trapeziidae by Castro et al. (1994), it seems useful to also recognise subfamilies within the Trapeziidae sensu stricto Števčić (2005) recognised three tribes in his Trapeziidae, Calocarcinini Števčić, 2005, Quadrellini Števčić, 2005, and Sphaenomeridini Števčić, 2005 [sic]. Having examined material of *Sphenomerides*, *Calocarcinus* and *Philippicarcinus*, we are of the opinion that all three form a coherent group, characterised by a generally broader carapace, lack of setal rows on the tips of the ambulatory dactyli, prominent heterochely (strongly asymmetrical chelipeds), and living in deep sea soft and precious corals or sponges. Recent expeditions have obtained a large series of both *Calocarcinus* and *Philippicarcinus* from the Philippines, and the differences are consistent (Peter Castro and P. K. L. Ng, unpublished data). We here apply the suprageneric taxon Calocarcininae Števčić, 2005, for these three genera. Following Article 24.2.1 of the Code, we act as first revisers and select Calocarcinini Števčić, 2005, as having priority over Sphaenomeridini Števčić, 2005 [sic] which was published simultaneously with Calocarcinini Števčić, 2005. Clark & Ng (2006) commented on the discordant classification presented if the larvae of *Quadrella* are considered. The two trapezoid genera associated with soft corals, *Quadrella* and *Hexagonalia*, also have a very distinct carapace form and front, and we thus also recognise a third subfamily, Quadrellinae Števčić, 2005, within the Trapeziidae.

FAMILY DOMECIIDAE ORTMANN, 1893

Domoeciinae Ortmann, 1893

Domecia Eydoux & Souleyet, 1842
- = *Domecia* Eydoux & Souleyet, 1842 (type species *Domecia hispida* Eydoux & Souleyet, 1842, by monotypy; gender feminine) [Opinion 73]
- = *Domaecius* Dana, 1851 (incorrect spelling)
- = *Domaecia* Dana, 1851 (incorrect spelling)
- = *Domoecia* A. Milne-Edwards, 1873 (incorrect spelling)
- = *Neleus* Desbonne, in Desbonne & Schramm, 1867 (type species *Neleus acanthophorus* Desbonne, in Desbonne & Schramm, 1867, by monotypy; gender masculine)
- = *Eupilumnus* Kingsley, 1880 (type species *Eupilumnus websteri* Kingsley, 1880, by monotypy; name pre-occupied by *Eupilumnus* Kossmann, 1877 [Crustacea]; gender masculine)

Domecia acanthophora (Desbonne, in Desbonne & Schramm, 1867) [*Neleus*]
- = *Pilumnus melanacanthus* Kingsley, 1879
- = *Eupilumnus websteri* Kingsley, 1880

Domecia africana Guinot, in Manning & Holthuis, 1981 {1}

Domecia glabra Alcock, 1899

Domecia hispida Eydoux & Souleyet, 1842 [nomen protectum] [Direction 36]
- = *Cancer tridentatus* Forskål, 1775 [nomen oblitum] {2}

Jonesius Sankarankutty, 1962
= *Jonesius* Sankarankutty, 1962 (type species *Jonesius minuta* Sankarankutty, 1962, by monotypy; gender masculine)
Jonesius triunguiculatus (Borradaile, 1902) [*Pseudozius*]
= *Jonesius minuta* Sankarankutty, 1962
= *Maldivia gardineri* Rathbun, 1911
= *Maldivia galapagensis* Garth, 1939

Maldivia Borradaile, 1902
= *Maldivia* Borradaile, 1902 (type species *Maldivia symbiotica* Borradaile, 1902, by monotypy; gender feminine)
Maldivia symbiotica Borradaile, 1902

Palmyria Galil & Takeda, 1986
= *Palmyria* Galil & Takeda, 1986 (type species *Maldivia palmyrensis* Rathbun, 1923, by original designation; gender feminine)
Palmyria palmyrensis (Rathbun, 1923) [*Maldivia*]

Notes

{1} This taxon was originally described only as a form of *Domecia acanthophora* by Guinot-Dumortier (1964) and, as such, the name is not nomenclaturally available under the Code (Article 15.2). It was first used as a valid name by Manning & Holthuis (1981) (who recognised the taxon as a subspecies), but they incorrectly credited the authorship to Guinot.

{2} The original description of *Cancer tridentatus* Forskål, 1775 (from Suez) is too brief, but it fits the genus *Domecia* as presently understood, and best matches *Domecia hispida* Eydoux & Souleyet, 1842, which is present in the Red Sea. We do not think it is possible to be certain, and it is unfortunate that it is the oldest name. To have the senior name replacing the well known name of *Domecia hispida* serves no purpose, and we invoke Article 23.9.2 of the Code in suppressing the senior name. To fulfil this article (i.e. used in 25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years), we attach a list of supporting references below (dating from 1957). Even without a comprehensive search, we easily uncovered 45 references; the actual number is certainly much higher.

Supporting documents: Abele (1976); Cai et al. (1994); Castro (1976); Castro et al. (2004); Chen & Lan (1981); Coles (1980); Dai & Yang (1991); Dai et al. (1986); Davie (2002); Forest & Guinot (1961, 1962); Garth (1965); Guinot (1964, 1985a); Hendrickx (1995a); Jeng (1997); Kropp & Birkeland (1981); Manning & Holthuis (1981); McLaughlin et al. (2005); McNeill (1968); Miyake (1983); Naim (1980); Neumann & Spiridonov (1999); Ng et al. (2001); Ng & Richer de Forges (2007); Odinetz (1983); Odinetz-Collart & Richer de Forges (1985); Ooishi (1970); Patton (1967); Paulay et al. (2003); Peyrot-Clausade (1977a, b, 1989); Poore (2004); Poupin (1996); Randall (2004); Ribes (1978); Richer de Forges & Ng (2006); Sakai (1976); Schweitzer (2005); Serène (1968, 1984); Serène et al. (1974); Takeda & Miyake (1976); Takeda & Nonomura (1976); Williams et al. (1989); Yu et al. (1996).

FAMILY TETRALIIDAE CASTRO, NG & AHYONG, 2004

Tetraliidae Castro, Ng & Ahyong, 2004
Tetraliinae Števčić, 2005

Tetralia Dana, 1851 {1}
= *Tetralia* Dana, 1851 (type species *Cancer glaberrimus* Herbst, 1790, by monotypy; gender feminine)
Tetralia aurantistellata Trautwein, 2007
Tetralia brengelae Trautwein, 2007
Tetralia brunalineata Trautwein, 2007
Tetralia cavimana Heller, 1861
Tetralia cinctipes Paul'son, 1875
= *Tetralia glaberrima* forma *pullidactyla* Patton, 1966 (unavailable name)
= *Tetralia glaberrima pullidactyla* Garth, 1971
Tetralia glaberrima (Herbst, 1790) [*Cancer*]
= *Trapezia serratifrons* Hombron & Jaquinot, 1846
= *Trapezia integra* Latreille, 1828
= *Tetralia laevissima* Stimpson, 1858
= *Tetralia glaberrima* forma *fulva* Patton, 1966 (unavailable name)
= *Tetralia glaberrima fulva* Serène, 1984
= *Tetralia sanguineomaculata* Galil & Clark, 1990
Tetralia muta (Linnaeus, 1758) [*Cancer*]
= *Tetralia armata* Dana, 1852
= *Tetralia vanninii* Galil & Clark, 1988 {2}
Tetralia nigrolineata Serène & Pham, 1957
= *Tetralia glaberrima* forma *obscura* Patton, 1966 (unavailable name)
= *Tetralia glaberrima obscura* Serène, 1984
Tetralia ocucaerulea Trautwein, 2007
Tetralia rubridactyla Garth, 1971
= *Tetralia glaberrima* forma *rubrodactyla* Patton, 1966 (unavailable name)
= *Tetralia innamorata* Galil & Clark, 1988

Tetraloides Galil, 1986
= *Tetraloides* Galil, 1986 (type species *Tetralia nigrifrons* Dana, 1852, by original designation; gender masculine)
Tetraloides heterodactylus (Heller, 1861) [*Tetralia*]
= *Tetralia nigrifrons* forma *fusca* Serène & Pham, 1957 {3}
= *Tetralia heterodactyla* forma *cyanea* Serène & Pham, 1957 {3}
= *Tetralia pubescens* Klunzinger, 1913
Tetraloides nigrifrons (Dana, 1852) [*Tetralia*]
= *Tetralia nigrifrons* forma *lissodactyla* Serène & Pham, 1957 {3}

Notes

{1} The taxonomy of the genus *Tetralia* is still unsettled, with probably more species to be discovered (e.g., see Trautwein, 2004).

{2} Despite the detailed revision of the complex nomenclature associated with *Tetralia* species by Castro et al. (2004), one remaining problem is with the absence of information on the diagnostic color pattern, ambiguity of the description and the absence of a holotype for *T. vanninii* Galil & Clark, 1988, a junior subjective synonym of *Tetralia muta* (Linnaeus, 1758) (Castro, 2003; Castro et al., 2004; Trautwein, 2007). The holotype of *T. vanninii* Galil & Clark, 1988, a male specimen from Somalia, is

lost, and the paratypes actually include two different species.

{3} Although the names of "forms" that were established by Patton (1966), are invalid under Article 10.2 of the Code (see Castro, 1997; Castro et al., 2004); the names established by Serène & Dat (1957) are available, because the cut-off date for recognition of "forms" as valid taxa is 1961.

Fig. 138. *Tetralia* cf. *rubridactylus*, Panglao, Philippines (photo: P. Ng)

Fig. 139. *Tetralia aurantistellata*, central Philippines (photo: P. Ng)

FAMILY TRAPEZIIDAE MIERS, 1886

Trapeziidae Miers, 1886 [Opinion 16150] {1}
Calocarcinini Števčić, 2005
Quadrellini Števčić, 2005
Sphaenomeridini Števčić, 2005 [sic]

Subfamily Calocarcininae Števčić, 2005

Calocarcinini Števčić, 2005
Sphaenomeridini Števčić, 2005 [sic]

Calocarcinus Calman, 1909
  = *Calocarcinus* Calman, 1909 (type species *Calocarcinus africanus* Calman, 1909, by monotypy; gender masculine)
Calocarcinus africanus Calman, 1909
Calocarcinus crosnieri Galil & Clark, 1990
Calocarcinus habei Takeda, 1980
Calocarcinus lewinsohni Takeda & Galil, 1980

Philippicarcinus Garth & Kim, 1983
  = *Philippicarcinus* Garth & Kim, 1983 (type species *Philippicarcinus oviformis* Garth & Kim, 1983, by original designation; gender masculine)
Philippicarcinus oviformis Garth & Kim, 1983
Philippicarcinus tuberomerus Garth & Kim, 1983

Sphenomerides Rathbun, 1897
  = *Sphenomerus* Wood-Mason & Alcock, 1891 (type species *Sphenomerus trapezoides* Wood-Mason & Alcock, 1891, by monotypy; name pre-occupied by *Sphenomerus* Candèze, 1859 [Coleoptera]; gender masculine)
  = *Sphenomerides* Rathbun, 1897 (replacement name for *Sphenomerus* Wood-Mason & Alcock, 1891; gender masculine)
Sphenomerides trapezoides (Wood-Mason & Alcock, 1891) [*Sphenomerus*]

Subfamily Quadrellinae Števčić, 2005

Quadrellini Števčić, 2005

Hexagonalia Galil, 1986
  = *Hexagonalia* Galil, 1986 (type species *Quadrella brucei* Serène, 1973, by original designation; gender feminine)
Hexagonalia brucei (Serène, 1973) [*Quadrella*]
Hexagonalia laboutei Galil, 1997
Hexagonalia unidentata Castro, 2005

Quadrella Dana, 1851
  = *Quadrella* Dana, 1851 (type species *Quadrella coronata* Dana, 1852, by monotypy; gender feminine)
Quadrella boopsis Alcock, 1898
  = *Quadrella bispinosa* Borradaile, 1902
Quadrella coronata Dana, 1852
  = *Quadrella coronata* var. *granulosa* Borradaile, 1902
Quadrella maculosa Alcock, 1898
  = *Quadrella cyrenae* Ward, 1942
Quadrella nitida Smith, 1869
Quadrella reticulata Alcock, 1898
Quadrella serenei Galil, 1986
  = *Quadrella lewinsohni* Galil, 1986

Subfamily Trapeziinae Miers, 1886

Trapeziidae Miers, 1886 [Opinion 1615]

Trapezia Latreille, 1828
= *Trapecia* Berthold, 1827 (type species *Cancer rufopunctatus* Herbst, 1799, or *Cancer glaberrimus* Herbst, 1790; gender feminine) (suppressed under Article 23.9.1)
= *Trapezia* Latreille, 1828 (type species *Trapezia dentifrons* Latreille, 1828, subsequent designation by Desmarest, 1858; gender feminine) [Opinion 1614] {2}
= *Grapsillus* MacLeay, 1838 (type species *Grapsillus maculatus* MacLeay, 1838, subsequent designation by Rathbun, 1930; gender masculine)
Trapezia areolata Dana, 1852
Trapezia bella Dana, 1852
Trapezia bidentata (Forskål, 1775) [*Cancer*]
= *Trapezia ferruginea* Latreille, 1828
= *Trapezia miniata* Hombron & Jacquinot, 1846
= *Grapsillus subinteger* MacLeay, 1838
= *Trapezia ferruginea typica* Borradaile, 1900 (pre-occupied name)
= *Trapezia cymodoce* var. *edentula* Laurie, 1906
= *Trapezia subdentata* Gerstaecker, 1857
= *Trapezia plana* Ward, 1941
= *Trapezia subdentata* Gerstaecker, 1857
Trapezia cheni Galil, 1983
Trapezia corallina Gerstaecker, 1857
Trapezia cymodoce (Herbst, 1801) [*Cancer*] [Opinion 1614]
= *Trapezia dentifrons* Latreille, 1828
= *Grapsillus dentatus* MacLeay, 1838
= *Trapezia dentata* var. *subintegra* Dana, 1852
= *Trapezia coerulea* Rüppell, 1830
= *Trapezia hirtipes* Hombron & Jacquinot, 1846
= *Trapezia cymodoce* var. *typica* Ortmann, 1893
= *Trapezia cymodoce* var. *ornatus* Chen, 1933
Trapezia digitalis Latreille, 1828
= *Trapezia leucodactyla* Rüppell, 1830
= *Trapezia fusca* Hombron & Jacquinot, 1846
= *Trapezia nigrofusca* Stimpson, 1860
= *Trapezia digitalis* var. *typica* Borradaile, 1902 (pre-occupied name)
Trapezia flavopunctata Eydoux & Souleyet, 1842
= *Trapezia latifrons* A. Milne-Edwards, 1867
Trapezia formosa Stimpson, 1869
Trapezia garthi Galil, 1983
Trapezia globosa Castro, 1997
Trapezia guttata Rüppell, 1830
= *Trapezia davaoensis* Ward, 1941
= *Trapezia ferruginea* var. *ceylonica* Chen, 1933
= *Trapezia miersi* Ward, 1941
Trapezia intermedia Miers, 1886
Trapezia lutea Castro, 1997
Trapezia neglecta Castro, 2003
Trapezia punctimanus Odinetz, 1984
Trapezia punctipes Castro, 1997
Trapezia richtersi Galil & Lewinsohn, 1983
= *Trapezia richtersi* Serène, 1983
Trapezia rufopunctata (Herbst, 1799) [*Cancer*] {3}
= *Grapsillus maculatus* MacLeay, 1838
= *Trapezia acutifrons* A. Milne-Edwards, 1867
= *Trapezia rufopunctata* forme *typica* Bouvier, 1915 (pre-occupied name)
= *Quadrella rufopunctata* Chen, 1933
Trapezia septata Dana, 1852
= *Trapezia reticulata* Stimpson, 1858
= *Trapezia areolata inermis* A. Milne-Edwards, 1873
Trapezia serenei Odinetz, 1984
Trapezia speciosa Dana, 1852
Trapezia tigrina Eydoux & Souleyet, 1842
= ?*Trapezia punctata* Coulon, 1864
= *Trapezia wardi* Serène, 1971
= *Trapezia danae* Ward, 1939

Incertae sedis

Trapezia affinis White, 1847 (nomen nudum)

Notes

{1} The name Trapeziidae Miers, 1886, is actually not the earliest name for the group. There are two earlier names - Trapezidés A. Milne-Edwards, 1862, and Trapeziden Nauck, 1880. Both names, however, cannot be used as they were used as French and German vernacular names, respectively, and therefore not available under the Code.

{2} The current consensus is that the type species of *Trapezia* Latreille, 1828, is *Trapezia dentifrons* Latreille, 1828, as designated by Rathbun (1930). There was, however, an earlier designation by E. Desmarest (1858: 18), who, fortunately, also selected *T. dentifrons* as the type species, so the nomenclature remains unchanged.

{3} The type locality for *Trapezia rufopunctata* (Herbst, 1799) was listed as unknown by Herbst (1799: 55) [as *Cancer rufopunctatus*] and not Singapore as noted by Castro et al. (2004: 42).

Fig. 140. *Philippicarcinus oviformis*, central Philippines (photo: P. Ng)

Fig. 141. *Trapezia guttata*, central Philippines (photo: T. Y. Chan)

SUPERFAMILY TRICHODACTYLOIDEA H. MILNE EDWARDS, 1853

FAMILY TRICHODACTYLIDAE H. MILNE EDWARDS, 1853

Trichodactylacea H. Milne Edwards, 1853
Holthuisiini Pretzmann, 1978
Dilocarcini Pretzmann, 1978
Valdiviini Pretzmann, 1978

Subfamily Dilocarcininae Pretzmann, 1978

Dilocarcini Pretzmann, 1978
Holthuisiini Pretzmann, 1978
Valdiviini Pretzmann, 1978

Bottiella Magalhães & Türkay, 1996
= *Bottiella* Magalhães & Türkay, 1996 (type species *Dilocarcinus* (*Dilocarcinus*) *medemi* Smalley & Rodríguez, 1972, by original designation; gender feminine)
Bottiella cucutensis (Pretzmann, 1968)
Bottiella medemi (Smalley & Rodríguez, 1972) [*Dilocarcinus* (*Dilocarcinus*)]
Bottiella niceforei (Schmitt & Pretzmann, 1968) [*Trichodactylus* (*Valdivia*)]

Dilocarcinus H. Milne Edwards, 1853
= *Dilocarcinus* H. Milne Edwards, 1853 (type species *Dilocarcinus spinifer* H. Milne Edwards, 1853, subsequent designation by Pretzmann, 1968; gender masculine)
Dilocarcinus pagei pagei Stimpson, 1861
= *Dilocarcinus pagei cristatus* Bott, 1969
Dilocarcinus pagei enriquei Pretzmann, 1978
Dilocarcinus septemdentatus (Herbst, 1783) [*Cancer*]
= *Cancer orbicularis* Meuschen, 1781 [published in work rejected for nomenclatural purposes, Opinion 261]
= *Dilocarcinus spinifer* H. Milne Edwards, 1853
= *Dilocarcinus spiniferum* Ortmann, 1897 (incorrect spelling)
Dilocarcinus truncatus Rodríguez, 1992

Forsteria Bott, 1969
= *Forsteria* Bott, 1969 (type species *Valdivia* (*Forsteria*) *venezuelensis* Rathbun, 1905, by original designation; gender feminine)
Forsteria venezuelensis (Rathbun, 1905) [*Valdivia* (*Forsteria*)]
= *Trichodactylus* (*Valdivia*) *ornatifrons* Pretzmann, 1968
= *Valdivia* (*Forsteria*) *venezuelensis edentata* Bott, 1969

Fredilocarcinus Pretzmann, 1978
= *Dilocarcinus* (*Fredilocarcinus*) Pretzmann, 1978 (type species *Dilocarcinus* (*Fredilocarcinus*) *raddai* Pretzmann, 1978, by monotypy; gender masculine)
Fredilocarcinus apyratii Magalhães & Türkay, 1996
Fredilocarcinus musmuschiae (Pretzmann & Mayta, 1980) [*Dilocarcinus* (*Fredilocarcinus*)]
Fredilocarcinus raddai (Pretzmann, 1978) [*Dilocarcinus* (*Fredilocarcinus*)]

Goyazana Bott, 1969
= *Dilocarcinus* (*Goyazana*) Bott, 1969 (type species *Dilocarcinus castelnaui* H. Milne Edwards, 1853, by monotypy; gender feminine)
Goyazana castelnaui (H. Milne Edwards, 1853) [*Dilocarcinus*]
Goyazana rotundicauda Magalhães & Türkay, 1996

Moreirocarcinus Magalhães & Türkay, 1996
= *Moreirocarcinus* Magalhães & Türkay, 1996 (type species *Trichodactylus* (*Trichodactylus*) *chacei* Pretzmann, 1968, by original designation; gender masculine)
Moreirocarcinus chacei (Pretzmann, 1968) [*Trichodactylus* (*Trichodactylus*)]
= *Zilchiopsis chacei ecuadoroides* Pretzmann, 1978
Moreirocarcinus emarginata (H. Milne Edwards, 1853) [*Dilocarcinus*]
= *Valdivia ecuadoriensis* Pretzmann, 1968
Moreirocarcinus laevifrons (Moreira, 1901) [*Dilocarcinus*]

Poppiana Bott, 1969
= *Orthostoma* Randall, 1840 (type species *Orthostoma dentata* Randall, 1840, by monotypy; junior homonym of *Orthostoma* Ehrenberg, 1831 [Annelida]; gender neuter)
= *Poppiana* Bott, 1969 (replacement name for *Orthostoma* Randall, 1840; gender feminine)
Poppiana argentiniana (Rathbun, 1906)
= *Dilocarcinus argentinianus apaluensis* Pretzmann, 1968
= *Trichodactylus* (*Dilocarcinus*) *bachmayeri* Pretzmann, 1968
= *Trichodactylus* (*Valdivia*) *boliviensis* Parisi, 1923
Poppiana bulbifer (Rodríguez, 1992) [*Dilocarcinus*]
Poppiana dentata (Randall, 1840) [*Orthostoma*]
= *Dilocarcinus dentatus cayennensis* Pretzmann, 1968
= *Dilocarcinus dentatus trinidadensis* Pretzmann, 1968
= *Dilocarcinus multidentatus* von Martens, 1869

Melocarcinus Magalhães & Türkay, 1996
= *Melocarcinus* Magalhães & Türkay, 1996 (type species *Trichodactylus* (*Valdivia*) *meekeri* Pretzmann, 1968, by original designation; gender masculine)
Melocarcinus meekei (Pretzmann, 1968) [*Trichodactylus* (*Valdivia*)]

Rotundovaldivia Pretzmann, 1968
= *Valdivia* (*Rotundovaldivia*) Pretzmann, 1968 (type species *Trichodactylus* (*Valdivia*) *bourgeti* Rathbun, 1905, by original designation; gender feminine)
Rotundovaldivia latidens (A. Milne-Edwards, 1869) [*Trichodactylus* (*Valdivia*)]
= *Trichodactylus* (*Valdivia*) *bourgeti* Rathbun, 1905
= *Trichodactylus* (*Valdivia*) *bourgeti falcipenis* Pretzmann, 1968

Sylviocarcinus H. Milne Edwards, 1853
= *Sylviocarcinus* H. Milne Edwards, 1853 (type species *Sylviocarcinus devillei* H. Milne Edwards, 1853, by monotypy; gender masculine)
= *Holthuisia* Pretzmann, 1968 (type species *Dilocarcinus pictus* H. Milne Edwards, 1853, by original designation; gender feminine)
= *Holthuisisia* Pretzmann, 1968 (incorrect spelling)
Sylviocarcinus australis Magalhães & Türkay, 1996
Sylviocarcinus devillei H. Milne Edwards, 1853
= *Sylviocarcinus peruvianus* A. Milne-Edwards, 1869
= *Dilocarcinus spinifrons* Kingsley, 1880
= *Dilocarcinus margaritifrons* Ortmann, 1893
= *Sylviocarcinus gigas* Smalley & Rodríguez, 1972
Sylviocarcinus maldonadoensis (Pretzmann, 1978) [*Holthuisia*]
= ?*Trichodactylus* (*Dilocarcinus*) *gurupensis* Rathbun, 1904
Sylviocarcinus pictus (H. Milne Edwards, 1853) [*Dilocarcinus*]
= ?*Dilocarcinus pardalinus* Gerstaecker, 1856
= *Holthuisia picta rionegrensis* Pretzmann, 1968
Sylviocarcinus piriformis (Pretzmann, 1968) [*Valdivia* (*Valdivia*)]
= *Valdivia* (*Valdivia*) *torresi* Pretzmann, 1968

Valdivia White, 1847
= *Valdivia* White, 1847 (type species *Valdivia serrata* White, 1847, by monotypy; gender feminine) [Opinion 73]
Valdivia camerani (Nobili, 1896) [*Sylviocarcinus*]
Valdivia haraldi Bott, 1969
Valdivia novemdentata (Pretzmann, 1968) [*Trichodactylus* (*Valdivia*)]
Valdivia serrata serrata White, 1847 [Direction 36]
= *Valdivia* (*Valdivia*) *serrata surinamensis* Pretzmann, 1968
= *Valdivia* (*Valdivia*) *serrata cururuensis* Bott, 1969
= *Rotundovaldivia hartii gila* Pretzmann, 1978
Valdivia serrata harttii (Rathbun, 1905) [*Trichodactylus* (*Valdivia*)]

Zilchiopsis Bott, 1969
= *Zilchiopsis* Bott, 1969 (type species *Zilchiopsis sattleri* Bott, 1969, by original designation; gender feminine)
Zilchiopsis collastinensis (Pretzmann, 1968) [*Holthuisia*]
= *Zilchiopsis sattleri* Bott, 1969
Zilchiopsis cryptoda (Ortmann, 1893) [*Dilocarcinus*]
Zilchiopsis oronensis (Pretzmann, 1968) [*Valdivia* (*Valdivia*)]

Incertae sedis

Valdivia convexiuscula White, 1847 (nomen nudum)

Subfamily Trichodactylinae H. Milne Edwards, 1853

Trichodactylidae H. Milne Edwards, 1853

Avotrichodactylus Pretzmann, 1968
= *Trichodactylus* (*Avotrichodactylus*) Pretzmann, 1968 (type species *Trichodactylus constrictus* Pearse, 1911, by original designation; gender masculine)
Avotrichodactylus constrictus (Pearse, 1911) [*Trichodactylus*]
= *Trichodactylus bidens* Bott, 1969
Avotrichodactylus oaxensis Rodríguez, 1992

Rodriguezia Bott, 1969
= *Trichodactylus* (*Rodriguezia*) Bott, 1969 (type species *Trichodactylus villalobosi* (Rodríguez & Manrique, 1966, by original designation; gender feminine)
Rodriguezia mensabak (Cottarelli & Argano, 1977) [*Trichodactylus* (*Rodriguezia*)]
Rodriguezia villalobosi (Rodríguez & Manrique, 1966) [*Trichodactylus*]

Trichodactylus Latreille, 1828
= *Trichodactylus* Latreille, 1828 (type species *Trichodactylus fluviatilis* Latreille, 1828, by monotypy; gender masculine) [Opinion 73, Direction 37]
= *Trichodactylus* (*Mikrotrichodactylus*) Pretzmann, 1968 (type species *Trichodactylus borellianus* Nobili, 1896, by original designation; gender masculine)
Trichodactylus borellianus Nobili, 1896
Trichodactylus crassus A. Milne-Edwards, 1869
?*Trichodactylus cunninghami* (Bate, 1868) [*Gelasimus*]
Trichodactylus dentatus H. Milne Edwards, 1853
Trichodactylus ehrhardti Bott, 1969
Trichodactylus faxoni Rathbun, 1906
= *Trichodactylus* (*Trichodactylus*) *maytai* Pretzmann, 1978
Trichodactylus fluviatilis Latreille, 1828 [Direction 36]
= *Trichodactylus* (*Trichodactylus*) *tifucanus theresiopoliensis* Pretzmann, 1968
Trichodactylus kensleyi Rodríguez, 1992
Trichodactylus panoplus (von Martens, 1869) [*Sylviocarcinus*]
= *Trichodactylus* (*Mikrotrichodactylus*) *borellianus brasiliensis* Pretzmann, 1968
= *Dilocarcinus panoplus* var. *marmorata* Nobili, 1901
Trichodactylus petropolitanus (Goldi, 1886) [*Sylviocarcinus*]
= *Trichodactylus petroplitanus paranensis* Bott, 1969
= *Trichodactylus* (*Valdivia*) *thayeri* Rathbun, 1906
= *Trichodactylus* (*Valdivia*) *thayeri glaber* Pretzmann, 1968
= *Trichodactylus* (*Valdivia*) *tifucanus* Rathbun, 1906
= *Trichodactylus* (*Valdivia*) *tifucanus acutidens* Pretzmann, 1968
Trichodactylus parvus Moreira, 1912
Trichodactylus quinquedentatus Rathbun, 1893

Incertae sedis

Trichodactylus affinis White, 1847 (nomen nudum)
Telphusa ? *quadratus* Latreille, in Berthold, 1827 (nomen nudum)

Fig. 142. *Trichodactylus fluviatilis*, Brazil (photo: C. Magalhães)

Fig. 143. *Valdivia serrata*, Pico da Neblina, Amazonas, Brazil (photo:V.T. de Carvalho)

SUPERFAMILY XANTHOIDEA MACLEAY, 1838

Remarks. – The present composition of the Xanthoidea differs markedly from that first proposed by Guinot (1978) and from other arrangements used by subsequent authors. The taxa allied to Eriphiidae have been moved to their own superfamily, Eriphioidea, while the Carpiliidae is now likewise in the Carpilioidea. All the Pilumnidae and allies are now also in the Pilumnoidea, while the Trapeziidae, Domeciidae and Tetraliidae have been transferred to the Trapezioidea. The family Pseudorhombilidae Alcock, 1900, long associated with the goneplacids and their allies, is referred to the Xanthoidea for the first time. Pseudorhombilids are much closer to panopeids in regard to the form of the male abdomen and gonopods.

FAMILY PANOPEIDAE ORTMANN, 1893

Eucratopsinae Stimpson, 1871 (priority ignored because of broader usage of junior name Panopeinae Ortmann, 1893; Code, Article 35.5)
Panopaeinae Ortmann, 1893
Prionoplacidae Alcock, 1900
Chasmophorinae Števčić, 2005
Cycloplacinae Števčić, 2005
Malacoplacini Števčić, 2005
Robertsellini Števčić, 2005
Thalassoplacini Števčić, 2005

Subfamily Eucratopsinae Stimpson, 1871

Eucratopsinae Stimpson, 1871
Prionoplacidae Alcock, 1900
Cycloplacinae Števčić, 2005
Malacoplacini Števčić, 2005
Robertsellini Števčić, 2005
Thalassoplacini Števčić, 2005

Chasmophora Rathbun, 1914
= *Chasmophora* Rathbun, 1914 (type species *Eucratopsis macrophthalma* Rathbun, 1898, by original designation; gender feminine)
Chasmophora macrophthalma (Rathbun, 1898) [*Eucratopsis*]

Cycloplax Guinot, 1969
= *Cycloplax* Guinot, 1969 (type species *Cycloplax pinnotheroides* Guinot, 1969, by original designation; gender feminine)
Cycloplax pinnotheroides Guinot, 1969

Cyrtoplax Rathbun, 1914
= *Cyrtoplax* Rathbun, 1914 (type species *Eucratoplax spinidentata* Benedict, 1892, by original designation; gender feminine)
Cyrtoplax bidentata Gomez & Ortiz, 1975
Cyrtoplax panamensis Ziesenhenne, in Garth, 1940
Cyrtoplax schmitti Rathbun, 1935
Cyrtoplax spinidentata (Benedict, 1892) [*Eucratoplax*]

Eucratopsis Smith, 1869
= *Eucratopsis* Smith, 1869 (type species *Eucrate crassimanus* Dana, 1852, by monotypy; gender feminine) [Opinion 85, Direction 37]
= *Eucratoplax* A. Milne-Edwards, 1880 (type species *Eucratoplax guttata* A. Milne-Edwards, 1880, by monotypy; gender feminine)
Eucratopsis crassimana (Dana, 1851) [*Eucrate*] [Direction 36]
= *Eucratoplax guttata* A. Milne-Edwards, 1880

Glyptoplax Smith, 1870
= *Glyptoplax* Smith, 1870 (type species *Glyptoplax pugnax* Smith, 1870, by monotypy; gender feminine) [Opinion 85, Direction 37]
Glyptoplax consagae Hendrickx, 1989
Glyptoplax pugnax Smith, 1870 [Direction 36]
?*Glyptoplax smithii* A. Milne-Edwards, 1880

Homoioplax Rathbun, 1914
= *Homoioplax* Rathbun, 1914 (type species *Pseudorhombila haswelli* Miers, 1884, by monotypy; gender feminine)
Homoioplax haswelli (Miers, 1884) [*Pseudorhombila*]

Malacoplax Guinot, 1969
= *Malacoplax* Guinot, 1969 (type species *Eucrate californiensis* Lockington, 1877, by original designation; gender feminine)
Malacoplax californiensis (Lockington, 1877) [*Eucrate*]

Odontoplax Garth, 1986
= *Odontoplax* Garth, 1986 (type species *Odontoplax chacei* Garth, 1986, by original designation; gender feminine)
Odontoplax chacei Garth, 1986

Panoplax Stimpson, 1871
= *Panoplax* Stimpson, 1871 (type species *Panoplax depressa* Stimpson, 1871, by monotypy; gender feminine) [Opinion 85, Direction 37]
Panoplax elata (A. Milne-Edwards, 1880) [*Eucratoplax*]
Panoplax depressa Stimpson, 1871 [Direction 36]
= *Micropanope levimanus* Chace, 1940
Panoplax mundata Glassell, 1935

Prionoplax H. Milne Edwards, 1852
= *Prionoplax* H. Milne Edwards, 1852 (type species *Prionoplax spinicarpus* H. Milne Edwards, 1852, by monotypy; gender feminine) [Opinion 85, Direction 37]
?*Prionoplax atlantica* Kendall, 1891
Prionoplax ciliata Smith, 1870
= ?*Speocarcinus ostrearicola* Rathbun, 1910
= *Cyrtoplax valeriana* Rathbun, 1928
Prionoplax spinicarpus H. Milne Edwards, 1852 [Direction 36]

Robertsella Guinot, 1969
= *Robertsella* Guinot, 1969 (type species *Robertsella mystica* Guinot, 1969, by original designation; gender feminine)
Robertsella mystica Guinot, 1969

Tetraplax Rathbun, 1901
= *Tetraplax* Rathbun, 1901 (type species *Frevillea quadridentata* Rathbun, 1898, by monotypy; gender feminine)
Tetraplax ortrudae Türkay, 1967
Tetraplax quadridentata (Rathbun, 1898) [*Frevillea*]

Thalassoplax Guinot, 1969
= *Thalassoplax* Guinot, 1969 (type species *Thalassoplax angusta* Guinot, 1969, by original designation; gender feminine)
Thalassoplax angusta Guinot, 1969

Subfamily Panopeinae Ortmann, 1893

Panopaeinae Ortmann, 1893
Lophoxanthini Števčić, 2005
Tetraxanthinae Števčić, 2005

Acantholobulus Felder & Martin, 2003
= *Acantholobulus* Felder & Martin, 2003 (type species *Panopeus bermudensis* Benedict & Rathbun, 1891, by original designation; gender masculine)
Acantholobulus bermudensis Benedict & Rathbun, 1891 [*Panopeus*]
= *Panopeus bermudensis* var. *sculptus* Verrill, 1908
= *Panopeus hemphillii* Benedict & Rathbun, 1891
= *Panopeus gatunensis* Abele & Kim, 1989
= *Hexapanopeus heblingi* Rodrigues & de Loyola, 1998
Acantholobulus mirafloresensis (Abele & Kim, 1989) [*Panopeus*]
Acantholobulus pacificus (Edmondson, 1931) [*Panopeus*]
Acantholobulus schmitti (Rathbun, 1930) [*Hexapanopeus*]
=*Panopeus margentus* Williams & Boschi, 1990

Dyspanopeus Martin & Abele, 1986
= *Dyspanopeus* Martin & Abele, 1986 (type species *Panopeus sayi* Smith, 1869, by original designation; gender masculine)
Dyspanopeus sayi (Smith, 1869) [*Panopeus*]

Eurypanopeus A. Milne-Edwards, 1878
= *Eurypanopeus* A. Milne-Edwards, 1878 (type species *Panopeus crenatus* H. Milne Edwards, 1834, subsequent designation by Fowler, 1912; gender masculine)
Eurypanopeus abbreviatus (Stimpson, 1860) [*Panopeus*]
= *Panopeus politus* Smith, 1869
Eurypanopeus ater Rathbun, 1930
Eurypanopeus blanchardi (A. Milne-Edwards, 1881) [*Panopeus*]
Eurypanopeus canalensis Abele & Kim, 1989
Eurypanopeus confragosus Rathbun, 1933
Eurypanopeus crenatus (H. Milne Edwards, 1834) [*Xantho*] {2}
= *Eurypanopeus peruvianus* A. Milne-Edwards, 1880
Eurypanopeus depressus (Smith, 1869) [*Panopeus*]
Eurypanopeus dissimilis (Benedict & Rathbun, 1891) [*Panopeus*]
Eurypanopeus hyperconvexus Garth, 1986
Eurypanopeus ovatus (Benedict & Rathbun, 1891) [*Panopeus*]
Eurypanopeus planissimus (Stimpson, 1860) [*Xantho*]
Eurypanopeus planus (Smith, 1869) [*Panopeus*]
Eurypanopeus transversus (Stimpson, 1860) [*Panopeus*]

Eurytium Stimpson, 1859
= *Eurytium* Stimpson, 1859 (type species *Cancer limosa* Say, 1818, by original designation; gender neuter) [Opinion 85, Direction 37]
Eurytium affine (Streets & Kingsley, 1877) [*Panopeus*]
Eurytium albidigitum Rathbun, 1933
Eurytium limosum (Say, 1818) [*Cancer*] [Direction 36]
Eurytium tristani Rathbun, 1906
= *Panopeus convexus minor* Bott, 1955

Hexapanopeus Rathbun, 1898
= *Hexapanopeus* Rathbun, 1898 (type species *Panopeus angustifrons* Benedict & Rathbun, 1891, by original designation; gender masculine)
Hexapanopeus angustifrons (Benedict & Rathbun, 1891) [*Panopeus*]
Hexapanopeus beebei Garth, 1961
Hexapanopeus caribbaeus (Stimpson, 1871) [*Micropanope*]
Hexapanopeus cartagoensis Garth, 1939
Hexapanopeus costaricensis Garth, 1940
Hexapanopeus nicaraguensis (Rathbun, 1904) [*Lophopanopeus*]
Hexapanopeus orcutti Rathbun, 1930
Hexapanopeus paulensis Rathbun, 1930
Hexapanopeus quinquedentatus Rathbun, 1901
Hexapanopeus rubicundus Rathbun, 1933
Hexapanopeus sinaloensis Rathbun, 1930
= *Hexapanopeus setipalpus* Finnegan, 1931

Lophopanopeus Rathbun, 1898
= *Lophopanopeus* Rathbun, 1898 (type species *Xantho bella* Stimpson, 1860, by original designation; gender masculine) [Opinion 85, Direction 37]
Lophopanopeus bellus (Stimpson, 1860) [*Xantho*] [Direction 36]
= *Xanthodes hemphillii* Lockington, 1877
= *Xantho hemphilliana* Lockington, 1877 (incorrect spelling)
Lophopanopeus diegensis Rathbun, 1900
Lophopanopeus frontalis (Rathbun, 1894) [*Lophozozymus* (*Lophoxanthus*)]
Lophopanopeus heathii Rathbun, 1900
Lophopanopeus leucomanus (Lockington, 1877) [*Xanthodes*]
Lophopanopeus lobipes (A. Milne-Edwards, 1880) [*Neopanope*]
Lophopanopeus lockingtoni Rathbun, 1876
Lophopanopeus maculatus Rathbun, 1898
Lophopanopeus somaterianus Rathbun, 1930

Lophoxanthus A. Milne-Edwards, 1879
= *Lophoxanthus* A. Milne-Edwards, 1879 (type species *Xantho lamellipes* Stimpson, 1860, by monotypy; gender masculine)
Lophoxanthus lamellipes (Stimpson, 1860) [*Xantho*]

Metopocarcinus Stimpson, 1860
= *Metopocarcinus* Stimpson, 1860 (type species *Metopocarcinus truncatus* Stimpson, 1860, by monotypy; gender masculine) [Opinion 85, Direction 37]
Metopocarcinus concavatus Crane, 1947
Metopocarcinus truncatus Stimpson, 1860 [Direction 36]

Neopanope A. Milne-Edwards, 1880
= *Neopanope* A. Milne-Edwards, 1880 (type species *Neopanope pourtalesii* A. Milne-Edwards, 1880, subsequent designation by Fowler, 1912; gender feminine)
Neopanope packardii Kingsley, 1879
= *Neopanope pourtalesii* A. Milne-Edwards, 1880
Neopanope texana (Stimpson, 1859) [*Panopeus*]

Panopeus H. Milne Edwards, 1834
= *Panopeus* H. Milne Edwards, 1834 (type species *Panopeus herbstii* H. Milne Edwards, 1834, subsequent designation by ICZN plenary powers; gender masculine) [Opinion 1282]
Panopeus africanus A. Milne-Edwards, 1867
Panopeus americanus Saussure, 1857
= *Panopeus areolatus* Benedict & Rathbun, 1891
Panopeus austrobesus Williams, 1983
Panopeus boekei Rathbun, 1915
Panopeus chilensis H. Milne Edwards & Lucas, 1843
= *Panopeus validus* Smith, 1869
= ?*Panopeus bradleyi* Smith, 1869
Panopeus convexus A. Milne-Edwards, 1880
Panopeus diversus Rathbun, 1933
Panopeus harttii Smith, 1869
= *Hexapanopeus hirsutus* Boone, 1927
Panopeus herbstii H. Milne Edwards, 1834 [Opinion 1282] {3}
= *Galene hawaiiensis* Dana, 1852
= *Eurypanopeus herbstii* var. *minax* Verrill, 1908
= *Panopeus herbstii* forma *typica* Rathbun, 1930

Panopeus lacustris Desbonne, in Desbonne & Schramm, 1867
= *Panopeus crassus* A. Milne-Edwards, 1880
= *Panopeus herbstii granulosus* A. Milne-Edwards, 1880
= *Eupanopeus herbstii* var. *minax* Verrill, 1908
Panopeus meridionalis Williams, 1983
Panopeus obesus Smith, 1869
Panopeus occidentalis Saussure, 1857
= *Panopeus serratus* Saussure, 1857
Panopeus purpureus Lockington, 1877
Panopeus rugosus A. Milne-Edwards, 1880
Panopeus simpsoni Rathbun, 1930
Panopeus turgidus Rathbun, 1930

Rhithropanopeus Rathbun, 1898
= *Rhithropanopeus* Rathbun, 1898 (type species *Pilumnus harrisii* Gould, 1841, by original designation and monotypy; gender masculine) [Opinion 85, Direction 37]
Rhithropanopeus harrisii (Gould, 1841) [*Pilumnus*] [Direction 36]
= *Panopeus wurdemannii* Gibbes, 1850
= *Rhithropanopeus harrisii tridentatus* Maitland, 1874

Tetraxanthus Rathbun, 1898
= *Tetraxanthus* Rathbun, 1898 (type species *Xanthodes bidentatus* A. Milne-Edwards, 1880, by monotypy; gender masculine) [Opinion 85, Direction 37]
Tetraxanthus bidentatus (A. Milne-Edwards, 1880) [*Xanthodes*] [Direction 36]
Tetraxanthus rathbunae Chace, 1939
Tetraxanthus rugosus Rathbun, 1930

Incertae sedis

"*Panopeus*" *laevis* Dana, 1852

Notes

{1} *Chasmophora* Rathbun, 1914, was described as being close to *Euryplax* (see Rathbun, 1914) although Tesch (1918b) suggested that it was closer to genera like *Speocarcinus*, *Prionoplax* and *Cyrtoplax*. Guinot (1969c: 714, fig. 134) figured its G1 and commented on its affinities, but left its family position unsettled. *Euryplax* is currently in the Euryplacidae, *Speocarcinus* in Xanthidae while *Prionoplax* and *Cyrtoplax* are in Panopeidae. Števčić (2005: 54) established a new subfamily, Chasmophorinae, for the genus and transferred it to the Pseudorhombilidae, although the absence of prominent denticles on the sides of the G1 (cf. Guinot, 1969c: Fig. 134) suggests otherwise. Ng & Castro (2007) provisionally kept it as a genus of Euryplacidae but in view of its stout and relatively short G1 (Guinot, 1969c: Fig. 134), it should also not be retained there. Recently, as part of their revision of the Euryplacidae, Peter Castro and P. K. L. Ng examined specimens of *Chasmophora macrophthalma* (Rathbun, 1898) and it is clearly not a euryplacid. Its male andomen is relatively broad with segments 3–5 fused, and its G1 is relatively stout. In the condition of its male abdomen and gonopods, *Chasmophora* has clear affinities with members of the Eucratopsinae in the Panopeidae, and as such, it is referred there.

{2} Henri Milne Edwards (1834) was the first to name this species *Xantho crenatus*, but the name was incorrectly attributed by most subsequent authors to H. Milne Edwards & Lucas, 1843.

{3} The identity of *Galene hawaiiensis* Dana, 1852, has been problematic. It briefly described and only partially figured from a single specimen from Hawaii, and never since reported. Nothing currently known from Hawaii or neighbouring waters looks even superficially similar. It has been referred to *Ozius* and *Eurycarcinus* by some workers. P. K. L. Ng has examined the problem and believes that *Galene hawaiiensis* is synonymous with the common American shore crab *Panopeus herbstii*. The shape of the carapace and anterolateral margin figured by Dana (1852a) matches *P. herbstii* well. *Panopeus herbstii*, is not native to Hawaii but was introduced from mainland America, and is now relatively common. It seems possible that Dana obtained an alien specimen in Hawaii, or had an American one which had been mislabelled. Similar problems occur with some grapsids he described.

Fig. 144. *Rhithropanopeus harrisii*, an alien in Panama (photo: A. Anker)

Fig. 145. *Dyspanopeus sayi*, Venice; alien invasive from Americas (photo: A. De Angeli)

FAMILY PSEUDORHOMBILIDAE ALCOCK, 1900

Pseudorhombilinae Alcock, 1900
Euphrosynoplacini Števčić, 2005
Chacellini Števčić, 2005
Bathyrhombilini Števčić, 2005
Perunorhombilini Števčić, 2005
Trapezioplacinae Števčić, 2005 {1}

Bathyrhombila Hendrickx, 1998
= *Bathyrhombila* Hendrickx, 1998 (type species *Bathyrhombila furcata* Hendrickx, 1998, by original designation and monotypy; gender feminine)
Bathyrhombila furcata Hendrickx, 1998

Chacellus Guinot, 1969
= *Chacellus* Guinot, 1969 (type species *Chacellus filiformis* Guinot, 1969, by original designation and monotypy; gender masculine)
Chacellus pacificus Hendrickx, 1989
Chacellus filiformis Guinot, 1969

Euphrosynoplax Guinot, 1969
= *Euphrosynoplax* Guinot, 1969 (type species *Euphrosynoplax clausa* Guinot, 1969, by original designation and monotypy; gender feminine)
Euphrosynoplax campechiensis Vázquez-Bader & Gracia, 1991
Euphrosynoplax clausa Guinot, 1969

Nanoplax Guinot, 1967
= *Nanoplax* Guinot, 1967 (type species *Panopeus xanthiformis* A. Milne-Edwards, 1880, by original designation and monotypy; gender feminine)
Nanoplax xanthiformis (A. Milne-Edwards, 1880) [*Panopeus*]

Oediplax Rathbun, 1894
= *Oediplax* Rathbun, 1894 (type species *Oediplax granulatus* Rathbun, 1894, by original designation and monotypy; gender feminine) [Opinion 85, Direction 37]
Oediplax granulata Rathbun, 1894 [Direction 36]

Perunorhombila Števčić, 2005
= *Perunorhombila* Števčić, 2005 (type species *Pilumnoplax nitida* Chace, 1940, by original designation and monotypy; gender feminine)
Perunorhombila nitida (Chace, 1940) [*Pilumnoplax*]

Pseudorhombila H. Milne Edwards, 1837
= *Pseudorhombila* H. Milne Edwards, 1837 (type species *Melia quadridentata* Latreille, 1828, by original designation; gender feminine) [Opinion 85, Direction 37]
Pseudorhombila guinotae Hernandez-Aguilera, 1982
Pseudorhombila octodentata Rathbun, 1906
Pseudorhombila ometlanti Vázquez-Bader & Gracia, 1995
Pseudorhombila quadridentata (Latreille, 1828) [*Melia*] [Direction 36]
Pseudorhombila xanthiformis Garth, 1940
= *Nanoplax garthi* Guinot, 1969 (replacement name for *Pseudorhombila xanthiformis* Garth, 1940, when species transferred to *Nanoplax*) {2}

Trapezioplax Guinot, 1969 {1}
= *Trapezioplax* Guinot, 1969 (type species *Frevillea tridentata* A. Milne-Edwards, 1880, by original designation; gender feminine)
Trapezioplax tridentata (A. Milne-Edwards, 1880) [*Frevillea*]

Notes

{1} Guinot (1969b: 522) commented on the generic placement of *Frevillea tridentata* A. Milne-Edwards, 1880, and suggested that it should be placed in a new genus. She later described *Frevillea tridentata* in more detail and established a new genus, *Trapezioplax*, for it (Guinot, 1969c: 712, Pl. 5 fig. 3, Figs. 128, 129) (see Guinot, 1971: 1082, for addendum on plate and figure numbers). She did not resolve the precise family or subfamily placement of *Trapezioplax* but noted it had several unusual features. Števčić (2005: 46) established a new subfamily, Trapezioplacinae, for the genus, and placed it in the Pseudorhombilidae. Ng & Castro (2007) provisionally kept *Trapezioplax* in the Euryplacidae. As part of a revision of the Euryplacidae, Peter Castro and P. K. L. Ng examined material of this species and are now of the opinion that it does not belong in the Euryplacidae as its male abdomen has segments 3 to 5 fused and the G1 is relatively stout and short. We agree that placing *Trapezioplax* in the Pseudorhombilidae is the best option because although its G1 structure is relatively simple, without any folds, its other features agree (see Hendrickx, 1995b, 1998). However, we do not see the need to recognise a separate subfamily, the Trapezioplacinae Števčić, 2005, for just one genus.

{2} The confusion resulting from the name *Pseudorhombila xanthiformis* Garth, 1940, and the unnecessary replacement name, *Nanoplax garthi* Guinot, 1969, has been discussed in depth by Hendrickx (1995b).

Fig. 146. *Trapezioplax tridentata*, Tortugas, Florida, preserved coloration (photo: P. Ng)

FAMILY XANTHIDAE MACLEAY, 1838

Xanthidae MacLeay, 1838 [Opinion 423]
Trichiidea De Haan, 1839
Polydectinae Dana, 1851
Liagoridés A. Milne-Edwards, 1862 (not in Latin, unavailable name)
Etisinae Ortmann, 1893
Zozymoida Alcock, 1898 (incorrect spelling)
Euxanthoida Alcock, 1898
Actaeinae Alcock, 1898
Xanthodioida Alcock, 1898
Cymoida Alcock, 1898
Melioida Alcock, 1898
Lybioida Serène, 1965
Zalasiinae Serène, 1968
Liomeroida Sakai, 1976
Kraussiinae Ng, 1993
Antrocarcininae Ng & Chia, 1994
Banareiini Števčić, 2005
Coralliopinae Števčić, 2005
Gonopanopeini Števčić, 2005
Ladomedaeidae Števčić, 2005
Liagorini Števčić, 2005
Linnaeoxanthinae Števčić, 2005
Megametopinae Števčić, 2005
Micropanopeini Števčić, 2005
Orphoxanthini Števčić, 2005
Paraxanthini Števčić, 2005
Speocarcinidae Števčić, 2005
Chlorodiellinae Ng & Holthuis, 2007

Remarks. – This is one of the largest families in the Brachyura, despite several modern revisions and re-assessments. Even with the removal of taxa like the Pilumnoidea and Eriphioidea into their own superfamilies, the present Xanthidae is still very species-rich. Even with the excellent work of Serène (1984), we believe that there are still some difficulties in separating several of the xanthid subfamilies, and some are probably artificial or polyphyletic. While the core genera of each subfamily appear distinctive, many of the peripheral genera intergrade and seem almost arbitrarily assigned to their subfamilies. Even subfamilies that seem clearly discrete, such as the Cymoinae, Polydectinae, Kraussiinae, Antrocarcininae and Zalasiinae, often have some genera with characters overlapping with other xanthid groups. For example in the Kraussiinae, *Garthasia* appears to link it to the Xanthinae (Ng, 1993b); and in the Zalasiinae, genera like *Banareia* and *Calvactaea* appear to link to the Actaeinae (Guinot, 1976). The Etisinae and Chlorodiellinae share spoon-tipped fingers and dactylo-propodal locks on their legs, but if this phylogenetically unites them, or instead represents convergence, as the current subfamily recognition reflects, needs further investigation. Subfamilies like the Euxanthinae, Actaeinae, Liomerinae, Xanthinae and Zosiminae are difficult to define as there are so many "exceptions". We do not propose to change the currently accepted view, but we wish to point out some areas where we see particular problems with the present classification. It may prove that the family Xanthidae needs much more subdivision before a classification can be derived that more truly reflects its phylogenetic history, but such action needs a well grounded and wide-ranging review of genera. The definition of these subfamilies merit comment.

Euxanthinae: the major character used to separate the Euxanthinae is that the first anterolateral tooth is separated from the exorbital margin such that the anterolateral margin is continued towards the anterior buccal cavity. This character is strong for the central core of euxanthine genera (like *Carpoporus, Epistocavea, Euxanthus, Glyptoxanthus, Guinotellus, Hepatoporus,* and *Hypocolpus*) but can be difficult to appreciate in some genera such as *Alainodaeus, Medaeus, Medaeops, Paramedaeus*, and *Monodaeus* where it can become quite vague. Davie (1997) commented that *Paraxanthodes* (Xanthinae) is most closely related to *Alainodaeus, Medaeus, Medaeops, Paramedaeus*, and *Monodaeus* and the division that separates this group of euxanthines from the Xanthinae proper is very tenuous. He considered the latter five genera, at least, to form a monophyletic grouping based on the general conformation of the carapace, sternum, male abdomen shape. Davie (1997) also drew comparisons between *Alainodaeus* and other non-euxanthine genera such as *Nanocassiope* Guinot, 1967, and the panopeid genus *Micropanope* Stimpson, 1871, and this helps to reinforce how weakly the Euxanthinae is defined at present. Ng & Clark (1993) discussed the problems of distinguishing between the subfamilies Xanthinae and Euxanthinae when they described two new genera, *Jacforus* and *Danielea*. In establishing the Ladomedaeidae, Števčić (2005) argued that the possession of sutures on all male abdominal segments and having endostomial ridges were strong characters. In all other aspects, *Ladomedaeus* Števčić, 2005, is no more than an unusual *Medaeus*-like taxon (see later comment under the genus and Maniel-Santos & Ng, 2007). More new genera and species of euxanthines have recently been added from the Philippines (Mendoza & Ng, in press).

The strongly differentiated basal tooth on the dactylus of the major chela, is a common character in several euxanthine genera such as *Alainodaeus* Davie, 1993, *Cranaothus* Ng, 1993, *Palatigum* Davie, 1997, *Paramedaeus* Guinot, 1967, *Paraxanthodes* Guinot, 1967, *Medaeops* Guinot, 1967, *Miersiella* Guinot, 1967, and *Monodaeus* Guinot, 1967. This character has not been mentioned before as having potential phylogenetic importance, but Ng (1993a) noted its presence in both *Cranaothus deforgesi* Ng, 1993, and *Paramedaeus noelensis* (Ward, 1934), and suggested that, as in *Calappa*, it may be used to "peel" open gastropods (see Ng & L. W. H. Tan, 1984a, 1985).

Liomerinae: the Liomerinae is also poorly defined. For example Serène (1984: 16) in his key to subfamilies merely uses an overall similarity of carapace shape: "carapace is transversely oval, generally much broader than long, with the dorsal surface convex, smooth, granular or rugose and the regions prominent or hardly indicated" versus "carapace xanthoid-shaped ...". However, given the enormous diversity of carapace shape within the Xanthidae, and even between the subgenera of *Liomera*, this does not seem enough, on its own, to

adequately separate a subfamily. Nevertheless we agree there is a general "liomerid-look" and we merely signal here that it would be far more satisfying if more rigorous characters could be found to separate the subfamily.

Actaeinae: again poorly defined. The genera most closely related to *Actaea* all share a similar look, but some of the peripheral genera could easily be placed within the Xanthinae. There does not seem to be any single apomorphy that separates the Actaeinae from the Xanthinae or Zosiminae. Serène (1984: 16) in his key separates the later two groupings by this combination of characters: "The front is bi- or quadrilobed, sometimes with the submedians large and the laterals distinct. The basal antennal article may or may not embrace the ventral prolongation of the fronto-lateral margin. The regions of the carapace are more feebly granular, never spinosed; the anterolateral margins may or may not be emarginated with more or less prominent teeth or lobes." Individually all of these character states are represented in the Actaeinae. What is known about their larvae also does not help – all indications are that we are dealing with a polyphyletic grouping (see Ng & Clark, 1994). More work is clearly needed to adequately define the Actaeinae.

Xanthinae and Zosiminae: The division of these two subfamilies is "problematic". In studying some xanthines, Ng & Chen (2004: 2356) commented that "The close affinities of *Ovatis* with *Paratergatis* and *Pulcratis* also cast doubt on the validity of the Xanthinae and Zosiminae … *Paratergatis* and *Pulcratis* are currently placed in the Zosiminae. The only character that effectively distinguishes the Xanthinae and Zosiminae at present is whether the ambulatory articles are cristate but this is unlikely to have significant phylogenetic importance. In *Ovatis*, while none of the articles of the ambulatory legs are distinctly cristate, it can be described as weakly so; and those of *Paratergatis* are only weakly cristate. With regards to their general features, *Paratergatis*, *Pulcratis*, *Ovatis* and *Liagore* all appear to be related and as such, their present allocation into two separate subfamilies seems difficult to justify". The larval data suggest the same problems (Ng & Clark, 1998; Clark et al., 2004). In the context of these and many other problems it is premature to recognise more related "grey" subfamilies or tribes (viz. Coralliopinae, Gonopanopeini, Liagorini, Linnaeoxanthinae, Megametopinae, Micropanopeini, Orphoxanthini Paraxanthini) as has been suggested by Števčić (2005). We thus place them in synonymy pending future clarification.

Etisinae, Chlorodiellinae and Cymoinae: these groups have all been treated, at some time, as subfamilies of the Xanthidae, and along with the Trapeziidae, Tetraliidae and Domeciidae (now considered separate families), all share an important apomorphy, viz., the ambulatory legs have a dactylo-propodal articulation formed by a rounded prolongation of the propodal lateral margin sliding against and beneath a projecting button situated proximally on the lateral margin of the dactylus. We consider, however, that this character is probably paraphyletic and has evolved independently in different lineages. The same, or similar, structures are present in other unrelated groups such as in the Pilumnidae, and even the Majidae. The delineation between some Etisinae and Chlorodiellinae (as Chlorodiinae by most authors) is not always clear (see Ng & Yang, 1998; Clark & Ng, 1999), and recent evidence shows that the larvae of representative of both subfamilies are also very similar (P. Clark, pers. comm.), so perhaps it may prove that the Etisinae, Chlorodiellinae and Cymoinae, at least, may form a monophyletic clade which could require separate nomenclatural treatment.

Members of the Kraussinae, Antrocarcininae and Zalasiinae are peculiar, and their relationships within the Xanthidae will need to be re-examined. The family Speocarcinidae Števčić, 2005, placed in the Xanthoidea by Števčić (2005) is here recognised as a separate subfamily in the Xanthidae until its affinities are better understood. Members of this subfamily have traditionally been linked with the Pilumnidae or Goneplacidae, but its relationship is likely to be with the Xanthidae instead.

As has been discussed under the Trapezioidea, we believe a separate superfamily is needed for Trapeziidae, Tetraliidae and Domeciidae, which have been traditionally associated with the Xanthidae or Xanthoidea.

Incertae sedis

Chlorodius congener White, 1847 (nomen nudum)
Xantho dia White, 1847 (nomen nudum)
Xantho peuce White, 1847 (nomen nudum)
Xantho spinigera White, 1847 (nomen nudum)
Atergatis asperimanus White, 1848
Panopeus otagoensis Filhol, 1886
Cancer occultus Herbst, 1783 {1}
Cancer lapideus Herbst, 1785 {1}

Subfamily Actaeinae Alcock, 1898

Actaeinae Alcock, 1898

Actaea De Haan, 1833
  = *Cancer* (*Actaea*) De Haan, 1833 (type species *Cancer granulatus* Audouin, 1826, subsequent designation by Rathbun, 1922, name pre-occupied by *Cancer granulatus* Linnaeus, 1758; next available name *Cancer savignii* H. Milne Edwards, 1834; gender feminine) [Opinion 73, Direction 37]
  = *Anchilops* Gistel, 1848 (unnecessary replacement name for *Cancer* (*Actaea*) De Haan, 1833; gender masculine)
  = *Euxanthodes* Paul'son, 1875 (type species *Euxanthodes granulatus* Paul'son, 1875, by monotypy; gender masculine)
?*Actaea acantha* (H. Milne Edwards, 1834) [*Cancer*]
  = *Actaea spinifera* Kingsley, 1879
Actaea allisoni Garth, 1985
?*Actaea angusta* Rathbun, 1898
Actaea areolata (Dana, 1852) [*Actaeodes*]
  = *Actaea danae* A. Milne-Edwards, 1865
?*Actaea bifrons* Rathbun, 1898
Actaea bocki Odhner, 1925
Actaea calculosa (H. Milne Edwards, 1834) [*Cancer*]
  = ?*Actaea granulata* var. *laevis* A. Milne-Edwards, in Guinot, 1976
  = *Euxanthus tuberculosa* Miers, 1884
Actaea capricornensis Ward, 1933

Actaea carcharias White, 1848
Actaea catalai Guinot, 1976
Actaea flosculata Alcock, 1898
Actaea fragifera (White, 1848) [*Chlorodius*]
Actaea glandifera Rathbun, 1914
Actaea hieroglyphica Odhner, 1925
Actaea hystrix Miers, 1886
Actaea jacquelinae Guinot, 1976
Actaea occidentalis Odhner, 1925
Actaea peronii (H. Milne Edwards, 1834) [*Xantho*]
Actaea perspinosa Borradaile, 1902
Actaea petalifera Odhner, 1925
Actaea picta Zehntner, 1894
Actaea polyacantha (Heller, 1861) [*Chlorodius*]
= *Actaeodius fragifer* Klunzinger, 1913
?*Actaea polydora* (Herbst, 1801) [*Cancer*]
Actaea pura Stimpson, 1858
Actaea sabae Nobili, 1905
Actaea savignii (H. Milne Edwards, 1834) [*Cancer*] [Direction 36]
= *Cancer granulatus* Audouin, 1826 (pre-occupied name)
Actaea semblatae Guinot, 1976
Actaea spinosissima Borradaile, 1902
Actaea spongiosa (Dana, 1852) [*Actaeodes*]
Actaea squamosa Henderson, 1893
Actaea squamulosa Odhner, 1925
Actaea tessellata Pocock, 1890

Actaeodes Dana, 1852
= *Actaeodes* Dana, 1852 (type species *Zozymus tomentosus* H. Milne Edwards, 1834, by original designation; gender masculine)
= *Cycloblepas* Ortmann, 1894 (type species *Cycloblepas semoni* Ortmann, 1894, by original designation; gender masculine)
Actaeodes consobrinus (A. Milne-Edwards, 1873) [*Actoea*]
= *Actaea suffuscula* Rathbun, 1911
Actaeodes hirsutissimus (Rüppell, 1830) [*Xantho*]
Actaeodes mutatus Guinot, 1976
Actaeodes quinquelobatus Garth & Kim, 1983
Actaeodes semoni (Ortmann, 1894) [*Cycloblepas*]
Actaeodes tomentosus (H. Milne Edwards, 1834) [*Zozymus*]

Allactaea Williams, 1974
= *Allactaea* Williams, 1974 (type species *Allactaea lithostrota* Williams, 1974, by original designation; gender feminine)
Allactaea lithostrota Williams, 1974

Epiactaea Serène, 1984
= *Epiactaea* Serène, 1984 (type species *Actaea nodulosa* White, 1848, by original designation; gender feminine)
Epiactaea bullifera (Alcock, 1898) [*Actaea*]
Epiactaea margaritifera (Odhner, 1925) [*Actaea*]
= *Actaea nodulosa* Henderson, 1893
Epiactaea nodulosa (White, 1848) [*Cancer*]
= *Actaea pisigera* Nobili, 1905

Epiactaeodes Serène, 1984
= *Epiactaeodes* Serène, 1984 (type species *Actaea tesselatus* Pocock, 1890, by original designation; gender masculine)
Epiactaeodes pictus (Zehntner, 1894) [*Actaea*]
Epiactaeodes tesselatus (Pocock, 1890) [*Actaea*]

Forestia Guinot, 1976
= *Forestia* Guinot, 1976 (type species *Xantho depressus* White, 1848, by original designation; gender feminine)
Forestia abrolhensis (Montgomery, 1931) [*Actaea*]
Forestia depressa (White, 1848) [*Xantho*]
= *Pilumnus granulatus* Krauss, 1843
= *Pilumnus planus* Edmondson, 1931
Forestia pascua Garth, 1985
Forestia scabra (Odhner, 1925) [*Actaea*]

Gaillardiellus Guinot, 1976
= *Gaillardiellus* Guinot, 1976 (type species *Cancer* (*Aegle*) *rüppellii* Krauss, 1843, by original designation; gender masculine)
Gaillardiellus alphonsi (Nobili, 1905) [*Actaea*]
Gaillardiellus bathus Davie, 1997
Gaillardiellus orientalis (Odhner, 1925) [*Actaea*]
Gaillardiellus rueppelli (Krauss, 1843) [*Cancer* (*Aegle*)]
= *Aegle rugata* White, 1848
= *Actaea pilosa* Stimpson, 1858
Gaillardiellus superciliaris (Odhner, 1925) [*Actaea*]

Heteractaea Lockington, 1877
= *Heteractaea* Lockington, 1877 (type species *Heteractaea pilosus* Lockington, 1877, by monotypy; gender feminine)
Heteractaea ceratopus (Stimpson, 1860) [*Pilumnus*]
Heteractaea lunata (Lucas, in H. Milne Edwards & Lucas, 1844) [*Pilumnus*] {2}
= *Heteractaea pilosus* Lockington, 1877
Heteractaea peterseni Garth, 1940

Lobiactaea Sakai, 1983
= *Lobiactaea* Sakai, 1983 (type species *Actaea lobipes* Odhner, 1925, by original designation; gender feminine)
Lobiactaea lobipes (Odhner, 1925) [*Actaea*]

Meractaea Serène, 1984
= *Meractaea* Serène, 1984 (type species *Meractaea brucei* Serène, 1984, by monotypy; gender feminine)
Meractaea brucei Serène, 1984
Meractaea multidentata Davie, 1997
Meractaea tafai Davie, 1992

Novactaea Guinot, 1976
= *Novactaea* Guinot, 1976 (type species *Novactaea bella* Guinot, 1976, by original designation; gender feminine)
Novactaea bella Guinot, 1976
Novactaea michaelseni (Odhner, 1925) [*Actaea*]
?*Novactaea modesta* (De Man, 1888) [*Actaeodes*]
Novactaea pulchella (A. Milne-Edwards, 1865) [*Actaea*]

Odhneria Sakai, 1983
= *Odhneria* Sakai, 1983 (type species *Odhneria acutidens* Sakai, 1983, by original designation; gender feminine)
Odhneria acutidens Sakai, 1983
Odhneria echinus (Alcock, 1898) [*Actaea*]

Paractaea Guinot, 1969
= *Paractaea* Guinot, 1969 (type species *Xantho rufopunctatus* H. Milne Edwards, 1834, by original designation; gender feminine)
Paractaea excentrica Guinot, 1969
Paractaea garretti (Rathbun, 1906) [*Actaea*]
Paractaea indica Deb, 1985
Paractaea margaritaria (A. Milne-Edwards, 1868) [*Actaea*]
Paractaea monodi Guinot, 1969
Paractaea nodosa (Stimpson, 1860) [*Actaea*]
Paractaea rebieri Guinot, 1969
Paractaea retusa (Nobili, 1905) [*Actaea*]
Paractaea retusa forma *hippocrepica* Guinot, 1969 (unavailable name)
Paractaea rufopunctata rufopunctata (H. Milne Edwards, 1834) [*Xantho*]
Paractaea rufopunctata africana Guinot, 1976
= *Paractaea rufopunctata* forma *africana* Guinot, 1969 (unavailable name) {3}

Paractaea rufopunctata forma *frontalis* Serène, 1984 (unavailable name) {3}
Paractaea rufopunctata forma *illusoria* Guinot, 1969 (unavailable name) {3}
Paractaea rufopunctata forma *intermedia* Guinot, 1969 (unavailable name) {3}
Paractaea rufopunctata plumosa Guinot, in Sakai, 1976
= *Paractaea rufopunctata* forma *plumosa* Guinot, 1969 (unavailable name) {3}
Paractaea rufopunctata forma *primarathbunae* Guinot, 1969 (unavailable name) {3}
Paractaea rufopunctata forma *sanctaeluciae* Serène, 1984 (unavailable name) {3}
Paractaea rufopunctata forma *tertiarathbunae* Guinot, 1969 (unavailable name) {3}
Paractaea rufopunctata forma *waltersi* Serène, 1984 (unavailable name) {3}
Paractaea philippinensis (Ward, 1942) [*Actaea*]
Paractaea secundarathbunae Guinot, 1969
Paractaea sulcata (Stimpson, 1860) [*Actaea*]
Paractaea tumulosa (Odhner, 1925) [*Actaea*]
Paractaea typica Deb, 1989

Paractaeopsis Serène, 1984
= *Paractaeopsis* Serène, 1984 (type species *Actaea quadriareolata* Takeda & Miyake, 1968, by original designation; gender feminine)
Paractaeopsis quadriareolata (Takeda & Miyake, 1968) [*Actaea*]

Platyactaea Guinot, 1967
= *Iphimedia* Duchassaing, in A. Milne-Edwards, 1866 (type species *Iphimedia sulcata* Duchassaing, in A. Milne-Edwards, 1866, by monotypy; junior homonym of *Iphimedia* Rathke, 1843 [Amphipoda]; gender feminine)
= *Platyactaea* Guinot, 1967 (type species *Actaea dovii* Stimpson, 1871, by original designation; gender feminine)
Platyactaea dovii (Stimpson, 1871) [*Actaea*]
Platyactaea setigera (H. Milne Edwards, 1834) [*Xantho*]
= *Iphimedia sulcata* Duchassaing, in A. Milne-Edwards, 1866 [nomen nudum]
= *Actaea setigera* A. Milne-Edwards, 1865

Psaumis Kossmann, 1877
= *Psaumis* Kossmann, 1877 (type species *Cancer fossulatus* Girard, 1859, by original designation; gender feminine)
Psaumis cavipes (Dana, 1852) [*Actaeodes*]
= *Actaea cellulosa* Dana, 1852
= *Actaea schmardae* Heller, 1861
= *Glyptoxanthus cymbifer* Rathbun, 1914
Psaumis fossulata (Girard, 1859) [*Cancer*]

Pseudactaea Serène, 1962
= *Pseudactea* Serène, 1962 (type species *Lophactaea multicristata* Zehntner, 1894, by original designation; gender feminine)
= *Pseudactaea* Serène, 1968 (justified emendation following Article 33.2.3.1 of Code) {4}
Pseudactea corallina (Alcock, 1898) [*Lophactaea*]
Pseudactea multiareolata Takeda & Marumura, 2002
Pseudactea multicristata (Zehntner, 1894) [*Lophactaea*]

Pseudoliomera Odhner, 1925
= *Pseudoliomera* Odhner, 1925 (type species *Liomera granosimana* A. Milne-Edwards, 1865, by original designation; gender feminine)
Pseudoliomera granosimana (A. Milne-Edwards, 1865) [*Liomera*]
= *Pseudoliomera natalensis* Ward, 1934
Pseudoliomera helleri (A. Milne-Edwards, 1865) [*Actaea*]
Pseudoliomera lata (Borradaile, 1902) [*Actaea*]
Pseudoliomera neospeciosa (Deb, 1989) [*Paractaea*]
Pseudoliomera paraspeciosa (Ward, 1941) [*Actaea*]
Pseudoliomera remota (Rathbun, 1907) [*Actaea*]
= *Actaea nana* Klunzinger, 1913
Pseudoliomera ruppellioides (Odhner, 1925) [*Actaea*]
Pseudoliomera speciosa (Dana, 1852) [*Actaeodes*]
= *Actaeodes nodipes* Heller, 1861
= *Psaumis glabra* Kossmann, 1877
Pseudoliomera variolosa (Borradaile, 1902) [*Actaea*]
Pseudoliomera violacea (A. Milne-Edwards, 1873) [*Lophactaea*]

Rata Davie, 1992
= *Rata* Davie, 1992 (type species *Rata tuamotense* Davie, 1992, by original designation; gender neuter)
Rata chalcal Davie, 1997
Rata tuamotense Davie, 1992

Serenius Guinot, 1976
= *Serenius* Guinot, 1976 (type species *Zozymus pilosus* A. Milne-Edwards, 1867, by original designation; gender masculine)
Serenius andamanicus Deb, 1985
Serenius ceylonicus (Laurie, 1906) [*Zozymus*]
Serenius demani (Odhner, 1925) [*Zozymus*]
Serenius gemmula (Dana, 1852) [*Zozymus*]
Serenius kuekenthali (De Man, 1902) [*Zozymus*]
Serenius pilosus (A. Milne-Edwards, 1867) [*Zozymus*]

Incertae sedis

Cancer nodulosus Fabricius, 1781 {5}

Subfamily Antrocarcininae Ng & Chia, 1994

Antrocarcininae Ng & Chia, 1994

Antrocarcinus Ng & Chia, 1994
= *Antrocarcinus* Ng & Chia, 1994 (type species *Antrocarcinus petrosus* Ng & Chia, 1994, by original designation; gender masculine)
Antrocarcinus petrosus Ng & Chia, 1994

Cyrtocarcinus Ng & Chia, 1994
= *Cyrtocarcinus* Ng & Chia, 1994 (type species *Harrovia truncata* Rathbun, 1906, by original designation; gender masculine)
Cyrtocarcinus truncatus (Rathbun, 1906) [*Harrovia*]

Glyptocarcinus Takeda, 1973
= *Glyptocarcinus* Takeda, 1973 (type species *Glyptocarcinus lophopus* Takeda, 1973, by original designation; gender masculine)
Glyptocarcinus lophopus Takeda, 1973
Glyptocarcinus politus Ng & Chia, 1994

Subfamily Chlorodiellinae Ng & Holthuis, 2007 {6}

Chlorodiella Rathbun, 1897
= *Chlorodiella* Rathbun, 1897 (originally intended as replacement name for *Chlorodius* H. Milne Edwards, 1834; suppressed as such and recognised as valid genus by ICZN (pending); type species to be *Cancer niger* Forskål, 1775, subsequent designation by ICZN (pending); gender feminine)
Chlorodiella barbata (Borradaile, 1900) [*Chlorodius*]

Chlorodiella corallicola Miyake & Takeda, 1968
Chlorodiella crispipleopa Dai, Yang, Song & Chen, 1986
Chlorodiella cytherea (Dana, 1852) [*Chlorodius*]
= *Pilodius martensis* Nobili, 1905
Chlorodiella davaoensis Ward, 1941
Chlorodiella laevissima (Dana, 1852) [*Chlorodius*]
= ?*Menippe martensi* Krauss, 1843
Chlorodiella longimana (H. Milne Edwards, 1834) [*Chlorodius*]
Chlorodiella nigra (Forskål, 1775) [*Cancer*]
= *Cancer clymene* Herbst, 1801
= *Chlorodius nebulosus* Dana, 1852
= *Chlorodius depressus* Heller, 1861
= ?*Chlorodius hirtipes* White, 1848
Chlorodiella ohshimai Miyake & Takeda, 1967
?*Chlorodiella quadrilobata* Dai, Cai & Yang, 1996
Chlorodiella spinimera Dai, Cai & Yang, 1996
Chlorodiella xishaensis Chen & Lan, 1978

Cyclodius Dana, 1851
= *Cyclodius* Dana, 1851 (type species *Cyclodius ornatus* Dana, 1852, subsequent designation by Rathbun, 1922; gender masculine) [Opinion 73, Direction 37]
= *Phymodius* A. Milne-Edwards, 1863 (type species *Chlorodius ungulatus* H. Milne Edwards, 1834, subsequent designation by Rathbun (1930); gender masculine)
Cyclodius drachi Guinot, 1964 [*Phymodius*]
Cyclodius granulatus (Targioni-Tozzetti, 1877) [*Pilodius*]
= *Chlorodopsis arabicus* Laurie, 1915
= *Chlorodopsis inoequalis* Klunzinger, 1913
Cyclodius granulosus De Man, 1888
Cyclodius maculatus (Stimpson, 1860) [*Chlorodius*]
Cyclodius obscurus (Hombron & Jacquinot, 1846) [*Chlorodius*]
= *Chlorodius monticulosus* Dana, 1852
= *Cyclodius ornatus* Dana, 1852 [Direction 36]
Cyclodius nitidus (Dana, 1852) [*Pilodius*]
= *Chlorodius sculptus* A. Milne-Edwards, 1873
Cyclodius perlatus Nobili, 1905 [*Phymodius*]
Cyclodius ungulatus (H. Milne Edwards, 1834) [*Chlorodius*]
= *Cyclodius gracilis* Dana, 1852

Garthiella Titgen, 1986
= *Garthiella* Titgen, 1986 (type species *Chlorodopsis aberrans* Rathbun, 1906, by original designation; gender feminine)
Garthiella aberrans (Rathbun, 1906) [*Chlorodopsis*]

Liocarpilodes Klunzinger, 1913
= *Liocarpilodes* Klunzinger, 1913 (type species *Actaeodes integerrimus* Dana, 1852, by monotypy; gender masculine)
Liocarpilodes armiger (Nobili, 1905) [*Pilodius*]
Liocarpilodes biunguis (Rathbun, 1906) [*Xanthodius*]
Liocarpilodes harmsi (Balss, 1934) [*Pilodius*]
= *Chlorodopsis natalensis* Ward, 1934
Liocarpilodes integerrimus (Dana, 1852) [*Actaeodes*]
= *Pseudozius coralliophilus* Borradaile, 1902
= *Chlorodiella asper* Edmondson, 1925
Liocarpilodes pacificus Balss, 1938

Pilodius Dana, 1851
= *Pilodius* Dana, 1851 (type species *Pilodius pubescens* Dana, 1852, subsequent designation by Serène, 1984; gender masculine) {7}
= *Chlorodopsis* A. Milne-Edwards, 1873 (type species *Chlorodopsis melanochirus* A. Milne-Edwards, 1873, subsequent designation by Rathbun, 1922; gender feminine) [Opinion 73, Direction 37]
Pilodius areolatus (H. Milne Edwards, 1834) [*Chlorodius*]
= *Chlorodius perlatus* MacLeay, 1838
= *Xantho dehaani* Krauss, 1843
= *Etisodes caelatus* Dana, 1852
= *Chlorodopsis areolata* var. *brandonensis* Ward, 1942
= *Actaeodes affinis* Dana, 1852
Pilodius cephalalgicus Clark & Galil, 1993
Pilodius consors Clark & Galil, 1993
Pilodius flavus Rathbun, 1894
= *Chlorodopsis melanospinis* Rathbun, 1911
= *Chlorodopsis hawaiiensis* Edmondson, 1962
Pilodius granulatus Stimpson, 1858
Pilodius maotieni Serène, 1971
Pilodius miersi (Ward, 1936) [*Chlorodopsis*]
= *Pilodius luomi* Serène, 1971
Pilodius moranti Clark & Galil, 1993
Pilodius nigrocrinitus Stimpson, 1859
= *Chlorodopsis melanochirus* A. Milne-Edwards, 1873 [Direction 36]
Pilodius paumotensis Rathbun, 1907
= *Chlorodopsis oahuensis* Edmondson, 1962
Pilodius philippinensis (Ward, 1941) [*Chlorodopsis*]
= *Pilodius serenei* Takeda & Miyake, 1968
Pilodius pilumnoides (White, 1848) [*Chlorodius*]
= *Chlorodopsis* (*Cyclodius*) *palaoensis* Sakai, 1936
Pilodius pubescens Dana, 1852
= *Pilodius melanodactylus* A. Milne-Edwards, 1873
Pilodius pugil Dana, 1852
= *Pilumnus globosus* Boone, 1934
Pilodius scabriculus Dana, 1852
= *Chlorodopsis venusta* Rathbun, 1907
= *Chlorodopsis natalis* Serène, 1984
Pilodius spinipes Heller, 1861
= ?*Cancer eurynome* Herbst, 1801
= *Chlorodopsis woodmasoni* Alcock, 1898
"*Pilodius*" *kauaiensis* Edmondson, 1962 {8}

Sulcodius Clark & Ng, 1999
= *Sulcodius* Clark & Ng, 1999 (type species *Chlorodius miliaris* A. Milne-Edwards, 1873, by original designation; gender masculine)
Sulcodius deflexus (Dana, 1852) [*Etisus*]
= *Chlorodius miliaris* A. Milne-Edwards, 1873 {9}

Tweedieia Ward, 1934
= *Tweedieia* Ward, 1934 (type species *Tweedieia noelensis* Ward, 1934, by original designation; gender feminine)
Tweedieia brevidactyla Dai & Yang, 1998
Tweedieia laysani (Rathbun, 1906) [*Phymodius*]
Tweedieia odhneri (Gordon, 1934) [*Phymodius*]
= *Tweedieia noelensis* Ward, 1934

Vellodius Ng & Yang, 1998
= *Vellodius* Ng & Yang, 1998 (type species *Pilodius etisoides* Takeda & Miyake, 1968, by original designation; gender masculine)
Vellodius etisoides (Takeda & Miyake, 1968) [*Pilodius*]

Subfamily Cymoinae Alcock, 1898

Cymoida Alcock, 1898

Cymo De Haan, 1833
= *Cymo* De Haan, 1833 (type species *Pilumnus andreossyi* Audouin, 1826, by monotypy; gender masculine) [Opinion 73, Direction 37]
Cymo andreossyi (Audouin, 1826) [*Pilumnus*] [Direction 36]
= *Cymo andreossyi maculata* Klunzinger, 1913

Cymo barunae Ho & Ng, 2005
Cymo cerasma Morgan, 1990
Cymo deplanatus A. Milne-Edwards, 1873
Cymo lanatopodus Galil & Vannini, 1990
Cymo melanodactylus Dana, 1852
= *Cancer* (*Cymo*) *meladactylus* De Haan, 1833 (nomen nudum)
= *Cancer* (*Cymo*) *meladactylus* Herklots, 1861 (nomen nudum)
= *Cymo melanodactylus saviiensis* Ward, 1939
Cymo quadrilobatus Miers, 1884
Cymo tuberculatus Ortmann, 1893

Subfamily Etisinae Ortmann, 1893

Etisinae Ortmann, 1893

Etisus H. Milne Edwards, 1834
= *Etisus* H. Milne Edwards, 1834 (type species *Cancer dentatus* Herbst, 1785, subsequent designation by Glaessner, 1929; gender masculine)
= *Etisodes* Dana, 1852 (type species *Etisodes frontalis* Dana, 1852, by monotypy; gender masculine)
Etisus albus (Ward, 1934) [*Etisodes*]
Etisus anaglyptus H. Milne Edwards, 1834
Etisus armatus (Ward, 1942) [*Etisodes*]
Etisus australis (Ward, 1936) [*Etisodes*]
Etisus bargibanti Crosnier, 1987
Etisus bifrontalis (Edmondson, 1935) [*Etisodes*]
Etisus bulejiensis Tirmizi & Ghani, 1988
Etisus demani Odhner, 1925
= *Chlorodopsis frontalis* Borradaile, 1902
= ?*Leptodius molokaiensis* Rathbun, 1906
Etisus dentatus (Herbst, 1785) [*Cancer*]
Etisus electra (Herbst, 1801) [*Cancer*]
= *Cancer metis* Herbst, 1801
= *Etisus rugosus* Hombron & Jacquinot, 1846
= *Etisodes sculptilis* Heller, 1861
= *Chlorodius samoaensis* Miers, 1875
= *Actaeodes frontalis* Paul'son, 1875
= *Chlorodius dentifrons* Stimpson, 1858
Etisus frontalis (Dana, 1852) [*Etisodes*]
Etisus godeffroyi (A. Milne-Edwards, 1873) [*Cycloxanthus*]
Etisus laboutei Crosnier, 1987
Etisus laevimanus Randall, 1840
= *Chlorodopsis espinosus* Borradaile, 1902
= *Etisus macrodactylus* Lucas, in Jacquinot & Lucas, 1853
= *Etisus macrodactylus* Bianconi, 1851
= *Etisus convexus* Stimpson, 1858
= *Etisus maculatus* Heller, 1861
Etisus maculatus (Stimpson, 1860) (American)
Etisus odhneri Takeda, 1971
Etisus paulsonii (Klunzinger, 1913) [*Chlorodopsis*]
Etisus punctatus Hombron & Jacquinot, 1846
Etisus rhynchophorus A. Milne-Edwards, 1873
Etisus sakaii Takeda & Miyake, 1968
Etisus splendidus Rathbun, 1906
Etisus utilis Jacquinot, in Jacquinot & Lucas, 1853
Etisus villosus Clark & Galil, 1995
Etisus zehntneri Serène, 1980

Paretisus Ward, 1933
= *Paretisus* Ward, 1933 (type species *Paretisus globulus* Ward, 1933, by monotypy; gender masculine)
Paretisus globulus Ward, 1933

Incertae sedis

Etisus occidentalis White, 1847 (nomen nudum)
Etisus phoebe White, 1847 (nomen nudum)

Subfamily Euxanthinae Alcock, 1898

Euxanthoida Alcock, 1898
Ladomedaeidae Števčić, 2005

Alainodaeus Davie, 1992
= *Alainodaeus* Davie, 1992 (type species *Alainodaeus akiaki* Davie, 1992, by original designation; gender masculine)
Alainodaeus akiaki Davie, 1992
Alainodaeus alis Davie, 1997
Alainodaeus nuku Davie, 1997
Alainodaeus rimatara Davie, 1992

Batodaeus Vázquez-Bader & Gracia, 2005
= *Batodaeus* Vázquez-Bader & Gracia, 2005 (type species *Batodaeus adanad* Vázquez-Bader & Gracia, 2005, by monotypy; gender masculine)
Batodaeus adanad Vázquez-Bader & Gracia, 2005

Carpoporus Stimpson, 1871
= *Carpoporus* Stimpson, 1871 (type species *Carpoporus papulosus* Stimpson, 1871, by monotypy; gender masculine) [Opinion 73]
Carpoporus papulosus Stimpson, 1871 [Direction 36]

Cranaothus Ng, 1993
= *Cranaothus* Ng, 1993 (type species *Cranaothus deforgesi* Ng, 1993, by original designation; gender masculine)
Cranaothus deforgesi Ng, 1993

Crosnierius Serène & Vadon, 1981
= *Crosnierius* Serène & Vadon, 1981 (type species *Crosnierius carinatus* Serène & Vadon, 1981, by original designation; gender masculine)
Crosnierius carinatus Serène & Vadon, 1981
Crosnierius gracilipes Ng & Chen, 2005

Danielea Ng & Clark, 2003
= *Danielea* Ng & Clark, 2003 (type species *Medaeus noelensis* Ward, 1942, by original designation; gender feminine)
Danielea noelensis (Ward, 1942) [*Medaeus*]

Edwardsium Guinot, 1967 {10}
= *Edwardsium* Guinot, 1967 (type species *Cancer spinimanus* H. Milne Edwards, 1834, by original designation; gender neuter)
Edwardsium spinimanum (H. Milne Edwards, 1834) [*Cancer*]
= *Cancer miniatus* Desbonne, in Desbonne & Schramm, 1867
Edwardsium lobipes (Rathbun, 1898) [*Medaeus*]
Edwardsium crosslandi (Finnegan, 1931) [*Actaea*]
Edwardsium crockeri (Glassell, 1936) [*Actaea*]

Epistocavea Davie, 1992
= *Epistocavea* Davie, 1992 (type species *Epistocavea mururoa* Davie, 1992, by original designation; gender feminine)
Epistocavea mururoa Davie, 1992

Euxanthus Dana, 1851
= *Euxanthus* Dana, 1851 (type species *Euxanthus sculptilis* Dana, 1852, subsequent designation by Guinot-Dumortier, 1960; gender masculine)
= *Melissa* Strahl, 1861 (type species *Cancer melissa* Herbst, 1801, by tautonomy; gender feminine)
= *Euxanthopsis* Rathbun, 1897 (unnecessary replacement name for *Euxanthus* Dana, 1851; gender feminine)
= *Euryetisus* Cano, 1889 (type species *Euryetisus deplanatus* Cano, 1889, subsequent designation under Article 68.2.1, gender masculine) [Opinion 85, Direction 37]

Euxanthus boletarius (Rathbun, 1911) [*Actaea*]
Euxanthus exsculptus (Herbst, 1790) [*Cancer*]
= *Cancer melissa* Herbst, 1801
= *Cancer mamillatus* H. Milne Edwards, 1834
= *Euxanthus nitidus* Dana, 1852
= *Euxanthus punctatus* A. Milne-Edwards, 1865
= *Euryetisus deplanatus* Cano, 1889 [Direction 36]
Euxanthus herdmani Laurie, 1906
Euxanthus huonii (Hombron & Jacquinot, 1846) [*Cancer*]
= *Euxanthus sculptilis* Dana, 1852
Euxanthus ruali Guinot, 1971
Euxanthus rugosus Miers, 1884

Glyptoxanthus A. Milne-Edwards, 1879
= *Glyptoxanthus* A. Milne-Edwards, 1879 (type species *Actaea erosa* Stimpson, 1859, subsequent designation by Rathbun, 1930; gender masculine)
Glyptoxanthus angolensis (Brito Capello, 1866) [*Actaea*]
Glyptoxanthus cavernosus (A. Milne-Edwards, 1878) [*Actaea*]
Glyptoxanthus corrosus (A. Milne-Edwards, 1869) [*Xantho*]
Glyptoxanthus erosus (Stimpson, 1859) [*Actaea*]
Glyptoxanthus hancocki Garth, 1939
Glyptoxanthus labyrinthicus (Stimpson, 1860) [*Actaea*]
Glyptoxanthus meandricus (Klunzinger, 1913) [*Actaea*]
= *Glyptoxanthus felipensis* Rathbun, 1933
Glyptoxanthus vermiculatus (Lamarck, 1818) [*Cancer*]

Guinotellus Serène, 1971
= *Guinotellus* Serène, 1971 (type species *Guinotellus melvillensis* Serène, 1971, by original designation; gender masculine)
Guinotellus melvillensis Serène, 1971 {11}

Hepatoporus Serène, 1984
= *Hepatoporus* Serène, 1984 (type species *Carpoporus orientalis* Sakai, 1935, by original designation; gender masculine)
= *Carpoporoides* Takeda & Nagai, 1986 (type species *Carpoporus orientalis* Sakai, 1935, by original designation; gender feminine)
Hepatoporus asper Davie & Turner, 1994
Hepatoporus distinctus (Takeda & Nagai, 1986) [*Carpoporoides*]
Hepatoporus guinotae (Zarenkov, 1971) [*Carpoporus*]
Hepatoporus orientalis (Sakai, 1935) [*Carpoporus*]

Hypocolpus Rathbun, 1897
= *Hypocoelus* Heller, 1861 (type species *Cancer sculptus* H. Milne Edwards, 1834, by monotypy; name pre-occupied by *Hypocoelus* Latreille, 1834 [Coleoptera]; gender masculine) {12}
= *Hypocolpus* Rathbun, 1897 (replacement name for *Hypocoelus* Heller, 1861; gender masculine)
Hypocolpus abbotti (Rathbun, 1894) [*Hypocoelus*]
Hypocolpus diverticulatus (Strahl, 1861) [*Melissa*]
= *Cancer sculptus* H. Milne Edwards, 1834 (pre-occupied name)
Hypocolpus haanii Rathbun, 1909
= *Cancer* (*Xantho*) *granulatus* De Haan, 1837 (pre-occupied name)
Hypocolpus guinotae Vannini, 1982
Hypocolpus kurodai Takeda, 1980
Hypocolpus mararae Crosnier, 1991
Hypocolpus pararugosus Crosnier, 1997
Hypocolpus pardii Galil & Vannini, 1990
Hypocolpus perfectus Guinot-Dumortier, 1960
Hypocolpus maculatus (Haswell, 1882) [*Euxanthus*]
= *Hypocoelus punctatus* Miers, 1884
Hypocolpus rugosus (Henderson, 1893) [*Hypocoelus*]
Hypocolpus stenocoelus Guinot–Dumortier, 1960

Ladomedaeus Števčić, 2005
= *Ladomedaeus* Števčić, 2005 (type species *Medaeus serratus* Sakai, 1965, by original designation; gender masculine)
Ladomedaeus serratus (Sakai, 1965) [*Medaeus*] {13}
Ladomedaeus fungillus Manuel-Santos & Ng, 2007

Lipaesthesius Rathbun, 1898
= *Lipaesthesius* Rathbun, 1898 (type species *Lipaesthesius leeanus* Rathbun, 1898, by original designation; gender masculine) [Opinion 85, Direction 37]
Lipaesthesius leeanus Rathbun, 1898 [Direction 36]
= *Medaeus rugosus* Boone, 1927

Medaeops Guinot, 1967 {14}
= *Medaeops* Guinot, 1967 (type species *Leptodius granulosus* Haswell, 1882, by original designation; gender masculine)
Medaeops edwardsi Guinot, 1967
Medaeops gemini Davie, 1997
Medaeops granulosus (Haswell, 1882) [*Leptodius*]
= *Xantho macgillivrayi* Miers, 1884
= *Lophopanopeus japonicus* Rathbun, 1898
= *Lophoxanthus erosus* Parisi, 1916
Medaeops merodontos Davie, 1997
Medaeops neglectus (Balss, 1922) [*Xantho*]
Medaeops serenei Ng & McLay, 2007

Medaeus Dana, 1851
= *Medaeus* Dana, 1851 (type species *Medaeus ornatus* Dana, 1852, by monotypy; gender masculine) [Opinion 712]
= *Stimpsonia* Števčić, 2005 (type species *Pilumnus spinulifer* Rathbun, 1898, by original designation; gender feminine) (unavailable name) {15}
Medaeus aztec Davie, 1997
Medaeus elegans A. Milne-Edwards, 1867
Medaeus grandis Davie, 1992
Medaeus ornatus Dana, 1852 [Opinion 712]
?*Medaeus pelagius* (Glassell, 1936) [*Pilumnus*]
?*Medaeus spinulifer* (Rathbun, 1898) [*Pilumnus*]

Miersiella Guinot, 1967
= *Miersiella* Guinot, 1967 (type species *Medaeus haswelli* Miers, 1886, by original designation; gender feminine)
Miersiella cavifrons Takeda, 1989
Miersiella haswelli (Miers, 1886) [*Medaeus*]

Monodaeus Guinot, 1967
= *Monodaeus* Guinot, 1967 (type species *Xantho couchii* Couch, 1851, by original designation; gender masculine)
Monodaeus couchii (Couch, 1851) [*Xantho*]
= *Xantho tuberculatus* Bell, 1852
Monodaeus cristulatus Guinot & Macpherson, 1988
Monodaeus arnaudi Guinot & Macpherson, 1988
Monodaeus guinotae Forest, 1976
Monodaeus pettersoni Garth, 1985
Monodaeus rectifrons (Crosnier, 1967) [*Medaeus*]
Monodaeus rouxi (Capart, 1951) [*Medaeus*]
Monodaeus tuberculidens (Rathbun, 1911) [*Xanthias*]

Olenothus Ng, 2002
= *Olenothus* Ng, 2002 (type species *Olenothus uogi* Ng, 2002, by original designation; gender masculine)
Olenothus uogi Ng, 2002

Palatigum Davie, 1997
= *Palatigum* Davie, 1997 (type species *Palatigum trichostoma* Davie, 1997, by original designation; gender neuter)
Palatigum trichostoma Davie, 1997

Paramedaeus Guinot, 1967
= *Paramedaeus* Guinot, 1967 (type species *Medaeus simplex* A. Milne-Edwards, 1873, by original designation; gender masculine)
Paramedaeus globosus Serène & Vadon, 1981
Paramedaeus megagomphios Davie, 1997
Paramedaeus octogesimus Ng & Clark, 2002
Paramedaeus planifrons (Sakai, 1965) [*Medaeus*]
Paramedaeus simplex (A. Milne-Edwards, 1873) [*Medaeus*]

Pleurocolpus Crosnier, 1995
= *Pleurocolpus* Crosnier, 1995 (type species *Pleurocolpus boileaui* Crosnier, 1995, by original designation; gender masculine)
Pleurocolpus boileaui Crosnier, 1995

Pseudomedaeus Guinot, 1968
= *Pseudomedaeus* Guinot, 1968 (type species *Medaeus africanus* Monod, 1956, by original designation; gender masculine)
Pseudomedaeus africanus (Monod, 1956) [*Medaeus*]
Pseudomedaeus agassizi (A. Milne-Edwards, 1880) [*Leptodius*]
= *Medaeus latifrons* Chace, 1942
Pseudomedaeus distinctus (Rathbun, 1898) [*Lophopanopeus*]

Incertae sedis

Euxanthus rugulosus Heller, 1865

Subfamily Kraussiinae Ng, 1993

Kraussiinae Ng, 1993

Garthasia Ng, 1993
= *Garthasia* Ng, 1993 (type species *Kraussia americana* Garth, 1939, by original designation; gender feminine)
Garthasia americana (Garth, 1939) [*Kraussia*]

Kraussia Dana, 1852
= *Kraussia* Dana, 1852 (type species *Platyonichus rugulosa* Krauss, 1843, by monotypy; gender feminine)
Kraussia rugulosa (Krauss, 1843) [*Platyonichus*]
= *Trichocera porcellana* White, 1848
= *Kraussia proporcellana* Ward, 1934

Palapedia Ng, 1993
= *Palapedia* Ng, 1993 (type species *Palapedia valentini* Ng, 1993, by original designation; gender feminine)
Palapedia bongensis (Serène, 1972) [*Kraussia*]
Palapedia hendersoni (Rathbun, 1902) [*Kraussia*]
Palapedia integra (De Haan, 1835) [*Cancer* (*Xantho*)]
Palapedia marquesa (Serène, 1972) [*Kraussia*]
Palapedia nitida (Stimpson, 1858) [*Kraussia*]
Palapedia obliquefrons (Dai, Yang, Song & Chen, 1986) [*Kraussia*]
Palapedia pelsartensis (Serène, 1972) [*Kraussia*]
Palapedia quadriceps (Yokoya, 1936) [*Kraussia*]
Palapedia rastripes (Müller, 1887) [*Kraussia*]
Palapedia roycei (Serène, 1972) [*Kraussia*]
Palapedia serenei Ng, 1993
Palapedia truncatifrons (Sakai, 1974) [*Kraussia*]
Palapedia valentini Ng, 1993
Palapedia wilsoni (Serène, 1972) [*Kraussia*]
Palapedia yongshuensis (Dai, Cai & Yang, 1994) [*Kraussia*]

Subfamily Liomerinae Sakai, 1976

Liomeroida Sakai, 1976

Actiomera, new genus {16}
= *Actites* Lanchester, 1902 (type species *Actites erythrus* Lanchester, 1902, by original designation; junior homonym of *Actites* Billberg, 1828; gender masculine)
= *Actiomera*, new genus (replacement name for *Actites* Lanchester, 1902; gender feminine)
Actiomera boninensis (Odhner, 1925) [*Carpilodes*]
Actiomera erythra (Lanchester, 1902) [*Actites*]
Actiomera lophopa (Alcock, 1898) [*Carpilodes*]
= *Xantho frontalis* Borradaile, 1902

Bruciana Serène, 1977
= *Liomera* (*Bruciana*) Serène, 1977 (type species *Carpilodes pediger* Alcock, 1898, by original designation; gender feminine)
Bruciana pediger (Alcock, 1898) [*Carpilodes*]

Liomera Dana, 1851
= *Liomera* Dana, 1851 (type species *Liomera lata* Dana, 1852, by monotypy; gender feminine) [Opinion 85, Direction 37]
= *Carpilodes* Dana, 1851 (type species *Carpilodes tristis* Dana, 1852, by monotypy; gender masculine) [Opinion 73]
= *Carpiloxanthus* A. Milne-Edwards, 1862 (type species *Carpiloxanthus vaillantianus* A. Milne-Edwards, 1862, by monotypy; gender masculine)
= *Actaeopsis* Lanchester, 1900 (type species *Carpilodes pallidus* Borradaile, 1900, by monotypy; name pre-occupied by *Actaeopsis* Carter, 1896 [Crustacea]; gender feminine)
?*Liomera albolineata* (Serène & Luom, 1960) [*Carpilodes*]
Liomera bella (Dana, 1852) [*Actaeodes*]
= *Carpiloxanthus vaillantianus* A. Milne-Edwards, 1862
Liomera caelata (Odhner, 1925) [*Carpilodes*]
?*Liomera canaliculatus* (Hombron & Jacquinot, 1846) [*Zozymus*]
Liomera cinctimana (White, 1847) [*Carpilius*]
= *Liomera lata* Dana, 1852
= *Liomera cocosana* Boone, 1927
?*Liomera crucifera* (Serène & Luom, 1960) [*Carpilodes*]
Liomera edwarsi Kossmann, 1877
= *Carpilodes sayademalhensis* Rathbun, 1911
?*Liomera guttata* De Man, 1888
?*Liomera hartmeyeri* (Odhner, 1925) [*Carpilodes*]
Liomera laevis (A. Milne-Edwards, 1873) [*Carpilodes*]
= ?*Liomera laevis odhneri* Serène & Luom, 1960
Liomera laperousei Garth, 1985
Liomera margaritata (A. Milne-Edwards, 1873) [*Carpilodes*]
= *Chlorodius exiguus* Targioni-Tozzetti, 1877
= *Carpilodes striatus* De Man, 1888
= *Carpilodes diodoreus* Nobili, 1905
?*Liomera medipacifica* (Edmondson, 1951) [*Carpiliodes*, sic]
Liomera monticulosa (A. Milne-Edwards, 1873) [*Carpilodes*]
= *Carpilodes cariosus* Alcock, 1898
Liomera nigrimanus Davie, 1997
?*Liomera nigropunctata* (Serène & Luom, 1960)
Liomera pallida (Borradaile, 1900) [*Carpilodes*]
Liomera rubra (A. Milne-Edwards, 1865) [*Carpilodes*]
= *Carpilodes coccineus* Rathbun, 1906
Liomera rugata (H. Milne Edwards, 1834) [*Zozymus*]
Liomera rugipes (Heller, 1861) [*Actaeodes*]
?*Liomera sagamiensis* (Sakai, 1939) [*Carpilodes*]
Liomera semigranosa De Man, 1888
?*Liomera serratipes* (Odhner, 1925) [*Carpilodes*]

Liomera stimpsonii (A. Milne-Edwards, 1865) [*Carpilodes*]
Liomera striolata (Odhner, 1925) [*Carpilodes*]
?*Liomera supernodosa* (Rathbun, 1906) [*Carpilodes*]
Liomera tristis (Dana, 1852) [*Carpilodes*] [Direction 36]
= *Carpilodes granulatus* Heller, 1862
Liomera venosa (H. Milne Edwards, 1834) [*Cancer*]
= *Cancer obtusus* De Haan, 1835
= *Carpilodes granulosus* Haswell, 1882
= *Carpilodes socius* Lanchester, 1900
Liomera virgata (Rathbun, 1906) [*Carpilodes*]
Liomera yaldwyni Takeda & Webber, 2006

Meriola Davie, 1992
= *Meriola* Davie, 1992 (type species *Meriola rufomaculata* Davie, 1992, by original designation; gender feminine)
Meriola acutidens (Sakai, 1969) [*Neoliomera*]
Meriola corallina Takeda & Marumura, 1997
Meriola rufomaculata Davie, 1992

Neoliomera Odhner, 1925
= *Neoliomera* Odhner, 1925 (type species *Zozymus pubescens* H. Milne Edwards, 1834, by original designation; gender feminine)
Neoliomera cerasinus Ng, 2002
Neoliomera demani Forest & Guinot, 1961
Neoliomera insularis (Adams & White, 1849) [*Atergatis*]
Neoliomera intermedia Odhner, 1925
?*Neoliomera lippa* (Nobili, 1905) [*Carpilodes*]
Neoliomera nobilii Odhner, 1925
Neoliomera ovata Tweedie, 1950
Neoliomera praetexta (Rathbun, 1906) [*Liomera*]
Neoliomera pubescens (H. Milne Edwards, 1834) [*Zozymus*]
Neoliomera richtersi (De Man, 1889) [*Actaeodes*]
Neoliomera richteroides Sakai, 1965
Neoliomera sabaea (Nobili, 1905) [*Actaea*]
Neoliomera striata Buitendijk, 1941
Neoliomera sundaica (De Man, 1888) [*Actaeodes*]
Neoliomera themisto (De Man, 1889) [*Actaeodes*]
Neoliomera variolosa (A. Milne-Edwards, 1873) [*Liomera*]

Paraliomera Rathbun, 1930
= *Paraliomera* Rathbun, 1930 (type species *Liomera longimana* A. Milne-Edwards, 1865, by original designation; gender feminine)
Paraliomera dispar (Stimpson, 1871) [*Chlorodius*]
Paraliomera longimana (A. Milne-Edwards, 1865) [*Liomera*]
= *Cancer nigerrimus* Desbonne, in Desbonne & Schramm, 1867
?*Paraliomera macandreae* (Miers, 1881) [*Leptodius*] {17}

Subfamily Polydectinae Dana, 1851

Polydectinae Dana, 1851
Melioida Alcock, 1898
Lybioida Serène, 1965

Lybia H. Milne Edwards, 1834
= *Melia* Berthold, 1827 (type species *Grapse tessellatus* Latreille, in Milbert, 1812, by monotypy; name pre-occupied by *Melia* Bosc, 1813 [Crustacea]; gender feminine) [Opinion 36, Direction 37]
= *Lybia* H. Milne Edwards, 1834 (type species *Grapse tessellatus* Latreille, in Milbert, 1812, by monotypy; gender feminine)
= *Prolybia* Ward, 1933 (type species *Prolybia australiensis* Ward, 1933, by monotypy; gender fenminine)
Lybia australiensis (Ward, 1933) [*Prolybia*]
Lybia caestifera (Alcock, 1898) [*Melia*]
Lybia denticulata Nobili, 1905
Lybia edmondsoni Takeda & Miyake, 1970
Lybia hatagumoana Sakai, 1961
Lybia leptochelis (Zehntner, 1894) [*Ceratoplax*]
Lybia plumosa Barnard, 1947
Lybia pugil (Alcock, 1898) [*Melia*]
Lybia tessellata (Latreille, in Milbert, 1812) [*Grapse*] [Direction 36]
Lybia tutelina C. G. S. Tan & Ng, 1994

Polydectus H. Milne Edwards, 1837
= *Polydectus* H. Milne Edwards, 1837 (type species *Pilumnus cupulifer* Latreille, in Milbert, 1812, by monotypy; gender masculine) [Opinion 85, Direction 37]
Polydectus cupulifer (Latreille, in Milbert, 1812) [*Cancer*] [Direction 36]
= *Polydectus villosus* Dana, 1852

Subfamily Speocarcininae Števčić, 2005

Speocarcinidae Števčić, 2005 {18}

Speocarcinus Stimpson, 1859
= *Speocarcinus* Stimpson, 1859 (type species *Speocarcinus carolinensis* Stimpson, 1859, by monotypy; gender masculine) [Opinion 85, Direction 37]
Speocarcinus carolinensis Stimpson, 1859 [Direction 36]
Speocarcinus granulimanus Rathbun, 1894
Speocarcinus lobatus Guinot, 1969
Speocarcinus meloi D'Incao & Gomes da Silva, 1992
Speocarcinus monotuberculatus Felder & Rabalais, 1986
Speocarcinus spinicarpus Guinot, 1969

Subfamily Xanthinae MacLeay, 1838

Xanthidae MacLeay, 1838 [Opinion 423]
Xanthodioida Alcock, 1898
Liagoridés A. Milne-Edwards, 1862 (not in Latin, unavailable name)
Coralliopinae Števčić, 2005 {19}
Eucratodinae Števčić, 2005{20}
Gonopanopeini Števčić, 2005
Liagorini Števčić, 2005
Linnaeoxanthinae Števčić, 2005 {21}
Megametopinae Števčić, 2005
Micropanopeini Števčić, 2005
Paraxanthini Števčić, 2005
Orphnoxanthini Števčić, 2005

Cataleptodius Guinot, 1968
= *Cataleptodius* Guinot, 1968 (type species *Chlorodius floridanus* Gibbes, 1850, by original designation; gender masculine)
Cataleptodius floridanus (Gibbes, 1850) [*Chlorodius*]
= *Chlorodius limosus* Desbonne, in Desbonne & Schramm, 1867
Cataleptodius occidentalis (Stimpson, 1871) [*Chlorodius*]
= *Chlorodius fisheri* Lockington, 1877
Cataleptodius olsoni Manning & Chace, 1990
Cataleptodius snodgrassi (Rathbun, 1902) [*Leptodius*]
Cataleptodius taboganus (Rathbun, 1912) [*Leptodius*]
?*Cataleptodius parvulus* (Fabricius, 1793) [*Cancer*]
= *Chlorodius americanus* Saussure, 1858

Coralliope Guinot, 1967
= *Coralliope* Guinot, 1967 (type species *Actumnus parvulus* A. Milne-Edwards, 1869, by original designation; gender feminine)
Coralliope armstrongi (Garth, 1948) [*Micropanope*]
Coralliope parvula (A. Milne-Edwards, 1869) [*Actumnus*]
= *Xanthodes talismani* A. Milne-Edwards & Bouvier, 1898

Cycloxanthops Rathbun, 1897
= *Cycloxanthops* Rathbun, 1897 (replacement name for *Cycloxanthus* A. Milne-Edwards, 1863; gender masculine)
= *Cycloxanthus* A. Milne-Edwards, 1863 (type species *Xantho sexdecimdentatus* H. Milne Edwards & Lucas, 1843, by original designation; name pre-occupied by *Cycloxanthus* A. Milne-Edwards, 1850 [fossil Crustacea]; gender masculine)
Cycloxanthops bocki Garth, 1957
Cycloxanthops novemdentatus (Lockington, 1877) [*Xanthodes*]
= *Cycloxanthus californiensis* Rathbun, 1894
= *Cycloxanthops rugosa* Holmes, 1900
Cycloxanthops occidentalis (A. Milne-Edwards, 1868) [*Xantho*]
Cycloxanthops sexdecimdentatus (H. Milne Edwards & Lucas, 1843) [*Xantho*]
Cycloxanthops truncatus (De Haan, 1837) [*Cancer* (*Xantho*)]
Cycloxanthops vittatus (Stimpson, 1860) [*Xantho*]

Demania Laurie, 1906
= *Demania* Laurie, 1906 (type species *Demania splendida* Laurie, 1906, by monotypy; gender feminine)
Demania alcocki Deb, 1987
Demania armadillus (Herbst, 1790)
= *Demania bangladeshensis* Ng, Huda & Banu, 1987
= *Demania indiana* Deb, 1987
Demania baccalipes (Alcock, 1898) [*Xantho* (*Lophoxanthus*)]
Demania crosnieri Serène, 1984
Demania cultripes (Alcock, 1898) [*Xantho* (*Lophoxanthus*)]
= *Demania alcalai* Garth, 1976
= *Demania macneilli* Garth, 1976
Demania garthi Guinot & Richer de Forges, 1981
Demania intermedia Guinot, 1969
Demania japonica Guinot, 1977
Demania mortenseni (Odhner, 1925) [*Actaea*]
Demania reynaudii (H. Milne Edwards, 1834) [*Xantho*]
= *Demania squamosa* Guinot, 1977
Demania rotundata Serène, in Guinot, 1969
Demania scaberrima (Walker, 1887) [*Xantho*]
Demania serenei Guinot & Richer de Forges, 1981
Demania splendida Laurie, 1906
Demania toxica Garth, 1971
Demania unispinosa Chen & Ng, 1999
Demania wardi Garth & Ng, 1985

Ectaesthesius Rathbun, 1898
= *Ectaesthesius* Rathbun, 1898 (type species *Ectaesthesius bifrons* Rathbun, 1898, by monotypy; gender masculine)
Ectaesthesius bifrons Rathbun, 1898

Epixanthops Serène, 1984
= *Epixanthops* Serène, 1984 (type species *Epixanthops casellatoi* Serène, 1984, by original designation; gender masculine)
Epixanthops casellatoi Serène, 1984

Eucratodes A. Milne-Edwards, 1880 {20}
= *Eucratodes* A. Milne-Edwards, 1880 (type species *Eucratodes agassizii* A. Milne-Edwards, 1880, by monotypy; gender masculine) [Opinion 85, Direction 37]
Eucratodes agassizii A. Milne-Edwards, 1880

Euryxanthops Garth & Kim, 1983
= *Euryxanthops* Garth & Kim, 1983 (type species *Eurypanopeus orientalis* Sakai, 1939, by original designation; gender masculine)
Euryxanthops cepros Davie, 1997
Euryxanthops chiltoni Ng & McLay, 2007
Euryxanthops dorsiconvexus Garth & Kim, 1983
Euryxanthops flexidentatus Garth & Kim, 1983
Euryxanthops latifrons Davie, 1997
Euryxanthops orientalis (Sakai, 1939) [*Eurypanopeus*]

Garthiope Guinot, 1990
= *Garthiope* Guinot, 1990 (type species *Micropanope spinipes* A. Milne-Edwards, 1880, by original designation; gender feminine)
Garthiope anchialina Guinot & Iliffe, 1991
Garthiope barbadensis (Rathbun, 1921) [*Pilumnus*]
Garthiope fraseri (Garth, 1946) [*Micropanope*]
Garthiope spinipes (A. Milne-Edwards, 1880) [*Micropanope*]
= *Pilumnus andrewsii* Rathbun, 1898

Gaudichaudia Rathbun, 1930
= *Gaudichaudia* Rathbun, 1930 (type species *Xantho gaudichaudii* H. Milne Edwards, 1834, by original designation; gender feminine)
Gaudichaudia gaudichaudii (H. Milne Edwards, 1834) [*Xantho*]
= *Xantho bifrons* Ortmann, 1893
Gaudichaudia tridentatus (Lenz, 1902) [*Leptodius*]
= *Leptodius spinosogranulatus* Lenz, 1902

Gonopanope Guinot, 1967
= *Gonopanope* Guinot, 1967 (type species *Xanthodes angustus* Lockington, 1877, by original designation; gender feminine)
Gonopanope angusta (Lockington, 1877) [*Xanthodes*]
Gonopanope areolata (Rathbun, 1898) [*Micropanope*]
Gonopanope nitida (Rathbun, 1898) [*Micropanope*]

Guitonia Garth & Iliffe, 1992
= *Guitonia* Garth & Iliffe, 1992 (type species *Guitonia troglophila* Garth & Iliffe, 1992, by original designation; gender feminine)
Guitonia troglophila Garth & Iliffe, 1992

Jacforus Ng & Clark, 2003
= *Jacforus* Ng & Clark, 2003 (type species *Cycloxanthops cavatus* Rathbun, 1907, by original designation; gender masculine)
Jacforus cavatus (Rathbun, 1907) [*Cycloxanthops*]
= *Euxanthus minutus* Edmondson, 1925
= *Megametope sulcatus* Edmondson, 1931

Juxtaxanthias Ward, 1942
= *Juxtaxanthias* Ward, 1942 (type species *Cancer lividus* Latreille, in Milbert, 1812, by original designation; gender masculine)
Juxtaxanthias intonsus (Randall, 1840) [*Xantho*]
Juxtaxanthias lividus (Latreille, in Milbert, 1812) [*Cancer*]
Juxtaxanthias tetraodon (Heller, 1862) [*Eudora*]

Lachnopodus Stimpson, 1858
= *Lachnopodus* Stimpson, 1858 (type species *Lachnopodus rodgersi* Stimpson, 1858, by monotypy; gender masculine) [Opinion 85, Direction 37]
= *Lioxantho* Alcock, 1898 (type species *Lioxantho tumidus* Alcock, 1898, subsequent designation by Ward, 1934; gender masculine)
Lachnopodus bidentatus (A. Milne-Edwards, 1867) [*Xantho*]
= *Lioxantho laevidorsalis* Miers, 1886
Lachnopodus gibsonhilli (Tweedie, 1950)
Lachnopodus ponapensis (Rathbun, 1907) [*Xanthias*]
= *Lachnopodus haematostictus* Ward, 1934
Lachnopodus rodgersi Stimpson, 1858 [Direction 36]
Lachnopodus subacutus (Stimpson, 1858) [*Liomera*]
= *Lioxantho tumidus* Alcock, 1898
Lachnopodus tahitensis De Man, 1889

Leptodius A. Milne-Edwards, 1863
= *Leptodius* A. Milne-Edwards, 1863 (type species *Chlorodius exaratus* H. Milne Edwards, 1834, by monotypy; gender masculine) [Opinion 85, Direction 37]
Leptodius australis Ward, 1936
Leptodius davaoensis Ward, 1941
= *Leptodius leptodon* Forest & Guinot, 1961
Leptodius efferens Rathbun, 1907
Leptodius exaratus (H. Milne Edwards, 1834) [*Chlorodius*] [Direction 36]
= *Cancer inaequalis* Olivier, 1791
= *Cancer inaequalis* Audouin, 1826
= *Leptodius lividus* Paul'son, 1875
= *Xantho exaratus* var. *typica* Ortmann, 1893
Leptodius gracilis (Dana, 1852) [*Chlorodius*]
?*Leptodius hombronii* (Lucas, in Jacquinot & Lucas, 1853) [*Chlorodius*]
Leptodius planus Ward, 1934
Leptodius nigromaculatus Serène, 1962
Leptodius nudipes (Dana, 1852) [*Chlorodius*]
= *Xantho danae* Odhner, 1925 [unnecessary replacement name for *Chlorodius nudipes* Dana, 1852]
Leptodius philippinensis Ward, 1941
Leptodius sanguineus (H. Milne Edwards, 1834) [*Chlorodius*]
= ?*Cancer eudora* Herbst, 1801
= *Lagostoma nodosa* Randall, 1840
= *Chlorodius edwardsii* Heller, 1861
Leptodius waialuanus Rathbun, 1906

Liagore De Haan, 1833 {21}
= *Cancer* (*Liagore*) De Haan, 1833 (type species *Cancer* (*Liagore*) *rubromaculata* De Haan, 1835, by monotypy; gender feminine) [Opinion 85, Direction 37]
Liagore erythematica Guinot, 1971
Liagore pulchella Ng & Naruse, 2007
Liagore rubromaculata (De Haan, 1835) [*Cancer* (*Liagore*)] [Direction 36]

Linnaeoxanthus Števčić, 2005
= *Linnaeoxanthus* Števčić, 2005 (type species *Pilumnoplax acanthomerus* Rathbun, 1911, by original designation; gender feminine) {22}
Linnaeoxanthus acanthomerus (Rathbun, 1911) [*Pilumnoplax*]

Lioxanthodes Calman, 1909
= *Lioxanthodes* Calman, 1909 (type species *Lioxanthodes alcocki* Calman, 1909, by original designation; gender masculine)
Lioxanthodes alcocki Calman, 1909
Lioxanthodes madagascariensis Serène, 1984
Lioxanthodes pacificus Edmondson, 1935

Macromedaeus Ward, 1942
= *Macromedaeus* Ward, 1942 (type species *Macromedaeus punctatus* Ward, 1942, by original designation; gender masculine)
Macromedaeus crassimanus (A. Milne-Edwards, 1867) [*Xantho*]
Macromedaeus demani (Odhner, 1925) [*Xantho*]
Macromedaeus distinguendus (De Haan, 1835) [*Cancer* (*Xantho*)]
Macromedaeus nudipes (A. Milne-Edwards, 1867) [*Xantho*]
= *Macromedaeus punctatus* Ward, 1942
Macromedaeus quinquedentatus (Krauss, 1843) [*Xantho*]
= *Xantho* (*Leptodius*) *euglyptus* Alcock, 1898
= ?*Leptodius euglyptus quadrispinosus* Chhapgar, 1957
Macromedaeus voeltzkowi (Lenz, 1905) [*Xantho* (*Leptodius*)]

Marratha Ng & Clark, 2003
= *Marratha* Ng & Clark, 2003 (type species *Cycloxanthops angustus* Rathbun, 1906, by original designation; gender feminine)
Marratha angusta (Rathbun, 1906) [*Cycloxanthops*]

Megametope Filhol, 1886
= *Megametope* Filhol, 18886 (type species *Xantho rotundifrons* H. Milne Edwards, 1834, by monotypy; gender masculine)
= *Gabrielia* McCulloch, 1908 (type species *Lioxantho haswelli* Fulton & Grant, 1906, by monotypy; gender feminine)
Megametope carinatus Baker, 1907
Megametope ogaensis Sakai, 1974
Megametope punctatus (Haswell, 1882) [*Cycloxanthus*]
= *Lioxantho haswelli* Fulton & Grant, 1906
Megametope rotundifrons (H. Milne Edwards, 1834) [*Xantho*]
Melybia Stimpson, 1871
= *Melybia* Stimpson, 1871 (type species *Melybia thalamita* Stimpson, 1871, by monotypy; gender feminine) [Opinion 85, Direction 37]
Melybia thalamita Stimpson, 1871 [Direction 36]
= *Melybia forceps* A. Milne-Edwards, 1880

Metaxanthops Serène, 1984
= *Metaxanthops* Serène, 1984 (type species *Metaxanthops acutus* Serène, 1984, by original designation; gender masculine)
Metaxanthops acutus Serène, 1984

Microcassiope Guinot, 1967
= *Microcassiope* Guinot, 1967 (type species *Xanthodes rufopunctatus* A. Milne-Edwards, 1869, by original designation; gender feminine)
Microcassiope granulimana (Stimpson, 1871) [*Pilumnus*]
Microcassiope minor (Dana, 1852) [*Xantho*]
= *Xanthodes rufopunctatus* A. Milne-Edwards, 1869
= *Xanthodes granosus* A. Milne-Edwards & Bouvier, 1898
Microcassiope orientalis Takeda & Miyake, 1969
Microcassiope taboguillensis (Rathbun, 1907) [*Micropanope*]
Microcassiope xantusii (Stimpson, 1871) [*Xanthodes*]
= *Pilumnus beebei* Boone, 1927
= *Xanthias serrulata* Finnegan, 1931

Micropanope Stimpson, 1871
= *Micropanope* Stimpson, 1871 (type species *Micropanope sculptipes* Stimpson, 1871, by monotypy; gender feminine) [Opinion 85, Direction 37]
= *Aldrovandia* Števčić, 2005 (type species *Micropanope taylori* Garth, 1986, by original designation; gender feminine) (unavailable name) {15}
= *Aristotelopanope* Števčić, 2005 (type species *Micropanope ashcrafti* Garth, 1986, by original designation; gender feminine) (unavailable name) {15}
= *Helleria* Števčić, 2005 (type species *Micropanope manteri* Garth, 1986, by original designation; gender feminine) (unavailable name) {15}
Micropanope ashcrafti Garth, 1986
?*Micropanope cristimanus* Stimpson, 1871
?*Micropanope lata* (Faxon, 1893) [*Panopeus*]
Micropanope latimanus Stimpson, 1871
Micropanope lobifrons A. Milne-Edwards, 1881
Micropanope manteri Garth, 1986
?*Micropanope nuttingi* (Rathbun, 1898) [*Xanthias*]
Micropanope pusilla A. Milne-Edwards, 1880
Micropanope sculptipes Stimpson, 1871 [Direction 36]
= *Micropanope pugilator* A. Milne-Edwards, 1880
Micropanope sexlobata Rathbun, 1906
Micropanope taylori Garth, 1986
?*Micropanope truncatifrons* Rathbun, 1898
Micropanope urinator (A. Milne-Edwards, 1881) [*Pilumnus*]

Nanocassiope Guinot, 1967
= *Nanocassiope* Guinot, 1967 (type species *Xanthodes melanodactylus* A. Milne-Edwards, 1867, by original designation; gender feminine)
Nanocassiope alcocki (Rathbun, 1902) [*Xanthias*]
Nanocassiope granulipes (Sakai, 1939) [*Heteropanope*]
Nanocassiope melanodactylus (A. Milne-Edwards, 1868) [*Xanthodes*]
Nanocassiope oblonga Davie, 1995
Nanocassiope polita (Rathbun, 1894) [*Micropanope*]
= *Panopeus tanneri* Faxon, 1893
Nanocassiope tridentata Davie, 1995

Nectopanope Wood-Mason, 1891
= *Nectopanope* Wood-Mason, 1891 (type species *Nectopanope rhodobaphes* Wood-Mason, 1891, by monotypy; gender feminine)
Nectopanope rhodobaphes Wood-Mason, 1891

Neolioxantho Garth & Kim, 1983
= *Neolioxantho* Garth & Kim, 1983 (type species *Lioxantho latifrons* Rathbun, 1911, by original designation; gender masculine)
Neolioxantho asterodactylus Garth & Kim, 1983
Neolioxantho latifrons Rathbun, 1911 [*Lioxantho*]
= *Xanthias rathbunae* Takeda, 1976

Neoxanthias Ward, 1933
= *Neoxanthias* Ward, 1933 (type species *Cancer impressus* Latreille, in Milbert, 1812, by original designation; gender masculine)
Neoxanthias impressus (Latreille, in Milbert, 1812) [*Cancer*]
= *Neoxanthias australiensis* Ward, 1942
Neoxanthias lacunosus (Rathbun, 1906) [*Xantho*]
Neoxanthias michelae Serène & Vadon, 1981
= *Demania shyamasundarii* Devi, 1991 {23}

Neoxanthops Guinot, 1968
= *Neoxanthops* Guinot, 1968 (type species *Cycloxanthus lineatus* A. Milne-Edwards, 1867, by original designation; gender masculine)
Neoxanthops lineatus (A. Milne-Edwards, 1867) [*Cycloxanthus*]
Neoxanthops quadrilobatus (Sakai, 1939) [*Cycloxanthops*]
?*Neoxanthops rotundus* Guinot, 1968

Orphnoxanthus Alcock, 1898
= *Orphnoxanthus* Alcock, 1898 (type species *Xanthodes microps* Alcock & Anderson, 1894, by monotypy; gender masculine) [Opinion 85, Direction 37]
Orphnoxanthus microps (Alcock & Anderson, 1894) [*Xanthodes*] [Direction 36]

Ovatis Ng & Chen, 2004
= *Ovatis* Ng & Chen, 2004 (type species *Ovatis simplex* Ng & Chen, 2004, by monotypy; gender masculine)
Ovatis simplex Ng & Chen, 2004

Paraxanthias Odhner, 1925
= *Paraxanthias* Odhner, 1925 (type species *Xanthodes notatus* Dana, 1852, by original designation; gender masculine)
Paraxanthias elegans (Stimpson, 1858) [*Xanthodes*]
= *Pseudoxanthodes* Števčić, 2005 (type species *Xanthodes sulcatus* Faxon, 1893, sic "*Xanthoides sulcatus* Faxon, 1893", by original designation; gender masculine)
Paraxanthias eriphioides (A. Milne-Edwards, 1867) [*Xanthodes*]
?*Paraxanthias flavescens* (Rathbun, 1906) [*Xanthias*]
?*Paraxanthias insculptus* (Stimpson, 1871) [*Xanthodes*]
= *Pilumnoides pusillus* Rathbun, 1902
Paraxanthias notatus (Dana, 1852) [*Xanthodes*]
Paraxanthias pachydactylus (A. Milne-Edwards, 1867) [*Xanthodes*]
?*Paraxanthias parvus* (Borradaile, 1900) [*Xanthias*]
?*Paraxanthias sulcatus* (Faxon, 1893) [*Xanthodes*]
Paraxanthias taylori (Stimpson, 1861) [*Xanthodes*]

Paraxanthodes Guinot, 1968
= *Paraxanthodes* Guinot, 1968 (type species *Micropanope obtusidens* Sakai, 1965, by original designation; gender masculine)
Paraxanthodes cumatodes (McGilchrist, 1905) [*Xanthodes*]
Paraxanthodes obtusidens (Sakai, 1965) [*Micropanope*]
Paraxanthodes polynesiensis Davie, 1992

Paraxanthus Lucas, in H. Milne Edwards & Lucas, 1844 {2}
= *Paraxanthus* Lucas, in H. Milne Edwards & Lucas, 1844 (type species *Paraxanthus hirtipes* Lucas, in H. Milne Edwards & Lucas, 1844, by monotypy; gender masculine) [Opinion 85, Direction 37]
Paraxanthus barbiger (Poeppig, 1836) [*Gecarcinus*] [Direction 36]
= *Paraxanthus hirtipes* Lucas, in H. Milne Edwards & Lucas, 1844 {2}

Xanthias Rathbun, 1897
= *Xanthodes* Dana, 1852 (type species *Xanthodes granosomanus* Dana, 1852, subsequent designation by Serène, 1984; name pre-occupied by *Xanthodes* Guenée, 1852 [Lepidoptera]; gender masculine)
= *Xanthias* Rathbun, 1897 (replacement name for *Xanthodes* Dana, 1852; gender masculine)
= *Pestoxanthias* Števčić, 2005 (type species *Actaea inornatus* Rathbun, 1898 (sic "*Xanthias incornutus* (Rathbun, 1898)", by original designation; gender masculine) (unavailable name) {15}
Xanthias canaliculatus Rathbun, 1906
Xanthias cherbonnieri Guinot, 1964
Xanthias dawsoni Takeda & Webber, 2006
Xanthias gilbertensis Balss, 1938
Xanthias glabrous Edmondson, 1951
Xanthias inornatus (Rathbun, 1898) [*Actaea*]
= *Xanthias vestitus* Rathbun, 1922
Xanthias lamarckii (H. Milne Edwards, 1834) [*Xantho*]
= *Xanthodes granosomanus* Dana, 1852
= *Xantho cultrimanus* White, 1848
Xanthias latifrons (De Man, 1887) [*Panopeus*]
= *Xanthodes minutus* Rathbun, 1894
= ?*Chlorododius tuberosicarpus* Klunzinger, 1913
Xanthias maculatus Sakai, 1961
?*Xanthias nitidulus* (Dana, 1852) [*Xanthodes*]
Xanthias oahuensis Edmondson, 1951
Xanthias punctatus (H. Milne Edwards, 1834) [*Xantho*]
= *Liomera maculata* Haswell, 1882
= *Xanthias punctatus samoensis* Ward, 1939
Xanthias sinensis (A. Milne-Edwards, 1867) [*Pseudozius*]
= *Lioxantho asperatus* Alcock, 1898
Xanthias teres Davie, 1997

Xantho Leach, 1814
= *Xantho* Leach, 1814 (type species *Cancer incisus* Leach, 1814, by monotypy; gender masculine) [Opinion 423]
= *Salax* Gistel, 1848 (unnecessary replacement name for *Xantho* Leach, 1814; gender masculine)
Xantho granulicarpus Forest, 1953
Xantho hydrophilus (Herbst, 1790) [*Cancer*]
= *Cancer incisus* Leach, 1814 [Opinion 423]
= *Cancer floridus* Montagu, 1808

Xantho pilipes A. Milne-Edwards, 1867
Xantho poressa (Olivi, 1792) [*Cancer*]
= ?*Alpheus tinctor* Weber, 1795 (nomen nudum)
= ?*Cancer tinctor* Fabricius, 1798 {24}
= *Xantho rivulosa* Risso, 1827
Xantho sexdentatus (Miers, 1881) [*Lophozozymus* (*Lophoxanthus*)]

Xanthodius Stimpson, 1859
= *Xanthodius* Stimpson, 1859 (type species *Xanthodius sternberghii* Stimpson, 1859, by monotypy; gender masculine) [Opinion 85, Direction 37]
= *Olivioxantho* Števčić, 2005 (type species *Xantho denticulatus* White, 1848, by original designation; gender masculine) (unavailable name) {15}
Xanthodius americanus (Saussure, 1858)
Xanthodius cooksoni (Miers, 1877) [*Leptodius*]
= *Leptodius lobatus* A. Milne-Edwards, 1880
Xanthodius denticulatus (White, 1848) [*Xantho*]
= *Xantho humilis* Desbonne, in Desbonne & Schramm, 1867
Xanthodius inaequalis inaequalis (Olivier, 1791) [*Cancer*]
= *Leptodius punctatus* Miers, 1881
= *Leptodius angolensis* Bott, 1964
Xanthodius inaequalis faba (Dana, 1852) [*Actaeodes*]
= *Chlorodius* (*Leptodius*) *convexus* A. Milne-Edwards, 1869
Xanthodius sternberghii Stimpson, 1859 [Direction 36]
= *Xanthodius hebes* Stimpson, 1860
= *Acteodes mexicanus* Lockington, 1877
?*Xanthodius stimpsoni* (A. Milne-Edwards, 1879) [*Xantho*]
= *Xantho multidentatus* Lockington, 1877
= *Daira ecuadoriensis* Rathbun, 1935

Incertae sedis

Xantho arcuatus Heller, 1865

Subfamily Zalasiinae Serène, 1968

Trichidea De Haan, 1839 (pre-occupied name)
Zalasiinae Serène, 1968
Banareiini Števčić, 2005

Banareia A. Milne-Edwards, 1869
= *Banareia* A. Milne-Edwards, 1869 (type species *Banareia armata* A. Milne-Edwards, 1869, by monotypy; gender feminine) [Opinion 73]
= *Banareiopsis* Ward, 1939 (type species *Banareiopsis australis* Ward, 1936, by original designation; gender feminine)
Banareia acies (Rathbun, 1911) [*Actaea*]
Banareia armata A. Milne-Edwards, 1869 [Direction 36]
Banareia australis (Ward, 1936) [*Banareiopsis*]
Banareia balssi Guinot, 1976
Banareia banareias (Rathbun, 1911) [*Actaea*]
Banareia fatuhiva Davie, 1992
Banareia inconspicua Miers, 1884
Banareia japonica (Odhner, 1925) [*Actaea*]
Banareia kraussi (Heller, 1861) [*Actaea*]
Banareia nobilii (Odhner, 1925) [*Actaea*]
Banareia odhneri Sakai, 1974
Banareia palmeri (Rathbun, 1894) [*Actaea*]
Banareia parvula (Krauss, 1843) [*Menippe*]
= *Cancer* (*Menippe*) *parvulus* De Haan, 1833 (nomen nudum)
Banareia serenei Guinot, 1976
Banareia subglobosa (Stimpson, 1858) [*Actaea*]
Banareia villosa Rathbun, 1906

Calvactaea Ward, 1933
= *Calvactaea* Ward, 1933 (type species *Calvactaea tumida* Ward, 1933, by original designation; gender feminine)
Calvactaea tumida Ward, 1933
= *Atergatopsis globosa* Balss, 1935

Zalasius Rathbun, 1897
= *Trichia* De Haan, 1839 (type species *Trichia dromiaeformis* De Haan, 1839, by monotypy; name pre-occupied by *Trichia* Hoffmann, 1790 [Protista]; gender feminine)
= *Zalasius* Rathbun, 1897 (replacement name for *Trichia* De Haan, 1839; gender masculine)
= *Macneillena* Iredale, 1930 (unnecessary replacement name for *Trichia* De Haan, 1839; gender feminine)
Zalasius australis (Baker, 1906) [*Trichia*]
Zalasius dromiaeformis (De Haan, 1839) [*Trichia*]
Zalasius horii Miyake, 1940
Zalasius imajimai Takeda & Miyake, 1969
Zalasius indicus Sankarankutty, 1968
Zalasius sakaii Balss, 1938

Subfamily Zosiminae Alcock, 1898

Zozymoida Alcock, 1898 (incorrect spelling) {25}

Atergatis De Haan, 1833
= *Atergatis* De Haan, 1833 (type species *Cancer integerrimus* Lamarck, 1818, subsequent designation by Rathbun, 1922; gender masculine) [Opinion 73, Direction 37]
Atergatis dentatus De Haan, 1835
Atergatis dilatatus De Haan, 1835
Atergatis floridus (Linnaeus, 1767) [*Cancer*] {26}
Atergatis granulatus De Man, 1889
= *Neoliomera sakagutchi* Sakai, 1939
Atergatis integerrimus (Lamarck, 1818) [*Cancer*] [Direction 36]
= *Cancer laevis latipes* Seba, 1761
= *Atergatis subdivisus* White, 1848
Atergatis interruptus Takeda & Marumara, 1997
Atergatis laevigatus A. Milne-Edwards, 1865
Atergatis latissimus (H. Milne Edwards, 1834) [*Zozimus*]
= *Cancer* (*Atergatis*) *frontalis* De Haan, 1837
= *Atergatis sinuatifrons* White, 1848
?*Atergatis montrouzieri* A. Milne-Edwards, 1873
Atergatis nitidus A. Milne-Edwards, 1865
Atergatis ocyroe (Herbst, 1801) [*Cancer*] {26}
= *Atergatis compressipes* MacLeay, 1838
Atergatis obtusus A. Milne-Edwards, 1865
Atergatis reticulatus (De Haan, 1835) [*Cancer* (*Atergatis*)]
Atergatis roseus (Rüppell, 1830) [*Carpilius*]
= *Cancer orientalis* Herbst, 1790
= *Carpilius marginatus* Rüppell, 1830
= *Atergatis scrobiculatus* Heller, 1861
Atergatis subdentatus (De Haan, 1835) [*Cancer* (*Atergatis*)]
?*Atergatis tweediei* Ward, 1934

Atergatopsis A. Milne-Edwards, 1862
= *Atergatopsis* A. Milne-Edwards, 1862 (type species *Carpilius signatus* Adams & White, 1849, by monotypy; gender feminine) [Opinion 73, Direction 37]
?*Atergatopsis alcocki* (Laurie, 1906) [*Actaea*]
= *Xantho bowensis* Rathbun, 1923
Atergatopsis amoyensis De Man, 1879
Atergatopsis germaini A. Milne-Edwards, 1865
Atergatopsis granulata A. Milne-Edwards, 1865
Atergatopsis immigrans (Edmondson, 1962) [*Neoliomera*]

?*Atergatopsis inskipensis* (Rathbun, 1923) [*Actaea*]
Atergatopsis lucasii Montrouzier, 1865
?*Atergatopsis obesa* (A. Milne-Edwards, 1865) [*Actaea*]
Atergatopsis signata (Adams & White, 1849) [*Carpilius*] [Direction 36]
= *Atergatopsis flavomaculatus* A. Milne-Edwards, 1865
= *Atergatis frauenfeldi* Heller, 1861
= ?*Atergatopsis crockeri* Ward, 1939
Atergatopsis tweediei Balss, 1938

Lophozozymus A. Milne-Edwards, 1863
= *Lophozozymus* A. Milne-Edwards, 1863 (type species *Xantho octodentatus* H. Milne Edwards, 1834, subsequent designation by A. Milne-Edwards (1873); gender masculine)
Lophozozymus anaglyptus (Heller, 1861) [*Atergatis*] {27}
= *Lophactaea helleri* Kossmann, 1877
Lophozozymus bertonciniae Guinot & Richer de Forges, 1981
Lophozozymus cristatus A. Milne-Edwards, 1867
Lophozozymus dodone (Herbst, 1801) [*Cancer*]
= *Xantho radiatus* H. Milne Edwards, 1834
= *Atergatis lateralis* White, 1848
= *Atergatis elegans* Heller, 1862
= *Xantho lamelligera* White, 1848
= *Xantho nitidus* Dana, 1852
Lophozozymus edwardsi Odhner, 1925
Lophozozymus erinnyes Ng & Chia, 1997
Lophozozymus evestigatus Guinot, 1977
Lophozozymus glaber Ortmann, 1843
Lophozozymus guezei Guinot, 1977
Lophozozymus incisus (H. Milne Edwards, 1834) [*Xantho*] (secondary homonym of *Xantho incisus* Leach, 1814)
Lophozozymus pictor (Fabricius, 1798) [*Cancer*]
= *Alpheus pictor* Weber, 1795 (nomen nudum)
= *Xantho octodentatus* H. Milne Edwards, 1834
Lophozozymus pulchellus A. Milne-Edwards, 1867
Lophozozymus rathbunae Ward, 1942
Lophozozymus simplex De Man, 1888
Lophozozymus superbus (Dana, 1852) [*Xantho*]

Paratergatis Sakai, 1965
= *Paratergatis* Sakai, 1965 (type species *Paratergatis longimanus* Sakai, 1965, by original designation; gender masculine)
Paratergatis longimanus Sakai, 1965

Platypodia Bell, 1835
= *Platypodia* Bell, 1835 (type species *Xantho granulosus* Rüppell, 1830, subsequent designation by Rathbun, 1930; gender feminine)
= *Lophactaea* A. Milne-Edwards, 1862 (type species *Xantho granulosus* Rüppell, 1830, subsequent designation by Rathbun, 1930; gender feminine)
= *Paraplatypodia* Ward, 1942 (type species *Paraplatypodia morini* Ward, 1942, by original designation; gender feminine)
Platypodia alcocki Buitendijk, 1941
Platypodia cristata (A. Milne-Edwards, 1865) [*Lophactaea*]
Platypodia delli Takeda & Webber, 2006
Platypodia eydouxi (A. Milne-Edwards, 1865) [*Lophactaea*]
= *Atergatis limbatus* Streets, 1877 {28}
Platypodia foresti Serène, 1984
Platypodia granulosa (Rüppell, 1830) [*Xantho*]
= *Cancer limbatus* H. Milne Edwards, 1834 {28}
= *Platypodia keelingi* Tweedie, 1950
Platypodia morini (Ward, 1942) [*Paraplatypodia*]
Platypodia pseudogranulosa Serène, 1984
Platypodia semigranosa (Heller, 1861) [*Atergatis*]
Platypodia tomentosa (De Man, 1902) [*Lophactaea*]

Platypodiella Guinot, 1967
= *Platypodiella* Guinot, 1967 (type species *Cancer spectabilis* Herbst, 1794, by original designation; gender feminine)
Platypodiella gemmata (Rathbun, 1902) [*Platypodia*]
Platypodiella georgei den Hartog & Türkay, 1991
Platypodiella picta (A. Milne-Edwards, 1869) [*Lophactaea*]
Platypodiella rotundata (Stimpson, 1860) [*Atergatis*]
= *Atergatis cristatissimo* Lockington, 1876
Platypodiella spectabilis (Herbst, 1794) [*Cancer*]
= *Cancer lobata* H. Milne Edwards, 1834

Pulcratis Ng & Huang, 1997
= *Pulcratis* Ng & Huang, 1997 (type species *Pulcratis reticulatus* Ng & Huang, 1997, by original designation; gender masculine)
Pulcratis reticulatus Ng & Huang, 1997

Zosimus Leach, 1818
= *Zosimus* Leach, 1818 (type species *Cancer aeneus* Linnaeus, 1758, by monotypy; gender masculine) [Opinion 85, Direction 37]
= *Cancer* (*Aegle*) De Haan, 1833 (type species *Cancer aeneus* Linnaeus, 1758, by monotypy; name pre-occupied by *Aegle* Oken, 1815 [Mollusca]; gender masculine)
= *Zozymus* H. Milne Edwards, 1834 (incorrect spelling) [Direction 37]
Zosimus actaeoides (A. Milne-Edwards, 1867) [*Lophozozymus*] {27}
Zosimus aeneus (Linnaeus, 1758) [*Cancer*] [Direction 36]
= *Cancer floridus* Herbst, 1783
= *Cancer amphitrite* Herbst, 1801
Zosimus sculptus (Herbst, 1794) [*Cancer*] {27}
Zosimus fissa (Henderson, 1893) [*Lophactaea*] {27}
Zosimus hawaiiensis (Rathbun, 1906) [*Actaea*]
?*Zosimus laevis* Dana, 1852
Zosimus maculatus (De Man, 1888) [*Lophactaea*] {27}

Zozymodes Heller, 1861
= *Zozymodes* Heller, 1861 (type species *Zozymodes carinipes* Heller, 1861, by monotypy; gender masculine) [Opinion 85, Direction 37]
Zozymodes cavipes (Dana, 1852) [*Chorodius*]
?*Zozymodes nodosus* Klunzinger, 1913
Zozymodes pumilus (Hombron & Jacquinot, 1846) [*Zozymus*]
= *Leptodius cristatus* Borradaile, 1902
Zozymodes xanthoides (Krauss, 1843) [*Cancer* (*Pilumnus*)]
= *Zozymodes carinipes* Heller, 1861 [Direction 36]

Incertae sedis

Cancer miliaris Latreille, in Milbert, 1812 {29}

Notes

{1} *Cancer occultus* Herbst, 1783, was only briefly described as a very small species (3 “lines”) from Indian Seas, and red in colour with black-tipped fingers, a carapace with rounded margins, converging sides, slightly swollen and with small chelipeds, the smaller one of which has a cylindrical and delicate pincer (Herbst, 1783: 137). The description is too brief and there are no figures. Our best guess is that this is a species of *Liocarpilodes* or the like. It may even be a species of *Chlorodiella* although all these species have dentate carapace margins. It is really not possible to be more precise. With regards to *Cancer*

lapideus Herbst, 1785, this species was provided with a very simple and small figure (Herbst, 1783: 185, pl. 11 fig. 64), but it is not helpful. It is supposed to have a floral like pattern on its small carapace, and a stone like appearance. It may be some sort of xanthid or xanthoid, but we cannot be sure. There are no known types (K. Sakai, 1999).

{2} The authorship for these taxa should be "Lucas, in H. Milne Edwards & Lucas, 1844", rather than just "H. Milne Edwards & Lucas, 1844" (Guinot & Cleva, 2002).

{3} Article 10.2 of the Code states that names for forms and other infrasubspecific taxa established after 1961 are not available. As such, the many of the forms of the common reef actaeine *Paractaea rufopunctata* (H. Milne Edwards, 1834) recognised by Guinot (1969d) and Serène (1984) are not valid names. Two of these, *Paractaea rufopunctata* forma *africana* Guinot, 1969, and *Paractaea rufopunctata* forma *plumosa* Guinot, 1969, were validated subsequently (Guinot, 1976; Sakai, 1976). Castro & Eldredge (in preparation), will be recognising three of these taxa (forma *intermedia* Guinot, 1969, forma *primarathbunae* Guinot, 1969, and forma *tertiarathbunae* Guinot, 1969) as distinct subspecies.

{4} Serène (1962) established *Pseudactea* with this spelling, and used it again in 1965. Throughout these papers, he used the name "*Actea*". Later, Serène (1968: 79) corrected the spelling to "*Pseudactaea*" which indicates that his original spelling was a lapsis. This emended spelling has since been used by all subsequent workers. The name was clearly intended to be formed using *Actaea* De Haan, 1833, as the stem. All authors since have used the spelling "*Pseudactaea*", including the major revision of the Xanthidae by Serène himself (1984). Article 33.2.3.1 of the Code states that "when an unjustified emendation is in prevailing usage and is attributed to the original author and date it is deemed to be a justified emendation". On this basis, we follow prevailing usage and recognise *Pseudactaea* Serène, 1962, as the correct name.

{5} *Cancer nodulosus* Fabricius, 1781, is almost certainly a member of the Actaeinae (Xanthidae). The species was obtained by Banks but the type locality is not known. Banks not only collected along the eastern coast of Australia, but also in the West Indies (and perhaps other localities). He was part of James Cook's first voyage around the world, and collected throughout the expedition. The characters in the description of Fabricius are general, equally apply to a number of species, and we believe are inadequate to define *C. nodulosus*. The types are lost, and therefore a neotype would be required to validate the species.

{6} The well known subfamily name, Clorodiinae Dana, 1851 (sic Chlorodiinae), is actually a junior synonym of Atelecycylidae, and not a xanthid. A new name needs to be established for the group previously assigned to this subfamily, for which the name Chlorodiellinae was proposed by Ng & Holthuis (2007). While the overall case with the genera is pending ICZN approval, the subfamily name Chlorodiellinae is available as of this publication.

{7} In the last revision of *Pilodius* Dana, 1851, by Clark & Galil (1993), the type species was stated as *Chlorodius pilumnoides* White, 1848, by original designation. Serène (1984), however, stated *Pilodius pubescens* Dana, 1852, was the type species. Dana (1851b: 126) when establishing *Pilodius*, did not name any included species, whereas Dana (1852a: 80) listed four species (*Chlorodius pilumnoides*, *Pilodius pubescens* Dana, 1852, *P. pugil* Dana, 1852, and *P. scabriculus* Dana, 1852) and says in the generic description "*Chlorodius pilumnoides*, White, hic pertinet", but again no type was indicated. Nor did Dana (1852b) designate a type. Clark & Galil (1993) probably took Dana's (1852a) statement to suggest that he regarded *Chlorodius pilumnoides* as the "typical member" *Pilodius*, and recognised it as the type species. Article 67.5 of the Code, however, argues for a "rigid" interpretation of what constitutes a valid designation, and would dismiss this. Any of the four species listed in Dana (1852a) would be available for nomination as a type species. Serène (1984: 233) was apparently the first to nominate, through his statement, that *Pilodius pubescens* is the type species, and his action therefore has precedence. Even if *Chlorodius pilumnoides* or *Pilodius pubescens* were to be the type species it would not change the composition of the genus as presently understood (see Clark & Galil, 1993).

{8} *Pilodius kauaiensis* Edmondson, 1962, is problematic as no males are known. P. K. L. Ng has examined the type specimen in the Bernice P. Bishop Museum, as well as one in the ZRC recently collected from Oahu, Hawaii. Its antennal structure and general carapace features indicate that it is not a pilodiine, and may warrant its own genus, but male abdominal and gonopod characters will need to be examined before its taxonomic status can be clarified.

{9} Clark & Ng (1999) clarified the taxonomy of the poorly known species *Chlorodius miliaris* A. Milne-Edwards, 1873 (type locality New Caledonia), and showed that it differed markedly from other genera in the subfamily. They then placed it in a new monotypic genus, *Sulcodius*. This species, however, is almost certainly identical with another poorly known species, *Etisus deflexus* Dana, 1852, originally described from Fiji. On the basis of the description and figures, and the detailed redescription of the species from Palau by Takeda (1971), we have little doubt that *Etisus deflexus* Dana, 1852, is a senior subjective synonym of *Chlorodius miliaris* A. Milne-Edwards, 1873, and the two are here synonymised.

{10} In describing *Edwardsium*, Guinot (1967a) did not assign it to any subfamily. A re-examination of specimens of *Edwardsium spinimanum* (H. Milne Edwards, 1834), the type species of the genus, indicates that it is best to place it in the Euxanthinae for the moment as it has most of the features here diagnosed for the subfamily (J. C. E. Mendoza & P. K. L. Ng, unpublished data).

{11} *Guinotellus melvillensis* Serène, 1971, was described on the basis of a small male specimen from the Philippines (see also Serène & Umali, 1972). Recently, many new specimens were found, including large adult males, and a complete redescription has been provided (Mendoza et al., in press). Although peculiar in its dome-shaped carapace, it nevertheless has all the diagnostic features of the Euxanthinae and should be placed there.

{12} In the original description of *Hypocoelus* Heller, 1861, two species were listed, *Cancer sculptus* H. Milne Edwards, 1834, and *Cancer exsculptus* Herbst, 1790. However, as he regarded *C. exsculptus* to be a synonym of *Cancer sculptus*, he effectively only treated one species. As such, *Cancer sculptus* H. Milne Edwards, 1834, is the type species of *Hypocoelus* Heller, 1861, by monotypy. Some authors suggest that the type species of *Hypocoelus* Heller, 1861, was selected by Guinot-Dumortier (1960). Guinot-Dumortier (1960) by indicating *Melissa diverticulata* Strahl, 1861, as the type of *Hypocolpus*, de facto also selected *Cancer sculptus* H. Milne Edwards, 1834, as the type species of *Hypocoelus* since she (p. 180) cited that species in the synonymy of *Hypocolpus diverticulatus*. The above comments are largely irrelevant however as *Hypocoelus* Heller, 1861, is pre-occupied by *Hypocoelus* Latreille, 1834, and has been replaced by *Hypocolpus* Rathbun, 1897. Although *Cancer sculptus* H. Milne Edwards, 1834, is a junior homonym and nomenclaturally invalid, it is nevertheless an available name, and may be used as a type species under the Code (Article 69.2.2).

{13} While he did not formally describe *Ladomedaeus*, Števčić's (2005) description of the new family Ladomedaeidae (here synonymised under Euxanthinae), stated that the new genus *Ladomedaeus* was the type genus, and assigned *M. serratus* Sakai, 1965, as its type species, all in the same paragraph. This is valid under the Code, making both Ladomedaeidae Števčić, 2005, and *Ladomedaeus* Števčić, 2005, available names. The generic assignment of *Medaeus serratus* Sakai, 1965, was considered as uncertain by Guinot (1967a: 374), who commented "… est une forme à part (en particulier les crêtes endostomiennes sont bien définies, complètes. Nous laissons pour l'instant imprécise son appartenance générique, mais nous avons des raisons de croire qu'il s'agirait plutôt d'un Pilumninae-Eumedoninae". However, she made an additional comment a year later "Dans la meme note (*ibid*., p. 374), nous avions suppose que *Medaeus serratus* Sakai, 1965, pourrait avoir quelques liens avec les Pilumninae-Eumedoninae. Cette hypothèse nous apparaît maintenant erronée, et nous explique-rons ultérieurement notre point de vue sur cette question." (Guinot, 1968c: 334). In any case, the gonopods as described and figured by Sakai "(1965: 101, Fig. 3a, b) are typical for most Xanthidae; as is the general facies of the species (see also Ikeda, 1998: 128, pl. 58). The presence of distinct endostomial ridges, however, is unusual. Sakai (1965: 101) had also described the male abdomen as consisting of "… seven distinct segments as in the female", and this may have been part of the problem. This is certainly not the typical condition in the Xanthidae s .str. in which segments 3 to 5 are fused. However the sutures separating segments 3 to 5 can still be visible, even though these segments are immovable, i.e. effectively fused (see Ng and Chia, 1994). Such a condition is known for xanthid genera like *Neoxanthias*. Števčić (2005) took the reported differences at face value, and as a result, unnecessarily (in our opinion) recognised a family-level taxon for the genus. While a new genus is warranted, it is easily accommodated in the Euxanthinae of the Xanthidae sensu stricto Manuel-Santos & Ng (2007) have discussed this matter at length after examining specimens of *L. serratus* as well as a new species from the Philippines.

{14} *Medaeops* Guinot, 1967, is clearly heterogeneous, and a revision will be needed to ascertain if it is monophyletic, as well as it affinities with the closely related *Mondaeus* Guinot, 1967 (see Davie, 1997; Ng & McLay, 2007)

{15} Števčić (2005: 133–134) named many new genera none of which are nomenclaturally available as no diagnoses were given. From our own unpublished data, some are valid taxa. These will need to be formally described by the various workers currently revising these taxa.

{16} Lanchester seemed to have run out of luck with this taxon. Lanchester (1900) first established *Actaeopsis*, for a new xanthid from Malaya. Later, realising that this name was pre-occupied by *Actaeopsis* Carter, 1898, for a fossil crustacean, he proposed a replacement name, *Actites* Lanchester, 1902. This name has since been adopted, though usually as a subgenus of *Liomera* Dana, 1851 (see Serène, 1984). The morphological differences are significant enough, however, to recognise it as a distinct genus (see Davie, 1992; Ng, 2002c). Unfortunately for Lanchester, the name *Actites* Lanchester, 1902, is also pre-occupied by *Actites* Billberg, 1828, named for a bird. Although most current authors cite the year of publication as 1901, as discussed earlier in the Introduction, the December 1901 issue of the *Proceedings of the Zoological Society of London*, in which the name appeared was not actually published until 1902. As there are no other synonyms for *Actites* Lanchester, 1902, we here propose a replacement name, *Actiomera*. The type species remains as *Actites erythrus* Lanchester, 1902. The name is derived from an arbitrary combination of *Actites* and *Liomera*, and the gender is feminine.

{17} *Leptodius macandreae* Miers, 1881, was described from the Canary Islands, in a footnote by Miers (1881: 215, 216), and he noted that it was "… very nearly allied to *Leptodius dispar*, Stimpson, a Cuban species …" (Miers, 1881: 216). This species is now in *Paraliomera*, and we tentatively refer Miers' species there.

{18} The systematic position of *Speocarcinus* Stimpson, 1859, has been uncertain for some time (see Guinot, 1969c; Ng, 1987), even after a number of species previously assigned to the genus have been transferred to

other genera and families. The affinities of the genus are nevertheless with the xanthids, and Števčić (2005) correctly assigned it to the Xanthoidea. In fact, with regards to the form of the male abdomen (segments three to five fused), presence of a relatively slender G1 and a relatively short G2 (but prominently longer and less sigmoidal than those in pilumnoids), there is nothing to distinguish *Speocarcinus* from xanthids. We therefore believe that it is more logical to regard Speocarcinidae Števčić, 2005, as a subfamily of the Xanthidae.

{19} The status of the Coralliopinae Števčić, 2005, is not settled. In establishing *Coralliope*, Guinot (1967a: 355) commented that it seemed to have relationships with trapeziids or domeciids. Typically, Števčić (2005) established a new subfamily for the genus and commented that it may be in the Trapeziidae, but with doubt. Looking at the general facies of the members of the genus, and the G1 structure, it seems to have more affinities with the Domeciidae. This matter, however, needs more study, and until then, we prefer to leave it in the Xanthidae.

{20} The status of *Eucratodes* A. Milne-Edwards, 1880, has not been clear. Described for a single species, *Eucratodes agassizii* A. Milne-Edwards, 1880, from the Gulf coast of Mexico and Puerto Rico, Rathbun (1930: 470, 471) commented that it was close to *Metopocarcinus* Stimpson, 1860, and left it in her Xanthidae. *Metopocarcinus* is now in the Panopeidae. Balss (1957) agreed and left it in the Xanthidae. Guinot (1969c: 722, Fig. 145, 146) discussed the position of *Eucratodes* and provided figures of the G1 and male sternum. She commented that it was not really a goneplacid, panopeid or pilumnid and indicated it had more xanthid tendencies. Števčić (2005: 46) suggested establishing a new subfamily, Eucratodinae Števčić, 2005, for the genus and placed it in the Xanthidae. Ng & Castro (2007) provisionally left it in the Euryplacidae but as its male abdomen has segments 3 to 5 fused and the G1 is neither slender nor long, it should be transferred out. An ongoing revision of the Euryplacidae by Peter Castro and P. K. L. Ng suggests that the G1 structure of *Eucratodes agassizii* is certainly xanthid in form (more xanthine), and although the carapace is "euryplacid-like", there are some xanthids that are superficially look like this as well. We retain the genus in the Xanthinae for the time being, and provisionally keep the Eucratodinae Števčić, 2005, in the synonymy of Xanthinae. The various groupings in the Xanthinae need to re-evaluated systematically with all the genera re-examined before any further splitting be done.

{21} An unusual species of *Liagore* which does not show any colour patterns on the carapace was recently described by Ng & Naruse (2007) from Vanuatu.

{22} Števčić (2005) established a new genus (*Linnaeoxanthus*) and a new subfamily (Linnaeo-xanthinae) in the Xanthidae for a peculiar species first described from the Indian Ocean by Rathbun (1911) as *Pilumnoplax acanthomerus* (based on a male and an ovigerous female). The carapace of *P. acanthomerus* looks very much like species of *Xanthias*, but it has spinous legs and chelipeds, as well as a relatively flattened and spinous chela with sharp fingers. It is clearly a xanthid, and likely to be in the subfamily Xanthinae as defined at present. In view of the unsettled taxonomy of the many of the xanthid subfamilies, particularly Xanthinae, it premature to recognise the Linnaeoxanthinae Števčić, 2005. We have tried to re-examine the specimen, supposedly in the Cambridge University zoology collections, but the specimen could not be found (R. Symonds & Paul Clark, pers. comm.). With regards to the genus *Linnaeoxanthus* Števčić, 2005, although Števčić (2005) did not formally describe it, his description of the new family, Linnaeoxanthinae Števčić, 2005, the statement that the new genus *Linnaeoxanthus* was the type genus, and the assignment of *Pilumnoplax acanthomerus* Rathbun, 1911, as its type species, all in the same paragraph, is valid under the Code, making both names available.

{23} Devi (1991) described what she thought was a new species of *Demania*, *D. shyamasundari*, from the Bay of Bengal in India, but her figures and descriptions (including the fresh colour) match those of *Neoxanthias michelae* Serène and Vadon, 1981 (see type description, Ho et al., 2000; Ng et al., 2001).

{24} *Cancer tinctor* Fabricius, 1798, has been forgotten since its description. In the ZMUC is a type specimen (male, 50.0 by 31.1 mm, ZMUC Cru 108), and appears to belong to *Xantho* sensu stricto. It is closest to *Xantho poressa* (Olivi, 1792), with which we synonymise it pending further study.

{25} In establishing a new tribe, Alcock (1898) used the spelling "Zozymoida". This was because he had used the incorrect spelling for the type genus, *Zosimus* Leach, 1818. The original spelling used by Leach (1818) was with an "s", but H. Milne Edwards (1834) used a different spelling, *Zozymus*, and the latter has been used by many subsequent workers. The original spelling for the genus by Leach must be maintained, and as a consequence, the spelling for the subfamily as well.

{26} The synonymy of the well known poisonous reef xanthid crab *Atergatis floridus* (Linnaeus, 1767) with *Cancer ocyroe* Herbst, 1901, and *Atergatis compressipes* MacLeay, 1838, has not been questioned for many decades. Nomenclatural problems with the name *Cancer floridus* with the Atlantic aethrid *Hepatus epheliticus* (Linnaeus, 1763) have been resolved by Ng and Holthuis (1993) with the selection of a neotype for the latter species. Ng & Davie (2007) recently showed that *Cancer ocyroe* Herbst, 1901, is a valid species of *Atergatis*, distinguished by its different carapace physiognomy and mouthpart structure, and most prominently, by its completely different colour pattern in life.

{27} The characters that separate *Zosimus* Leach, 1818, and *Platypodia* Bell, 1835, are not distinct. Characters such as areolation, degree and extent of granulation, and strength of the crests on the anterolateral margin and

pereiopods, are not reliable. In an appraisal of these genera, Guinot (1967b: 559) suggested that two species previously allied with *Platypodia*, *Lophactaea fissa* Henderson, 1893, and *Actaea hawaiiensis* Rathbun, 1906, may be better accommodated within *Zosimus*. She also suggested that the two taxa may be synonymous (see also Davie, 2002: 567). The generic placement of two species currently placed in *Platypodia*, *Lophozozymus actaeoides* A. Milne-Edwards, 1867, and *Lophactaea maculata* De Man, 1888, may not belong there. In the ZRC are specimens of *Actaea hawaiiensis*, *Lophozozymus actaeoides* and *Lophactaea maculata*, as well as many of the type species of both genera. Examing these, we (P. K. L. Ng & P. J. F. Davie) are confident that *Lophactaea fissa* and *Actaea hawaiiensis* are two distinct species, differing markedly in carapace form. With regards to *Zosimus* and *Platypodia*, we propose that *Zosimus* be defined primarily by the last anterolateral tooth been acutely triangular and directed laterally; and the outer surface of the ambulatory propodus possessing a distinct longitudinal groove between two raised areas which may be covered with granules or vermiculations. To this effect, we here transfer *Lophozozymus actaeoides*, *Lophactaea maculata*, *Lophactaea fissa* and *Actaea hawaiiensis* to *Zosimus*. It is also interesting to note that there is a prominent vermiculated pattern of granules on the carpus of the cheliped in the type species of *Zosimus*, *Z. aeneus*. From *Z. maculatus*, *Z. hawaiiensis* to *Z. actaeoides*, this pattern gradually becomes less obvious. *Cancer sculptus* Herbst, 1794, should also be referred to *Zosimus* as defined here. The species has been classified in *Platypodia* (see K. Sakai, 1999: 33) but it is clearly very close to *Z. fissa*. It is quite possible that *Z. sculptus* is synonymous with *Z. fissa*, the two agreeing in most characters. One species of *Platypodia* needs to be referred elsewhere, *Platypodia anaglypta* (Heller, 1861) (originally in *Atergatis*). The last anterolateral tooth is separated from the rest of the teeth by a prominent sinuous groove which is absent in the other *Zosimus* and *Platypodia* species. In addition, this is the smoothest of all known *Platypodia* species. In fact, it looks much more like a species of *Lophozozymus* (which also has the groove on the last anterolateral tooth) and we refer it there for the moment. This revised classification has support from their live colours. Like many species of *Lophozozymus*, *L. anaglyptus* has a prominent colour pattern, with a prominent purple carapace with bright yellow spots. With the exclusion of the above species of *Platypodia* into *Zosimus* and *Lophozozymus*, all the remaining species are relatively drab greenish-brown species without bright colours or prominent color patterns. *Zosimus aeneus* is a well known brightly coloured and strikingly patterned species, and *Z. hawaiiensis* also has a bright orange colour with banded legs (P. K. L. Ng, fresh specimen). The revision of these taxa is now currently under preparation by the authors (Davie & Ng, in prep.).

{28} The identity of *Atergatis limbatus* Streets, 1877, and *Cancer limbatus* H. Milne Edwards, 1834, will need to be checked; the close similarity of their names suggests a connection and both are now in *Platypodia*. Rathbun (1906: 845) cited Streets' (1877) species, *A. limbatus*, as a junior synonym of *P. eydouxi* without comment. In her later synopsis of the American fauna, Rathbun (1930: 246) listed *Cancer limbatus* H. Milne Edwards, 1834, as a synonym of *P. granulosa* (Rüppell, 1830).

{29} The identity of *Cancer miliaris* Latreille, in Milbert, 1812, is a problem. It was described briefly from Mauritius by Latreille (1812: 273), and from what we can gather, it seems to be a species of *Zosimus* or *Platypodia*, or perhaps even *Xanthias*. The carapace regions are well developed, the surface is granular and there are many red spots. It is not possible to be certain, as there are a number of species with these characters. Certainly, this is not the same species as *Chlorodius miliaris* A. Milne-Edwards, 1873 (type locality New Caledonia) (junior synonym of *Etisus deflexus* Dana, 1852, type locality Fiji), now in *Sulcodius* Clark & Ng, 1999.

Fig. 147. *Cymo quadrilobatus*, Vanuatu (photo: T. Y. Chan)

Fig. 148. *Lophozozymus pulchellus*, central Philippines (photo: P. Ng)

Fig. 149. *Paraxanthus barbiger*, Chile (photo: A. Anker)

Fig. 150. *Lybia* cf. *hatagumoana*, central Philippines (photo: P. Ng)

Fig. 151. *Pseudactea corallina*, central Philippines (photo: T. Y. Chan)

Fig. 152. *Pulcratis reticulatus*, Philippines (photo: T. Y. Chan)

Fig. 153. *Cycloxanthops vittatus*, Panama (photo: A. Anker)

Fig. 154. *Zalasius dromiaeformis*, Vanuatu (photo: T. Y. Chan)

Fig. 155. *Demania armadillus*, Phuket, Thailand; a highly poisonous species (photo: P. Ng)

SUBSECTION THORACOTREMATA GUINOT, 1977

SUPERFAMILY CRYPTOCHIROIDEA PAUL'SON, 1875

FAMILY CRYPTOCHIRIDAE PAUL'SON, 1875

Cryptochiridae Paul'son, 1875
Lithoscaptidae Richters, 1880
Hapalocarcinidae Calman, 1900

Cecidocarcinus Kropp & Manning, 1987
= *Cecidocarcinus* Kropp & Manning, 1987 (type species *Cecidocarcinus brychius* Kropp & Manning, 1987, by original designation; gender masculine)
Cecidocarcinus brychius Kropp & Manning, 1987
Cecidocarcinus zibrowii Manning, 1991

Cryptochirus Heller, 1861
= *Cryptochirus* Heller, 1861 (type species *Cryptochirus coralliodytes* Heller, 1861, by monotypy; gender masculine)
= *Troglocarcinus* (*Favicola*) Fize & Serène, 1957 (nomen nudum)
= *Favicola* Serène, 1966 (type species *Cryptochirus rugosus* Edmondson, 1933, by original designation; gender masculine)
Cryptochirus coralliodytes Heller, 1861
= *Cryptochirus rugosus* Edmondson, 1933
Cryptochirus planus Takeda & Tamura, 1983) [*Favicola*]
Cryptochirus rubrilineatus Fize & Serène, 1957

Dacryomaia Kropp, 1990
= *Dacryomaia* Kropp, 1990 (type species *Cryptochirus edmonsoni* Fize & Serène, 1956, by original designation; gender feminine)
Dacryomaia edmonsoni (Fize & Serène, 1956) [*Cryptochirus*]
Dacryomaia japonica (Takeda & Tamura, 1981) [*Favicola*]

Detocarcinus Kropp & Manning, 1987
= *Detocarcinus* Kropp & Manning, 1987 (type species *Troglocarcinus balssi* Monod, 1956, by original designation; gender masculine)
Detocarcinus balssi (Monod, 1956) [*Troglocarcinus*]

Fizesereneia Takeda & Tamura, 1980
= *Fizesereneia* Takeda & Tamura, 1980 (type species *Troglocarcinus heimi* Fize & Serène, 1955, by original designation; gender feminine) [Opinion 1591]
= *Fizeserenia* Kropp & Manning, 1987 (incorrect spelling)
Fizesereneia heimi (Fize & Serène, 1956) [*Troglocarcinus*] [Opinion 1591]
Fizesereneia ishikawai Takeda & Tamura, 1980
Fizesereneia latisella Kropp, 1994
Fizesereneia stimpsoni (Fize & Serène, 1956) [*Troglocarcinus*]
Fizesereneia tholia Kropp, 1994

Fungicola Serène, 1966
= *Fungicola* Fize & Serène, 1957 (nomen nudum)
= *Fungicola* Serène, 1966 (type species *Troglocarcinus utinomii* Fize & Serène, 1956, by original designation; gender feminine)
Fungicola fagei (Fize & Serène, 1956) [*Troglocarcinus*]
Fungicola utinomii (Fize & Serène, 1956) [*Troglocarcinus*]
= *Pseudocryptochirus ishigakiensis* Takeda & Tamura, 1979

Hapalocarcinus Stimpson, 1859
= *Hapalocarcinus* Stimpson, 1859 (type species *Hapalocarcinus marsupialis* Stimpson, 1859, by monotypy; gender masculine)
Hapalocarcinus marsupialis Stimpson, 1859

Hiroia Takeda & Tamura, 1981
= *Hiroia* Takeda & Tamura, 1981 (type species *Troglocarcinus krempfi* Fize & Serène, 1956, by original designation; gender feminine)
Hiroia krempfi (Fize & Serène, 1956) [*Troglocarcinus*]

Lithoscaptus A. Milne-Edwards, 1862
= *Lithoscaptus* A. Milne-Edwards, 1862 (type species *Lithoscaptus paradoxus* A. Milne-Edwards, 1862, by monotypy; gender masculine)
Lithoscaptus grandis (Takeda & Tamura, 1983) [*Cryptochirus*]
Lithoscaptus helleri (Fize & Serène, 1957) [*Troglocarcinus* (*Favicola*)]
Lithoscaptus nami (Fize & Serène, 1957) [*Cryptochirus*]
Lithoscaptus pacificus (Edmondson, 1933) [*Cryptochirus*]
Lithoscaptus paradoxus A. Milne-Edwards, 1862
= *Cryptochirus bani* Fize & Serène, 1957
= *Cryptochirus coralliodytes* var. *fusca* Fize & Serène, 1957
= *Cryptochirus coralliodytes* var. *parvula* Fize & Serène, 1957
Lithoscaptus pardalotus Kropp, 1995
Lithoscaptus prionotus Kropp, 1994
= *Cryptochirus trispinosus* Fize & Serène, 1957 (nomen nudum)
Lithoscaptus tri (Fize & Serène, 1956) [*Cryptochirus*]

Luciades Kropp & Manning, 1996
= *Luciades* Kropp & Manning, 1996 (type species *Luciades agana* Kropp & Manning, 1996, by original designation; gender feminine)
Luciades agana Kropp & Manning, 1996 {1}

Neotroglocarcinus Takeda & Tamura, 1980
= *Neotroglocarcinus* Fize & Serène, 1957 (nomen nudum)
= *Neotroglocarcinus* Takeda & Tamura, 1980 (type species *Troglocarcinus monodi* Fize & Serène, 1956, by original designation; gender masculine)
Neotroglocarcinus hongkongensis (Shen, 1936) [*Cryptochirus*]
= *Neotroglocarcinus monodi* (Fize & Serène, 1956) [*Troglocarcinus*]
Neotroglocarcinus dawydoffi (Fize & Serène, 1956) [*Troglocarcinus*]

Opecarcinus Kropp & Manning, 1987
= *Opecarcinus* Kropp & Manning, 1987 (type species *Pseudocryptochirus hypostegus* Shaw & Hopkins, 1977, by original designation; gender masculine)
Opecarcinus aurantius Kropp, 1989
Opecarcinus crescentus (Edmondson, 1925) [*Cryptochirus*]
Opecarcinus granulatus (Shen, 1936) [*Cryptochirus*]
Opecarcinus hypostegus (Shaw & Hopkins, 1977) [*Pseudocryptochirus*]
Opecarcinus lobifrons Kropp, 1989
Opecarcinus peliops Kropp, 1989
Opecarcinus pholeter Kropp, 1989
Opecarcinus sierra Kropp, 1989

Pelycomaia Kropp, 1990
= *Pelycomaia* Kropp, 1990 (type species *Cryptochirus minutus* Edmondson, 1933, by original designation; gender feminine)
Pelycomaia minuta (Edmondson, 1933) [*Cryptochirus*]

Pseudocryptochirus Hiro, 1938
= *Pseudocryptochirus* Hiro, 1938 (type species *Pseudocryptochirus viridis* Hiro, 1938, by monotypy; gender masculine)
Pseudocryptochirus viridis Hiro, 1938

Pseudohapalocarcinus Fize & Serène, 1956
= *Pseudohapalocarcinus* Fize & Serène, 1956 (type species *Pseudohapalocarcinus ransoni* Fize & Serène, 1956, by monotypy; gender masculine)
Pseudohapalocarcinus ransoni Fize & Serène, 1956

Sphenomaia Kropp, 1990
= *Sphenomaia* Kropp, 1990 (type species *Cryptochirus pyriformis* Edmondson, 1933, by original designation; gender feminine)
Sphenomaia pyriformis (Edmondson, 1933) [*Cryptochirus*]

Troglocarcinus Verrill, 1908
= *Troglocarcinus* Verrill, 1908 (type species *Troglocarcinus corallicola* Verrill, 1908, by monotypy; gender masculine)
= *Troglocarcinus* (*Mussicola*) Fize & Serène, 1957 (type species *Troglocarcinus corallicola* Verrill, 1908, subsequent designation by Kropp & Manning, 1987; gender feminine)
Troglocarcinus corallicola Verrill, 1908

Utinomiella Kropp & Takeda, 1988
= *Utinomia* Takeda & Tamura, 1981 (type species *Cryptochirus dimorphus* Henderson, 1906, by original designation; name pre-occupied by *Utinomia* Tomlinson, 1963 [Crustacea]; gender feminine)
= *Utinomiella* Kropp & Takeda, 1988 (replacement name for *Utinomia* Takeda & Tamura, 1981; gender feminine)
Utinomiella dimorpha (Henderson, 1906) [*Cryptochirus*]
= *Pseudocryptochirus kahe* McCain & Coles, 1979

Xynomaia Kropp, 1990
= *Xynomaia* Kropp, 1990 (type species *Troglocarcinus sheni* Fize & Serène, 1956, by original designation; gender feminine)
Xynomaia boissoni (Fize & Serène, 1956) [*Troglocarcinus*]
Xynomaia sheni (Fize & Serène, 1956) [*Troglocarcinus*]
Xynomaia verrilli (Fize & Serène, 1957) [*Troglocarcinus* (*Favicola*)]

Zibrovia Kropp & Manning, 1996
= *Zibrovia* Kropp & Manning, 1996 (type species *Zibrovia galea* Kropp & Manning, 1996, by original designation; gender feminine)
Zibrovia galea Kropp & Manning, 1996 [1]

Incertae sedis

Troglocarcinus rathbuni Fize & Serène, 1957 (nomen nudum)

Notes

{1} The date of publication for these taxa should be 1996. The journal and paper in question was dated 1995, but R. B. Manning (in litt. to R. Kropp, April 15, 1996) reported that it was actually published in 1996.

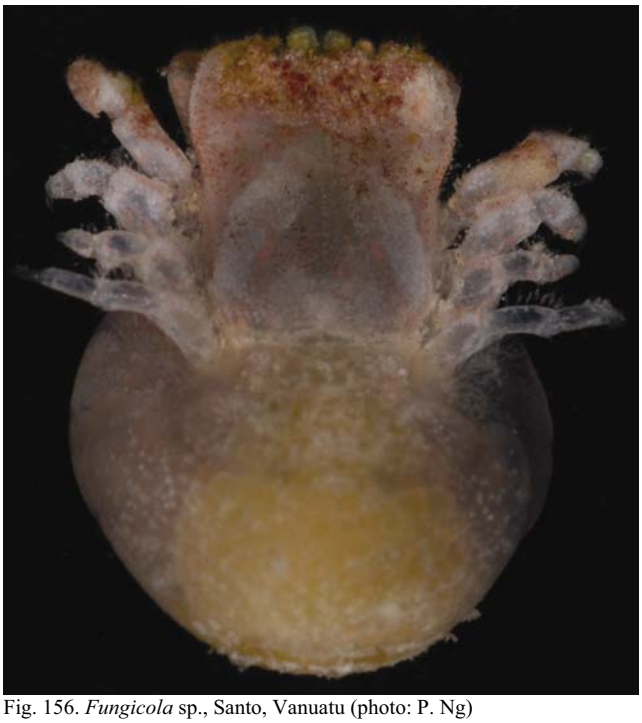
Fig. 156. *Fungicola* sp., Santo, Vanuatu (photo: P. Ng)


Fig. 157. *Hapalocarcinus marsupialis*, Philippines (photo: T. Y. Chan)

SUPERFAMILY GRAPSOIDEA MACLEAY, 1838

Remarks. – Schubart et al. (2006: 198) argue on the basis of their molecular (12S and 16S rRNA) concensus tree that "... it becomes evident that both superfamilies, Grapsoidea and Ocypodoidea, are not monophyletic in their current composition, as exemplified by a proposed sister group relationship of Varunidae and Macrophthalmidae. These results confirm those from previous molecular studies and we therefore propose to refrain from the traditional use of the Grapsoidea and Ocypodoidea as monophyletic superfamilies and treat the constituent families separately." We do not agree with this recommendation and continue here to recognise these as valid superfamilies pending stronger evidence to the contrary. We concede that the genes they have been using work well at the genus level, both reinforcing our morphological generic concepts, and pointing out instances where species have been wrongly placed. However, at the higher level classification, the conclusions they have drawn from their genetic data seem more questionable. For example, while they point out that their results show a sister relationship for the Varunidae and Macrophthalmidae, they pass over the fact that *Mictyris* is in the same monophyletic grouping and sister to these families. This seems most unlikely, and in fact, each of these families has a suite of significant morphological characters that strongly contradict any suggestion of them belonging to the same evolutionary lineage. Similarly, Schubart et al. (2006) showed that the Plagusiidae is sister to the Gecarcinidae, whereas our morphological datasets strongly contradict such an interpretation. Interestingly, our hypothesis was supported by a subsequent genetic analyses (N. K. Ng et al., 2007), that showed plagusiids to be well separated. While we believe that genetic analyses will eventually help successfully resolve these higher order relationships, we are of the opinion that it will require the use of additional and/or more conserved genes. Our morphological understanding of higher taxonomic groupings has, after all, grown out of the analysis and interpretation of a wide array of characters. The truth will ultimately, almost certainly come from a consensus of both molecular and morphological approaches.

FAMILY GECARCINIDAE MACLEAY, 1838

Gécarciniens H. Milne Edwards, 1837 (not in Latin, unavailable name)
Cardisomaceen Nauck, 1880 (not in Latin, unavailable name)
Geocarcinidae Miers, 1886
Cardisominae Ehrardt, 1968 (nomen nudum) {1}

Remarks. – While the Gecarcinidae appears to be a monophyletic group (Schubart et al., 2000a, b, 2002; N. K. Ng et al., 2007), the relationships within are not simple. Cuesta et al. (2002) looked at the first zoeal stages of *Epigrapsus politus*, *E. notatus* and *Gecarcoidea lalandii*, and through comparisons with these and other gecarcinid larvae, suggested that the "Zoea larvae of the family Gecarcinidae display a combination of characters that unifies them and allows them to be distinguished from the rest of the grapsoid families ... the combination of antennal and telson morphology, and setation of the second maxilliped endopod (1, 1, 6) is not present in any other family of grapsoids. This seems to reflect a possible monophyletic origin of the Gecarcinidae, which was also suggested for the genera *Cardisoma* and *Gecarcinus* based on mtDNA sequence data …... Within the Gecarcinidae, the only important difference is the setation of the maxillar endopod. According to this, the two major groups can be distinguised within the Gecarcinidae: *Epigrapsus, Gecarcinus* and *Gecarcoidea* on one hand (with a 2, 2 setation), and the genus *Cardisoma* on the other hand (with 2, 3)" (Cuesta et al., 2002: 1681, 1683). Our ongoing studies of these genera support these conclusions. Clearly, the genera *Cardisoma* and *Discoplax* share a suite of characters that indicate that they deserve subfamilial recognition. On the basis of the adult morphology, *Epigrapsus* is also phylogenetically distinct from *Gecarcinus* and its allies, suggesting that it should also be separated. A fuller analysis of the relationships within the family is currently in progress (Davie & Ng, in prep.).

Cardisoma Latreille, 1828
= *Cardisoma* Berthold, 1827 (type species *Cancer guanhumi* Berthold, 1827, or *Cancer carnifex* Herbst, 1796; gender neuter) (suppressed under Article 23.9.1)
= *Cardisoma* Latreille, 1828 (type species *Cardisoma guanhumi* Latreille, 1828, subsequent designation by H. Milne Edwards, 1838; gender neuter)
= *Perigrapsus* Heller, 1862 (type species *Perigrapsus excelsus* Heller, 1862, by monotypy; gender masculine) [Opinion 85, Direction 37]
= *Cardiosoma* Smith, 1869 (unnecessary replacement name for *Cardisoma* Latreille, 1825; gender neuter)
Cardisoma armatum Herklots, 1851
Cardisoma carnifex (Herbst, 1796) [*Cancer*]
= *Cardisoma obesum* Dana, 1851
= *Perigrapsus excelsus* Heller, 1862 [Direction 36]
= *Cancer urvillei* H. Milne Edwards, 1853
Cardisoma crassum Smith, 1870
= *Cardisoma latimanus* Lockington, 1877
Cardisoma guanhumi Latreille, 1828
= *Cancer guanhumi* Berthold, 1827 (suppressed under Article 23.9.1)
= *Ocypode gigantea* Fréminville, 1835
= *Cardisoma quadrata* Saussure, 1858
= *Cardisoma diurnum* Gill, 1862

Discoplax A. Milne-Edwards, 1867
= *Discoplax* A. Milne-Edwards, 1867 (type species *Discoplax longipes* A. Milne-Edwards, 1867, by monotypy; gender feminine)
Discoplax gracilipes Ng & Guinot, 2001
Discoplax hirtipes (Dana, 1852) [*Cardisoma*] [Opinion 1205] {2}
= *Gecarcinus hirtipes* Lamarck, 1818 [Opinion 1205]
Discoplax longipes A. Milne-Edwards, 1867
Discoplax rotunda (Quoy & Gaimard, 1824) [*Thelphusa*]
= *Cardisoma frontalis* H. Milne Edwards, 1853
= *Discoplax pagenstecheri* Kossmann, 1878

Epigrapsus Heller, 1862
= *Epigrapsus* Heller, 1862 (type species *Epigrapsus politus* Heller, 1862, by monotypy; gender masculine)
= *Nectograpsus* Heller, 1865 (type species *Nectograpsus politus* Heller, 1862, by monotypy; gender masculine)

= *Grapsodes* Heller, 1865 (type species *Grapsodes notatus* Heller, 1865, by monotypy; gender masculine)
= *Mystacocarcinus* Hilgendorf, 1888 (type species *Mystacocarcinus crenidens* Hilgendorf, 1888, by monotypy; gender masculine)
Epigrapsus notatus (Heller, 1865) [*Grapsodes*]
= *Epigrapsus* (*Grapsodes*) *notatus punctatus* Sendler, 1923
= *Epigrapsus* (*Grapsodes*) *wolfi* Sendler, 1923
= *Mystacocarcinus crenidens* Hilgendorf, 1888
Epigrapsus politus Heller, 1862
Epigrapsus villosus Ng, 2002

Gecarcinus Leach, 1814
= *Gecarcinus* Leach, 1814 (type species *Cancer ruricola* Linnaeus, 1758, subsequent designation by H. Milne Edwards, 1837; gender masculine) {3}
= *Geocarcinus* Miers, 1886 (probably incorrect emendation of *Gecarcinus* Leach, 1814)
Gecarcinus quadratus Saussure, 1853
Gecarcinus lateralis (Fréminville, 1835) [*Ocypoda*]
= *Gecarcinus depressus* Saussure, 1858
Gecarcinus ruricola (Linnaeus, 1758) [*Cancer*]
= *Ocypode tourlourou* Latreille, 1803
= *Gecarcinus agricola* Reichenbach, 1828
= *Ocypode rubra* Fréminville, 1835

Gecarcoidea H. Milne Edwards, 1837
= *Gecarcoidea* H. Milne Edwards, 1837 (type species *Gecarcoidea lalandii* H. Milne Edwards, 1837, by monotypy; gender feminine)
= *Pelocarcinus* H. Milne Edwards, 1853 (type species *Gecarcoidea lalandii* H. Milne Edwards, 1837, by monotypy; gender masculine)
= *Hylaeocarcinus* Wood-Mason, 1873 (type species *Hylaeocarcinus humei* Wood-Mason, 1873, by monotypy; gender masculine)
= *Limnocarcinus* De Man, 1879 (type species *Limnocarcinus intermedius* De Man, 1879, by monotypy; gender masculine)
Gecarcoidea lalandii H. Milne Edwards, 1837
= *Hylaeocarcinus humei* Wood-Mason, 1873
= *Limnocarcinus intermedius* De Man, 1879
= *Pelocarcinus marchei* A. Milne-Edwards, 1890
= *Pelocarcinus cailloti* A. Milne-Edwards, 1890
Gecarcoidea natalis (Pocock, 1888) [*Hylaeocarcinus*]

Johngarthia Türkay, 1970
= *Johngarthia* Türkay, 1970 (type species *Gecarcinus planatus* Stimpson, 1860, by original designation; gender feminine)
Johngarthia lagostoma (H. Milne Edwards, 1837) [*Gecarcinus*]
Johngarthia malpilensis (Faxon, 1893) [*Gecarcinus*]
Johngarthia planata (Stimpson, 1860) [*Gecarcinus*]
= *Gecarcinus digueti* Bouvier, 1895
Johngarthia weileri (Sendler, 1912) [*Gecarcinus*]

Incertae sedis

"*Gecarcinus*" *barbatus* Poeppig, 1836

Notes

{1} Ehrardt (1968) uses the family name Cardisomidae in his text. But as no description is provided, the name must be regarded as a nomen nudum under the Code.

{2} See Comment on the proposed suppression of *Gecarcinus hirtipes* Lamarck, 1818, versus *Cardisoma hirtipes* Dana, 1852, by Holthuis (1980), and the reply by Türkay (1980). The specific name has been placed on the Official List of Specific names in Zoology by the ICZN (1982: Opinion 1205).

{3} In Cuvier's *Règne Animal*, on plate 24, H. Milne Edwards (1837) figured *Gecarcinus ruricola* as his representation of *Gecarcinus*, and on the basis of the title of his work, can be regarded as a type designation. Some authors cite the year for this as 1838, but according to Cowan (1976), plate 24 was released in March 1837.


Fig. 158. *Discoplax longipes*, Guam (photo: H.C. Liu)


Fig. 159. *Johngarthia weileri*, Sao Tome (photo: A. Anker)


Fig. 160. *Epigrapsus villosus*, Vanuatu; this is a new record for the islands; the species previously only known from Guam (photo: H.H. Tan)

FAMILY GLYPTOGRAPSIDAE SCHUBART, CUESTA & FELDER, 2002

Remarks . – Available larval and DNA evidence suggests that the American and east Atlantic genera *Glyptograpsus* Smith, 1870, and *Platychirograpsus* De Man, 1896, are distinct from other grapsoids, and because of this Schubart et al. (2002) established a new family for them (see also Cuesta & Schubart, 1997; Schubart et al., 2006). The adult morphological characters, however, show no major differences to distinguish them from the Varunidae. Nevertheless, we provisionally continue to recognise the Glyptograpsidae. This is especially in view of the fact that the Varunidae sensu lato is also being revised and redefined, e.g. most recently, the genus *Xenograpsus*, was transferred to its own family (N. K. Ng, et al., 2007).

Glyptograpsidae Schubart, Cuesta & Felder, in Martin & Davis, 2001 (nomen nudum) {1}
Glyptograpsidae Schubart, Cuesta & Felder, 2002

Glyptograpsus Smith, 1870
= *Glyptograpsus* Smith, 1870 (type species *Glyptograpsus impressus* Smith, 1870, by original designation; gender masculine) [Opinion 85, Direction 37]
= *Areograpsus* Benedict, 1892 (type species *Areograpsus jamaicensis* Benedict, 1802, by monotypy; gender masculine)
Glyptograpsus impressus Smith, 1870 [Direction 36]
= *Glyptograpsus spinipes* Cano, 1889
Glyptograpsus jamaicensis (Benedict, 1802) [*Areograpsus*]

Platychirograpsus De Man, 1896
= *Platychirograpsus* De Man, 1896 (type species *Platychirograpsus spectabilis* De Man, 1896, by monotypy, Article 68.2.1; gender masculine) [Opinion 85, Direction 37]
Platychirograpsus spectabilis De Man, 1896 [Direction 36]
= *Platychirograpsus typicus* Rathbun, 1914

Notes

{1}Martin & Davis (2001: 75) first used the name "Glyptograpsidae Schubart, Cuesta & Felder , 2001" but the name was actually not published until 2002. They had cited Schubart et al.'s paper as being in press at the time of their publication. As such, the name in Martin & Davis (2001) is a nomen nudum as there was no description, diagnosis or indication, although they named the two genera included. The name Glyptograpsidae was only made available in Schubart et al. (2002).

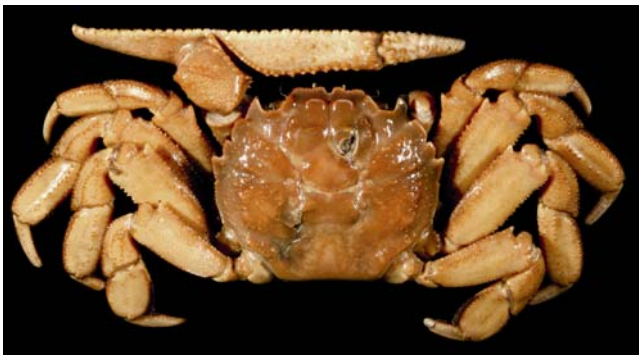

Fig. 161. *Platychirograpsus spectabilis*, Mexico; preserved colours (photo: T. Naruse)

FAMILY GRAPSIDAE MACLEAY, 1838

Grapsidae MacLeay, 1838
Goniopsinae Kossmann, 1877
Leptograpsinae Kossmann, 1877

Subfamily Grapsinae MacLeay, 1838

Grapsidae MacLeay, 1838
Leptograpsinae Kossmann, 1877
Goniopsinae Kossmann, 1877

Geograpsus Stimpson, 1858
= *Geograpsus* Stimpson, 1858 (type species *Grapsus lividus* H. Milne Edwards, 1837, subsequent designation by Rathbun, 1918; gender masculine)
= *Orthograpsus* Kingsley, 1880 (type species *Orthograpsus hillii* Kingsley, 1880, subsequent designation by Manning & Holthuis, 1981; gender masculine)
Geograpsus crinipes (Dana, 1851) [*Grapsus*]
= *Geograpsus antelmei* Ward, 1942
Geograpsus grayi (H. Milne Edwards, 1853) [*Grapsus*]
= *Geograpsus rubidus* Stimpson, 1858
= *Geograpsus longitarsis minikoiensis* Borradaile, 1901
= *Geograpsus viaderi* Ward, 1942
Geograpsus lividus (H. Milne Edwards, 1837) [*Grapsus*]
= *Grapsus brevipes* H. Milne Edwards, 1853
= *Orthograpsus hillii* Kingsley, 1880
= *Geograpsus occidentalis* Stimpson, 1860
Geograpsus stormi De Man, 1895
?*Geograpsus depressus* (Heller, 1862) [*Grapsus*]

Goniopsis De Haan, 1833
= *Grapsus* (*Goniopsis*) De Haan, 1833 (type species *Grapsus* (*Goniopsis*) *cruentatus* Latreille, 1803, subsequent designation by Rathbun, 1918; gender feminine)
Goniopsis cruentata (Latreille, 1803) [*Grapsus* (*Goniopsis*)]
= *Grapsus longipes* Randall, 1840
Goniopsis pelii (Herklots, 1851) [*Grapsus* (*Grapsus*)]
= *Grapsus* (*Grapsus*) *simplex* Herklots, 1851
Goniopsis pulchra (Lockington, 1877 [*Goniograpsus*]

Grapsus Lamarck, 1801
= *Grapsus* Lamarck, 1801 (type species *Cancer grapsus* Linnaeus, 1758, by tautonomy [see also designation by Latreille 1810: 422]; gender masculine)
Grapsus albolineatus Latreille, in Milbert, 1812 [recte *Grapse*] {1}
= *Grapsus albolineatus* Lamarck, 1818
= *Cancer strigosus* Herbst, 1799
= *Grapsus* (*Goniopsis*) *flavipes* MacLeay, 1838
= *Grapsus peroni* H. Milne Edwards, 1853
= *Grapsus longipes* Stimpson, 1858
Grapsus adscensionis (Osbeck, 1765) [*Cancer*]
= *Grapsus webbi* H. Milne Edwards, 1853
= *Grapsus pictus* var. *ocellatus* Studer, 1883
Grapsus fourmanoiri Crosnier, 1965
Grapsus grapsus (Linnaeus, 1758) [*Cancer*]
= *Grapsus pictus* Lamarck, 1801
= *Grapsus maculatus* H. Milne Edwards, 1853
= ?*Grapsus ornatus* H. Milne Edwards, 1853
= *Cancer jumpibus* Swire, 1938
= *Grapsus altifrons* Stimpson, 1860
Grapsus granulosus H. Milne Edwards, 1853 {2}
Grapsus intermedius De Man, 1888
Grapsus longitarsis Dana, 1851
= *Grapsus subquadratus* Stimpson, 1858
= *Grapsus longitarsis somalicus* Maccagno, 1930

Grapsus tenuicrustatus (Herbst, 1783) [*Cancer*]
= *Grapsus hirtus* Randall, 1840
= *Grapsus rude* H. Milne Edwards, 1837
= *Grapsus rudis* H. Milne Edwards, 1853
= *Grapsus pharaonis* H. Milne Edwards, 1853
= *Grapsus gracilipes* H. Milne Edwards, 1853
= *Grapsus gracillimus* Sendler, 1923

Leptograpsodes Montgomery, 1931
= *Leptograpsodes* Montgomery, 1931 (type species *Leptograpsodes webhaysi* Montgomery, 1931, by monotypy; gender masculine)
Leptograpsodes octodentatus (H. Milne Edwards, 1837) [*Cyclograpsus*]
= *Grapsus inornatus* Hess, 1865
= *Leptograpsodes webhaysi* Montgomery, 1931

Leptograpsus H. Milne Edwards, 1853
= *Leptograpsus* H. Milne Edwards, 1853 (type species *Cancer variegatus* Fabricius, 1793, subsequent designation by Rathbun, 1918; gender masculine)
Leptograpsus variegatus (Fabricius, 1793) [*Cancer*]
= *Sesarma pentagona* Hutton, 1875
= *Grapsus personatus* Lamarck, 1818
= *Grapsus strigilatus* White, 1842
= *Grapsus planifrons* Dana, 1851
= *Leptograpsus ansoni* H. Milne Edwards, 1853
= *Leptograpsus gayi* H. Milne Edwards, 1853
= *Leptograpsus verreauxi* H. Milne Edwards, 1853

Metopograpsus H. Milne Edwards, 1853
= *Metopograpsus* H. Milne Edwards, 1853 (type species *Cancer messor* Forskål, 1775, subsequent designation by Davie, 2002; gender masculine)
Metopograpsus frontalis Miers, 1880
= *Metopograpsus messor gracilipes* De Man, 1891
Metopograpsus latifrons (White, 1847) [*Grapsus*]
= *Grapsus latifrons* White, 1847 [nomen nudum]
= *Metopograpsus maculatus* H. Milne Edwards, 1853
= *Grapsus* (*Grapsus*) *dilatatus* De Haan in Herklots, 1861 (nomen nudum)
= *Grapsus* (*Grapsus*) *dilatatus* De Man, 1879
= *Metopograpsus pictus* A. Milne-Edwards, 1867
Metopograpsus messor (Forskål, 1775) [*Cancer*]
= *Grapsus gaimardi* Audouin, 1826
= *Grapsus* (*Pachygrapsus*) *aethiopicus* Hilgendorf, 1869
Metopograpsus oceanicus (Hombron & Jacquinot, 1846) [*Grapsus*]
= *Grapsus* (*Grapsus*) *sulcifer* Herklots, 1861 (nomen nudum) {3}
Metopograpsus quadridentatus Stimpson, 1858
= *Grapsus* (*Grapsus*) *plicatus* Herklots, 1861 (nomen nudum) {3}
= *Pachygrapsus quadratus* Tweedie, 1936
Metopograpsus thukuhar (Owen, 1839) [*Grapsus*]
= *Metopograpsus eydouxi* H. Milne Edwards, 1853
= *Metopograpsus intermedius* H. Milne Edwards, 1853
= *Pachygrapsus parallelus* Randall, 1840

Pachygrapsus Randall, 1840
= *Pachygrapsus* Randall, 1840 (type species *Pachygrapsus crassipes* Randall, 1840, subsequent designation by Kingsley, 1880; gender masculine) [Opinion 712]
= *Goniograpsus* Dana, 1851 (type species *Goniograpsus innotatus* Dana, 1851, subsequent designation by Manning & Holthuis, 1981; gender masculine)
Pachygrapsus corrugatus (von Martens, 1872) [*Grapsus* (*Leptograpsus*)]
Pachygrapsus crassipes Randall, 1840 [Opinion 712]
= *Grapsus eydouxi* H. Milne Edwards, 1853
= ?*Leptograpsus gonagrus* H. Milne Edwards, 1853
Pachygrapsus fakaravensis Rathbun, 1907
Pachygrapsus gracilis (Saussure, 1858) [*Metopograpsus*]
= *Grapsus guadulpensis* Desbonne, in Desbonne & Schramm, 1867
Pachygrapsus laevimanus Stimpson, 1858
Pachygrapsus loveridgei Chace, 1966
Pachygrapsus marmoratus (Fabricius, 1787) [*Cancer*]
= *Cancer femoralis* Olivier, 1791
= *Grapsus varius* Latreille, 1803
= *Grapsus* (*Grapsus*) *savignyi* De Haan, 1835
= ?*Leptograpsus bertheloti* H. Milne Edwards, 1853
= ?*Pachygrapsus pubescens* Heller, 1865
Pachygrapsus maurus (Lucas, 1846) [*Grapsus*]
= *Goniograpsus simplex* Dana, 1852
Pachygrapsus minutus A. Milne-Edwards, 1873
= *Sesarma murrayi* Calman, 1909
Pachygrapsus planifrons De Man, 1888
= *Pachygrapsus longipes* Rathbun, 1894
= *Pachygrapsus laevis* Borradaile, 1900
Pachygrapsus plicatus (H. Milne Edwards, 1837) [*Grapsus*]
= ?*Pachygrapsus natalensis* Ward, 1934
= *Pachygrapsus striatus* A. Milne-Edwards, 1873
= *Pachygrapsus kraussi* (H. Milne Edwards, 1853) [*Grapsus*]
Pachygrapsus propinquus De Man, 1908
Pachygrapsus socius Stimpson, 1871 {4}
Pachygrapsus transversus (Gibbes, 1850) [*Grapsus*] {4}
= *Goniograpsus innotatus* Dana, 1851
= *Leptograpsus rugulosus* H. Milne Edwards, 1853
= *Metopograpsus dubius* Saussure, 1858
= *Metopograpsus miniatus* Saussure, 1858
= *Grapsus declivifrons* Heller, 1862
= *Pachygrapsus intermedius* Heller, 1862
= *Pachygrapsus advena* Catta, 1876

Planes Bowdich, 1825
= *Planes* Bowdich, 1825 (type species *Planes clypeatus* Bowdich, 1825, by monotypy; gender masculine) [Opinion 85, Direction 37]
= *Nautilograpsus* H. Milne Edwards, 1837 (type species *Cancer minutus* Linnaeus, 1758, subsequent designation by Rathbun, 1918; gender masculine)
= *Nautilograpsoides* Smirnov, 1929 (no type species designated; gender masculine) {5}
Planes major (MacLeay, 1838) [*Nautilograpsus*]
= *Planes cyaneus* Dana, 1851
= ?*Varuna atlantica* Mellis, 1875
= *Nautilograpsus angustatus* Stimpson, 1858
Planes marinus Rathbun, 1914
Planes minutus (Linnaeus, 1758) [*Cancer*] [Direction 36]
= *Cancer cantonensis* Linnaeus, 1747 (unavailable pre-1758 name)
= *Planes clypeatus* Bowdich, 1825
= *Cancer pusillus* Fabricius, 1775
= *Grapsus pelagicus* Say, 1818
= *Grapsus testudinum* Roux, 1828
= *Nautilograpsus smithii* MacLeay, 1838
= *Planes linnaeana* Leach, in White, 1847 (nomen nudum)
= *Grapsus diris* Costa, 1853
= *Planes linnaeana* Bell, 1845

Incertae sedis

Grapsus flavicola White, 1847 (nomen nudum)
Grapse erytrhocheles Latreille, in Milbert, 1812

?*Marestia* Dana, 1852
  = *Marestia* Dana, 1852 (type species *Marestia atlantica* Dana, 1852, by present designation; gender feminine) {6}
Marestia atlantica Dana, 1852
Marestia elegans Dana, 1852
Marestia mawsoni Rathbun, 1918
Marestia pervalida Dana, 1852

Notes

{1} *Grapsus albolineatus* is usually credited to Lamarck (1818), but the correct author should be Latreille, in Milbert, 1812 (see Notes in INTRODUCTION).

{2} *Grapsus granulosus* H. Milne Edwards, 1853, is often regarded as a junior synonym of *Grapsus albolineatus* Latreille, in Milbert, 1812 (see Crosnier, 1965, Davie, 2002); but Holthuis (1977) commented that it is a distinct species (see also Vannini & Valmori, 1981; Zaouali et al., 2007).

{3} As with a number of names listed by Herklots (1861), including the unpublished ones of De Haan, these names are nomen nuda as he did not provide any description or indication.

{4} *Pachygrapsus socius* Stimpson, 1871, has long been regarded as a junior synonym of *P. transversus* (Gibbes, 1850) but was recently recognised as a separate taxon (Schubart et al., 2005) (see also Poupin et al., 2005).

{5} Smirnov (1929) described a new fossil species of *Nautilograpsus* (presently *Planes*), and established a new name *Nautilograpsoides*, but did not indicate what a type species (see also Glaessner, 1929).

{6} *Marestia* was described on the basis of megalopae collected from the Atlantic, South Africa and Pacific. From the descriptions and figures, it appears to be grapsid of some sort.


Fig. 162. *Pachygrapsus fakaravensis*, Hawaii (photo: P. Ng)

FAMILY PLAGUSIIDAE DANA, 1851

Plagusiinae Dana, 1851 [Opinion 712]
Euchirograpsini Števčić, 2005
Percnini Števčić, 2005

Subfamily Plagusiinae Dana, 1851 {1}

Plagusiinae Dana, 1851 [Opinion 712]
Euchirograpsini Števčić, 2005

Davusia Guinot, 2007 {2}
  = *Davusia* Guinot, 2007 (type species *Plagusia glabra* Dana, 1852, by original designation; gender feminine)
Davusia glabra (Dana, 1852) [*Plagusia*]

Euchirograpsus H. Milne Edwards, 1853
  = *Euchirograpsus* H. Milne Edwards, 1853 (type species *Euchirograpsus liguricus* H. Milne Edwards, 1853, by monotypy; gender masculine) [Opinion 85, Direction 37]
Euchirograpsus americanus A. Milne-Edwards, 1880
Euchirograpsus antillensis Türkay, 1975
Euchirograpsus liguricus H. Milne Edwards, 1853 [Direction 36]
Euchirograpsus madagascariensis Türkay, 1978
Euchirograpsus pacificus Türkay, 1975
Euchirograpsus polyodous (Stebbing, 1921) [*Pachygrapsus*] {3}
Euchirograpsus timorensis Türkay, 1975
Euchirograpsus tuerkayi Crosnier, 2001

Miersiograpsus Türkay, 1978
  = *Miersiograpsus* Türkay, 1978 (type species *Miersiograpsus australiensis* Türkay, 1978, by original designation; gender masculine)
Miersiograpsus australiensis Türkay, 1978
Miersiograpsus kingsleyi (Miers, 1885) [*Brachygrapsus*]

Plagusia Latreille, 1804
  = *Plagusia* Latreille, 1804 (type species *Cancer depressus* Fabricius, 1775, by monotypy; gender feminine) [Opinion 712]
  = *Philyra* De Haan, 1833 (type species *Cancer depressus* Fabricius, 1775, subsequent monotypy by De Haan, 1835; name pre-occupied by *Philyra* Latreille, 1829 [Crustacea]; gender feminine) [Opinion 712]
Plagusia chabrus (Linnaeus, 1758) [*Cancer*]
  = *Cancer velutinus* Linnaeus, 1764
  = *Grapsus* (*Plagusia*) *capensis* De Haan, 1835
  = *Plagusia tomentosus* H. Milne Edwards, 1837
  = *Plagusia spinosa* MacLeay, 1838
  = *Plagusia gaimardi* H. Milne Edwards, 1853
Plagusia dentipes (De Haan, 1835) [*Grapsus* (*Plagusia*)]
Plagusia depressa (Fabricius, 1775) [*Cancer*] [Opinion 712]
  = *Plagusia sayi* de Kay, 1844
  = *Plagusia gracilis* Saussure, 1858
Plagusia immaculata Lamarck, 1818
Plagusia integripes Garth, 1973
Plagusia speciosa Dana, 1852
Plagusia squamosa (Herbst, 1790) [*Cancer*]
  = *Grapse tuberculatus* Latreille, in Milbert, 1812 {4}
  = *Plagusia tuberculata* Lamarck, 1818
  = *Plagusia orientalis* Stimpson, 1858

Subfamily Percninae Števčić, 2005

Percnini Števčić, 2005

Percnon Gistel, 1848
= *Acanthopus* De Haan, 1833 (type species *Cancer planissimus* Herbst, 1804, subsequent designation by Rathbun, 1918; name pre-occupied by *Acanthopus* Klug, 1807 [Hymenoptera]; gender masculine) [Direction 37]
= *Percnon* Gistel, 1848 (replacement name for *Acanthopus* De Haan, 1833; gender neuter) [Opinion 85, Direction 37]
= *Leiolophus* Miers, 1876 (unnecessary replacement name for *Acanthopus* De Haan, 1833; gender masculine)
= *Liolophus* Alcock (incorrect emendation of *Leiolophus* Miers, 1876)
Percnon abbreviatum (Dana, 1851) [*Acanthopus*]
Percnon affine (H. Milne Edwards, 1853) [*Acanthopus*]
= *Acanthopus pilimanus* A. Milne-Edwards, 1873
Percnon gibbesi (H. Milne Edwards, 1853) [*Acanthopus*]
= *Plagusia delaunayi* Rochebrune, 1883
Percnon guinotae Crosnier, 1965
Percnon planissimum (Herbst, 1804) [*Cancer*] [Direction 36]
= *Plagusia clavimana* Lamarck, 1806
= *Plagusia serripes* Lamarck, 1818
= *Acanthopus tenuifrons* H. Milne Edwards, 1853
= *Percnon demani* Ward, 1934
Percnon sinense Chen, 1977

Notes

{1} The Plagusiinae has long being classified as a subfamily in the Grapsidae and traditionally contained only *Plagusia* and *Percnon*, which seem to be allied by the unusual clefted front, fused male abdominal segments, and reduced exopod of the third maxilliped which lacks a palp. Another two diagnostic characters are the unusual abdominal press-button locking mechanism (see Guinot & Bouchard 1998) and raised rim adjacent to press-button at the suture between sternites 5/6. An emended diagnosis for the Plagusiidae is provided: Carapace subcircular to quadrate; surface smooth and glabrous to strongly tuberculate and tomentose. Front of two types: a) narrow, not overhanging epistome although may be armed with projecting spines; divided into three lobes by deeply cleft antennular fossae, such that antennules visible in dorsal view, or b) broader and more grapsid-like, overhanging epistome; shallow grooves marking incipient antennular clefts, but not obvious in dorsal view. Anterolateral margins with one to several teeth or spines behind exorbital angle. Lower border of orbit curved, continued as ridge to meet prominent anterior border of buccal cavern. Antennal flagellum short. Third maxillipeds not completely closing buccal cavern; merus and ischium without oblique setose crest; exopod slender, with or without flagellum; palp articulating near antero-external angle of merus. Male abdomen entirely covering sternum between last pair of legs; segments 3–6 or 3–5 fused, sutures may be still evident. Abdominal locking mechanism press-button type, corneous rim or constricted apex present in *Plagusia* and *Percnon*; suture between sternites 5/6 with raised rim adjacent to press-button.

In a preliminary tree, Schubart et al. (2000) questioned the then taxonomic position of *Euchirograpsus*, suggesting that its affinities were with the plagusiines (Schubart, 2002). Davie (2002) transferred *Euchirograpsus* and *Miersiograpsus* to Plagusiinae from Varuninae and Grapsinae respectively. Our re-examination of specimens showed that both *Euchirograpsus* and *Miersiograpsus* have the male abdominal segments 3–6 fused, an apomorphy otherwise not known in the Grapsidae sensu lato. Also we found that there are shallow grooves along the front which appear to mark incipient antennular clefts, like those found in *Plagusia* and *Percnon*. This, along with the DNA data, is sufficient grounds to formally place them in the Plagusiidae. However, there are a number of what must be considered as plesiomorphic grapsid features which are still retained by both *Euchirograpsus* and *Miersiograpsus*, such as a relatively broader front which overhangs the epistome, and the third maxilliped with a normal long exopod that bears a well developed palp. Interestingly Guinot & Bouchard (1998: 664) also recognised that as a "grapsid", *Euchirograpsus* was unusual in its type of push-button abdominal locking mechanism: "... a specially acute button and a socket posteriorly defined by a strongly calcified border, which suggests that the genus is misplaced in the Varuninae."

With regards to *Percnon*, DNA (Schubart et al. 1999) and larval evidence (J. Cuesta, pers. comm.) have suggested that *Percnon* is different and doubtfully placed in the Plagusiidae. On the basis of adult morphology, we concur that *Percnon* species are highly derived, and have many unique generic apomorphies, probably related to their unusual habit of living subtidally on rock faces exposed to heavy wave action. These, combined with unusual sternal characters and the unique grapsoid condition of the male abdomen having only segments 3–5 fused, lead us to support the recognition of a separate subfamily, Percninae, a taxon first erected as a tribe by Števčić (2005).

{2} The atypical *Plagusia glabra* Dana, 1852, was recently referred to its own genus by Guinot (2007).

{3} *Pachygrapsus polyodous* Stebbing, 1921, was described on the basis of one specimen from Natal in southern Africa. The carapace form, armature of the anterolateral margin, and structure of the chelipeds, closely resemble species of *Euchirograpsus*, and it has been tentatively referred to this genus by Poupin et al. (2005). However, it differs from all known *Euchirograpsus* in having the ventral margins of its ambulatory meri prominently serrated, suggesting that it may well belong to its own genus. Unfortunately the type is apparently lost. Barnard (1950: 118) stated that "only one male specimen was captured. It has not been returned to the South African Museum, so I am unable to check Stebbing's description or give further details". Stebbing's South African collection was largely donated to the Natural History Museum, London, but the holotype of *P. polyodous* is not found there and is probably lost (P. F. Clark, pers. comm.). Nevertheless, it is clear that Stebbing's species does not belong to *Pachygrapsus*.

{4} *Plagusia tuberculatus* is usually credited to Lamarck (1818), but the correct author should be Latreille, in Milbert, 1812 (see Notes in INTRODUCTION).

FAMILY SESARMIDAE DANA, 1851

Sesarminae Dana, 1851
Aratini Števčić, 2005

Aratus H. Milne Edwards, 1853
= *Aratus* H. Milne Edwards, 1853 (type species *Sesarma pisonii* H. Milne Edwards, 1837, by monotypy; gender masculine)
Aratus pisonii (H. Milne Edwards, 1837) [*Sesarma*] {1}

Armases Abele, 1992
= *Armases* Abele, 1992 (type species *Sesarma cinereum* Bosc, 1802, by original designation; gender neuter)
Armases americanum (Saussure, 1858) [*Sesarma*]
= *Sesarma* (*Holometopus*) *tampicense* Rathbun, 1914
Armases angustipes (Dana, 1852) [*Sesarma*]
= *Sesarma* (*Holometopus*) *miersii iheringi* Rathbun, 1918
Armases angustum (Smith, 1870) [*Sesarma*]
= *Sesarma ophioderma* Nobili, 1901
Armases benedicti (Rathbun, 1897) [*Sesarma* (*Holometopus*)]
= *Sesarma chiragra* Ortmann, 1897
Armases cinereum (Bosc, 1802) [*Sesarma*]
Armases elegans (Herklots, 1851) [*Sesarma* (*Holometopus*)]
Armases gorei (Abele, 1981) [*Sesarma*]
Armases magdalenense (Rathbun, 1918) [*Sesarma* (*Holometopus*)]
Armases miersii (Rathbun, 1897) [*Sesarma* (*Holometopus*)]
Armases occidentale (Smith, 1870) [*Sesarma*]
= *Sesarma* (*Holometopus*) *festae* Nobili, 1901
= *Sesarma* (*Holometopus*) *biolleyi* Rathbun, 1906
Armases ricordi (H. Milne Edwards, 1853) [*Sesarma*]
= *Sesarma guerini* H. Milne Edwards, 1853
= *Sesarma miniata* Saussure, 1858
= *Sesarma ricordi* var. *terrestris* Verrill, 1908
Armases roberti (H. Milne Edwards, 1853) [*Sesarma*]
= *Sesarma bromelium* Rathbun, 1896
Armases rubripes (Rathbun, 1897) [*Sesarma*] [Opinion 1140]
= *Sesarma trapezium* Dana, 1852 (priority suppressed by ICZN) [Opinion 1140] {2}

Bresedium Serène & Soh, 1970
= *Bresedium* Serène & Soh, 1970 (type species *Sesarma edwardsii brevipes* De Man, 1889, by original designation; gender neuter)
Bresedium brevipes (De Man, 1889) [*Sesarma*]
Bresedium philippinense (Rathbun, 1914) [*Sesarma* (*Sesarma*)] {3}
Bresedium sedilense (Tweedie, 1940) [*Sesarma*]

Chiromantes Gistel, 1848
= *Grapsus* (*Pachysoma*) De Haan, 1833 (type species *Grapsus* (*Pachysoma*) *haematochir* De Haan, 1833, subsequent designation by Holthuis, 1977; name pre-occupied by *Pachysoma* Macleay, 1821 [Coleoptera]; gender neuter)
= *Chiromantes* Gistel, 1848 (replacement name for *Pachysoma* De Haan, 1833; gender masculine)
= *Holometopus* H. Milne Edwards, 1853 (type species *Grapsus* (*Pachysoma*) *haematochir* De Haan, 1833, by monotypy; gender neuter) [Opinion 85, Direction 37]
"*Chiromantes*" *angolense* (Brito Capello, 1864) [*Sesarma*] {4}
"*Chiromantes*" *boulengeri* (Calman, 1920) [*Sesarma*] {5}
"*Chiromantes*" *buettikoferi* (De Man, 1883) [*Sesarma*] {4}
"*Chiromantes*" *dehaani* (H. Milne Edwards, 1853) [*Sesarma*] {5}
= *Sesarma hanseni* Rathbun, 1897
"*Chiromantes*" *eulimene* (De Man, 1895) [*Sesarma* (*Sesarma*)] {6}
Chiromantes haematocheir (De Haan, 1833) [*Grapsus* (*Pachysoma*)] [Directions 36, 85] {5}
= *Holometopus serenei* Soh, 1978 {9}
"*Chiromantes*" *neglectum* (De Man, 1887) [*Sesarma*] {5, 7}
"*Chiromantes*" *obtusifrons* (Dana, 1851) [*Sesarma*] {8}
"*Chiromantes*" *ortmanni* (Crosnier, 1965) [*Sesarma* (*Holometopus*)] {6}

Clistocoeloma A. Milne-Edwards, 1873
= *Clistocoeloma* A. Milne-Edwards, 1873 (type species *Clistocoeloma balansae* A. Milne-Edwards, 1873, by monotypy; gender neuter) [Opinion 85, Direction 37]
Clistocoeloma balansae A. Milne-Edwards, 1873 [Direction 36]
Clistocoeloma amamaparense Rahayu & Takeda, 2000
Clistocoeloma lanatum (Alcock, 1900) [*Sesarma*]
Clistocoeloma merguiense De Man, 1888
Clistocoeloma sinense Shen, 1933
Clistocoeloma suvaense Edmondson, 1951
Clistocoeloma tectum (Rathbun, 1914) [*Sesarma* (*Sesarma*)]
Clistocoeloma villosum (A. Milne-Edwards, 1869) [*Sesarma*]

Episesarma De Man, 1895
= *Episesarma* De Man, 1895 (type species *Sesarma taeniolata* Miers, 1877, subsequent designation by Holthuis, 1978; gender neuter)
= *Neoepisesarma* Serène & Soh, 1970 (type species *Sesarma mederi* H. Milne Edwards, 1853, by original designation; gender neuter)
Episesarma mederi (H. Milne Edwards, 1853) [*Sesarma*]
= *Sesarma taeniolata* White, 1847 (nomen nudum)
= *Sesarma taeniolata* Miers, 1877
Episesarma chentongense (Serène & Soh, 1967) [*Sesarma* (*Sesarma*)]
Episesarma crebrestriatum (Tesch, 1917) [*Sesarma*]
Episesarma lafondii (Hombron & Jacquinot, 1846) [*Sesarma*]
Episesarma mederi (A. Milne-Edwards, 1854) [*Sesarma*]
Episesarma palawanense (Rathbun, 1914) [*Sesarma* (*Sesarma*)]
Episesarma singaporense (Tweedie, 1936) [*Sesarma*]
Episesarma versicolor (Tweedie, 1940) [*Sesarma*]

Geosesarma De Man, 1892
= *Geosesarma* De Man, 1892 (type species *Sesarma* (*Geosesarma*) *nodulifera* De Man, 1892, subsequent designation by Serène & Soh, 1970; gender neuter)
Geosesarma albomita Yeo & Ng, 1999
Geosesarma amphinome (De Man, 1899) [*Sesarma* (*Sesarma*)]
Geosesarma angustifrons (A. Milne-Edwards, 1869) [*Sesarma*]
Geosesarma araneum (Nobili, 1899) [*Sesarma*]
Geosesarma aurantium Ng, 1995
Geosesarma bau Ng & Jongkar, 2004
Geosesarma bicolor Ng & Davie, 1995
Geosesarma cataracta Ng, 1986
Geosesarma confertum (Ortmann, 1894) [*Sesarma*]
Geosesarma celebense (Schenkel, 1902) [*Sesarma* (*Geosesarma*)]
Geosesarma clavicrure (Schenkel, 1902) [*Sesarma*]
Geosesarma danumense Ng, 2003
Geosesarma foxi (Kemp, 1918) [*Sesarma*]
Geosesarma gordonae (Serène, 1968) [*Sesarma* (*Geosesarma*)]
Geosesarma gracillimum (De Man, 1902) [*Sesarma* (*Sesarma*)]
Geosesarma hednon Ng, Liu & Schubart, 2003
Geosesarma ianthina Pretzmann, 1985
Geosesarma insulare Ng, 1986
Geosesarma johnsoni (Serène, 1968) [*Sesarma* (*Geosesarma*)]
Geosesarma katibas Ng, 1995
Geosesarma krathing Ng & Naiyanetr, 1992
Geosesarma lawrencei Manuel-Santos & Yeo, 2007
Geosesarma leprosum (Schenkel, 1902) [*Sesarma*]

Geosesarma maculatum (De Man, 1892) [*Sesarma*]
Geosesarma malayanum Ng & Lim, 1986
Geosesarma nannophyes (De Man, 1885) [*Sesarma* (*Episesarma*)]
Geosesarma nemesis Ng, 1986
Geosesarma noduliferum (De Man, 1892) [*Sesarma* (*Geosesarma*)]
Geosesarma notophorum Ng & C. G. S. Tan, 1995
Geosesarma ocypodum (Nobili, 1899) [*Sesarma*]
Geosesarma penangense (Tweedie, 1940) [*Sesarma*]
Geosesarma peraccae (Nobili, 1903) [*Sesarma* (*Sesarma*)]
Geosesarma protos Ng & Takeda, 1992
Geosesarma rathbunae (Serène, 1968) [*Sesarma* (*Geosesarma*)]
Geosesarma rouxi (Serène, 1968) [*Sesarma* (*Geosesarma*)]
Geosesarma sabanum Ng, 1992
Geosesarma sarawakense (Serène, 1968) [*Sesarma* (*Geosesarma*)]
Geosesarma serenei Ng, 1986
Geosesarma scandens Ng, 1986
Geosesarma solomonense (Serène, 1968) [*Sesarma* (*Geosesarma*)]
Geosesarma starmuhlneri Pretzmann, 1984
Geosesarma sumatraense Ng, 1986
Geosesarma sylvicola (De Man, 1892) [*Sesarma* (*Geosesarma*)]
Geosesarma ternatense (Serène, 1968) [*Sesarma* (*Geosesarma*)]
Geosesarma teschi Ng, 1986
Geosesarma thelxinoe (De Man, 1908) [*Sesarma*]
Geosesarma tiomanicum Ng, 1986
Geosesarma vicentense (Rathbun, 1914) [*Sesarma* (*Sesarma*)]

Haberma Ng & Schubart, 2002
= *Haberma* Ng & Schubart, 2002 (type species *Haberma nanum* Ng & Schubart, 2002, by original designation; gender neuter)
Haberma nanum Ng & Schubart, 2002
Haberma kamora Rahayu & Ng, 2005

Karstama Davie & Ng, 2007 {10}
= *Karstama* Davie & Ng, 2007 (type species *Sesarmoides boholano* Ng, 2002, by original designation; gender neuter)
Karstama balicum (Ng, 2002) [*Sesarmoides*]
Karstama boholano (Ng, 2002) [*Sesarmoides*]
Karstama cerberus (Holthuis, 1964) [*Sesarma*]
Karstama emdi (Ng & Whitten, 1995) [*Sesarmoides*]
Karstama guamense (Ng, 2002) [*Sesarmoides*]
Karstama jacksoni (Balss, 1934) [*Sesarma*]
Karstama jacobsoni (Ihle, 1912) [*Sesarma*]
Karstama loyalty (Ng, 2002 [*Sesarmoides*]
Karstama microphthalmus (Naruse & Ng, 2007) [*Sesarmoides*]
Karstama novabritannia (Ng, 1988) [*Sesarmoides*]
Karstama sulu (Ng, 2002) [*Sesarmoides*]
Karstama ultrapes (Ng, Guinot & Iliffe, 1994) [*Sesarmoides*]

Labuanium Serène & Soh, 1970
= *Labuanium* Serène & Soh, 1970 (type species *Sesarma polita* De Man, 1888, by original designation; gender neuter)
Labuanium cruciatum (Bürger, 1893) [*Sesarma*]
Labuanium demani (Bürger, 1893) [*Sesarma*]
Labuanium finni (Alcock, 1900) [*Sesarma*]
Labuanium gracilipes (H. Milne Edwards, in Jacquinot & Lucas, 1854) [*Sesarma*]
= *Sesarma compressum* Jacquinot, 1853
= *Sesarma jacquinoti* Ortmann, 1894
Labuanium politum (De Man, 1888) [*Sesarma*]
Labuanium rotundatum (Hess, 1865) [*Sesarma*]
= *Sesarma dentifrons* A. Milne-Edwards, 1869
= *Sesarma oceanica* De Man, 1889
= *Sesarma gardineri* Borradaile, 1900
= *Sarmatium faxoni* Rathbun, 1906
= *Sesarma* (*Episesarma*) *rotundata papuomalesiaca* Nobili, 1899
Labuanium scandens Ng & Liu, 2003
Labuanium schuetteii (Hess, 1865) [*Sesarma*]
Labuanium sinuatifrontatum (Roux, 1933) [*Sesarma*]
"*Labuanium*" *trapezoideum* (H. Milne Edwards, 1837) [*Sesarma*] {11}
= *Sesarma trapezoideum longitarsis* De Man, 1889
= *Sesarma oblongum* von Martens, 1868

Metagrapsus H. Milne Edwards, 1837
= *Metagrapsus* H. Milne Edwards, 1837 (type species *Sesarma curvatum* H. Milne Edwards, 1837, subsequent designation by Rathbun, 1918; gender masculine)
Metagrapsus curvatus (H. Milne Edwards, 1837) [*Sesarma*]
= *Sesarma violacea* Herklots, 1851
= *Metagrapsus pectinatus* H. Milne Edwards, 1853

Metasesarma H. Milne Edwards, 1853
= *Metasesarma* H. Milne Edwards, 1853 (type species *Metasesarma rousseauxi* H. Milne Edwards, 1853, by monotypy; gender neuter) [Opinion 85, Direction 37]
Metasesarma aubryi (A. Milne-Edwards, 1869) [*Sesarma* (*Holometopus*)]
Metasesarma obesum (Dana, 1851) [*Sesarma*]
= *Metasesarma rousseauxi* H. Milne Edwards, 1853 [Direction 36]
= *Metasesarma granularis* Heller, 1862
= *Metasesarma rugulosa* Heller, 1865

Metopaulias Rathbun, 1896
= *Metopaulias* Rathbun, 1896 (type species *Metopaulias depressus* Rathbun, 1896, by original designation; gender masculine)
Metopaulias depressus Rathbun, 1896

Muradium Serène & Soh, 1970
= *Muradium* Serène & Soh, 1970 (type species *Cancer tetragonus* Fabricius, 1798, by original designation; gender neuter)
Muradium tetragonum (Fabricius, 1798) [*Cancer*] {12}
= *Alpheus tetragonus* Weber, 1795 (nomen nudum)
= *Cancer fascicularis* Herbst, 1799

Namlacium Serène & Soh, 1970
= *Namlacium* Serène & Soh, 1970 (type species *Sesarma crepidatum* Calman, 1925, by original designation; gender neuter)
Namlacium crepidatum (Calman, 1925) [*Sesarma*]

Nanosesarma Tweedie, 1950
= *Nanosesarma* Tweedie, 1950 (type species *Sesarma andersoni* De Man, 1895, by original designation; gender neuter) {13}
= *Beanium* Serène & Soh, 1970 (type species *Sesarma batavica* Moreira, 1903, by original designation; gender neuter) {13}
Nanosesarma andersonii (De Man, 1895) [*Sesarma*]
Nanosesarma batavicum (Moreira, 1903) [*Sesarma*]
Nanosesarma edamense (De Man, 1887) [*Sesarma*]
Nanosesarma jousseaumei (Nobili, 1906) [*Sesarma*] {14}
Nanosesarma minutum (De Man, 1887) [*Sesarma*] {15}
= *Sesarma* (*Sesarma*) *gordoni* Shen, 1935 {15}
= *Sesarma barbimanum* Cano, 1889
Nanosesarma nunongi Tweedie, 1950
Nanosesarma pontianacense (De Man, 1895) [*Sesarma* (*Episesarma*)] {16}
Nanosesarma tweediei (Serène, 1967) [*Nanosesarma*]
Nanosesarma vestitum (Stimpson, 1858) [*Sesarma*]

Neosarmatium Serène & Soh, 1970
= *Neosarmatium* Serène & Soh, 1970 (type species *Sesarma smithii* H. Milne Edwards, 1853, by original designation; gender neuter)
Neosarmatium bidentatum Rahayu & Davie, 2006
Neosarmatium daviei Schubart & Ng, 2003
Neosarmatium fourmanoiri Serène, 1973
Neosarmatium indicum (A. Milne-Edwards, 1868) [*Metagrapsus*]
Neosarmatium inerme (De Man, 1887) [*Sarmatium*]
Neosarmatium integrum (A. Milne-Edwards, 1873) [*Metagrapsus*]
= *Sarmatium biroi* Nobili, 1905
Neosarmatium laeve (A. Milne-Edwards, 1869) [*Sesarma*]
= *Sesarma* (*Sesarma*) *aequifrons* Rathbun, 1914
= *Neosarmatium ambonensis* Serène & Moosa, 1971
Neosarmatium malabaricum (Henderson, 1893) [*Sarmatium*]
Neosarmatium meinerti (De Man, 1887) [*Sesarma*]
Neosarmatium papuense Rahayu & Davie, 2006
Neosarmatium punctatum (A. Milne-Edwards, 1873) [*Metagrapsus*]
Neosarmatium rotundifrons (A. Milne-Edwards, 1869) [*Sesarma*]
= *Sarmatium fryatti* Tesch, 1917
Neosarmatium smithi (H. Milne Edwards, 1853) [*Sesarma*]
Neosarmatium spinicarpus Davie, 1994
Neosarmatium tangi (Rathbun, 1931) [*Sesarma* (*Holometopus*)]
Neosarmatium trispinosum Davie, 1994

Neosesarma Serène & Soh, 1970
= *Neosesarma* Serène & Soh, 1970 (type species *Sesarma gemmiferum* Tweedie, 1936, by original designation; gender neuter)
Neosesarma gemmiferum (Tweedie, 1936) [*Sesarma*]
Neosesarma rectipectinatum (Tweedie, 1950) [*Sesarma*]

Parasesarma De Man, 1895
= *Parasesarma* De Man, 1895 (type species *Cancer quadratus* Fabricius, 1798 (not Fabricius, 1787, subsequent designation by Rathbun, 1918; gender neuter)
Parasesarma affine (De Haan, 1837) [*Grapsus* (*Pachysoma*)]
= *Sesarma ungulatum* H. Milne Edwards, 1853
Parasesarma anambas Yeo, Rahayu & Ng, 2004
Parasesarma africanum (Ortmann, 1894) [*Sesarma*]
Parasesarma asperum (Heller, 1865) [*Sesarma*]
Parasesarma batavianum (De Man, 1890) [*Sesarma*]
Parasesarma calypso (De Man, 1895) [*Sesarma* (*Parasesarma*)]
Parasesarma carolinense Rathbun, 1907 [*Sesarma* (*Parasesarma*)]
= *Sesarma sigillatum* Tweedie, 1950
Parasesarma catenatum (Ortmann, 1897) [*Sesarma*]
Parasesarma charis Rahayu & Ng, 2005
Parasesarma dumacense (Rathbun, 1914) [*Sesarma* (*Parasesarma*)]
Parasesarma ellenae (Pretzmann, 1968) [*Sesarma* (*Parasesarma*)]
Parasesarma erythodactyla (Hess, 1865) [*Sesarma*]
Parasesarma exquisitum Dai & Song, 1986
Parasesarma jamelense (Rathbun, 1914) [*Sesarma* (*Parasesarma*)]
Parasesarma kuekenthali (De Man, 1902) [*Sesarma* (*Parasesarma*)]
Parasesarma lenzii (De Man, 1894) [*Sesarma* (*Parasesarma*)]
Parasesarma lepidum (Tweedie, 1950) [*Sesarma*]
Parasesarma leptosoma (Hilgendorf, 1869) [*Sesarma*]
= *Sesarma* (*Holometopus*) *limbense* Rathbun, 1914
Parasesarma luomi Serène, 1982
Parasesarma melissa (De Man, 1887) [*Sesarma*]
Parasesarma moluccense (De Man, 1892) [*Sesarma* (*Parasesarma*)]
Parasesarma obliquifrons (Rathbun, 1924) [*Sesarma* (*Parasesarma*)]
Parasesarma pangauranense (Rathbun, 1914) [*Sesarma* (*Parasesarma*)]
Parasesarma pictum (De Haan, 1835) [*Grapsus* (*Pachysoma*)]
= *Sesarma rupicola* Stimpson, 1858
Parasesarma plicatum (Latreille, 1806) [*Ocypode*]
= *Alpheus quadratus* Weber, 1795 (nomen nudum)
= *Cancer quadratus* Fabricius, 1798 (pre-occupied name)
Parasesarma prashadi (Chopra & Das, 1937) [*Sesarma* (*Parasesarma*)]
Parasesarma rutilimanum (Tweedie, 1936) [*Sesarma*]
Parasesarma tripectinis (Shen, 1940) [*Sesarma*]
= *Parasesarma acis* Davie, 1993 {17}

Perisesarma De Man, 1895
= *Perisesarma* De Man, 1895 (type species *Sesarma* (*Perisesarma*) *dussumieri* A. Milne-Edwards, 1853, subsequent designation by Campbell, 1967; gender neuter)
"*Perisesarma*" *alberti* Rathbun, 1921 [*Sesarma* (*Chiromantes*)] {18}
Perisesarma bengalense Davie, 2003
Perisesarma bidens (De Haan, 1835) [*Grapsus* (*Pachysoma*)]
Perisesarma brevicristatum (Campbell, 1967) [*Sesarma*]
Perisesarma cricotum Rahayu & Davie, 2002
Perisesarma darwinense (Campbell, 1967) [*Sesarma*]
Perisesarma dussumieri (H. Milne Edwards, 1853) [*Sesarma*]
Perisesarma eumolpe (De Man, 1895) [*Sesarma* (*Perisesarma*)]
Perisesarma fasciatum (Lanchester, 1900) [*Sesarma*]
= *Sesarma* (*Chiromantes*) *siamense* Rathbun, 1909
Perisesarma foresti Rahayu & Davie, 2001
Perisesarma guttatum (A. Milne-Edwards, 1869) [*Sesarma*]
Perisesarma haswelli (De Man, 1887) [*Sesarma*]
"*Perisesarma*" *huzardi* (Desmarest, 1825) [*Grapsus*] {18}
= *Sesarma africana* H. Milne Edwards, 1837
Perisesarma indiarum (Tweedie, 1940) [*Sesarma* (*Perisesarma*)]
= *Sesarma* (*Perisesarma*) *indica* De Man, 1902 (pre-occupied name)
Perisesarma kamermani (De Man, 1883) [*Sesarma* (*Chiromantes*]
Perisesarma lanchesteri (Tweedie, 1936) [*Sesarma*]
Perisesarma lividum (A. Milne-Edwards, 1869) [*Sesarma*]
Perisesarma longicristatum (Campbell, 1967) [*Sesarma*]
Perisesarma maipoense (Soh, 1978) [*Chiromanthes*]
Perisesarma messa (Campbell, 1967) [*Sesarma*]
Perisesarma onychophorum (De Man, 1895) [*Sesarma* (*Perisesarma*)]
Perisesarma samawati Gillikin & Schubart, 2004
Perisesarma semperi (Bürger, 1893) [*Sesarma*]

Pseudosesarma Serène & Soh, 1970
= *Pseudosesarma* Serène & Soh, 1970 (type species *Sesarma edwardsii* De Man, 1888, by original designation; gender neuter)
Pseudosesarma bocourti (A. Milne-Edwards, 1869) [*Sesarma*]
= *Sesarma cheiragona* Targioni-Tozetti, 1877
"*Pseudosesarma*" *crassimanum* (De Man, 1887) [*Sesarma*] {19}
Pseudosesarma edwardsii (De Man, 1888) [*Sesarma*]
Pseudosesarma granosimanum (Miers, 1880) [*Sesarma*]
"*Pseudosesarma*" *johorense* (Tweedie, 1940) [*Sesarma*] {19}
Pseudosesarma laevimanum (Zehntner, 1894) [*Sesarma*]
Pseudosesarma modestum (De Man, 1902) [*Sesarma* (*Sesarma*)]
"*Pseudosesarma*" *moeschi* (De Man, 1888) [*Sesarma*] {19}
"*Pseudosesarma*" *patshuni* (Soh, 1978) [*Pseudosesarma*] {19}

Sarmatium Dana, 1851
= *Sarmatium* Dana, 1851 (type species *Sarmatium crassum* Dana, 1851, by monotypy; gender neuter) [Opinion 37, incorrectly spelt as "*Sarmartium*" in ICZN Official Lists, corrected in Supplement]
Sarmatium crassum Dana, 1851 [Direction 36]
Sarmatium hegerli Davie, 1992
Sarmatium germaini (A. Milne-Edwards, 1869) [*Sesarma*]
Sarmatium striaticarpus Davie, 1992
Sarmatium unidentatum Davie, 1992

Scandarma Schubart, Liu & Cuesta, 2003
= *Scandarma* Schubart, Liu & Cuesta, 2003 (type species *Scandarma lintou* Schubart, Liu & Cuesta, 2003, by original designation; gender neuter)
Scandarma lintou Schubart, Liu & Cuesta, 2003
Scandarma splendidum Naruse & Ng, 2007

Selatium Serène & Soh, 1970 {20}
= *Selatium* Serène & Soh, 1970 (type species *Sesarma brockii* De Man, 1887, by original designation; gender neuter)
Selatium brockii (De Man, 1887) [*Sesarma*]
Selatium elongatum (A. Milne-Edwards, 1869) [*Sesarma*] {20}
= *Sesarma latifemur* Alcock, 1900

Sesarma Say, 1817
= *Sesarma* Say, 1817 (type species *Ocypode reticulatus* Say, 1817, by monotypy; gender neuter)
Sesarma aequatoriale Ortmann, 1894
Sesarma ayatum Schubart, Reimer & Diesel, 1998
Sesarma bidentatum Benedict, 1892
Sesarma cookei Hartnoll, 1971
Sesarma crassipes Cano, 1889
Sesarma curacaoense De Man, 1892
Sesarma dolphinum Reimer, Schubart & Diesel, 1998
Sesarma fossarum Schubart, Reimer, Diesel & Türkay, 1997
Sesarma jarvisi Rathbun, 1914
Sesarma meridies Schubart & Koller, 2005
Sesarma rectum Randall, 1840
= *Sesarma eydouxi* H. Milne Edwards, 1853
= *Sesarma mulleri* A. Milne-Edwards, 1869
Sesarma reticulatum (Say, 1817) [*Ocypode* (*Sesarma*)]
Sesarma rhizophorae Rathbun, 1906
Sesarma rubinofforum Abele, 1973
Sesarma sulcatum Smith, 1870
Sesarma verleyi Rathbun, 1914
Sesarma windsor Türkay & Diesel, 1994

Sesarmoides Serène & Soh, 1970 {10}
= *Sesarmoides* Serène & Soh, 1970 (type species *Sesarma krausii* De Man, 1887, by original designation; gender masculine)
Sesarmoides borneensis (Tweedie, 1950) [*Sesarma*]
Sesarmoides kraussi (De Man, 1887) [*Sesarma*]
Sesarmoides longipes (Krauss, 1843) [*Sesarma*]

Sesarmops Serène & Soh, 1970
= *Sesarmops* Serène & Soh, 1970 (type species *Sesarma impressa* H. Milne Edwards, 1837, by original designation; gender masculine)
Sesarmops atrorubens (Hess, 1865) [*Sesarma*]
Sesarmops impressus (H. Milne Edwards, 1837) [*Sesarma*]
= *Sesarma similis* Hess, 1865
= *Sesarma frontale* A. Milne-Edwards, 1869
Sesarmops mindanaoensis (Rathbun, 1914) [*Sesarma* (*Sesarma*)]
"*Sesarmops*" *weberi* (De Man, 1892) [*Sesarma*] {11}
"*Sesarmops*" *sinensis* (H. Milne Edwards, 1853) [*Sesarma*] {21}
"*Sesarmops*" *intermedius* (De Haan, 1835) [*Grapsus* (*Pachysoma*)] {21}

Stelgistra Ng & Liu, 1999
= *Stelgistra* Ng & Liu, 1999 (type species *Sesarma* (*Sesarma*) *stormi* De Man, 1895, by original designation; gender feminine)
Stelgistra stormi (De Man, 1895) [*Sesarma* (*Sesarma*)]

Tiomanum Serène & Soh, 1970
= *Tiomanum* Serène & Soh, 1970 (type species *Sesarma indica* H. Milne Edwards, 1837, by original designation; gender neuter)
Tiomanum indicum (H. Milne Edwards, 1837) [*Sesarma*] {12}
= *Sesarma* (*Sesarma*) *tiomanensis* Rathbun, 1913

Incertae sedis

?*Cyclograpsus tasmanicus* Hombron & Jacquinot, 1846 {22}
"*Cyclograpsus*" *lophopus* Nobili, 1905 {23}
Sesarma armatum White, 1847 (nomen nudum)
Sesarma ? *graptochirus* White, 1847 (nomen nudum)
Sesarma helicoides White, 1847 (nomen nudum)

Notes

{1} Henri Milne Edwards (1837) linked *Sesarma pisonii* with *Cancer hispanus* Herbst, 1794, but this is incorrect. Herbst's species may be a varunid and we have tentatively placed it under incerta sedis in the Varunidae (see point 14 in Notes for Varunidae).

{2} The Commission was asked to give priority to *Sesarma rubripes* Rathbun, 1897, over *Sesarma trapezium* Dana, 1852, when the two names are regarded as synonymous; which the ICZN ratified as Opinion 1140 (ICZN, 1979).

{3} The poorly known *Sesarma* (*Sesarma*) *philippinensis* Rathbun, 1914, was suspected to be a species of *Bresedium* by Serène & Soh (1970), and this has been confirmed by the examination of recently collected specimens from the Philippines. Morphological and molecular data (P. K. L. Ng and C. D. Schubart) suggest that *Bresedium* and *Sesarmops* are close sister taxa.

{4} *Sesarma angolense* Brito Capello, 1864, and *Sesarma buettikoferi* De Man, 1883, are currently misplaced in *Chiromantes* (see {2}above), and there are indications they may need to be referred to a new genus (P. K. L. Ng and C. D. Schubart, ongoing study using morphological and molecular data, see point).

{5} *Chiromantes* Gistel, 1848, should be restricted to the single type species, *C. haematocheir*, that has a distinctive thoracic sternal structure (see Ng & Liu, 1999). All other species will need to be transferred elsewhere (P. K. L. Ng and C. D. Schubart, ongoing study using morphological and molecular data). In particular, the well known Indo-West Pacific species *Chiromantes dehaani* (H. Milne Edwards, 1853) must be referred to a separate genus, together with *Chiromantes boulengeri* (Calman, 1920), *Pseudosesarma patshuni* (Soh, 1978), *Pseudosesarma crassimanum* (De Man, 1887), *Pseudosesarma johorensis*

(Tweedie, 1940), *Pseudosesarma moeschi* (De Man, 1888), *Sesarmops*" *sinense* (H. Milne Edwards, 1853), and *Sesarmops*" *intermedium* (De Haan, 1835). The definitions for the genera *Sesarmops* and *Pseudosesarma* will thus need to be revised accordingly.

{6} *Sesarma* (*Sesarma*) *eulimene* De Man, 1895, and *Sesarma* (*Holometopus*) *ortmanni* Crosnier, 1965, are currently in *Chiromantes* (sensu Ng & Liu, 1999), but an ongoing revision of this genus by P. K. L. Ng and C. D. Schubart (using morphological and molecular data) shows that they should be transferred a new genus (see point 5).

{7} *Sesarma neglectum* De Man, 1887, has long been regarded as a junior subjective synonym of *Chiromantes dehaani* (H. Milne Edwards, 1853), but both are separate species, albeit in the same genus (see Ng et al., 2001). The type of *S. neglectum* is no longer extant but P. K. L. Ng and C. D. Schubart have examined topotypic material from Shanghai (China) and it is clearly a good species. Contrary to Ng et al. (2001), "*Chiromantes neglectum*" is not present in Taiwan but occurs only in the upper part of mainland China. *Chiromantes dehaani* is present throughout Japan (type locality), Taiwan and through to Hong Kong and southern China.

{8} *Sesarma obtusifrons* Dana, 1851, is currently in *Chiromantes* (see Ng & Liu, 1999) but has affinities with *Stelgistra*. However, ongoing studies of this and allied species by P. K. L. Ng and C. D. Schubart (using morphological and molecular data), indicates that it should be referred to its own genus (see point 5).

{9} The types of *Holometopus serenei* Soh, 1978, are small specimens of *Chiromantes haematocheir* (De Haan, 1833) (Naruse & Ng, in press)

{10} Ng (2002e) described a number of new cavernicolous *Sesarmoides* from the Indo-West Pacific and commented that the genus could be separated into two groups. Davie & Ng (2007) subsequently found more characters, and established a new genus, *Karstama*, for the cave-dwelling species previously assigned to *Sesarmoides*.

{11} *Sesarma trapezoidea* H. Milne Edwards, 1837 (at present in *Labuanium*, sensu Serène & Soh, 1970) and *Sesarma weberi* De Man, 1892 (at present in *Sesarmops*, sensu Serène & Soh, 1970) should be placed in the same genus as they share a suite of cheliped, gonopodal and larval features (P. K. L. Ng, ongoing study) (see Jeng et al., 2003).

{12} *Muradium* Serène & Soh, 1970 (type species *Cancer tetragonus* Fabricius, 1798) and *Tiomanum* Serène & Soh, 1970 (type species *Sesarma indica* H. Milne Edwards, 1837) were originally established as subgenera of *Neoepisesarma* Serène & Soh, 1970 (type species *Sesarma mederi* H. Milne Edwards, 1853) (presently = *Episesarma* De Man, 1895, type species *Sesarma taeniolata* Miers, 1877) by Serène & Soh (1970), and are here recognised as genera for convenience. An ongoing revision of *Episesarma* by P. J. F. Davie, however, indicates that all three may be synonymous.

{13} Holthuis (1977: 172) and Abele (1979: 177) both pointed out that *Beanium* Serène & Soh, 1970 (as *Nanosesarma* (*Beanium*)), is a junior subjective synonym of *Nanosesarma* Tweedie, 1950. Serène & Soh (1970) wrongfully proposed *Sesarma minutum* as the type species for *Nanosesarma* which already had as its type *S. andersoni* De Man, 1887, by original designation of Tweedie (1950). They further proposed *S. batavicum* Moreira, 1903, as the type for their new subgenus *Beanium* and included in *Nanosesarma* (*Beanium*), *S. andersoni* De Man, 1887, already the type of *Nanosesarma* sensu stricto. Because *Beanium* is a junior synonym of *Nanosesarma*, *S. batavicum* thus has no formal generic type status. A new name will be needed for the group of species Serène & Soh (1970) included in their concept of *Nanosesarma* (*Nanosesarma*) (e.g. *N. minutum* (De Man, 1887); *N. pontianacense* (De Man, 1895); *N. vestitum* (Stimpson, 1858); *N. jousseaumei* (Nobili, 1906) and *N. tweediei* Serène, 1967), if indeed this group is justifiably separable from *Nanosesarma* proper. Davie (in prep.) is currently revising *Nanosesarma,* and further discussion on the polyphly of *Nanosesarma*, and the designation of new names, as required, will be deferred until this revisionary paper.

{14} *Sesarma jousseaumei* Nobili, 1906, had been regarded as a senior synonym of *Sesarma* (*Sesarma*)] *gordoni* Shen, 1935 but a soon to be completed revision of the genus by P. J. F. Davie suggests it is a valid taxon. On a nomenclatural matter, Shen (1935: 19) specifically thanks Isabella Gordon for her help and guidance, and several pages later (Shen, 1935: 21), names a new species, "*Sesarma* (*Sesarma*) *gordoni*, sp. nov.". It is reasonable to construe that his intention was to honour Gordon, and thus the name should have been spelled as "gordonae" (female ending). However, nowhere does Shen explicitly state that he was naming it for Dr Gordon. In this case, we interpret the Code very strictly and maintain the use of the spelling "*gordoni*".

{15} The possible conspecificity of *Sesarma* (*Sesarma*) *gordoni* Shen, 1935, and *Sesarma minuta* De Man, 1887, has been discussed several times (see Ng et al., 2001; Davie, 2002) but a soon to be completed revision of *Nanosesarma* by P. J. F. Davie indicates that the two are synonymous.

{16} *Sesarma* (*Episesarma*) *pontianacensis* De Man, 1895, was referred to *Nanosesarma* by Tweedie (1950) but a soon to be completed revision of the genus by P. J. F. Davie indicates that it belongs to its own monotypic genus. It is retained in *Nanosesarma* pending publication.

{17} Ng et al. (2001), citing a study by A.-Y. Dai and her colleagues on some Hong Kong sesarmids, noted that *Parasesarma acis* Davie, 1993, was very likely to be a junior subjective synonym of *Parasesarma tripectinis* (Shen, 1940). In a separate study on some Irian Jayan (Indonesia) species of *Parasesarma*, Rahayu & Ng (2005) examined fresh material of *P. tripectinis* and confirmed the two as conspecific.

{18} The two African species, *Sesarma* (*Chiromantes*) *alberti* Rathbun, 1921, and *Sesarma huzardi* (Desmarest, 1825), are currently regarded as members of *Perisesarma*, but a re-examination of material of these two taxa suggest that they should be referred to a separate genus (P. J. F. Davie, ongoing study).

{19} *Sesarma crassimanum* De Man, 1887, *Sesarma johorensis* Tweedie, 1940, *Sesarma moeschi* De Man, 1888, and *Pseudosesarma patshuni* Soh, 1978, are currently placed in *Pseudosesarma* (sensu Serène & Soh, 1970), but an ongoing revision of this genus by P. K. L. Ng and C. D. Schubart (using morphological and molecular data) shows that both species are congeneric with *Sesarma dehaani* H. Milne Edwards, 1853 (now in *Chiromantes*) (see point 5).

{20} *Sesarma elongata* A. Milne-Edwards, 1869, has been included in *Selatium* in some literature (e.g. Hartnoll, 1975), without justification. This placement has now been confirmed by C. D. Schubart and P. K. L. Ng using morphological and molecular data sets. A new allied genus and two new species of intertidal sesarmids from Singapore and Taiwan are also to be described (Schubart & Ng, in prep.).

{21} *Sesarma sinense* H. Milne Edwards, 1853, and *Grapsus* (*Pachysoma*) *intermedium* De Haan, 1835, are currently placed in *Sesarmops* (sensu Serène & Soh, 1970), but an ongoing revision by P. K. L. Ng and C. D. Schubart (using morphological and molecular data) shows that both species are congeneric with *Sesarma dehaani* H. Milne Edwards, 1853 (now in *Chiromantes*) (see point 5).

{22} The identity of *Cyclograpsus tasmanicus* Hombron & Jacquinot, 1846, is uncertain, but we are confident that it is not a species of *Cyclograpsus* as present conceived. Campbell & Griffin (1966) left the matter of this species unsettled, but were certain it was not from Tasmania. The figures in Jacquinot & Lucas indicate it is probably a species of sesarmid. Characters such as the entire lateral carapace margin, a broad front which partially covers the antennae and antennules, chelae which lack stridulatory ridges, a cheliped dactylus which does not have dorsal tubercles, and the very short third maxilliped exopod with a rudimentary flagellum, suggest a species of *Metasesarma*. The type(s) will need to checked to ascertain its identity (see Ng & Davie, 1995; Ng & Schubart, 2003).

{23} The original description of *Cyclograpsus lophopus* by Nobili (1905) was not accompanied by any illustration, but suggests a rather unusual member of the genus. Tohru Naruse and N. K. Ng have examined the holotype female in the Paris Museum. It is clearly not a species of *Cyclograpsus* or varunid but a sesarmid instead. A new genus will need to be established for it at a later date.

Fig. 163. *Perisesarma indiarum*, Singapore (photo: T. Naruse)

Fig. 164. *Metopaulias depressus*, Jamaica (photo: Father A. J. S. Muñoz)

Fig. 165. *Karstama boholano*, Bohol, Philippines (photo: T. Y. Chan)

Fig. 166. *Labuanium politum*, Bohol, Philippines (photo: P. Ng)

FAMILY VARUNIDAE H. MILNE EDWARDS, 1853

Cyclograpsacea H. Milne Edwards, 1853
Varunacea H. Milne Edwards, 1853
Asthenognathidae Stimpson, 1858
Pseudograpsinae Kossmann, 1877
Helicinae Kossmann, 1877
Varuninae Alcock, 1900
Paragrapsini Števčić, 2005
Heliceinae K. Sakai, Türkay & Yang, 2006
Thalassograpsinae Davie & N. K. Ng, 2007
Gaeticinae Davie & N. K. Ng, 2007

Subfamily incertae sedis

Paracleistostoma fossulum Barnard, 1955 {1}

Subfamily Asthenognathinae Stimpson, 1858

Asthenognathidae Stimpson, 1858 {2}

Asthenognathus Stimpson, 1858
  = *Asthenognathus* Stimpson, 1858 (type species *Asthenognathus inaequipes* Stimpson, 1858, by monotypy; gender masculine) [Opinion 85, Direction 37]
Asthenognathus atlanticus Monod, 1933
"*Asthenognathus*" *gallardoi* Serène & Soh, 1976 {3}
Asthenognathus hexagonum Rathbun, 1909
Asthenognathus inaequipes Stimpson, 1858 [Direction 36]

Subfamily Cyclograpsinae H. Milne Edwards, 1853

Cyclograpsacea H. Milne Edwards, 1853
Helicinae Kossmann, 1877 (pre-occupied name)
Paragrapsini Števčić, 2005
Heliceinae K. Sakai, Türkay & Yang, 2006

Austrohelice K. Sakai, Türkay & Yang, 2006
  = *Austrohelice* K. Sakai, Türkay & Yang, 2006 (type species *Helice crassa* Dana, 1851, by original designation; gender feminine)
Austrohelice crassa (Dana, 1851) [*Helice*]
  = *Helice lucasi* H. Milne Edwards, 1853

Chasmagnathus De Haan, 1833
  = *Ocypode* (*Chasmagnathus*) De Haan, 1833 (type species *Ocypode* (*Chasmagnathus*) *convexus* De Haan, 1835, by monotypy; gender masculine) [Opinion 85, Direction 86]
Chasmagnathus convexus (De Haan, 1835) [*Ocypode* (*Chasmagnathus*)] [Direction 36]
  = *Helice spinicarpa* H. Milne Edwards, 1853

Cyclograpsus H. Milne Edwards, 1837
  = *Cyclograpsus* H. Milne Edwards, 1837 (type species *Cyclograpsus punctatus* H. Milne Edwards, 1837, subsequent designation by Rathbun, 1918; gender masculine)
  = *Gnathochasmus* MacLeay, 1838 (type species *Gnathochasmus barbatus* MacLeay, 1838, by monotypy; gender masculine)
Cyclograpsus audouinii H. Milne Edwards, 1837
  = *Cyclograpsus laevis* Hess, 1865
Cyclograpsus barbatus (MacLeay, 1838) [*Gnathochasmus*]
Cyclograpsus beccarii Nobili, 1899
Cyclograpsus cinereus Dana, 1851
  = *Cyclograpsus minutus* Hombron & Jacquinot, 1846
Cyclograpsus escondidensis Rathbun, 1933
?*Cyclograpsus eydouxi* H. Milne Edwards, 1853
Cyclograpsus granulatus Dana, 1851
Cyclograpsus granulosus H. Milne Edwards, 1853
Cyclograpsus henshawi Rathbun, 1902
Cyclograpsus incisus Shen, 1940
Cyclograpsus insularum Campbell & Griffin, 1966
Cyclograpsus integer H. Milne Edwards, 1837
  = *Cyclograpsus occidentalis* A. Milne-Edwards, 1878
  = *Cyclograpsus parvulus* De Man, 1896
Cyclograpsus intermedius Ortmann, 1894
Cyclograpsus lavauxi H. Milne Edwards, 1853
  = *Cyclograpsus whitei* H. Milne Edwards, 1853
Cyclograpsus longipes Stimpson, 1858
Cyclograpsus lucidus Dai, Yang, Song & Chen, 1986
Cyclograpsus punctatus H. Milne Edwards, 1837
  = *Gnathochasmus barbatus* MacLeay, 1838
  = *Cyclograpsus reynaudi* H. Milne Edwards, 1853
Cyclograpsus sanctaecrucis Griffin, 1968
Cyclograpsus unidens Nobili, 1905

Helicana K. Sakai & Yatsuzuka, 1980
  = *Helicana* K. Sakai & Yatsuzuka, 1980 (type species *Helice tridens wuana* Rathbun, 1931, by original designation; gender feminine)
Helicana wuana (Rathbun, 1931) [*Helice*]
  = *Helice tridens sheni* Sakai, 1939
Helicana japonica (K. Sakai & Yatsuzuka, 1980) [*Helice*]
Helicana doerjesi K. Sakai, Türkay & Yang, 2006

Helice De Haan, 1833
  = *Ocypode* (*Helice*) De Haan, 1833 (type species *Ocypode* (*Helice*) *tridens* De Haan, 1835, by monotypy; gender feminine) [Opinion 85, Direction, 37]
Helice formosensis Rathbun, 1931
Helice latimera Parisi, 1918
  = *Helice tridens pingi* Rathbun, 1931
Helice tientsinensis Rathbun, 1931
Helice tridens (De Haan, 1835) [*Ocypode* (*Helice*)] [Direction 36]
  = *Cyclograpsus latreillii* H. Milne Edwards, 1837
  = *Helice latreillei* H. Milne Edwards, 1837

Helograpsus Campbell & Griffin, 1966
  = *Helograpsus* Campbell & Griffin, 1966 (type species *Chasmagnathus haswellianus* Whitelegge, 1899, by original designation; gender masculine)
Helograpsus haswellianus (Whitelegge, 1899) [*Chasmagnathus*]
  = *Chasmagnathus convexus* Haswell, 1882 (pre-occupied name)

Metaplax H. Milne Edwards, 1852 {4}
  = *Metaplax* H. Milne Edwards, 1852 (type species *Metaplax distincta* H. Milne Edwards, 1852, subsequent designation by Davie & Nguyen, 2003; gender feminine)
  = *Rhaconotus* Gerstaecker, 1856 (type species *Rhaconotus crenulatus* Gerstaecker, 1856, by monotypy; name pre-occupied by *Rhaconotus* Ruthe, 1854 [Hymenoptera]; gender masculine)
Metaplax crenulata (Gerstaecker, 1856) [*Rhaconotus*] {4}
Metaplax dentipes (Heller, 1865) [*Helice*]
Metaplax distincta H. Milne Edwards, 1852
Metaplax elegans De Man, 1888
  = *Metaplax crassipes* De Man, 1892
Metaplax gocongensis Davie & Nguyen, 2003
Metaplax indica H. Milne Edwards, 1852
Metaplax intermedia De Man, 1888
Metaplax longipes Stimpson, 1858
Metaplax occidentalis Pretzmann, 1971
Metaplax sheni Gordon, 1931
Metaplax takahashii Sakai, 1939
Metaplax tredecim Tweedie, 1950

Neohelice K. Sakai, Türkay & Yang, 2006
= *Neohelice* K. Sakai, Türkay & Yang, 2006 (type species *Chasmagnathus granulatus* Dana, 1851, by original designation; gender feminine)
Neohelice granulata (Dana, 1851) [*Chasmagnathus*]
= *Helice gaudichaudi* H. Milne Edwards, 1853

Paragrapsus H. Milne Edwards, 1853
= *Paragrapsus* H. Milne Edwards, 1853 (type species *Cyclograpsus quadridentatus* H. Milne Edwards, 1837, subsequent designation by Tesch, 1918; gender masculine)
Paragrapsus gaimardii (H. Milne Edwards, 1837) [*Cyclograpsus*]
Paragrapsus quadridentatus (H. Milne Edwards, 1837) [*Cyclograpsus*]
Paragrapsus laevis (Dana, 1851) [*Chasmagnathus*]
= *Paragrapsus verreauxi* H. Milne Edwards, 1853
Paragrapsus urvillei H. Milne Edwards, 1853

Parahelice K. Sakai, Türkay & Yang, 2006 {5}
= *Pseudohelice* (*Parahelice*) K. Sakai, Türkay & Yang, 2004 (type species *Parahelice pilosa* K. Sakai, Türkay & Yang, 2006, by original designation; gender feminine)
Parahelice balssi (K. Sakai, Türkay & Yang, 2006) [*Pseudohelice* (*Parahelice*)]
Parahelice daviei (K. Sakai, Türkay & Yang, 2006) [*Pseudohelice* (*Parahelice*)]
Parahelice georgei (Clark, 1987) [*Chasmagnathus*]
Parahelice pilimana (A. Milne-Edwards, 1873) [*Helice*]
Parahelice pilosa (K. Sakai, Türkay & Yang, 2006) [*Pseudohelice* (*Parahelice*)]

Pseudohelice K. Sakai, Türkay & Yang, 2006
= *Pseudohelice* (*Pseudohelice*) K. Sakai, Türkay & Yang, in Guinot & Bouchard, 1998 (nomen nudum)
= *Pseudohelice* K. Sakai, Türkay & Yang, 2006 (type species *Chasmagnathus quadratus* Dana, 1851, by original designation; gender feminine)
Pseudohelice quadrata (Dana, 1851) [*Chasmagnathus*]
= *Helice leachii* Hess, 1865

Incerta sedis

Cyclograpsus marmoratus White, 1847 (nomen nudum)

Subfamily Gaeticinae Davie & N. K. Ng, 2007

Gaeticinae Davie & N. K. Ng, 2007

Gaetice Gistel, 1848 {6}
= *Grapsus* (*Platynotus*) De Haan, 1833 (type species *Grapsus* (*Platynotus*) *depressus* De Haan, 1835, by subsequent monotypy; name pre-occupied by *Platynotus* Fabricius, 1801 [Coleoptera]; gender masculine)
= *Goetice* Gistel, 1848 (replacement name for *Grapsus* (*Platynotus*) De Haan, 1833; gender masculine)
= *Platygrapsus* Stimpson, 1858 (unnecessary replacement name for *Grapsus* (*Platynotus*) De Haan, 1833; gender masculine)
= *Gætice* Rathbun, in Stimpson, 1907 (unjustified emendation of *Goetice* Gistel, 1848)
= *Gaetice* Tesch, 1918 (unjustified emendation of *Goetice* Gistel, 1848)
Gaetice depressus (De Haan, 1835) [*Grapsus* (*Platynotus*)]
= *Platygrapsus convexiusculus* Stimpson, 1858
Gaetice ungulatus Sakai, 1939

Sestrostoma Davie & N. K. Ng, 2007
= *Sestrostoma* Davie & N. K. Ng, 2007 (type species *Acmaopleura balssi* Shen, 1932, by original designation; gender neuter)
Sestrostoma balssi (Shen, 1932) [*Acmaeopleura*]
Sestrostoma depressum (Sakai, 1965) [*Acmaeopleura*]
Sestrostoma toriumii (Takeda, 1974) [*Acmaeopleura*]

Subfamily Thalassograpsinae Davie & N. K. Ng, 2007

Thalassograpsinae Davie & N. K. Ng, 2007

Thalassograpsus Tweedie, 1950
= *Thalassograpsus* Tweedie, 1950 (type species *Brachynotus harpax* Hilgendorf, 1892, by monotypy; gender masculine)
Thalassograpsus harpax (Hilgendorf, 1892) [*Brachynotus*]

Subfamily Varuninae H. Milne Edwards, 1853

Varunacea H. Milne Edwards, 1853
Pseudograpsinae Kossmann, 1877
Varuninae Alcock, 1900

Acmaeopleura Stimpson, 1858
= *Acmaeopleura* Stimpson, 1858 (type species *Acmaeopleura parvula* Stimpson, 1858, by monotypy; gender feminine) [Opinion 85, Direction 37]
Acmaeopleura parvula Stimpson, 1858 [Direction 36]
Acmaeopleura rotunda Rathbun, 1909

Brachynotus De Haan, 1833
= *Brachynotus* De Haan, 1833 (type species *Goneplax sexdentatus* Risso, 1827, by subsequent monotypy by De Haan, 1835; gender masculine) [Opinion 712]
= *Heterograpsus* Lucas, 1846 (type species *Heterograpsus sexdentatus* Lucas, 1846, by monotypy; gender masculine) (subjective junior synonym and homonym of *Goneplax sexdentatus* Risso, 1827)
= *Shurebus* Verany, 1846 (type species *Shurebus genuensis* Verany, 1846; gender masculine)
Brachynotus atlanticus Forest, 1957
Brachynotus foresti Zariquiey Alvarez, 1968
Brachynotus gemmellaroi (Rizza, 1839) [*Cleistotoma*]
Brachynotus sexdentatus (Risso, 1827) [*Goneplax*] [Opinion 712]
= *Shurebus genuensis* Verany, 1846
= *Heterograpsus sexdentatus* Lucas, 1846
= *Grapsus laevifatus* Spinola, in White, 1847 (nomen nudum)
= *Shurebus genoensis* Leach, in White, 1847 (nomen nudum)
= *Heterograpsus lucasi* H. Milne Edwards, 1853
= *Brachynotus lucasi* Pesta, 1918
?*Brachynotus spinosus* (H. Milne Edwards, 1853) [*Heterograpsus*] {7}

Cyrtograpsus Dana, 1851
= *Cyrtograpsus* Dana, 1851 (type species *Cyrtograpsus angulatus* Dana, 1851, by monotypy; gender masculine) [Opinion 85, Direction 37]
Cyrtograpsus affinis Dana, 1851
Cyrtograpsus altimanus Rathbun, 1914
Cyrtograpsus angulatus Dana, 1851 [Direction 36]
Cyrtograpsus cirripes Smith, 1800

Eriocheir De Haan, 1835
= *Grapsus* (*Eriocheir*) De Haan, 1835 (type species [*Grapsus* (*Eriocheir*) *japonicus* De Haan, 1835, by monotypy; gender feminine)
= *Eriochirus* H. Milne Edwards, 1853 (incorrect spelling)
Eriocheir hepuensis Dai, 1991
Eriocheir japonica (De Haan, 1835) [*Grapsus* (*Eriocheir*)]
= *Eriocheir rectus* Stimpson, 1858
= *Eriocheir formosa* Nakagawa, 1915 (nomen nudum)
Eriocheir ogasawaraensis Komai, in Komai, Yamasaki, Kobayashi, Yamamoto & Watanabe, 2006
Eriocheir sinensis H. Milne Edwards, 1853

Grapsodius Holmes, 1900
= *Grapsodius* Holmes, 1900 (type species *Grapsodius eximius* Holmes, 1900, by monotypy; gender masculine)
Grapsodius eximius Holmes, 1900

Hemigrapsus Dana, 1851
= *Hemigrapsus* Dana, 1851 (type species *Hemigrapsus crassimanus* Dana, 1851, subsequent designation by Rathbun, 1918; gender masculine)
= *Lobograpsus* A. Milne-Edwards, 1869 (type species *Cyclograpsus crenulatus* H. Milne Edwards, 1837, subsequent designation by Rathbun, 1918; gender masculine)
Hemigrapsus affinis Dana, 1851
Hemigrapsus crassimanus Dana, 1851
Hemigrapsus crenulatus (H. Milne Edwards, 1837) [*Cyclograpsus*]
= *Trichodactylus granarius* Nicolet, 1849
= *Trichodactylus granulatus* A. Milne-Edwards, 1853
= *Heterograpsus barbigerus* Heller, 1862
= *Heterograpsus barbimanus* Heller, 1865
= *Heterograpsus sanguineus* Lenz, 1902
Hemigrapsus estellinensis Creel, 1964
?*Hemigrapsus gibbus* (Hombron & Jacquinot, 1846) [*Cyclograpsus*]
Hemigrapsus longitarsis (Miers, 1879) [*Brachynotus*]
= *Eriocheir misakiensis* Rathbun, 1919
Hemigrapsus nudus (Dana, 1851) [*Pseudograpsus*]
= *Grapsus marmoratus* White, 1847
Hemigrapsus octodentatus (H. Milne Edwards, 1837) [*Cyclograpsus*]
Hemigrapsus oregonensis (Dana, 1851) [*Pseudograpsus*]
Hemigrapsus pallipes (H. Milne Edwards, 1837) [*Pseudograpsus*]
Hemigrapsus penicillatus (De Haan, 1835) [*Grapsus* (*Eriocheir*)]
= *Brachynotus brevidigitatus* Yokoya, 1928
Hemigrapsus sanguineus (De Haan, 1835) [*Grapsus* (*Grapsus*)]
= *Heterograpsus maculatus* H. Milne Edwards, 1853
Hemigrapsus sexdentatus (H. Milne Edwards, 1837) [*Cyclograpsus*]
= *Brachynotus edwardsii* Hilgendorf, 1882
Hemigrapsus sinensis Rathbun, 1931
Hemigrapsus tanakoi Asakura & Watanabe, 2005 {8}

Neoeriocheir Sakai, 1983
= *Neoeriocheir* Sakai, 1983 (type species *Eriocheir leptognathus* Rathbun, 1913, by original designation; gender feminine)
Neoeriocheir leptognathus (Rathbun, 1913) [*Eriocheir*]
= *Utica sinensis* Parisi, 1918

Noarograpsus N. K. Ng, Manuel & Ng, 2006
= *Noarograpsus* N. K. Ng, Manuel & Ng, 2006 (type species *Hemigrapsus lobulatus* Manuel, Gonzales & Basmayor, 1991; by original designation; gender masculine)
Noarograpsus lobulatus (Manuel, Gonzales & Basmayor, 1991) [*Hemigrapsus*]

Orcovita Ng & Tomascik, 1994
= *Orcovita* Ng & Tomascik, 1994 (type species *Orcovita saltatrix* Ng & Tomascik, 1994, by original designation; gender feminine)
Orcovita angulata Ng, Guinot & Iliffe, 1996
Orcovita fictilia Ng, Guinot & Iliffe, 1996
Orcovita gracilipes Ng, Guinot & Iliffe, 1996
Orcovita mcneiceae Ng & Ng, 2002
Orcovita miruku Naruse & Tamura, 2006
Orcovita mollitia Ng, Guinot & Iliffe, 1996
Orcovita saltatrix Ng & Tomascik, 1994

Otognathon Ng & Števčić, 1993 {9}
= *Otognathon* Ng & Števčić, 1993 (type species *Denthoxanthus komodoensis* Serène, 1971, by original designation; gender neuter)
Otognathon komodoense (Serène, 1971) [*Denthoxanthus*]

Parapyxidognathus Ward, 1941
= *Parapyxidognathus* Ward, 1941 (type species *Pyxidognathus deianira* De Man, 1888, by original designation; gender masculine)
Parapyxidognathus deianira (De Man, 1888) [*Pyxidognathus*]
Platyeriocheir N. K. Ng, Guo & Ng, 1999
= *Platyeriocheir* N. K. Ng, Guo & Ng, 1999 (type species *Eriocheir formosa* Chan, Hung & Yu, 1995, by original designation; gender feminine)
Platyeriocheir formosa (Chan, Hung & Yu, 1995) [*Eriocheir*]

Pseudogaetice Davie & N. K. Ng, 2007 {10}
= *Pseudogaetice* Davie & N. K. Ng, 2007 (type species *Gaetice americanus* Rathbun, 1923, by monotypy and original designation; gender masculine)
Pseudogaetice americanus (Rathbun, 1923) [*Gaetice*]

Pseudograpsus H. Milne Edwards, 1837
= *Pseudograpsus* H. Milne Edwards, 1837 (type species *Grapsus penicilliger* Latreille, 1817, subsequent designation by Holthuis, 1977; gender masculine) {11}
= *Pachystomum* Nauck, 1880 (type species *Pachystomum philippinense* Nauck, 1880, by monotypy; gender neuter)
Pseudograpsus albus Stimpson, 1858
= *Pachystomum philippinense* Nauck, 1880
Pseudograpsus crassus A. Milne-Edwards, 1868
Pseudograpsus elongatus (A. Milne-Edwards, 1873) [*Heterograpsus*]
= *Pseudograpsus erythraeus* Kossmann, 1877
Pseudograpsus intermedius Chappgar, 1955
Pseudograpsus nudus Stimpson, 1858
Pseudograpsus setosus (Fabricius, 1798) [*Cancer*]
= *Alpheus setosus* Weber, 1795 (nomen nudum)
= *Grapsus penicilliger* Latreille, 1817
= *Pseudograpsus barbatus* H. Milne Edwards, 1853

Ptychognathus Stimpson, 1858
= *Ptychognathus* Stimpson, 1858 (type species *Ptychognathus glaber* Stimpson, 1858, by monotypy; gender masculine) [Opinion 85, Direction 37] {12}
= *Coelochirus* Nauck, 1880 (type species *Coelochirus crinipes* Nauck, 1880, by monotypy; gender masculine)
Ptychognathus affinis De Man, 1895
Ptychognathus altimanus (Rathbun, 1914) [*Varuna*]
Ptychognathus andamanensis Pretzmann, 1984
Ptychognathus barbatus (A. Milne-Edwards, 1873) [*Gnathograpsus*]
Ptychognathus capillidigitatus Takeda, 1984
Ptychognathus crassimanus Finnegan, 1931
Ptychognathus demani Roux, 1917

Ptychognathus dentatus De Man, 1892
Ptychognathus easteranus Rathbun, 1907
Ptychognathus glaber Stimpson, 1858 [Direction 36]
Ptychognathus guijulugani Rathbun, 1914
Ptychognathus hachijoensis Sakai, 1955
Ptychognathus insolitus Osawa & N. K. Ng, 2007
Ptychognathus intermedius De Man, 1879
Ptychognathus ishii Sakai, 1939
Ptychognathus johannae Rathbun, 1914
Ptychognathus onyx Alcock, 1900
Ptychognathus pilipes (A. Milne-Edwards, 1868) [*Gnathograpsus*]
= *Coelochirus crinipes* Nauck, 1880
Ptychognathus pilosus De Man, 1892
Ptychognathus polleni De Man, 1895
Ptychognathus pusillus Heller, 1865
= *Litocheira inermis* Borradaile, 1903
Ptychognathus riedelii (A. Milne-Edwards, 1868) [*Gnathograpsus*]
= *Ptychognathus andamanica* Alcock, 1900
Ptychognathus spinicarpus Ortmann, 1894
Ptychognathus takahashii Sakai, 1939

Pyxidognathus A. Milne-Edwards, 1879
= *Pyxidognathus* A. Milne-Edwards, 1879 (type species *Pyxidognathus granulosus* A. Milne-Edwards, 1879, by monotypy; gender masculine) [Opinion 85, Direction 37]
= *Hypsilograpsus* De Man, 1879 (type species *Hypsilograpsus deldeni* De Man, 1879, by original designation; gender masculine)
Pyxidognathus fluviatilis Alcock, 1895
Pyxidognathus granulosus A. Milne-Edwards, 1879 [Direction 36]
= *Pyxidognathus deldeni* (De Man, 1879) [*Hypsilograpsus*]
Pyxidognathus subglobosus Tesch, 1918

Scutumara Ng & Nakasone, 1993
= *Scutumara* Ng & Nakasone, 1993 (type species *Scutumara enodis* Ng & Nakasone, 1993, by original designation; gender feminine)
Scutumara enodis Ng & Nakasone, 1993
Scutumara laniger (Tesch, 1918) [*Pseudograpsus*]
Scutumara miyakei (Nakamura & Kurata, 1977) [*Pseudograpsus*]

Tetragrapsus Rathbun, 1916
= *Tetragrapsus* Rathbun, 1916 (type species *Brachynotus* (*Heterograpsus*) *jouyi* Rathbun, 1894, by monotypy; gender masculine) [Opinion 650]
Tetragrapsus jouyi (Rathbun, 1894) [*Brachynotus* (*Heterograpsus*)] [Direction 36]

Utica White, 1847
= *Utica* White, 1847 (type species *Utica gracilipes* White, 1847, by monotypy; gender feminine) [Opinion 85, Direction 37] {13}
Utica barbimana A. Milne-Edwards, 1873
Utica borneensis De Man, 1895
Utica crassimana Haswell, 1882
Utica glabra A. Milne-Edwards, 1873
Utica gracilipes White, 1847 [Direction 36]
Utica nausithoe De Man, 1895
Utica setosipes Haswell, 1881

Varuna H. Milne Edwards, 1830
= *Varuna* H. Milne Edwards, 1830 (type species *Cancer litteratus* Fabricius, 1798, by monotypy; gender feminine) [Opinion 85, Direction 37]
= *Trichopus* De Haan, 1835 (type species *Cancer litteratus* Fabricius, 1798, by monotypy; gender masculine)
Varuna litterata (Fabricius, 1798) [*Cancer*] [Direction 36]
= *Alpheus litteratus* Weber, 1795 (nomen nudum)
= *Varuna tomentosa* Pfeffer, 1889
Varuna yui Hwang & Takeda, 1986

Incertae sedis

?*Cancer hispanus* Herbst, 1794 {14}
Trichopus mystacinus White, 1847 (nomen nudum)

Notes

{1} According to Manning & Holthuis (1981: 209), *P. fossulum* Barnard, 1955, is "... certainly no *Paracleistostoma* and possibly not even an ocypodid". P. K. L. Ng and C. G. S. Tan examined the holotype of *P. fossulum* in the South African Museum (a female 5.0 × 3.5 mm, catalogue number A10778, Delagoa Bay, South Africa), and the species is unlikely to be a camptandriid. The specimen is in poor condition but it is clear that the figures given in Barnard (1955) are accurate. As Manning & Holthuis (1981) have noted, the chelipeds are robust, unlike the small, slender ones of all known camptandriid females. Also, the third maxillipeds are set very wide apart, which is also not found in any other camptandriids; *Paratylodiplax blephariskios* has the closest to this condition with a triangular gap between the third maxilliped ischia (Barnard, 1950). From the available evidence, *P. fossulum* is not a camptandriid. The gaping third maxillipeds, setose ambulatory articles, and the form of the chelae suggest that it is most likely to be a species of Varunidae. Many varunids have similar features, although the transversely rectangular carapace with its transverse ridges, also immediately distinguishes it from any known varunid. One genus, *Parapyxidognathus* Ward, 1941, is atypical for a varunine in that it has a broader than long carapace, and in some ways resembles *Paracleistostoma fossulum*. In the form of its carapace, *P. fossulum* also somewhat resembles the unusual pinnotherid *Asthenognathus gallardoi* Serène & Soh, 1976 (see below).

{2} See point 1 of Notes in Pinnotheridae.

{3} *Asthenognathus gallardoi* Serène & Soh, 1976, is a very unusual species, and certainly cannot be retained in the genus as it now stands. It is markedly different from other members in the form of its carapace (with two transverse ridges on the dorsal surface), and by having normal third maxillipeds (P. J. F. Davie and P. K. L. Ng, unpublished data). Indications are that it should be referred to its own genus. Unfortunately, it is known only from one female specimen. In some ways, this species

resembles retroplumids in the form of the carapace but differs in its relatively broader front and distinct last pereiopod. It also bears a resemblance (especially the carapace) to "*Paracleistostoma*" *fossulum* Barnard, 1955, but the two are unlikely to be related as they have different pereiopods and mouthparts (see Notes for *P. fossulum*). A new species, close to *A. gallardoi*, was recently found in western Thailand, but unfortunately, it is also represented only by a female (Naruse & Clark, in press).

{4} *Metaplax crenulata* (Gerstaecker, 1856) is an atypical member of the genus as it now stands, and likely should be referred to its own genus. In any case, the genus *Metaplax* is currently being revised (Yang et al., in prep.).

{5} K. Sakai, Türkay & Yang (2006) established *Parahelice* as a subgenus of *Pseudohelice* K. Sakai, Türkay & Yang, 2006, but the differences described appear strong enough to simply recognise it as a distinct genus, as is done here.

{6} *Gaetice* has often been attributed to "Gistel, 1835" but this seems to be an error that has been perpetuated as we can find no such publication. Gistel (1848: x) was the first to realise that the name *Ocypode* (*Platynotus*) De Haan, 1835, was pre-occupied by a beetle genus, *Platynotus* Fabricius, 1801, and provided a replacement name, *Goetice*. Gistel did not explain the origins of his name but it was clearly spelt "*Goetice*". Stimpson (1858: 50), apparently unaware of Gistel's (1838) action, proposed another replacement name, *Platygrapsus* for *Platynotus*. Mary Rathbun, in a footnote in Stimpson (1907: 128), noted that *Platygrapsus* had been preceded by "*Gætice* Gistel", but did not explain why the spelling was changed. Tesch (1918a: 84, footnote) followed Rathbun, and the name "*Gaetice*" has been used by almost all subsequent authors. The type species, *Gaetice depressus*, is a very common intertidal crab in East Asia, and the name is used widely in reference texts, guides and other publications (e.g. see references in Sakai, 1976; Dai et al., 1986; Dai & Yang, 1991; Ng et al., 2001). While *Goetice* Gistel, 1848, is clearly the oldest available name, Rathbun's unjustified emended spelling, *Gaetice*, is the one in common use. The Code has a clause which states that "when an unjustified emendation is in prevailing usage and is attributed to the original author and date it is deemed to be a justified emendation." (Article 33.2.3.1). We here invoke this Article to keep the name *Gaetice* as spelt by Rathbun (in Stimpson, 1907) but attributed to Gistel (1848). Only two species are now recognised in *Gaetice*, *G. depressus* (De Haan, 1835) and *G. ungulatus* Sakai, 1939, but on ongoing revision by T. Naruse and N. K. Ng suggests that there are more species.

{7} The generic position of *Heterograpsus spinosus* H. Milne Edwards, 1853, needs to be re-examined. It is currently in the genus *Brachynotus* (see Davie, 2002) but it also has affinities with *Heterograpsus*. This matter is currently under study by N. K. Ng.

{8} *Hemigrapsus tanakoi* Asakura & Watanabe, 2005, was described as a sibling species of *Hemigrapsus penicillatus* (De Haan, 1835), distinguished primarily by biochemical data, details of pigmentation, and form of the carapace and gonopods (see also Mingkid et al., 2006). K. Sakai (2007) synonymised both species arguing that neither colour nor gonopodal differences were useful, although he did not discuss any of the other characters, or explain the genetic differences reported by the original authors. Having seen a large series of *Hemigrapsus penicillatus* from East Asia as well as specimens of *H. tanakoi* kindly passed to us by the original authors, we do not agree with K. Sakai (2007). "Although G1 and colour may not be good characters to distinguish the two species, as varunid crabs are typically highly variable in colour forms, and the G1 does not always work for many genera. In the case of *H. penicillatus* and *H. tanakoi*, there are enough differences in the form of the infra-orbital ridge, proportions of the ambulatory legs, the male telson, tip of the G1 and the female gonopore, to warrant the separation of the two species." (N. K. Ng, pers. comm.). We here recognise them as separate. A possible complication regarding the use of the names is the identity of *Brachynotus brevidigitatus* Yokoya, 1928, a species long regarded as a junior synonym of *H. penicillatus*, but if synonymous with *H. tanakoi* would become the older available name.

{9} *Dentoxanthus komodoensis* was described from a reef near the island of Komodo, Indonesia, by Serène (1971) on the basis of one small female specimen. Ng & Števčić (1993) re-examined the specimen, and noted that, despite its small size, it was mature. Serène (1971) believed that it was related to eumedonines (Pilumnidae), with Števčić & Ng (1988) and Ng & Števčić (1993) agreeing and suggesting it resembled genera like *Gonatonotus*. Because of the many differences with *Denthoxanthus iranicus* Stephensen, 1946 (the type of the genus), Ng & Števčić (1993) established a new genus, *Otognathon*, for *Dentoxanthus komodoensis* Serène, 1971. Two of the authors, P. K. L. Ng and P. J. F. Davie, together with N. K. Ng who recently completed a revision of the Varunidae, re-examined the type specimen of *O. komodoensis* (in the Zoological Reference Collection of the Raffles Museum, Singapore), and we now believe that it is not a pilumnoid but a varunid. There are some small varunid genera allied to *Pseudograpsus* that live in reef environments, and the females of these can be difficult to classify. For example, the affinities of *Scutumara* Ng & Nakasone, 1993, were not very clear until N. K. Ng & Komai (2000) found the males and clearly showed that it was a varunid. N. K. Ng and T. Komai are currently describing a new genus and new species of small varunid from Japan, that has a carapace similar to that of *Otognathon*. The female abdomen, vulvae and third maxillipeds of the female holotype of *O. komodoensis* are very similar to *Pseudograpsus* and *Scutumara*, although its ambulatory legs and chelipeds are atypical. Significantly, we observed that the distal part of the fingers has a chitinous edge (described by Ng & Števčić (1993) as "blade-like") – a character present in many grapsoids but not known in pilumnoids. Recently an undescribed species of *Otognathon* was collected from the Ryukyu Islands. It is clearly a grapsoid - the penis of the male of this species exits from thoracic sternite 8 (i.e. it is a thoracotreme), the inner surface of the chela is setose, the tips of the fingers have pectinated tips, the G1 is strongly calcified and straight, etc. (N. K. Ng

& T. Naruse, unpublished data). In view of all this evidence, we are now confident that *Otognathon* is a varunid.

{10} *Gaetice americanus* Rathbun, 1923, is clearly not a member of the genus *Gaetice* sensu stricto, and not even part of the Gaeticinae. It is closer to *Hemigrapsus* and is here transferred to a new genus, *Pseudogaetice*, in the Varuninae (Davie & N. K. Ng, 2007).

{11} *Pseudograpsus* is now being revised by N. K. Ng. P. K. L. Ng & Nakasone (1993) and N. K. Ng et al. (2002) have already indicated that at least two or three genera can be recognised.

{12} *Ptychognathus* is being revised by N. K. Ng and P. K. L. Ng. Several groups of species are recognisable, and new genera will be established for them.

{13} *Utica* can be easily divided into two groups, one with a distinct tranverse ridge on the carapace dorsal surface, and another without (P. J. F. Davie and N. K. Ng).

{14} Henri Milne Edwards (1837: 77), in discussing his new species, *Sesarma pisonii* H. Milne Edwards, 1837, commented that Herbst in his first volume, on page 126 and plate 37, had described a species "*Cancer hispanus*", that was probably the same as his species. The page H. Milne Edwards cited was incorrect, it is 150 and not 126. E. Desmarest (1858: 26) in his synopsis of *Sesarma* also commented that *Cancer hispanus* is a problem. Herbst (1794: 150, pl. 37 fig. 1) had described and figured *Cancer hispanus*, supposedly from rivers in Spain. No measurements were provided. From his description and figure, we have difficulty identifying the animal. It is certainly not the west Atlantic *Aratus pisonii* which has very different carapace features. *Cancer hispanus* resembles varunids in the general form of its carapace and keeled chelae, but its front is relatively narrow, and we know of no genus with which it can be identified. It also superficially resembles a male pinnotherid, although the figured stalked eyes seem too long. There are no known crabs from Spain or the eastern Atlantic that fit the animal Herbst described. Of course, it is also likely that Herbst's locality and habitat data are wrong. The specimen(s) in question are no longer extant and are not listed in K. Sakai (1999). For the moment, we regard it as incerta sedis in the Varunidae.

Fig. 167. *Gaetice depressus*, Qingdao, China; this may be a separate species and is now under study by T. Naruse and N.K. Ng (photo: P. Ng)

Fig. 168. *Pseudograpsus crassus*, Sulawesi; found living in a basalt tunnel, hence its dark colour (photo: P. Ng)

Fig. 169. *Pyxidognathus granulosus*, Cebu, Philippines; this species lives in fast flowing streams near river mouths (photo: P. Ng)

Fig. 170. *Orcovita mollitia*, Guam (photo: H.C. Liu)

Fig. 171. *Eriocheir hepuensis*, China (photo: P. Ng)

FAMILY XENOGRAPSIDAE N. K. NG, DAVIE, SCHUBART & NG, 2007

Xenograpsidae N. K. Ng, Davie, Schubart & Ng, 2007 {1}

Xenograpsus Takeda & Kurata, 1977
= *Xenograpsus* Takeda & Kurata, 1977 (type species *Xenograpsus novaeinsularis* Takeda & Kurata, 1977, by monotypy; gender masculine)
Xenograpsus ngatama McLay, 2007
Xenograpsus novaeinsularis Takeda & Kurata, 1977
Xenograpsus testudinatus N. K. Ng, Huang & Ho, 2000

Notes

{1} *Xenograpsus* was originally placed in the Varunidae and has been retained there until recently. N. K. Ng et al. (2007) recently showed, using a wide suite of morphological and molecular tools that it was in fact, a distinct family of grapsoid crabs.

Fig. 172. *Xenograpsus testudinatus*, Taiwan; the first specimen caught which became the holotype (photo: P.H. Ho)

Fig. 173. *Xenograpsus testudinatus*, Taiwan; in the aquarium (photo: P.H. Ho)

Fig. 174. *Xenograpsus testudinatus*, aggregating around sulphur deposits, Taiwan (after Jeng et al., 2004) (photo: M.S. Jeng)

Fig. 175. *Xenograpsus testudinatus*, Taiwan; starting to disperse (after Jeng et al., 2004) (photo: M.S. Jeng)

Fig. 176. *Xenograpsus testudinatus*, swarming out to feed between the tides, Taiwan (after Jeng et al., 2004) (photo: M.S. Jeng)

SUPERFAMILY OCYPODOIDEA RAFINESQUE, 1815

FAMILY CAMPTANDRIIDAE STIMPSON, 1858

Camptandriidae Stimpson, 1858
Cleistotomatini Pretzmann, 1977

Baruna Stebbing, 1904
= *Baruna* Stebbing, 1904 (type species *Baruna socialis* Stebbing, 1904, by monotypy; gender feminine)
= *Leipocten* Kemp, 1915 (type species *Leipocten sordidulum* Kemp, 1915, by monotypy; gender masculine)
Baruna minuta Harminto & Ng, 1991
Baruna socialis Stebbing, 1904
= *Leipocten sordidulum* Kemp, 1915
Baruna sinensis Tan & Huang, 1995
Baruna trigranulum (Dai & Song, 1986) [*Leipocten*]
= *Baruna mangromurphia* Harminto & Ng, 1991

Calabarium Manning & Holthuis, 1981
= *Calabarium* Manning & Holthuis, 1981 (type species *Calabarium crinodytes* Manning & Holthuis, 1981, by original designation; gender neuter)
Calabarium crinodytes Manning & Holthuis, 1981

Camptandrium Stimpson, 1858
= *Camptandrium* Stimpson, 1858 (type species *Camptandrium sexdentatum* Stimpson, 1858, by monotypy; gender neuter) [Opinion 85, Direction 37]
Camptandrium sexdentatum Stimpson, 1858 [Direction 36]

Cleistostoma De Haan, 1833
= *Ocypode* (*Cleistostoma*) De Haan, 1833 (type species *Ocypode* (*Cleistostoma*) *dilatata* De Haan, 1833, subsequent designation by De Man, 1888; gender neuter)
= *Leptochryseus* Al-Khayat & Jones, 1996 (type species *Cleistostoma kuwaitense* Jones & Clayton, 1983, by original designation; gender masculine)
Cleistostoma dilatatum (De Haan, 1833) [*Ocypode* (*Cleistostoma*)]
Cleistostoma kuwaitense Jones & Clayton, 1983 {1}
"*Cleistostoma*" *mcneilli* Ward, 1933 {2}

Deiratonotus Manning & Holthuis, 1981
= *Deiratonotus* Manning & Holthuis, 1981 (type species *Paracleistostoma cristatum* De Man, 1895, by original designation; gender neuter)
Deiratonotus cristatum (De Man, 1895) [*Paracleistostoma*]
"*Deiratonotus*" *japonicum* (Sakai, 1934) [*Paracleistostoma*] {1}
= *Deiratonotus tondensis* Sakai, 1983
Deiratonotus kaoriae Miura, Kawane & Wada, 2007

Ecphantor Manning & Holthuis, 1981
= *Ecphantor* Manning & Holthuis, 1981 (type species *Ecphantor modestus* Manning & Holthuis, 1981, by original designation; gender masculine)
Ecphantor modestus Manning & Holthuis, 1981

Ilyogynnis Manning & Holthuis, 1981
= *Ilyogynis* Manning & Holthuis, 1981 (type species *Paracleistostoma microcheirum* Tweedie, 1937, by original designation; gender neuter)
Ilyogynnis microcheirum (Tweedie, 1937) [*Paracleistostoma*]

Lillyanella Manning & Holthuis, 1981
= *Lillyanella* Manning & Holthuis, 1981 (type species *Lillyanella plumipes* Manning & Holthuis, 1981, by original designation; gender feminine)
Lillyanella plumipes Manning & Holthuis, 1981

Manningis Al-Khayat & Jones, 1996
= *Manningis* Al-Khayat & Jones, 1996 (type species *Paracleistostoma arabicum* Jones & Clayton, 1983, by original designation; gender neuter)
Manningis arabicum (Jones & Clayton, 1983) [*Paracleistostoma*]

Moguai C. G. S. Tan & Ng, 1999
= *Moguai* C. G. S. Tan & Ng, 1999 (type species *Moguai aloutos* C. G. S. Tan & Ng, 1999, by original designation; gender neuter)
Moguai aloutos C. G. S. Tan & Ng, 1999
Moguai elongatum (Rathbun, 1931) [*Camptandrium*]
Moguai pyriforme Naruse, 2005

Mortensenella Rathbun, 1909
= *Mortensenella* Rathbun, 1909 (type species *Mortensenella forceps* Rathbun, 1909, by monotypy; gender feminine)
Mortensenella forceps Rathbun, 1909

Nanusia C. G. S. Tan & Ng, 1999
= *Nanusia* Tan & Ng, 1999 (type species *Camptandrium starmuehlneri* Pretzmann, 1968, by present designation; gender feminine)
Nanusia starmuehlneri (Pretzmann, 1968) [*Camptandrium*]

Nasima Manning, 1992
= *Nasima* Manning, 1992 (type species *Cleistostoma dotilliforme* Alcock, 1900, by original designation; gender feminine)
Nasima dotilliformis (Alcock, 1900) [*Cleistostoma*]

Paracleistostoma De Man, 1895
= *Paracleistostoma* De Man, 1895 (type species *Paracleistostoma depressum* De Man, 1895, subsequent designation by Guinot & Crosnier, 1963; gender neuter)
Paracleistostoma crassipilum Dai, Yang, Song & Chen, 1986
Paracleistostoma depressum De Man, 1895
Paracleistostoma eriophorum Nobili, 1903 {3}
= *Paracleistostoma tweediei* C. G. S. Tan & Humpherys, 1995 {3}
= *Paracleistostoma tweediei* C. G. S. Tan & Ng, 1995
Paracleistostoma laciniatum Rahayu & Ng, 2003
Paracleistostoma longimanum Tweedie, 1937
Paracleistostoma quadratum Rahayu & Ng, 2003
Paracleistostoma tomentosum Yang & Sun, 1993
Paracleistostoma wardi (Rathbun, 1926) [*Cleistostoma*]

Paratylodiplax Serène, 1974
= *Paratylodiplax* Serène, 1974 (type species *Cleistostoma blephariskios* Stebbing, 1924, by original designation; gender feminine)
Paratylodiplax algoensis (Barnard, 1954) [*Cleistostoma*]
Paratylodiplax blephariskios (Stebbing, 1924) [*Cleistostoma*]
Paratylodiplax derijardi (Guinot & Crosnier, 1963) [*Tylodiplax*]
"*Paratylodiplax*" *edwardsii* (MacLeay, 1838) [*Cleistostoma*] {1}

Serenella Manning & Holthuis, 1981
= *Serenella* Manning & Holthuis, 1981 (type species *Macrophthalmus leachii* Audouin, 1826, by original designation; gender feminine)
Serenella leachii (Audouin, 1826) [*Macrophthalmus*]
= *Cleistostoma leachii* var. *penicillata* Paul'son, 1875

Takedellus C. G. S. Tan & Ng, 1999
= *Takedellus* C. G. S. Tan & Ng, 1999 (type species *Camptandrium ambonensis* Serène & Moosa, 1971, by original designation; gender masculine)
Takedellus ambonense (Serène & Moosa, 1971) [*Camptandrium*]
= *Camptandrium rathbunae* Takeda, 1971

Telmatothrix Manning & Holthuis, 1981
= *Telmatothrix* Manning & Holthuis, 1981 (type species *Telmatothrix powelli* Manning & Holthuis, 1981, by original designation; gender feminine)
Telmatothrix powelli Manning & Holthuis, 1981

Tylodiplax De Man, 1895
= *Tylodiplax* De Man, 1895 (type species *Tylodiplax tetratylophora* De Man, 1895, by monotypy; gender feminine)
"*Tylodiplax*" *indica* Alcock, 1900 {1}
Tylodiplax tetratylophora de Dan, 1895

Notes

{1} *Cleistostoma edwardsii* MacLeay, 1838, was referred to *Paratylodiplax* Serène, 1974, an action followed by Manning & Holthuis (1981) in their important review of the family. *Tylodiplax indica* Alcock, 1900, has been left in the genus without change since its description. The first author has examined specimens of both species and they are different from all other congeners. They will be placed in their own monotypic genera (Tan & Ng, in prep.). Re-examination of material of *Cleistostoma dilatatum* (De Haan, 1833) and *Cleistostoma kuwaitense* Jones & Clayton, 1983, type species of *Cleistostoma* De Haan, 1833, and *Leptochryseus* Al-Khayat & Jones, 1996, respectively, have shown that the two genera are synonyms (Tan & Ng, in prep.). Tan & Ng (in prep.) also show that *Deiratonotus* Manning & Holthuis, 1981, is also heterogeneous with two distinct groups, and the one containing *Paracleistostoma japonicum* Sakai, 1983, belongs to a new genus (see Sakai, 1934, 1983). They also concur with Kawane et al. (2005) who argue that *Deiratonotus japonicum* (Sakai, 1934), is a senior synonym of *Deiratonotus tondensis* Sakai, 1983.

{2} "*Cleistostoma*" *mcneilli* Ward, 1933, is not a species of *Cleistostoma*, and although some workers have referred it to *Paracleistosoma* it is also misplaced there. P. J. F. Davie is currently revising the Australian camptandriids and may place it in a new genus along with two other new species indigeneous to Australia.

{3} The identity of *Paracleistostoma eriophorum* Nobili, 1903, has been uncertain as he did not provide a figure, although the description was fairly detailed. Nonili (1903) distinguished it from from *P. depressum* and *P. cristatum* by its unusually tomentose ambulatory legs and the presence of two carinae of long granules on the inferior and superior margins of the outer surface of the cheliped palm. Nobili (1903) mentioned that the posterior carapace, including the median branchial and area around the intestinal region bears thick, short felt-like tomentum and the ambulatory legs are covered with long, woolly setae. He described the dactyli of the ambulatory legs as bearing sulci and being setose. On the basis of this description, Serène (1974: 64) noted "... it is possible that *eriophorum* is a *Leipocten* or *Baruna* ...", although Nobili's (1903) comparisons with *Paracleistostoma* suggests otherwise. Harminto & Ng (1989) did not consider this species in his study of *Baruna.* Through the courtesy of Giovanni Balma of the University of Turin, the first author managed to examine the holotype of *Paracleistostoma eriophorum* Nobili, 1903. Studies with C. G. S. Tan show that it is a senior synonym of *Paracleistostoma tweediei* Tan & Humpherys, 1995 (material examined: *Paracleistostoma eriophorum* Nobili, 1903: holotype male, 10.0 by 7.5mm, Museum of Zoology, University of Turin, catalogue number MZUT Cr1200, Buntal, Sarawak, East Malaysia, don. R. Shelford, 1902; *Paracleistostoma tweediei* Tan & Humpherys, 1995: holotype male, 10.2 by 7.9 mm, Zoological Reference Collection, Raffles Museum, Singapore, catalogue number ZRC 1987.57). This will be discussed in greater detail in a revision of the genus by C. G. S. Tan and P. K. L. Ng.

There is also a nomenclatural issue with *Paracleistostoma tweediei* C. G. S. Tan & Humpherys, 1995, and *Paracleistostoma tweediei* C. G. S. Tan & Ng, 1995. Both are objective synonyms as they are based on the same holotype. The problem arose because C. G. S. Tan and P. K. L. Ng originally intended to publish the new species, and the paper was prepared for a regional symposium in 1994 (Tan & Ng, 1995). At the same time, P. J. F. Davie and A. Humpherys had independently also discovered the species. As it was clear that the two taxa in question were conspecific, P. J. F. Davie and P. K. L. Ng left it to C. G. S. Tan and A. Humpherys to finish the new species description on their own (Tan & Humpherys, 1995). In early 1995, P. K. L. Ng asked the editors of the symposium volume to have the paragraph on the new *Paracleistostoma* in their paper deleted, but although they agreed, the changes were not made, no proofs were sent, and the volume was published in 1995 with the problem paragraph still intact. This mistake nevertheless validates *P. tweediei* C. G. S. Tan & Ng, 1995. In any case, the symposium article came out later than the paper in the *Raffles Bulletin of Zoology*. Since the symposium volume did not have a publication date, under the Code, it should be regarded as published on 31 December 2005. This gives *P. tweediei* C. G. S. Tan & Humpherys, 1995, priority over *P. tweediei* C. G. S. Tan & Ng, 1995.

Fig. 177. *Paracleistostoma quadratum*, Papua, Indonesia (photo: P. Ng)

FAMILY DOTILLIDAE STIMPSON, 1858

Dotinae Dana, 1851 (unavailable name as type genus *Doto* De Haan, 1835, is a pre-occupied name)
Dotillidae Stimpson, 1858
Scopimeridae Alcock, 1900

Dotilla Stimpson, 1858
= *Doto* De Haan, 1835 (type species *Cancer sulcatus* Forskål, 1775, by monotypy; name pre-occupied by *Doto* Oken, 1807 [Polychaeta]; gender feminine)
= *Dotilla* Stimpson, 1858 (replacement name for *Doto* De Haan, 1835; gender feminine)
Dotilla blanfordi Alcock, 1900
Dotilla fenestrata Hilgendorf, 1869
Dotilla intermedia De Man, 1888
= *Dotilla clepsydrodactyla* Alcock, 1900
Dotilla malabarica Nobili, 1903
Dotilla myctiroides (H. Milne Edwards, 1852) [*Doto*]
Dotilla pertinax Kemp, 1915
Dotilla sulcata (Forskål, 1775) [*Cancer*]
= *Dotilla affinis* Alcock, 1900
Dotilla wichmani De Man, 1892

Dotilloplax Tweedie, 1950
= *Dotilloplax* Tweedie, 1950 (type species *Dotilloplax kempi* Tweedie, 1950, by original designation; gender feminine)
Dotilloplax kempi Tweedie, 1950

Dotillopsis Kemp, 1919
= *Dotillopsis* Kemp, 1919 (type species *Dotilla brevitarsis* De Man, 1888, by original designation; gender feminine)
Dotillopsis brevitarsis (De Man, 1888) [*Dotilla*]
Dotillopsis profuga (Nobili, 1903) [*Dotilla*]

Ilyoplax Stimpson, 1858
= *Ilyoplax* Stimpson, 1858 (type species *Ilyoplax tenella* Stimpson, 1858, by monotypy; gender feminine) {1}
= *Dioxippe* De Man, 1888 (type species *Dioxippe orientalis* De Man, 1888, by present designation; name pre-occupied by *Dioxippe* Thomson, 1860 [Coleoptera]; gender feminine)
= *Tympanomerus* Rathbun, 1897 (replacement name for *Dioxippe* De Man, 1888; gender masculine)
Ilyoplax delsmani De Man, 1926
Ilyoplax dentata Ward, 1933
Ilyoplax dentimerosa Shen, 1932
Ilyoplax deschampsi (Rathbun, 1913) [*Tympanomerus*]
Ilyoplax formosensis Rathbun, 1921
Ilyoplax frater (Kemp, 1919) [*Tympanomerus*]
Ilyoplax gangetica (Kemp, 1919) [*Tympanomerus*]
Ilyoplax integra (Tesch, 1918) [*Tympanomerus*]
Ilyoplax lingulata (Rathbun, 1909) [*Cleistostoma*]
Ilyoplax longicarpa Tweedie, 1937
Ilyoplax ningpoensis Shen, 1940
Ilyoplax obliqua Tweedie, 1935
Ilyoplax orientalis (De Man, 1888) [*Dioxippe*]
Ilyoplax pacifica Kitaura & Wada, 2006
Ilyoplax philippinensis (Rathbun, 1914) [*Tympanomerus*]
Ilyoplax pingi Shen, 1932
Ilyoplax punctata Tweedie, 1935
Ilyoplax pusilla (De Haan, 1835) [*Ocypode* (*Cleistostoma*)]
Ilyoplax serrata Shen, 1931
Ilyoplax spinimera Tweedie, 1950
Ilyoplax stapletoni (De Man, 1908) [*Tympanomerus*]
Ilyoplax stevensi (Kemp, 1919) [*Tympanomerus*]
Ilyoplax strigicarpus Davie, 1990
Ilyoplax tansuiensis Sakai, 1939
Ilyoplax tenella Stimpson, 1858
Ilyoplax yuhana Rathbun, 1931

Potamocypoda Tweedie, 1938
= *Potamocypoda* Tweedie, 1938 (type species *Potamocypoda pugil* Tweedie, 1938, by original designation; gender feminine)
Potamocypoda parapugil Tai & Manning, 1984
Potamocypoda pugil Tweedie, 1938

Pseudogelasimus Tweedie, 1937
= *Pseudogelasimus* Tweedie, 1937 (type species *Pseudogelasimus plectodactylus* Tweedie, 1937, by original designation; gender masculine)
Pseudogelasimus loii Serène, 1982
Pseudogelasimus plectodactylus Tweedie, 1937

Scopimera De Haan, 1833
= *Ocypode* (*Scopimera*) De Haan, 1833 (type species *Ocypode* (*Scopimera*) *globosa* De Haan, 1835, by subsequent monotypy; gender feminine) {2}
Scopimera crabicauda Alcock, 1900
Scopimera curtelsoma Shen, 1936
Scopimera bitympana Shen, 1930
Scopimera globosa (De Haan, 1835) [*Ocypode* (*Scopimera*)]
= *Scopimera tuberculata* Stimpson, 1858
Scopimera gordonae Serène & Moosa, 1981
Scopimera inflata A. Milne-Edwards, 1873
Scopimera intermedia Balss, 1934
Scopimera investigatoris Alcock, 1900
Scopimera kochi Roux, 1917
Scopimera longidactyla Shen, 1932
Scopimera pilula Kemp, 1919
Scopimera proxima Kemp, 1919
Scopimera sigillorum (Rathbun, 1914) [*Dotilla*]

Shenius Serène, 1971 {3}
= *Shenius* Serène, 1971(type species *Camptandrium anomalum* Shen, 1935, by monotypy; gender masculine)
Shenius anomalus (Shen, 1935) [*Camptandrium*]

Tmethypocoelis Koelbel, 1897
= *Tmethypocoelis* Koelbel, 1897 (type species *Dioxippe* (*Tmethypocoelis*) *ceratophora* Koelbel, 1897, by original designation; gender feminine)
Tmethypocoelis ceratophora (Koelbel, 1897) [*Dioxippe* (*Tmethypocoelis*)]
Tmethypocoelis choreutes Davie & Kosuge, 1995
Tmethypocoelis koelbeli Davie, 1990
Tmethypocoelis odontodactylus Davie, 1990

Incertae sedis

Paracleistostoma dentatum Tesch, 1918 {4}
Xenophthalmus duplociliatus Sluiter, 1881 {5}

Notes

{1} *Ilyoplax* is being revised by P. J. F. Davie and Takeharu Kosuge and *Dioxippe*, long synonymised with *Ilyoplax*, will need to be resurrected. New genera will also be established for several other species.

{2} In an ongoing study of the Australian *Scopimera* by Michael Türkay with P. J. F. Davie, the necessity to split *Scopimera* into at least two genera is apparent.

{3} The position of *Shenius anomalus* (Shen, 1935) has not been settled. Shen (1935: 32, Fig. 9A, B) originally placed it in *Camptandrium* because the carapace and legs are similar, but his figures of the suborbital margin, male abdomen and

G1 (Shen, 1935: Fig. 8B, 9C, D) do not indicate a close relationship. Realising this, Serène (1971) established a new genus, *Shenius*, for it. Serène (1974) then transferred *Shenius* to Dotillinae Stimpson, 1858 (present Dotillidae), albeit with some doubt, probably because the carapace and pereiopod structures of *Shenius*, when compared to dotillids, are extremely different. Mannning & Holthuis (1981) agreed that *Shenius* was not a camptandriid. In an unpublished thesis, Harminto (1988) re-examined *Shenius* (with the first author) and agreed with Serène (1974) about its relationships to the Dotillidae. As in dotillids the male abdomen has all segments freely articulating, the G1 is slender and bent at the tip, and the mouthparts and orbital regions are of the same form. The different carapace and periopod features, however, suggest that it should be placed in its own subfamily, and a manuscript proposing this is being finished by P. K. L. Ng and Paul Clark (Ng & Clark, in prep.). *Shenius* is common in several parts of Singapore and P. K. L. Ng has provided larvae to Paul Clark and Jose Cuesta. The first zoea are very similar to known dotillids. Christoph Schubart has also sequenced its DNA and its affinities are clearly with the Dotillidae.

{4} Peter K. L. Ng and C. G. S. Tan have examined the type of *Paracleistostoma dentatum* Tesch, 1918a, and the species is not a camptandriid. The third maxillipeds are broad, with the merus and ischium almost equally long, and the front is narrow, being slightly less than half the width of the orbit. Unfortunately the only known specimen is the holotype female (6.2 × 3.3 mm, Amsterdam Museum De.102.997, coll. from Saleyer Island off southern Celebes (Sulawesi) in Indonesia by M. Weber (7–8 May 1899, Siboga Expedition)). Therefore the taxonomically crucial male abdominal and G1 characters are unknown. It is likely to be a species of Dotillinae, probably affiliated with *Ilyoplax* Stimpson, 1858. It is interesting to note that all the ambulatory legs have a fringe of longish setae on the inner edge of the dactyli. If it were to be transferred to *Ilyoplax*, then it would become a senior homonym of *Ilyoplax dentata* Ward, 1933, and the latter name would need to be replaced.

{5} *Xenophthalmus duplociliatus* Sluiter, 1881, was described from Java, Indonesia, and its identity has been problematic. Tesch (1918: 271) argued that it was not a *Xenophthalmus* species or pinnotherid but left its position unresolved. The description by Sluiter (1881: 163) makes it clear that this is likely to be a dotillid, perhaps a *Dotilla* species (see Point 9 in Notes for Pinnotheridae).

Fig. 178. *Ilyoplax* sp., Santo, Vanuatu (photo: P. Ng)

FAMILY HELOECIIDAE
H. MILNE EDWARDS, 1852

Heloeciacaea H. Milne Edwards, 1852
Heloeciinae Türkay, 1983

Heloecius Dana, 1851
= *Heloecius* Dana, 1851 (type species *Heloecius inornatus* Dana, 1851, by monotypy; gender masculine)
Heloecius cordiformis (H. Milne Edwards, 1837) [*Gelasimus*]
= *Heloecius areolatus* Heller, 1862
= *Heloecius inornatus* Dana, 1851
= *Heloecius signatus* Hess, 1865

Fig. 179. *Heloecius cordiformis*, Australia (photo: P. Davie)

FAMILY MACROPHTHALMIDAE DANA, 1851

Macrophthalmidae Dana, 1851
Ilyograpsini Števčić, 2005
Tritodynamiini Števčić, 2005

Subfamily Ilyograpsinae Števčić, 2005

Ilyograpsini Števčić, 2005 {1}

Ilyograpsus Barnard, 1955 {2}
= *Ilyograpsus* Barnard, 1955 (type species *Ilyograpsus rhizophorae* Barnard, 1955; by monotypy; gender masculine)
Ilyograpsus nodulosus Sakai, 1983
Ilyograpsus paludicola (Rathbun, 1909) [*Camptandrium*]
Ilyograpsus paantu Naruse & Kishino, 2006
Ilyograpsus rhizophorae Barnard, 1955
Ilyograpsus vanninii Sawada, Hosogi & K. Sakai, 2005

Subfamily Macrophthalminae Dana, 1851

Macrophthalmidae Dana, 1851

Australoplax Barnes, 1966
= *Australoplax* Barnes, 1966 (type species *Cleistostoma tridentata* A. Milne-Edwards, 1873, by original designation; gender feminine)
Australoplax tridentata (A. Milne-Edwards, 1873) [*Cleistostoma*]
= *Macrophthalmus hirsutissima* Grant & MacCulloch, 1906

Enigmaplax Davie, 1993
= *Enigmaplax* Davie, 1993 (type species *Enigmaplax littoralis* Davie, 1993, by original designation; gender feminine)
Enigmaplax littoralis Davie, 1993

Macrophthalmus Desmarest, 1823 {3}
Macrophthalmus (*Chaenostoma*) Stimpson, 1858
= *Chaenostoma* Stimpson, 1858 (type species *Chaenostoma orientale* Stimpson, 1858, by monotypy; gender neuter) {4}
= *Macrophthalmus* (*Mopsocarcinus*) Barnes, 1967 (type species *Macrophthalmus boscii* Audouin, 1826, by original designation; gender masculine)
Macrophthalmus (*Chaenostoma*) *boscii* Audouin, 1826
= *Chaenostoma orientale* Stimpson, 1858
= *Chaenostoma crassimanus* Stimpson, 1858
= *Macrophthalmus franchettii* Maccagno, 1936
Macrophthalmus (*Chaenostoma*) *dentatus* Stimpson, 1858
Macrophthalmus (*Chaenostoma*) *punctulatus* Miers, 1884

Macrophthalmus (*Euplax*) H. Milne Edwards, 1852 {5}
= *Euplax* H. Milne Edwards, 1852 (type species *Euplax leptophthalmus* H. Milne Edwards, 1852, subsequent designation by Rathbun, 1918; gender feminine)
Macrophthalmus (*Euplax*) *leptophthalmus* (H. Milne Edwards, 1852) [*Euplax*]
Macrophthalmus (*Euplax*) *dagohoyi* Mendoza & Ng, 2007

Macrophthalmus (*Hemiplax*) Heller, 1865
= *Hemiplax* Heller, 1865 (type species *Hemiplax hirtipes* Heller, 1865, by monotypy; gender feminine)
Macrophthalmus (*Hemiplax*) *hirtipes* (Jacquinot, in Hombron & Jacquinot, 1846) [*Cleistostoma*]
= *Hemiplax hirtipes* Heller, 1865 {6}

Macrophthalmus (*Macrophthalmus*) Desmarest, 1823
= *Macrophthalmus* Desmarest, 1823 (type species *Goneplax transversus* Latreille, 1817, by monotypy; gender masculine)
Macrophthalmus (*Macrophthalmus*) *abbreviatus* Manning & Holthuis, 1981
= *Ocypode* (*Macrophthalmus*) *dilatata* De Haan, 1835 (pre-occupied name)
Macrophthalmus (*Macrophthalmus*) *banzai* Wada & K. Sakai, 1989
Macrophthalmus (*Macrophthalmus*) *brevis* (Herbst, 1804) [*Cancer*]
= *Macrophthalmus carinimanus* H. Milne Edwards, 1837
= *Macrophthalmus simdentatus* Shen, 1936
= *Macrophthalmus dilatatus carens* Lanchester, 1900
= *Macrophthalmus travancorensis* Pillai, 1951
Macrophthalmus (*Macrophthalmus*) *ceratophorus* Sakai, 1969
Macrophthalmus (*Macrophthalmus*) *consobrinus* Nobili, 1906
Macrophthalmus (*Macrophthalmus*) *convexus* Stimpson, 1858
= *Macrophthalmus inermis* A. Milne-Edwards, 1867
Macrophthalmus (*Macrophthalmus*) *crassipes* H. Milne Edwards, 1852
Macrophthalmus (*Macrophthalmus*) *darwinensis* Barnes, 1971
Macrophthalmus (*Macrophthalmus*) *microfylacas* Nagai, Watanabe & Naruse, 2006
Macrophthalmus (*Macrophthalmus*) *gallardoi* Serène, 1971
Macrophthalmus (*Macrophthalmus*) *graeffei* A. Milne- Edwards, 1873
Macrophthalmus (*Macrophthalmus*) *grandidieri* A. Milne-Edwards, 1867
Macrophthalmus (*Macrophthalmus*) *hilgendorfi* Tesch, 1915
Macrophthalmus (*Macrophthalmus*) *laevimanus* H. Milne Edwards, 1852
= *Macrophthalmus malayensis* Tweedie, 1937
Macrophthalmus (*Macrophthalmus*) *latipes* Borradaile, 1902
Macrophthalmus (*Macrophthalmus*) *malaccensis* Tweedie, 1937
Macrophthalmus (*Macrophthalmus*) *milloti* Crosnier, 1965
Macrophthalmus (*Macrophthalmus*) *parvimanus* Guérin, 1834
= *Ocypoda microcheles* Bosc, 1802
= *Aërope bidens* Leach, in White, 1847 (nomen nudum)
= *Macrophthalmus parvimanus kempi* Gravely, 1927
Macrophthalmus (*Macrophthalmus*) *philippinensis* Serène, 1971
Macrophthalmus (*Macrophthalmus*) *sandakani* Rathbun, 1907
Macrophthalmus (*Macrophthalmus*) *serenei* Takeda & Komai, 1991
= *Macrophthalmus kempi* Serène, 1981 (pre-occupied name)
Macrophthalmus (*Macrophthalmus*) *sulcatus* H. Milne Edwards, 1852
Macrophthalmus (*Macrophthalmus*) *telescopicus* Owen, 1839
= *Macrophthalmus podophthalmus* Eydoux & Souleyet, 1842
= *Macrophthalmus compressipes* Randall, 1840
= ?*Macrophthalmus verreauxi* H. Milne Edwards, 1848
Macrophthalmus (*Macrophthalmus*) *tomentosus* Eydoux & Souleyet, 1842
Macrophthalmus (*Macrophthalmus*) *transversus* (Latreille, 1817) [*Goneplax*]

Macrophthalmus (*Mareotis*) Barnes, 1967
= *Macrophthalmus* (*Mareotis*) Barnes, 1967 (type species *Ocypode japonica* De Haan, 1835, by original designation; gender feminine)
Macrophthalmus (*Mareotis*) *abercrombiei* Barnes, 1966
Macrophthalmus (*Mareotis*) *crinitus* Rathbun, 1913
Macrophthalmus (*Mareotis*) *definitus* Adams & White, 1849
= *Macrophthalmus guamensis* Kesling, 1958
Macrophthalmus (*Mareotis*) *depressus* Rüppell, 1830
= *Macrophthalmus affinis* Guérin-Méneville, 1839
Macrophthalmus (*Mareotis*) *frequens* Tai & Song, 1984
Macrophthalmus (*Mareotis*) *japonicus* (De Haan, 1835) [*Ocypode*]
?*Macrophthalmus* (*Mareotis*) *laevis* A. Milne-Edwards, 1867
Macrophthalmus (*Mareotis*) *pacificus* Dana, 1851
= ?*Macrophthalmus bicarinatus* Heller, 1862

Macrophthalmus (*Mareotis*) *teschi* Kemp, 1919
Macrophthalmus (*Mareotis*) *tjiljapensis* Pretzmann, 1974
Macrophthalmus (*Mareotis*) *tomentosus* Eydoux & Souleyet, 1842
Macrophthalmus (*Mareotis*) *setosus* H. Milne Edwards, 1852

Macrophthalmus (*Paramareotis*) Komai, Goshima & Murai, 1995
= *Macrophthalmus* (*Paramareotis*) Komai, Goshima & Murai, 1995 (type species *Macrophthalmus quadratus* A. Milne-Edwards, 1873, by original designation; gender feminine)
Macrophthalmus (*Paramareotis*) *boteltobagoe* Sakai, 1939
Macrophthalmus (*Paramareotis*) *erato* De Man, 1888
Macrophthalmus (*Paramareotis*) *holthuisi* Serène, 1973
Macrophthalmus (*Paramareotis*) *quadratus* A. Milne-Edwards, 1873

Macrophthalmus (*Tasmanoplax*) Barnes, 1967
= *Macrophthalmus* (*Tasmanoplax*) Barnes, 1967 (type species *Macrophthalmus latifrons* Haswell, 1882, by original designation; gender feminine)
Macrophthalmus (*Tasmanoplax*) *latifrons* Haswell, 1882

Macrophthalmus (*Venitus*) Barnes, 1967
= *Macrophthalmus* (*Venitus*) Barnes, 1967 (type species *Gonoplax latreillei* Desmarest, 1822, by original designation; gender masculine)
Macrophthalmus (*Venitus*) *barnesi* Serène, 1971
Macrophthalmus (*Venitus*) *dentipes* Lucas, in Guérin-Méneville, 1836
= *Macrophthalmus rouxii* Lucas, in Guérin-Méneville, 1836
= *Macrophthalmus pectinipes* Guérin-Méneville, 1838
= *Macrophthalmus simplicipes* Guérin-Méneville, 1838
= *Macrophthalmus guerini* H. Milne Edwards, 1852
Macrophthalmus (*Venitus*) *gastrodes* Kemp, 1915
Macrophthalmus (*Venitus*) *latreillei* (Desmarest, 1822) [*Gonoplax*]
= *Macrophthalmus desmaresti* Lucas, 1839
= *Macrophthalmus polleni* Hoffmann, 1874
= *Macrophthalmus laniger* Ortmann, 1894
= *Macrophthalmus granulosus* De Man, 1904
Macrophthalmus (*Venitus*) *leptophthalmus* H. Milne Edwards, 1852
Macrophthalmus (*Venitus*) *serratus* Adams & White, 1849
Macrophthalmus (*Venitus*) *vietnamensis* Serène, 1971

Subfamily Tritodynamiinae Števčić, 2005 {7}

Tritodynamiini Števčić, 2005

Tritodynamia Ortmann, 1894 {7}
= *Tritodynamia* Ortmann, 1894 (type species *Tritodynamia japonica* Ortmann, 1894, by monotypy; gender feminine)
= *Tritodynamea* Balss, 1922 (type species *Tritodynamia horvathi* Nobili, 1905, by original designation; gender feminine)
Tritodynamia bidentata Yang & Tang, 2005
Tritodynamia dilatata Yang & Sun, 1996
Tritodynamia fujianensis Chen, 1979
Tritodynamia hainanensis Dai, Feng, Song & Chen, 1980
?*Tritodynamia horvathi* Nobili, 1905
= *Tritodynamea fani* Shen, 1932
?*Tritodynamia intermedia* Shen, 1935
Tritodynamia japonica Ortmann, 1894
Tritodynamia longipropoda Dai, Feng, Song & Chen, 1980
Tritodynamia rathbunae Shen, 1932

Notes

{1} The taxonomic position of *Ilyograpsus* has been a problem. Because of an obviously "grapsoid-like" external appearance, it has long been associated with that family or its allies. Fukuda (1978) first noted that it was more likely to be an ocypodoid instead on the basis of zoeal evidence; this was supported by a later study by Cuesta et al. (1997). Examination of fresh specimens confirms this supposition. In some ways, *Ilyograpsus* species resemble camptandriids (which some have been confused with in the past, see C. G. S. Tan & Ng, 1999), but the abdomen and gonopods ally them clearly with the macrophthalmids. Števčić (2005) recognised the family Macrophthalmidae but despite not recognizing any subfamilies within, nevertheless established a new tribe, Ilyograpsini, together with the tribe Macrophthalmini. In the present classification, his Ilyograpsini is regarded as a subfamily.

{2} *Ilyograpsus* has recently been revised by Komai & Wada (in press), and a new genus will be established for *Ilyograpsus paantu*.

{3} The taxonomy of the various subgenera of *Macrophthalmus* is less than satisfactory. Some such as *Chaenostoma*, *Euplax* and *Venitus* appear to be distinct and probably deserve to be treated as good genera. Barnes (1970, 1977), provided a valuable baseline but a modern revision is urgently needed.

{4} Barnes (1957) proposed a new name for this subgenus, *Macrophthalmus* (*Mopsocarcinus*) (type species *Macrophthalmus boscii* Audouin, 1826), apparently unaware that there was an earlier name, *Chaenostoma* Stimpson, 1858 (type species *Chaenostoma orientale* Stimpson, 1858). Since *Chaenostoma orientale* Stimpson, 1858, is now regarded as a junior synonym of *Macrophthalmus boscii* Audouin, 1826, the name *Chaenostoma* Stimpson, 1858, must have priority as the subgeneric name (see Stimpson, 1858b; Ng et al., 2001).

{5} *Euplax* H. Milne Edwards, 1852, synonymised under *Macrophthalmus* (*Venitus*) Barnes, 1967, by Barnes (1977) (see also Barnes, 1966), was regarded as a good subgenus by Mendoza & Ng (2007). In any case, if *Euplax* and *Venitus* are regarded as synonyms, *Euplax* has priority, not *Venitus*, as believed by Barnes (1977). This was first pointed out by Karasawa & Matsuoka (1992).

{6} *Hemiplax hirtipes* Heller, 1865, is now regarded as a junior synonym of *Macrophthalmus* (*Hemiplax*) *hirtipes* (Jacquinot, in Hombron & Jacquinot, 1846). If Heller's species was ever to be referred to *Macrophthalmus* sensu stricto and regarded as a distinct species, a replacement would become necessary.

{7} These species of *Tritodynamia* have been previously placed in the Pinnotheridae, but most have features more typical of macrophthalmid crabs. Their distinctive appearance, and a number of apomorphic characters warrant

their own subfamily. However, two species, *T. horvathi* and *T. intermedia*, appear to be abberant within the genus, showing varunid rather than macrophthalmid affinities. This is the subject of an ongoing revision by P.J.F. Davie and N. K. Ng. If they are to be removed from *Tritodynamia*, then *Tritodynamea* Balss, 1922, is available to receive them. See point 1 in Notes on Pinnotheridae.

Fig. 180. *Macrophthalmus abbreviatus*, Qingdao, China (photo: P. Ng)

Fig. 181. *Macrophthalmus dagohoyi*, Philippines (photo: T. Y. Chan)

Fig. 182. *Macrophthalmus*, new species, Philippines, now under study by T. Naruse and J. C. Mendoza (photo T. Y. Chan)

Fig. 183. *Macrophthalmus* aff. *boscii*, Philippines; this species complex that is being studied by T. Naruse and P. K. L. Ng (photo: P. Ng)

FAMILY MICTYRIDAE DANA, 1851

Mictyridae Dana, 1851 [recte Myctiridae] {1}

Mictyris Latreille, 1806
  = *Mictyris* Latreille, 1806 (type species *Mictyris longicarpus* Latreille, 1806, by monotypy; gender masculine)
  = *Mystiris* (incorrect spelling by Desmarest, 1858)
Mictyris brevidactylus Stimpson, 1858
Mictyris longicarpus Latreille, 1806
  = ?*Ocypode* (*Mictyris*) *deflexifrons* De Haan, 1835 {2}
Mictyris livingstonei MacNeill, 1926
Mictyris platycheles H. Milne Edwards, 1852

Incertae sedis

Myctiris subverrucatus White, 1847 (nomen nudum)

Notes

{1} Dana (1851d) spelt the family name as Myctiridae, but this is clearly a mistake as it was based on *Mictyris*. Alcock (1900b) emended it to Mictyridae.

{2} *Ocypode* (*Mictyris*) *deflexifrons* De Haan, 1835, is unlikely to be a synonym of *M. longicarpus*. P. J. F. Davie has ongoing work revising this family, and numerous new species are to be described.

Fig. 184. *Mictyris* cf. *brevidactylus*, central Philippines (photo: P. Ng)

Fig. 185. *Mictyris* cf. *brevidactylus*, central Philippines (photo: P. Ng)

FAMILY OCYPODIDAE RAFINESQUE, 1815

Ocypodia Rafinesque, 1815 [Opinion 712]
Ucainae Dana, 1851
Gelasimiden Nauck, 1880 (not in Latin, unavailable name)
Gelasimidae Miers, 1886
Ucini Pretzmann, 1983

Subfamily Ocypodinae Rafinesque, 1815

Ocypodia Rafinesque, 1815 [Opinion 712]

Ocypode Weber, 1795
= *Ocypode* Weber, 1795 (type species *Cancer ceratophthalmus* Pallas, 1772, subsequent designation by Latreille, 1810: 422; gender feminine) [Opinion 712] {1}
= *Ocypode* Fabricius, 1798 (type species *Cancer ceratophthalmus* Pallas, 1772, subsequent designation by Latreille, 1810; gender feminine) [Opinion 712]
= *Ocypoda* Lamarck, 1801 (incorrect spelling) [Opinion 712]
= *Monolepis* Say, 1817 (type species *Monolepis inermis* Say, 1817, subsequent designation by Fowler, 1912; gender feminine)
= *Ceratophthalma* MacLeay, 1838 (type species *Cancer cursor* Linnaeus, 1758, by monotypy; gender feminine)
= *Parocypoda* Neumann, 1878 (type species *Cancer ceratophthalmus* Pallas, 1772, by monotypy; gender feminine)
Ocypode africana De Man, 1881
= *Ocypoda hexagonura* Hilgendorf, 1882
Ocypode brevicornis H. Milne Edwards, 1837
Ocypode ceratophthalmus (Pallas, 1772) [*Cancer*] [Opinion 712] {2}
= *Cancer caninus* Herbst, 1782
= *Ocypode urvillei* Guérin, 1829
= *Ocypoda MacLeayana* Hess, 1865
Ocypode convexa Quoy & Gaimard, 1824
Ocypode cordimanus Latreille, 1818
Ocypode cursor (Linnaeus, 1758) [*Cancer*]
= *Ocypode ippeus* Olivier, 1804
Ocypode fabricii H. Milne Edwards, 1837
Ocypode gaudichaudii H. Milne Edwards & Lucas, 1843
Ocypode jousseaumei (Nobili, 1905) [*Ocypoda*]
Ocypode kuhlii De Haan, 1835
?*Ocypode longicornuta* Dana, 1852
Ocypode macrocera H. Milne Edwards, 1852
= *Ocypode portonovoensis* Kumar & Tiwari, 1964
Ocypode madagascariensis Crosnier, 1965
Ocypode mortoni George, 1982
Ocypode nobilii De Man, 1902
Ocypode occidentalis Stimpson, 1860
Ocypode pallidula Jacquinot, in Hombron & Jacquinot, 1846
= *Ocypode laevis* Dana, 1852 (name pre-occupied by *Ocypode laevis* Fabricius, 1798)
Ocypode pauliani Crosnier, 1965
Ocypode platytarsis H. Milne Edwards, 1852
Ocypode pygoides Ortmann, 1894
Ocypode quadrata (Fabricius, 1787) [*Cancer*]
= ?*Ocypode rhombea* Weber, 1795 (nomen nudum)
= ?*Ocypode rhombea* Fabricius, 1798 {3}
= *Ocypode albicans* Bosc, 1802
= *Monolepis inermis* Say, 1817
= *Ocypode arenarius* Say, 1817
Ocypode rotundata Miers, 1882
= *Ocypode rotundata* var. *arabica* Nobili, 1906
Ocypode ryderi Kingsley 1880
Ocypode saratan (Forskål, 1775) [*Cancer*]
= *Ocypode aegyptica* Gerstaecker, 1856
Ocypode sinensis Dai, Song & Yang, 1985
Ocypode stimpsoni Ortmann, 1897

Incertae sedis

Ocypode laevis Fabricius, 1798
Ocypode minuta Fabricius, 1798

Subfamily Ucinae Dana, 1851

Ucainae Dana, 1851
Gelasimiden Nauck, 1880 (not in Latin, unavailable name)
Gelasimidae Miers, 1886
Ucini Pretzmann, 1983

Uca Leach, 1814 {4}
Uca (*Australuca*) Crane, 1975
= *Australuca* Crane, 1975 (type species *Gelasimus bellator* White, 1847, by original designation; gender feminine)
Uca (*Australuca*) *bellator* (White, 1847) [*Gelasimus*]
= *Gelasimus signatus* var. *angustifrons* De Man, 1891
= *Gelasimus brevifrons* var. *delicata* Maccagno, 1928
Uca (*Australuca*) *elegans* George & Jones, 1982
Uca (*Australuca*) *hirsutimanus* George & Jones, 1982
Uca (*Australuca*) *longidigitum* (Kingsley, 1880) [*Gelasimus*]
Uca (*Australuca*) *polita* Crane, 1975
Uca (*Australuca*) *seismella* Crane, 1975
Uca (*Australuca*) *signata* (Hess, 1865) [*Gelasimus*]
= *Uca bellator minima* Crane, 1975

Uca (*Cranuca*) Beinlich & von Hagen, 2006
= *Cranuca* Beinlich & von Hagen, 2006 (type species *Gelasimus inversa* Hoffmann, 1874, by original designation; gender feminine)
Uca (*Cranuca*) *inversa* (Hoffmann, 1874) [*Gelasimus*]
= *Gelasimus smithii* Kingsley, 1880
= ?*Gelasimus variegatus* Heller, 1862

Uca (*Gelasimus*) Latreille, 1817
= *Gelasimus* Latreille, 1817 (type species *Cancer vocans* Linnaeus, 1758; subsequent designation by H. Milne Edwards, 1841; gender masculine)
= *Gelasima* Latreille, 1817 (incorrect spelling of *Gelasimus* Latreille, 1817)
= *Latuca* Bott, 1973 (type species *Mesuca* (*Latuca*) *neocultrimana* Bott, 1973, by original designation; gender feminine)
= *Mesuca* Bott, 1973 (type species *Cancer tetragonon* Herbst, 1790, by original designation; gender feminine)
= *Thalassuca* Crane, 1975 (type species *Cancer tetragonon* Herbst, 1790, by original designation; gender feminine)
Uca (*Gelasimus*) *borealis* Crane, 1975
Uca (*Gelasimus*) *dampieri* Crane, 1975
Uca (*Gelasimus*) *hesperiae* Crane, 1975
Uca (*Gelasimus*) *neocultrimana* Bott, 1973
= *Uca* (*Thalassuca*) *vocans pacificensis* Crane, 1975
Uca (*Gelasimus*) *tetragonon* (Herbst, 1790) [*Cancer*]
= *Uca affinis* Guérin, 1829
= *Uca duperreyi* Guérin, 1829
= *Gelasimus tetragonon* var. *spinicarpa* Kossmann, 1877
= *Gelasimus variatus* Hess, 1865
Uca (*Gelasimus*) *vocans* (Linnaeus, 1758) [*Cancer*]
= *Gelasimus marionis* Desmarest, 1823 {5}
= *Ocypode citharoedicus* Say, 1817
= *Gelasimus nitidus* Dana, 1851 {6}
= *Gelasimus cultrimanus* White, 1847
= *Uca marionis* forma *excisa* Nobili, 1906
Uca (*Gelasimus*) *vomeris* McNeill, 1920

Uca (*Leptuca*) Bott, 1973
= *Leptuca* Bott, 1973 (type species *Gelasimus stenodactylus* H. Milne Edwards & Lucas, 1843, by original designation; gender feminine)
= *Celuca* Crane, 1975 (type species *Uca deichmanni* Rathbun, 1935, by original designation; gender feminine)
Uca (*Leptuca*) *batuenta* Crane, 1941
Uca (*Leptuca*) *beebei* Crane, 1941
Uca (*Leptuca*) *crenulata* (Lockington, 1877) [*Gelasimus*]
= *Gelasimus gracilis* Rathbun, 1894
Uca (*Leptuca*) *coloradensis* (Rathbun, 1894) [*Gelasimus*]
Uca (*Leptuca*) *cumulanta* Crane, 1943
Uca (*Leptuca*) *deichmanni* Rathbun, 1935
Uca (*Leptuca*) *dorotheae* Crane, 1968
Uca (*Leptuca*) *festae* Nobili, 1902
= *Uca guayaquilensis* Rathbun, 1935
= *Uca orthomana* Bott, 1954
= *Uca leptochela* Bott, 1954
= *Uca leptochela eibli* Bott, 1958
Uca (*Leptuca*) *helleri* Rathbun, 1902
Uca (*Leptuca*) *inaequalis* Rathbun, 1935
Uca (*Leptuca*) *latimanus* (Rathbun, 1894) [*Gelasimus*]
Uca (*Leptuca*) *leptodactylus* Rathbun, 1898
Uca (*Leptuca*) *limicola* Crane, 1941
Uca (*Leptuca*) *musica* Rathbun, 1914
Uca (*Leptuca*) *oerstedi* Rathbun, 1904
Uca (*Leptuca*) *panacea* Novak & Salmon, 1974
Uca (*Leptuca*) *panamensis* (Stimpson, 1859) [*Gelasimus*]
Uca (*Leptuca*) *pygmaea* Crane, 1941
Uca (*Leptuca*) *pugilator* (Bosc, 1802) [*Ocypoda*]
Uca (*Leptuca*) *saltitanta* Crane, 1941
Uca (*Leptuca*) *speciosa* (Ives, 1891) [*Gelasimus*]
Uca (*Leptuca*) *spinicarpus* Rathbun, 1900
Uca (*Leptuca*) *stenodactylus* (H. Milne Edwards & Lucas, 1843) [*Gelasimus*]
= *Gelasimus gibbosus* Smith, 1870
Uca (*Leptuca*) *subcylindrica* (Stimpson, 1859) [*Gelasimus*]
Uca (*Leptuca*) *tallanica* von Hagen, 1968
Uca (*Leptuca*) *tenuipedis* Crane, 1941
Uca (*Leptuca*) *terpsichores* Crane, 1941
Uca (*Leptuca*) *tomentosa* Crane, 1941
= *Uca mertensi* Bott, 1954
Uca (*Leptuca*) *uruguayensis* Nobili, 1901
= *Uca olympioi* Oliviera, 1939

Uca (*Minuca*) Bott, 1973
= *Minuca* Bott, 1954 (type species *Gelasimus mordax* Smith, 1870, by original designation; gender feminine)
= *Planuca* Bott, 1973 (type species *Uca thayeri* Rathbun, 1900, by original designation; gender feminine)
= *Borboruca* Crane, 1975 (type species *Uca thayeri* Rathbun, 1900, by original designation; gender feminine)
Uca (*Minuca*) *argillicola* Crane, 1941
Uca (*Minuca*) *brevifrons* (Stimpson, 1860) [*Gelasimus*]
Uca (*Minuca*) *burgersi* Holthuis, 1967
= *Gelasimus affinis* Streets, 1872 (pre-occupied name)
= *Uca panama* Coelho, 1972
Uca (*Minuca*) *ecuadoriensis* Maccagno, 1928
= *Uca schmitti* Crane, 1943
Uca (*Minuca*) *galapagensis* Rathbun, 1902
= *Gelasimus macrodactylus* H. Milne Edwards & Lucas, 1843 (suppressed by ICZN)
Uca (*Minuca*) *herradurensis* Bott, 1954
Uca (*Minuca*) *longisignalis* Salmon & Atsaides, 1968
Uca (*Minuca*) *marguerita* Thurman, 1981
Uca (*Minuca*) *minax* (LeConte, 1855) [*Gelasimus*]
Uca (*Minuca*) *mordax* (Smith, 1870) [*Gelasimus*]
Uca (*Minuca*) *pugnax* (Smith, 1870) [*Gelasimus*] [Opinion 522]
Uca (*Minuca*) *rapax* (Smith, 1870) [*Gelasimus*]
= ?*Gelasimus palustris* H. Milne Edwards, 1852
= ?*Uca pugnax brasiliensis* Oliviera, 1939
= *Uca virens* Salmon & Atsaides, 1968
Uca (*Minuca*) *thayeri* Rathbun, 1900
Uca (*Minuca*) *umbratila* Crane, 1941
= *Uca thayeri ilchi* Bott, 1954
Uca (*Minuca*) *victoriana* von Hagen, 1987
Uca (*Minuca*) *vocator* (Herbst, 1804) [*Cancer*]
= *Uca salsisitus* Oliviera, 1939 {7}
= *Uca murifecenta* Crane, 1943
= *Uca lanigera* von Hagen, 1968
Uca (*Minuca*) *zacae* Crane, 1941
= *Uca macrodactyla glabromana* Bott, 1954

Uca (*Paraleptuca*) Bott, 1973
= *Paraleptuca* Bott, 1973 (type species *Gelasimus chlorophthalmus* H. Milne Edwards, 1837, by original designation; gender feminine)
= *Austruca* Bott, 1973 (type species *Gelasimus annulipes* H. Milne Edwards, 1837, by original designation; gender feminine)
= *Amphiuca* Crane, 1975 (type species *Gelasimus chlorophthalmus* H. Milne Edwards, 1837, by original designation; gender feminine)
Uca (*Paraleptuca*) *albimana* (Kossmann, 1877) [*Gelasimus*]
Uca (*Paraleptuca*) *annulipes* (H. Milne Edwards, 1837) [*Gelasimus*]
Uca (*Paraleptuca*) *bengali* Crane, 1975
Uca (*Paraleptuca*) *chlorophthalmus* (H. Milne Edwards, 1837) [*Gelasimus*]
= *Uca amazonensis* Doflein, 1899
Uca (*Paraleptuca*) *crassipes* (White, 1847) [*Gelasimus*]
= *Gelasimus gaimardi* H. Milne Edwards, 1852
= *Gelasimus splendidus* Stimpson, 1858
= *Gelasimus pulchellus* Stimpson, 1858
= *Gelasimus latreillei* H. Milne Edwards, 1852
= *Uca novaeguineae* Rathbun, 1913
Uca (*Paraleptuca*) *lactea* (De Haan, 1835) [*Ocypode* (*Gelasimus*)]
= *Gelasimus forceps* H. Milne Edwards, 1837 {8}
= *Uca orientalis* Nobili, 1901
Uca (*Paraleptuca*) *mjobergi* Rathbun, 1924
Uca (*Paraleptuca*) *perplexa* (H. Milne Edwards, 1837) [*Gelasimus*]
= *Gelasimus annulipes* var. *albimana* H. Milne Edwards, 1852
Uca (*Paraleptuca*) *sindensis* (Alcock, 1900) [*Gelasimus*]
Uca (*Paraleptuca*) *triangularis* (A. Milne-Edwards, 1873) [*Gelasimus*]
= *Gelasimus triangularis* var. *variabilis* De Man, 1891

Uca (*Tubuca*) Bott, 1973
= *Tubuca* Bott, 1973 (type species *Gelasimus urvillei* H. Milne Edwards, 1852, by original designation; gender feminine)
= *Deltuca* Crane, 1975 (type species *Gelasimus forcipatus* Adams & White, 1849, by original designation; gender feminine)
Uca (*Tubuca*) *acuta* (Stimpson, 1858) [*Gelasimus*]
Uca (*Tubuca*) *arcuata* (De Haan, 1835) [*Ocypode* (*Gelasimus*)]
= *Uca brevipes* H. Milne Edwards, 1852
Uca (*Tubuca*) *australiae* Crane, 1975
Uca (*Tubuca*) *capricornis* Crane, 1975
= *Uca pavo* George & Jones, 1982
Uca (*Tubuca*) *coarctata* (H. Milne Edwards, 1852) [*Gelasimus*]
= *Uca rathbunae* Pearse, 1912
= *Uca ischnodactylus* Nemec, 1939
= ?*Uca mearnsi* Rathbun, 1913
= ?*Gelasimus thomsoni* Kirk, 1880
Uca (*Tubuca*) *demani* Ortmann, 1897

= *Uca zamboangana* Rathbun, 1913
Uca (*Tubuca*) *dussumieri* (H. Milne Edwards, 1852) [*Gelasimus*]
= *Gelasimus dubius* Stimpson, 1858
Uca (*Tubuca*) *flammula* Crane, 1975
Uca (*Tubuca*) *forcipata* (Adams & White, 1849) [*Gelasimus*]
= *Uca rubripes* Estampador, 1937
= *Uca manii* Rathbun, 1909
Uca (*Tubuca*) *formosensis* Rathbun, 1921
Uca (*Tubuca*) *paradussumieri* Bott, 1973
= *Uca* (*Deltuca*) *dussumieri spinata* Crane, 1975
Uca (*Tubuca*) *rhizophoriae* Tweedie, 1950
Uca (*Tubuca*) *rosea* (Tweedie, 1937) [*Gelasimus*]
Uca (*Tubuca*) *typhoni* Crane, 1975
Uca (*Tubuca*) *urvillei* (H. Milne Edwards, 1852) [*Gelasimus*]

Uca (*Uca*) Leach, 1814
= *Uca* Leach, 1814 (type species *Uca major* Herbst, 1782, by monotypy; gender feminine) [Opinion 712] {4}
= *Heteruca* Bott, 1973 (type species *Gelasimus heteropleurus* Smith, 1870, by original designation; gender feminine)
= *Acanthoplax* H. Milne Edwards, 1852 (type species *Acanthoplax insignis* H. Milne Edwards, 1852, by monotypy; gender feminine)
= *Eurycheles* Rathbun, 1914 (type species *Uca monilifera* Rathbun, 1914, by monotypy; gender masculine; invalid name as published in synonymy)
= *Afruca* Crane, 1975 (type species *Gelasimus tangeri* Eydoux, 1835, by original designation; gender feminine)
Uca (*Uca*) *heteropleura* (Smith, 1870) [*Gelasimus*]
Uca (*Uca*) *insignis* (H. Milne Edwards, 1852) [*Acanthoplax*]
= *Gelasimus* (*Acanthoplax*) *excellens* Gerstaecker, 1856
= *Gelasimus armatus* Smith, 1870
Uca (*Uca*) *intermedia* von Prahl & Toro, 1985
Uca (*Uca*) *major* Herbst, 1782 [Opinion 712]
= *Ocypoda heterochelos* Lamarck, 1801
= *Cancer uca* Shaw & Nodder, 1803
= *Uca una* Leach, 1814 [Opinion 712]
= *Gelasimus grangeri* Desbonne, in Desbonne & Schram, 1867
Uca (*Uca*) *maracoani* (Latreille, 1802) [*Ocypode*]
Uca (*Uca*) *monilifera* Rathbun, 1914
Uca (*Uca*) *ornata* (Smith, 1870) [*Gelasimus*]
= *Uca pizarri* von Hagen, 1968
Uca (*Uca*) *princeps* (Smith, 1870) [*Gelasimus*]
Uca (*Uca*) *stylifera* (H. Milne Edwards, 1852) [*Gelasimus*]
= *Gelasimus heterophthalmus* Smith, 1870
Uca (*Uca*) *tangeri* (Eydoux, 1835) [*Gelasimus*] [Opinion 1262]
= *Gelasimus platydactylus* H. Milne Edwards, 1837
= *Gelasimus perlatus* Herklots, 1851
= *Gelasimus cimatodus* Rochebrune, 1833
= *Gonoplax speciosus* Monod, 1933 (nomen nudum)
= *Uca tangeri* var. *matandensis* Monod & Nicou, 1959

Incertae sedis

Gelasimus huttoni Filhol, 1886
Uca iranica Pretzmann, 1971
Gelasimus leptostyla Nutting, 1919
Goneplax nitida Desmarest, 1817 {6}
= *Gelasima nitida* Desmarest, 1822
Gelasimus minor Owen, 1839
Gelasimus porcellanus White, 1847
Gelasimus rectilatus Lockington, 1877
Gelasimus rubripes Hombron & Jacquinot, 1846
Gelasimus robustus White, 1847 (nomen nudum)
Gelasimus bellatrix White, 1847 (nomen nudum)
Gelasimus tenuimanus White, 1847 (nomen nudum)
Uca africana White, 1847 (nomen nudum)

Notes

{1} The identities of many species of *Ocypode* are still unclear; a revision is currently underway by Michael Türkay (Senckenberg Museum) and Katsushi Sakai (Kumamoto University, Japan).

{2} The identity of *Cancer caninus* Herbst, 1782 (p.78) is a problem. Herbst (1782: 78) cited and repeated the description of Rumphius (1705) from Indonesia. However the description is peculiar and seems to be a composite of two different species. Holthuis suggested to Beekman (1999: 400) that one might be a species of *Cardisoma* (Gecarcinidae), and the other the well known ocypodid *Ocypode ceratophthalmus*. From the description (translated by Beekman, 1999: 33), the gecarcinid is either *Cardisoma carnifex* or *Discoplax hirtipes*, but the description of *Ocypode* is more precise and we agree that it must be *O. ceratophthalmus*. There are no types and no figures (see also K. Sakai, 1999), but the name is available under the Code. We hereby act as first revisor and select the *Ocypode* part of the description to represent *Cancer caninus* Herbst, 1782. As such, *Cancer caninus* Herbst, 1782, becomes a junior subjective synonym of *Cancer ceratophthalmus* Pallas, 1772.

{3} The identity of *Ocypode rhombea* Fabricius, 1798, is not possible to ascertain as the sole remaining presumed type specimen in the ZMUC is a juvenile, and in poor condition. We follow convention in regarding it as a junior subjective synonym of *Ocypode quadratus* (Fabricius, 1787).

{4} *Uca* is a major problem despite the major revisions of Bott (1973) and Crane (1975). Most modern workers refuse to use the subgeneric systems proposed by these authors, or recognise any of them as genera. Despite this, most recognise that *Uca* sensu lato is markedly heterogeneous. Rosenberg (2001) supported recognition of most of Crane's (1975) subgenera, with support also for elevation to full genera (see also Rosenberg, 2000). Studies on the gastric mill by S. L. Yang (pers. comm.) also agree. Ongoing work by Shih Hsi-Te (Taichung Museum, Taiwan) suggests that at least one more supraspecific group can also be recognised. Crane's (1975) subgeneric grouping is more coherent and robust than that of Bott (1973), although some species will need to be reallocated. In the most recent reappraisal, Beinlich & von Hagen (2006) proposed a revised system of classification, recognising some supraspecific taxa and synonymising others. They also make a de facto selection of one name over another when the names were published in the same paper (ICZN, Article 24.2.2). To this effect, they selected *Latuca* Bott, 1973, over *Mesuca* Bott, 1973; and *Paraleptuca* Bott, 1973, over *Austruca* Bott, 1973. Several *Uca* species can still not be confidently identified, so cannot yet be subgenerically allocated. These taxa were discussed in detail by Crane (1975), and should be resolvable with future study. They are here listed as incertae sedis. It seems unlikely that the subgeneric and generic system in *Uca* will be settled until a new, thorough taxonomic

treatment is undertaken, using not only traditional morphological characters, but gastric mill structure, and DNA analyses.

{5} With regards to *Gelasimus marionis*, Desmarest (1823: 243) noted: “Gélasime de Marion": "Cette espèce... est de Manille. Elle m'a été communiquée par M. Marion de Procé de Nantes, à qui je la dédie" (see also Desmarest, 1825: 125). *Gelasimus marionis* Desmarest, 1823, is currently considered a junior synonym of *Uca vocans* (Linnaeus, 1758). Unfortunately the type is believed lost. None of Marion de Procé’s material appears to have survived, but we do know that at least some material arrived back in France (see also de Procé, 1822), because he clearly gave a fiddler crab to Desmarest (1823)!

{6} The name “Goneplace luisant”, followed by the Latin name *Goneplax nitida*, was first used for a fossil crab (unknown origin) in Desmarest (1817: 505), but he later (Desmarest, 1822: 106, pl. 8, figs. 7, 8) named it “*Gelasima nitida* (Gélasime luisante”. Henri Milne Edwards (1837: 55, footnote) accepted the synonymy of “*Gonoplace luisante* Desmarest, 1817, with *Gelasimus nitidus* Desmarest, 1822. Dana (1852a) subsequently established a new species, *Uca nitidus* from Fiji, apparently unaware of Desmarest’s action. That *U. nitidus* is a Dana species (without reference to Desmarest’s taxa) has been followed by subsequent workers like H. Milne Edwards (1852) and Crane (1975: 89), with the latter accepting it as a junior synonym of *Uca vocans*. The identity of Desmarest’s (1817, 1822) species is difficult to ascertain, and until it can be shown that it is synonymous with another known taxon, we recognise it as distinct for the time being. Accepting both, *Gelasimus nitidus* Desmarest, 1822, and *Gelasimus nitidus* Dana, 1851b, causes a problem of homonomy, but since the latter is a junior synonym of *U. vocans*, there is no immediate problem. If both are recognised as valid *Uca* species, then a replacement will be needed for Dana’s name.

{7} For *Uca vocator* (Herbst, 1804) and its subjective junior synonym, *Uca salsisitus* Oliveira, 1939, see Tavares & Braga de Mendonça (2003).

{8} Crane (1975: 323) gives a detailed explanation of the serious problems relating to *Gelasimus forceps* H. Milne Edwards, 1837. The type in the Paris Museum is a composite of a female body and a large male clela. Crane could not determine the identity of the female body, but considered the chela to very likely be from *Uca lactea* (De Haan, 1835). She regarded the identity of this species as unresolved. We here designate the chela identified as belonging to *Uca lactea*, as the lectotype of *Gelasimus forceps* H. Milne Edwards, 1837. This action makes both names synonyms and resolves the impasse with H. Milne Edwards’ taxon.

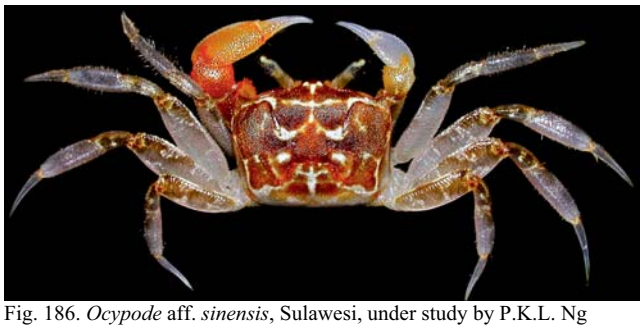

Fig. 186. *Ocypode* aff. *sinensis*, Sulawesi, under study by P.K.L. Ng (see Huang et al., 1998; photo: P. Ng)

Fig. 187. *Uca rosea*, Singapore (photo: P. Ng)

Fig. 188. *Uca dussumieri*, central Philippines (photo: P. Ng)

Fig. 189. *Uca paradussumieri*, Muar, Peninsular Malaysia, one of the largest *Uca* species in the Pacific (photo: P. Ng)

FAMILY UCIDIDAE ŠTEVČIĆ, 2005

Ucidinae Števčić, 2005

Remarks. – The phylogenetic affinities of *Ucides* Rathbun, 1897, have been uncertain for many years. The type species *U. cordatus* (Linnaeus, 1763) was for a long time placed in the Gecarcinidae because of its superficial similarities with genera like *Cardisoma*. Chace & Hobbs (1969) transferred it to the Ocypodidae. Türkay (1983b) supported this action and further placed it in the subfamily Heloecinae H. Milne Edwards, 1852. We have been studying its affinities for several years and were preparing to recognise *Ucides* as belonging to a distinct family when Števčić (2005: 131) established the subfamily Ucidinae in the Ocypodidae.

We disagree with the inclusion of *Ucides* in the Ocypodidae sensu stricto. It has a suite of significant apomorphies that suggest separate family ranking, e.g. carapace features, corneal structure, male abdominal segmentation, absence of setal tufts between the bases of the pereiopods, and the efferent branchial channels not being closed by the third maxillipeds anteriorly (Davie & Ng, in prep.).

Ucides Rathbun, 1897
= *Uca* Latreille, 1819 (type species *Cancer uca* Linnaeus, 1767, by monotypy; junior homonym of *Uca* Leach, 1814; gender feminine) [Opinion 712] {1}
= *Ucides* Rathbun, 1897 (type species *Cancer cordatus* Linnaeus, 1763, by original designation; gender masculine) {1}
= *Oedipleura* Ortmann, 1897 (replacement name for *Uca* Latreille, 1819; gender neuter) {1}
Ucides cordatus (Linnaeus, 1763) [*Cancer*]
= *Cancer uca* Linnaeus, 1767
= *Ocypode fossor* Latreille, 1802
= *Uca pilosipes* Gill, 1859
Ucides occidentalis (Ortmann, 1897) [*Oedipleura*]
= *Uca laevis* H. Milne Edwards, 1837 (pre-occupied name)

Notes

{1} Linnaeus (1767) named a species *Cancer uca*, which was later realised to be the same as one he had named earlier in 1763 as *Cancer cordatus*. The vernacular name "uçá" is one of the native Brazilian names employed by the famous naturalist G. Marcgraf in his *Historia Naturalis Brasiliae* (1648) and introduced into the zoological nomenclature, as *Cancer uca*, a species currently known as *Ucides cordatus* (see Tavares 1993). The name "*uca*" is today closely associated with the fiddler crabs of the genus *Uca* Leach, 1814, the type species being *Uca major* Herbst, 1782 (Opinion 712). *Uca* Latreille, 1819 (a junior homonym of *Uca* Leach, 1814) on the other hand, has *Cancer uca* Linnaeus, 1767, as the type species (Opinion 712). *Cancer cordatus* Linnaeus, 1763, and *Cancer uca* Linnaeus, 1767, are not fiddler crabs. To avoid confusion, Rathbun (1897), proposed *Ucides* as a replacement name for *Uca* Latreille, 1819, but chose *Cancer cordatus* Linnaeus, 1763, as the type species, because she realised it was a senior synonym of *Cancer uca* Linnaeus, 1767. In that same year, Ortmann (1897) independently proposed his own replacement name, *Oedipleura*, and since Ortmann did not specify, its type species is automatically *Cancer uca* Linnaeus, 1767, the same as that for *Uca* Latreille, 1819. This is the reason why *Ucides* Rathbun, 1897, and *Oedipleura* Ortmann, 1897, although both proposed as replacement names for *Uca* Latreille, 1819, have different but synonymous names for their type species.

Fig. 190. *Ucides cordatus*, Brazil (photo: A. O. de Almeida)

FAMILY XENOPHTHALMIDAE STIMPSON, 1858

Xenophthalmidae Stimpson, 1858

Remarks. – The Xenophthalminae Stimpson, 1858, has traditionally been placed in the Pinnotheridae as a distinct subfamily (see Schmidtt et al., 1973), even though all its members are free-living. However, Serène & Umali (1972: 84) had argued that it cannot be retained in the Pinnotheridae and should be recognised as a separate family. They comment that "in these three genera [*Xenophthalmus*, *Neoxenophthalmus* and *Anomalifrons*], the merus and the ischium of the third maxilliped are clearly separated, this particular character shows that the subfamilies Xenophthalminae and Anomalifrontinae must be excluded from the family Pinnotheridae and the family Xenophthalmidae Stimpson (1858) restored for them. This family is mainly characterized by the pronounced swelling of the pterygostomial region. The pseudo antero-lateral border of the carapace corresponds to the pterygostomian rim. The true antero-lateral border of the carapace is only faintly indicated by a feeble rim joining the posterior limit of the orbit to a notch corresponding to the junction of the pterygostomian rim with the lateral border of the carapace." (Serène & Umali, 1972: 84). Serène & Umali also noted that the two subfamilies can be differentiated by the form of the epistome and buccal cavern (without trace of an epistome, with the anterior part of the buccal cavern extending to the base of the antennular fossa in Xenophthalminae, versus with a narrow epistome and the anterior part of buccal cavern is normal in Anomalifrontinae). However, in the heading of the page discussing these three genera, Serène & Umali (1972: 84) still used the subfamily rank, "Xenophthalminae" (but under the family Grapsidae) and this may have contributed to workers not realizing that it had been recognised as a distinct family by them.

Števčić (2005: 118) followed Serène & Umali (1972) in recognising the Xenophthalmidae, with two subfamilies, Xenophthalminae Stimpson, 1858, and Anomalifrontinae Rathbun, 1931, but without further comment except to say that it was "Heterotremata (?) *incertae sedis*".

Peter K. L. Ng, Tohru Naruse and Paul F. Clark (unpublished data) examined many specimens of *Xenophthalmus pinnotheroide*s, *Neoxenophthalmus obscurus* and *Anomalifrons lightana* from Malaysia and Thailand in the the Raffles Museum of Biodiversity Research (Singapore) and The Natural History Museum (London). We confirm that all three genera are clearly thoracotremes. In the form of their medially constricted male abdomens which have all segments free, the three genera closely resemble many dotillids. The G1 is slender, straight and not heavily chitinised, and also resembles those of dotillids. The same is true of their third maxillipeds which are similar in form to those of dotillids or camptandriids. The chelae resemble those of camptandriids, with the chela relatively delicate, and the distal half of the cutting edge of the dactylus armed with a low tooth (see Rathbun, 1931; Sankarakutty, 1969; Takeda & Miyake, 1970; Serène & Umali, 1972). Camptandriids, however, have male abdominal segments 2 and 3 fused, and their G1 is strongly recurved (see Ng, 1998; C. G. S. Tan & Ng, 1999; Davie, 2002).

However, despite a resemblance to the dotillids, the absence of an epistome, the swollen pterygostomial regions, upturned front, the strongly reduced eyes, slit-like orbits and pilose legs with short spatuliform dactyli (see Rathbun, 1931; Sankarankutty, 1969; Takeda & Miyake, 1970; Serène & Umali, 1972), make the placement of these genera in the Dotillidae untenable. As such, it is best to recognise a separate family for *Xenophthalmus*, *Anomalifrons* and *Neoxenophthalmus*. Because the affinities of these genera are clearly with the Dotillidae and we here refer the Xenophthalmidae to the Ocypodoidea.

As to the two subfamilies recognised by Serène & Umali (1972), Xenophthalminae and Anomalifrontinae, we are unsure if this is really warranted. The differences which have been discussed but they are not substantial and it may be better to classify all three genera in one family without subfamilies. This matter is now being examined in detail by T. Naruse, P. Clark and P. K. L. Ng. For the moment, we keep the system recommended by Serène & Umali (1972).

One species previously referred to *Xenophthalmus*, *X. duplociliatus* Sluiter, 1881, is almost certainly a true dotillid (see Tesch, 1918: 271), and is referred there (see point 5 in Notes of Dotillidae).

Xenophthalmus pinnotheroides lives in soft mud in estuarine areas outside or near mangroves and can be collected in depths of up to 10 metres by grabs or trawls. In Peninsular Malaysia, when present, it can be found in large numbers (A. Sasekumar, pers. comm.). It is not known to be associated with any animals.

Subfamily Anomalifrontinae Rathbun, 1931

Anomalifrontinae Rathbun, 1931

Anomalifrons Rathbun, 1931
= *Anomalifrons* Rathbun, 1931 (type species *Anomalifrons lightana* Rathbun, 1931, by monotypy; gender feminine)
Anomalifrons lightana Rathbun, 1931

Subfamily Xenophthalminae Stimpson, 1858

Neoxenophthalmus Serène & Umali, 1972
= *Neoxenophthalmus* Serène & Umali, 1972 (type species *Xenophthalmus obscurus* Henderson, 1893, by original designation; gender masculine)
Neoxenophthalmus garthii (Sankarankutty, 1969) [*Xenophthalmus*] {1}
Neoxenophthalmus obscurus (Henderson, 1893) [*Xenophthalmus*]

Xenophthalmus White, 1846 {2}
= *Xenophthalmus* White, 1846 (type species *Xenophthalmus pinnotheroides* White, 1846, by monotypy; gender masculine) [Opinion 85, Direction 37]
Xenophthalmus pinnotheroides White, 1846 [Direction 36]
Xenophthalmus wolffi Takeda & Miyake, 1970

Notes

{1} *Xenophthalmus garthii* Sankarankutty, 1969, must be referred to *Neoxenophthalmus* Serène & Umali, 1972. It has a G1 in which the distal part is drawn out into a slender process (versus straight and simple in *Xenophthalmus*) and the orbits and eyes are positioned obliquely (versus parallel in *Xenophthalmus*). As both species, *N. obscurus* Henderson, 1893, and *N. garthii* were described from India, and the differences mentioned by Sakarankutty (1969) do not appear to be substantial, it is also possible that both are synonymous. Until more specimens can be examined, we keep them as separate.

{2} Schmidtt et al. (1973: 99) recognised four species in *Xenophthalmus*, but one species is clearly not a member of this genus or even family. *Xenophthalmus duplociliatus* Sluiter, 1881, was described from Tanjung Priok in Java, and has not been reported since. The description is brief but there are enough details to suggest it is not a *Xenophthalmus* species or a pinnotherid (see also Serène & Umali, 1972) but a dotillid instead. Tesch (1918: 271) comments: "A third species is *X. duplociliatus* Sluiter [1]). This species, according to the description, resembles the type species, but the chelipeds are much stronger, broadly-flattened and "lepelvormig gebogen" (shaped like a spoon); besides the under surface of the posterior legs is brightly red, and the 3rd and 4th segments of the abdomen of the ♀ is provided with a transverse row of long hairs. SLUITER [1881] says that WHITE [1846] mentions the presence of bristles at the 3rd segment of the abdomen of the ♀, but the latter author's words on this subject are: "a long ciliated process proceeding from each end of the third joint". One cannot help thinking that WHITE mistook the (bifurcated) pleopod of the ♀, eaching beyond the 3rd segment, for this "ciliated process", for in reality the abdomen of the ♀ does not show any prominences on its exposed surface or on its borders." The description suggests that "*Xenophthalmus duplociliatus*" is more likely to be a species of dotillid. Interestingly, members of the genus *Dotilla* have a row of setae across the abdomen as described by Sluiter (1881: 163). We agree with Tesch (1918) that it is not a *Xenophthalmus* species and we here refer it to the Dotillidae as an incerta sedis.

Fig. 191. *Xenophthalmus pinnotheroides*, off Ranong, western Thailand (photo: T. Naruse)

SUPERFAMILY PINNOTHEROIDEA DE HAAN, 1833

FAMILY PINNOTHERIDAE DE HAAN, 1833

Pinnotheridea De Haan, 1833
Xenophthalmidae Stimpson, 1858
Dissodactylidae Smith, 1870
Pinnothereliinae Alcock, 1900
Anomalofrontinae Rathbun, 1931
Alarconiini Števčić, 2005
Glassellini Števčić, 2005
Parapinnixini Števčić, 2005
Pinnixini Števčić, 2005

Subfamily incerta sedis

Aphanodactylus Tesch, 1918 {1}
  = *Aphanodactylus* Tesch, 1918 (type species *Aphanodactylus sibogae* Tesch, 1918, by monotypy; gender masculine)
Aphanodactylus brevipes (A. Milne-Edwards, 1853) [*Pinnixa*]
Aphanodactylus edmondsoni Rathbun, 1932
Aphanodactylus loimiae Konishi & Noda, 1999
Aphanodactylus sibogae Tesch, 1918

Voeltzkowia Lenz, 1905 {1}
  = *Voeltzkowia* Lenz, 1905 (type species *Voeltzkowia zanzibarensis* Lenz, 1905, by original designation; gender feminine)
Voeltzkowia zanzibarensis Lenz, 1905

Subfamily Pinnothereliinae Alcock, 1900

Pinnothereliinae Alcock, 1900
Alarconiini Števčić, 2005
Glassellini Števčić, 2005
Pinnixini Števčić, 2005

Alarconia Glassell, 1938
  = *Alarconia* Glassell, 1938 (type species *Alarconia seaholmi* Glassell, 1938, by monotypy; gender feminine)
Alarconia guinotae Coelho, 1996
Alarconia seaholmi Glassell, 1938

Austinixa Heard & Manning, 1997
  = *Austinixa* Heard & Manning, 1997 (type species *Pinnixa cristata* Rathbun, 1900, by original designation; gender feminine)
Austinixa aidae (Righi, 1967) [*Pinnixa*]
  = *Austinixa hardyi* Heard & Manning, 1997
Austinixa behreae (Manning & Felder, 1989) [*Pinnixa*]
Austinixa bragantina Coelho, 2005
Austinixa chacei (Wass, 1955) [*Pinnixa*]
Austinixa cristata (Rathbun, 1900) [*Pinnixa*]
Austinixa felipensis (Glassell, 1935) [*Pinnixa*]
Austinixa gorei (Manning & Felder, 1989) [*Pinnixa*]
Austinixa patagoniensis (Rathbun, 1918) [*Pinnixa*]
  = *Pinnixa angeloi* Righi, 1967

Glassellia Campos & Wicksten, 1997
  = *Glasellia* Campos & Wicksten, 1997 (type species *Pinnixa costaricana* Wicksten, 1982, by monotypy; gender feminine)
Glassellia costaricana (Wicksten, 1982) [*Pinnixa*]

Indopinnixa Manning & Morton, 1987
  = *Indopinnixa* Manning & Morton, 1987 (type species *Indopinnixa sipunculana* Manning & Morton, 1987, by monotypy; gender feminine)
Indopinnixa mortoni Davie, 1992
Indopinnixa sipunculana Manning & Morton, 1987

Pinnixa White, 1846
  = *Pinnixa* White, 1846 (type species *Pinnotheres cylindricum* Say, 1818, by monotypy; gender feminine) [Opinion 85, Direction 37]
  = *Tubicola* Lockington, 1876 (type species *Tubicola longipes* Lockington, 1876, by original designation; gender neuter)
  = *Palaeopinnixa* Via Boada, 1966 (type species *Pinnixa eocenica* Rathbun, 1926, by original designation; gender feminine) [fossil genus]
Pinnixa abbotti Glassell, 1935
Pinnixa affinis Rathbun, 1898
Pinnixa arenicola Rathbun, 1922
Pinnixa bahamondei Garth, 1957
Pinnixa balanoglossana Sakai, 1934
Pinnixa barnharti Rathbun, 1918
Pinnixa brevipollex Rathbun, 1898
?*Pinnixa californiensis* Rathbun, 1894
Pinnixa chaetopterana Stimpson, 1860
Pinnixa chiloensis Garth, 1957
Pinnixa costaricana Wicksten, 1982
Pinnixa cylindrica (Say, 1818) [*Pinnotheres*] [Direction 36]
Pinnixa darwini Garth, 1960
Pinnixa eburna Wells, 1928
Pinnixa faba (Dana, 1851) [*Pinnotheres*]
Pinnixa faxoni Rathbun, 1918
Pinnixa floridana Rathbun, 1918
Pinnixa forficulimanus Zmarzly, 1992
Pinnixa franciscana Rathbun, 1918
Pinnixa fusca Glassell, 1935
Pinnixa gracilipes Coelho, 1997
Pinnixa hematosticta Sakai, 1934
Pinnixa hiatus Rathbun, 1918
Pinnixa huffmani Glassell, 1935
Pinnixa latissima Coelho, 1997
Pinnixa leptodactyla Coelho, 1997
Pinnixa leptosynaptae Wass, 1968
Pinnixa littoralis Holmes, 1894
Pinnixa longipes (Lockington, 1876) [*Tubicola*]
Pinnixa lunzi Glassell, 1937
Pinnixa minuscula Zmarzly, 1992
Pinnixa minuta Rathbun, 1901
Pinnixa monodactyla (Say, 1818) [*Pinnotheres*]
Pinnixa occidentalis Rathbun, 1894
Pinnixa paitensis Rathbun, 1935
Pinnixa pearsei Wass, 1955
Pinnixa pembertoni Glassell, 1935
Pinnixa penultipedalis Stimpson, 1858
Pinnixa petersi Bott, 1955
Pinnixa plectrophoros Glassell, 1935
Pinnixa rapax Bouvier, 1917
Pinnixa rathbuni Sakai, 1934
Pinnixa rectinens Rathbun, 1918
Pinnixa richardsoni Glassell, 1936
Pinnixa salvadorensis Bott, 1955
Pinnixa sayana Stimpson, 1860
Pinnixa scamit Martin & Zmarzly, 1994
Pinnixa schmitti Rathbun, 1918
Pinnixa tomentosa Lockington, 1877

Pinnixa transversalis (H. Milne Edwards & Lucas, 1842) [*Pinnotheres*]
= *Pinnixa panamensis* Faxon, 1893
Pinnixa tubicola Holmes, 1894
Pinnixa tumida Stimpson, 1858
Pinnixa valdiviensis Rathbun, 1907
Pinnixa valerii Rathbun, 1931
Pinnixa vanderhorsti Rathbun, 1922
Pinnixa weymouthi Rathbun, 1918

Pinnotherelia H. Milne Edwards & Lucas, 1843
= *Pinnotherelia* H. Milne Edwards & Lucas, 1843 (type species *Pinnotherelia laevigata* H. Milne Edwards & Lucas, 1843, by monotypy; gender feminine) [Opinion 85, Directions 36, 37]
Pinnotherelia laevigata H. Milne Edwards & Lucas, 1843 [Direction 36]
= ?*Cyclograpsus gnatherion* Kinahan, 1857

Pseudopinnixa Ortmann, 1894 {1}
= *Pseudopinnixa* Ortmann, 1894 (type species *Pseudopinnixa carinata* Ortmann, 1894, by monotypy; gender feminine) [Opinion 85, Direction 37] {2}
Pseudopinnixa carinata Ortmann, 1894 [Direction 36]

Tetrias Rathbun, 1898
= *Tetrias* Rathbun, 1898 (type species *Tetrias scabripes* Rathbun, 1898, by monotypy; gender masculine) [Opinion 85, Direction 37]
Tetrias fischerii (A. Milne-Edwards, 1867) [*Pinnotheres*]
Tetrias scabripes Rathbun, 1898 [Direction 36]

Subfamily Pinnotherinae De Haan, 1833

Pinnotheridea De Haan, 1833
Dissodactylidae Smith, 1870
Parapinnixini Števčić, 2005

Abyssotheres Manning & Galil, 2000
= *Abyssotheres* Manning & Galil, 2000 (type species *Pinnotheres abyssicola* Alcock & Anderson, 1899, by original designation; gender masculine)
Abyssotheres abyssicola (Alcock & Anderson, 1899) [*Pinnotheres*]

Afropinnotheres Manning, 1993
= *Afropinnotheres* Manning, 1993 (type species *Afropinnotheres monodi* Manning, 1993, by original designation; gender masculine)
Afropinnotheres monodi Manning, 1993
Afropinnotheres crosnieri Manning, 1993
Afropinnotheres guinotae Manning, 1993
Afropinnotheres larissae (Machkevskiy, 1992) [*Pinnotheres*]

Alain Manning, 1998
= *Alain* Manning, 1998 (type species *Alain crosnieri* Manning, 1998, by original designation; gender masculine)
Alain crosnieri Manning, 1998

Alainotheres Manning, 1993
= *Alainotheres* Manning, 1993 (type species *Pinnotheres leloeuffi* Crosnier, 1969, by original designation; gender masculine)
Alainotheres leloeuffi (Crosnier, 1969) [*Pinnotheres*]

Arcotheres Manning, 1993
= *Arcotheres* Manning, 1993 (type species *Pinnotheres palaensis* Bürger, 1895, subsequent designation by Manning, 1993; gender masculine) {3}
Arcotheres alcocki (Rathbun, 1909) [*Pinnotheres*] {4}
= *Pinnotheres parvulus* De Man, 1887 (pre-occupied name)
Arcotheres arcophilus (Bürger, 1895) [*Pinnotheres*]
Arcotheres coarctatus (Bürger, 1895) [*Pinnotheres*] {4}
Arcotheres exiguus (Bürger, 1895) [*Pinnotheres*]
Arcotheres guinotae Campos, 2001
Arcotheres latifrons (Bürger, 1895) [*Xenophthalmus*] {4}
Arcotheres latus (Bürger, 1895) [*Pinnotheres*] {4}
Arcotheres modiolicola (Bürger, 1895) [*Pinnotheres*]
Arcotheres nudifrons (Bürger, 1895) [*Pinnotheres*]
Arcotheres palaensis (Bürger, 1895) [*Pinnotheres*]
Arcotheres pernicola (Bürger, 1895) [*Pinnotheres*] {4}
Arcotheres placunae (Hornell & Southwell, 1909) [*Pinnotheres*] {4}
Arcotheres rayi Ahyong & Ng, 2007 {4}
Arcotheres rhombifer (Bürger, 1895) [*Pinnotheres*] {4}
= *Pinnotheres latissimus* Bürger, 1895
Arcotheres rotundatus (Bürger, 1895) [*Pinnotheres*] {4}
= *Pinnotheres consors* Bürger, 1895
Arcotheres similis (Bürger, 1895) [*Pinnotheres*] {4}
Arcotheres sinensis (Shen, 1932) [*Pinnotheres*] {4}
Arcotheres spinidactylus (Gordon, 1936) [*Pinnotheres*]
Arcotheres tivelae (Gordon, 1936) [*Pinnotheres*]
Arcotheres winckworthi (Gordon, 1936) [*Pinnotheres*]

Austinotheres Campos, 2002
= *Austinotheres* Campos, 2002 (type species *Pinnotheres angelicus* Lockington, 1877, by original designation; gender masculine)
Austinotheres angelicus (Lockington, 1877) [*Pinnotheres*]

Buergeres Ng & Manning, 2003
= *Buergeres* Ng & Manning, 2003 (type species *Pinnotheres ortmanni* Bürger, 1895, by original designation; gender masculine)
Buergeres deccanensis (Chopra, 1931) [*Pinnotheres*]
Buergeres holothuriae (Semper, 1880) [*Pinnotheres*]
Buergeres ortmanni (Bürger, 1895) [*Pinnotheres*]
Buergeres tenuipes (Bürger, 1895) [*Pinnotheres*]

Calyptraeotheres Campos, 1990
= *Calyptraeotheres* Campos, 1990 (type species *Fabia granti* Glassell, 1933, by original designation; gender masculine)
Calyptraeotheres garthi (Fenucci, 1975)
Calyptraeotheres granti (Glassell, 1933) [*Fabia*]
Calyptraeotheres hernandezi Hernández-Ávila & Campos, 2006
Calyptraeotheres politus (Smith, 1870) [*Ostracotheres*]

Clypeasterophilus Campos & Griffith, 1990
= *Clypeasterophilus* Campos & Griffith, 1990 (type species *Dissodactylus rugatus* Bouvier, 1917, by original designation; gender masculine)
Clypeasterophilus juvenilis (Bouvier, 1917) [*Dissodactylus*]
= *Dissodactylus alcocki* Rathbun, 1918
Clypeasterophilus rugatus (Bouvier, 1917) [*Dissodactylus*]
= *Dissodactylus calmani* Rathbun, 1918
Clypeasterophilus stebbingi (Rathbun, 1918) [*Dissodactylus*]
Clypeasterophilus ususfructus (Griffith, 1987) [*Dissodactylus*]

Dissodactylus Smith, 1870
= *Dissodactylus* Smith, 1870 (type species *Dissodactylus nitidus* Smith, 1870, by monotypy; gender masculine) [Opinion 85, Direction 37]
= *Echinophilus* Rathbun, 1900 (type species *Echinophilus mellitae* Rathbun, 1900, by monotypy; gender masculine)
= *Dissodactylozoea* Aikawa, 1933 (type species *Echinophilus mellitae* Rathbun, 1900, subsequent designation by Schmitt, McCain & Davidson, 1973; gender feminine)

Dissodactylus crinitichelis Moreira, 1901
= *Dissodactylus encopei* Rathbun, 1901
Dissodactylus glasselli Rioja, 1944
Dissodactylus latus Griffith, 1987
Dissodactylus lockingtoni Glassell, 1935
= *Dissodactylus smithi* Rioja, 1944
Dissodactylus mellitae (Rathbun, 1900) [*Echinophilus*]
Dissodactylus meyerabichi Bott, 1955
Dissodactylus nitidus Smith, 1870 [Direction 36]
?*Dissodactylus pelagicus* (Aikawa, 1933) [*Dissodactylozoea*]
?*Dissodactylus pinna* (Aikawa, 1933) [*Dissodactylozoea*]
Dissodactylus primitivus Bouvier, 1917
= *Dissodactylus borradailei* Rathbun, 1918
Dissodactylus schmitti Griffith, 1987
?*Dissodactylus singularis* (Aikawa, 1933) [*Dissodactylozoea*]
?*Dissodactylus speciosus* (Aikawa, 1933) [*Dissodactylozoea*]
?*Dissodactylus tokyoensis* (Aikawa, 1933) [*Dissodactylozoea*]
?*Dissodactylus unicornis* (Aikawa, 1933) [*Dissodactylozoea*]
Dissodactylus xantusi Glassell, 1936

Durckheimia De Man, 1889
= *Durckheimia* De Man, 1889 (type species *Durckheimia carinipes* De Man, 1889, by monotypy; gender feminine)
= *Pinnotheropsis* Kubo, 1939 (type species *Pinnotheropsis yokotai* Kubo, 1939, by original designation; gender feminine)
= *Dürckheimia* Tesch, 1918 (incorrect spelling)
= *Duerckheimia* Guinot, 1966 (incorrect spelling)
Durckheimia caeca Bürger, 1895
= *Pinnotheropsis yokotai* Kubo, 1939
Durckheimia carinipes De Man, 1889
Durckheimia lochi Ahyong & Brown, 2003

Epulotheres Manning, 1993
= *Epulotheres* Manning, 1993 (type species *Epulotheres angelae* Manning, 1993, by original designation; gender masculine)
Epulotheres angelae Manning, 1993

Ernestotheres Manning, 1993
= *Ernestotheres* Manning, 1993 (type species *Pinnotheres conicola* Manning & Holthuis, 1981, by original designation; gender masculine)
Ernestotheres conicola (Manning & Holthuis, 1981) [*Pinnotheres*]

Fabia Dana, 1851
= *Fabia* Dana, 1851 (type species *Fabia subquadrata* Dana, 1851, by monotypy; gender feminine)
= *Cryptophrys* Rathbun, 1894 (type species *Cryptophrys concharum* Rathbun, 1894, by monotypy; gender feminine)
= *Raphonotus* Rathbun, 1897 (unnecessary replacement name for *Cryptophrys* Rathbun, 1893; gender masculine)
Fabia byssomiae (Say, 1818) [*Pinnotheres*]
= *Pinnotheres emiliai* Melo, 1971
= *Fabia insularis* Melo, 1971
Fabia canfieldi Rathbun, 1918
Fabia carvachoi Campos, 1996
Fabia concharum (Rathbun, 1894) [*Cryptophrys*]
= *Raphonotus lowei* Rathbun, 1900
Fabia felderi Gore, 1986
Fabia malaguena (Garth, 1948) [*Pinnotheres*]
Fabia obtusidentata Dai, Feng, Song & Chen, 1980
Fabia subquadrata Dana, 1851
Fabia tellinae Cobb, 1973

Gemmotheres Campos, 1996
= *Gemmotheres* Campos, 1996 (type species *Pinnotheres chamae* Roberts, 1975, by original designation; gender masculine)
Gemmotheres chamae (Roberts, 1975) [*Pinnotheres*]

Holotheres Ng & Manning, 2003
= *Holotheres* Ng & Manning, 2003 (type species *Pinnotheres semperi* Bürger, 1895, by original designation; gender masculine)
Holotheres flavus (Nauck, 1880) [*Pinnotheres*]
Holotheres halingi (Hamel, Ng & Mercier, 1999) [*Pinnotheres*]
Holotheres semperi (Bürger, 1895) [*Pinnotheres*]
Holotheres setnai (Chopra, 1931) [*Pinnotheres*]
Holotheres villosissimus (Doflein, 1904) [*Pinnotheres*]

Holothuriophilus Nauck, 1880
= *Holothuriophilus* Nauck, 1880 (type species *Holothuriophilus trapeziformis* Nauck, 1880, by designation under Article 68.2.1; gender masculine) [Opinion 85, Direction 37]
Holothuriophilus mutuensis (Sakai, 1939) [*Pinnaxodes*]
Holothuriophilus pacificus (Poeppig, 1836)
= *Pinnoteres silvestrii* Nobili, 1901
= *Pinnaxodes meinerti* Rathbun, 1904
Holothuriophilus trapeziformis Nauck, 1880 [Direction 36]

Hospitotheres Manning, 1993
= *Hospitotheres* Manning, 1993 (type species *Hospitotheres powelli* Manning, 1993, by original designation; gender masculine)
Hospitotheres powelli Manning, 1993

Juxtafabia Campos, 1993
= *Juxtafabia* Campos, 1993 (type species *Pinnotheres muliniarum* Rathbun, 1918, by original designation; gender feminine)
Juxtafabia muliniarum (Rathbun, 1918) [*Pinnotheres*]
= *Pinnotheres reticulatus* Rathbun, 1918
= *Pinnotheres jamesi* Rathbun, 1923

Limotheres Holthuis, 1975
= *Limotheres* Holthuis, 1975 (type species *Limotheres nasutus* Holthuis, 1975, by monotypy; gender masculine)
Limotheres nasutus Holthuis, 1975

Nannotheres Manning & Felder, 1996
= *Nannotheres* Manning & Felder, 1996 (type species *Nannotheres moorei* Manning & Felder, 1996, by monotypy; gender masculine)
Nannotheres moorei Manning & Felder, 1996

Nepinnotheres Manning, 1993
= *Nepinnotheres* Manning, 1993 (type species *Cancer pinnotheres* Linnaeus, 1758, by original designation; gender masculine)
Nepinnotheres affinis (Bürger, 1895) [*Pinnotheres*] {4}
Nepinnotheres africanus Manning, 1993
Nepinnotheres androgynus Manning, 1993
Nepinnotheres cardii (Bürger, 1895) [*Pinnotheres*] {4}
Nepinnotheres glaberrimus (Bürger, 1895) [*Pinnotheres*] {4}
Nepinnotheres pectinicola (Bürger, 1895) [*Pinnotheres*] {4}
Nepinnotheres pinnotheres (Linnaeus, 1758) [*Cancer*]
= *Cancer veterum* Bosc, 1801
= *Pinnotheres pinnae* Leach, 1814
= *Pinnotheres montagui* Leach, 1815
= *Pinnotheres pinnophylax* H. Milne Edwards, 1853
Nepinnotheres rathbunae (Schmitt, McCain & Davidson, 1973) [*Pinnotheres*] {4}
= *Pinnotheres barbatus* Bürger, 1895 (pre-occupied name)
Nepinnotheres sanqueri Manning, 1993
Nepinnotheres tellinae (Manning & Holthuis, 1981) [*Pinnotheres*]
Nepinnotheres villosulus (Guérin, 1831) [*Pinnotheres*] {4}

Opisthopus Rathbun, 1894
= *Opisthopus* Rathbun, 1894 (type species *Opisthopus transversus* Rathbun, 1894, by monotypy; gender masculine) [Opinion 85, Direction 37]
Opisthopus transversus Rathbun, 1894 [Direction 36]
= *Pinnotheres nudus* Holmes, 1895

Orthotheres Sakai, 1969
= *Orthotheres* Sakai, 1969 (type species *Orthotheres turboe* Sakai, 1969, by original designation; gender masculine)
Orthotheres glaber (Bürger, 1895) [*Pinnotheres*] {4}
= *Pinnotheres impressus* Bürger, 1895
Orthotheres halioditis Geiger & Martin, 1999
Orthotheres laevis (Bürger, 1895) [*Pinnotheres*] {4}
Orthotheres longipes (Bürger, 1895) [*Pinnotheres*] {4}
Orthotheres serrei (Rathbun, 1909) [*Pinnotheres*]
Orthotheres strombi (Rathbun, 1905) [*Pinnotheres*]
Orthotheres turboe Sakai, 1969
Orthotheres unguifalcula (Glassell, 1936) [*Pinnotheres*]

Ostracotheres H. Milne Edwards, 1853
= *Ostracotheres* H. Milne Edwards, 1853 (type species *Pinnotheres tridacnae* Rüppell, 1830, subsequent designation by Schmitt, McCain & Davidson, 1973; gender masculine)
Ostracotheres affinis H. Milne Edwards, 1853
Ostracotheres cynthiae Nobili, 1905
Ostracotheres holothuriensis (Baker, 1907) [*Pinnotheres*]
Ostracotheres spondyli Nobili, 1905
Ostracotheres subglobosus (Baker, 1907) [*Pinnotheres*]
Ostracotheres subquadratus Sakai, 1939
Ostracotheres tomentipes Takeda & Konishi, 1994
Ostracotheres tridacnae (Rüppell, 1830) [*Pinnotheres*]
= *Pinnotheres savignyi* H. Milne Edwards, 1853

Parapinnixa Holmes, 1895
= *Pseudopinnixa* Holmes, 1895 (type species *Pinnixa nitida* Lockington, 1876, by monotypy; name pre-occupied by *Pseudopinnixa* Ortmann, 1894 [Crustacea]; gender feminine) [Direction 37]
= *Parapinnixa* Holmes, 1895 (replacement name for *Pseudopinnixa* Holmes, 1894, gender feminine)
Parapinnixa affinis Holmes, 1900
Parapinnixa beaufortensis Rathbun, 1918
Parapinnixa bouvieri Rathbun, 1918
Parapinnixa cortesi Thoma, Heard & Vargas, 2005
Parapinnixa cubana Campos, 1994
Parapinnixa glasselli Garth, 1939
Parapinnixa hendersoni Rathbun, 1918
Parapinnixa magdalenensis Werding & Müller, 1990
Parapinnixa nitida (Lockington, 1876) [*Pinnixa*]

Pinnaxodes Heller, 1865
= *Pinnaxodes* Heller, 1865 (type species *Pinnaxodes hirtipes* Heller, 1865, subsequent designation under Article 68.2.1; gender masculine) [Opinion 85, Direction 37]
Pinnaxodes chilensis (H. Milne Edwards, 1837) [*Pinnotheres*]
= *Pinnaxodes hirtipes* Heller, 1865 [Direction 36]
Pinnaxodes floridensis Wells & Wells, 1961
Pinnaxodes gigas Green, 1992
Pinnaxodes major Ortmann, 1894
Pinnaxodes tomentosus Ortmann, 1894

Pinnotheres Bosc, 1802 {5}
= *Pinnotheres* Bosc, 1802 (type species *Cancer pisum* Linnaeus, 1767, subsequent designation by Latreille, 1810, see also Opinion 85; gender masculine) [Opinion 85, Direction 45]
= *Pinnotheres* Latreille, 1802 (junior homonym of *Pinnotheres* Bosc, 1802) [Direction 45]
= *Pinnozoea* Aikawa, 1933 (type species *Cancer pisum* Linnaeus, 1767, subsequent designation by Schmitt, McCain & Davidson, 1973; gender feminine)
Pinnotheres ascidicola Hesse, 1872
Pinnotheres atrinae Sakai, 1939
Pinnotheres atrinicola Page, 1983
Pinnotheres barbatus Desbonne, 1867
Pinnotheres bidentatus Sakai, 1939
Pinnotheres bipunctatus Nicolet, 1849
Pinnotheres boninensis Stimpson, 1858
Pinnotheres borradailei Nobili, 1905
Pinnotheres corbiculae Sakai, 1939
Pinnotheres coutierei Nobili, 1905
Pinnotheres cyclinus Gordon, 1932
Pinnotheres dilatatus Shen, 1932
Pinnotheres dofleini Lenz, 1914
Pinnotheres edwardsi De Man, 1887
Pinnotheres excussus Dai, Feng, Song & Chen, 1980
Pinnotheres globosus Hombron & Jacquinot, 1846
= *Pinnotheres meleagrinae* Hilgendorf, in von Der Decken, 1869 (nomen nudum)
Pinnotheres gordonae Shen, 1932 {6}
Pinnotheres guerini H. Milne Edwards, 1853
Pinnotheres haiyangensis Shen, 1932
Pinnotheres hanumantharaoi Devi & Shyamasundari, 1989
Pinnotheres hemphilli Rathbun, 1918
Pinnotheres hirtimanus H. Milne Edwards, 1853
Pinnotheres hickmani (Guiler, 1950) [*Fabia*]
Pinnotheres jamesi Rathbun, 1923
Pinnotheres kamensis Rathbun, 1909
Pinnotheres kutensis Rathbun, 1900
Pinnotheres laquei Sakai, 1961
Pinnotheres lanensis Rathbun, 1909
Pinnotheres latipes Jacquinot, in Hombron & Jacquinot, 1846
Pinnotheres lithodomi Smith, 1870
Pinnotheres luminatus Dai, Feng, Song & Chen, 1980
Pinnotheres lutescens Nobili, 1905
Pinnotheres mactricola Alcock, 1900
Pinnotheres maindroni Nobili, 1905
Pinnotheres margaritiferae Laurie, 1906
Pinnotheres marioni Gourret, 1887
Pinnotheres mccainae Schmitt, McCain & Davidson, 1973
= *Pinnotheres rouxi* Rossignol, 1957 (pre-occupied name)
Pinnotheres nigrans Rathbun, 1909
Pinnotheres novaezelandiae Filhol, 1885
= ?*Pinnotheres schauinslandi* Lenz, 1901
Pinnotheres obesus Dana, 1852
Pinnotheres obscuridentata Dai & Song, 1986
Pinnotheres obscurus Stimpson, 1858
Pinnotheres onychodactylus Tesch, 1918
Pinnotheres orcutti Rathbun, 1918
?*Pinnotheres ostrea* (Aikawa, 1933) [*Pinnozoea*]
Pinnotheres paralatissimus Dai & Song, 1986
Pinnotheres parvulus Stimpson, 1858
Pinnotheres pecteni Hornell & Southwell, 1909
Pinnotheres pectunculi Hesse, 1872
Pinnotheres perezi Nobili, 1905
Pinnotheres pholadis De Haan, 1835
= *Pinnotheres pisoides* Ortmann, 1894
Pinnotheres pichilinquei Rathbun, 1923
Pinnotheres pilulus Dai, Feng, Song & Chen, 1980
Pinnotheres pilumnoides Nobili, 1905
Pinnotheres pisum (Linnaeus, 1767) [*Cancer*] [Direction 45] {7}
= *Cancer nutrix* Scopoli, 1763 {7}
= *Cancer mytulorum albus* Baster, 1765
= *Cancer mytulorum fuscus* Baster, 1765
= *Cancer mytilorum albus* Herbst, 1783
= *Cancer mytilorum fuscus* Herbst, 1783

= *Cancer scopolinus* Herbst, 1783 {8}
= *Cancer minutus* de Wulfen, 1791
= *Cancer varians* Olivier, 1791
= *Cancer mytili* Leach, 1814
= *Cancer modioli* Leach, 1814
= *Cancer cranchii* Leach, 1815
= *Pinnotheres latreilii* Leach, 1817
= *Pinnotheres eubolinus* Nardo. 1847
= *Pinnotheres modiolae* Hope, 1851
= *Pinnotheres mactracum* Hope, 1851 (nomen nudum)
Pinnotheres pubescens (Holmes, 1894) [*Cryptophrys*]
Pinnotheres pugettensis Holmes, 1900
Pinnotheres purpureus Alcock, 1900
Pinnotheres quadratus Rathbun, 1909
Pinnotheres ridgewayi Southwell, 1911
Pinnotheres rouxi H. Milne Edwards, 1853
Pinnotheres sanguinolariae Pillai, 1951
Pinnotheres sebastianensis (Rodrigues da Costa, 1970) [*Fabia*]
Pinnotheres serrignathus Shen, 1932
Pinnotheres shoemakeri Rathbun, 1918
Pinnotheres siamensis Rathbun, 1909
Pinnotheres socius Lanchester, 1902
Pinnotheres taichungae K. Sakai, 2000
Pinnotheres taylori Rathbun, 1918
Pinnotheres trichopus Tesch, 1918
Pinnotheres tsingtaoensis Shen, 1932
Pinnotheres vicajii Chhapgar, 1957

Raytheres Campos, 2004
= *Raymondia* Campos, 2002 (type species *Pinnotheres clavapedatus* Glassell, 1935, by original designation; gender feminine; name pre-occupied by *Raymondia* Frauenfeld, 1855)
= *Raytheres* Campos, 2004 (replacement name for *Raymondia* Campos, 2002; gender masculine)
Raytheres clavapedatus (Glassell, 1935) [*Pinnotheres*]

Sakaina Serène, 1964
= *Sakaina* Serène, 1964 (type species *Sakaina japonica* Serène, 1964, by original designation; gender feminine)
Sakaina asiatica (Sakai, 1933) [*Parapinnixa*]
Sakaina incisa Sakai, 1969
Sakaina japonica Serène, 1964
Sakaina koreensis Kim & Sakai, 1972
Sakaina yokoyai (Glassell, 1933) [*Parapinnixa*]
= *Parapinnixa affinis* Yokoya, 1928 (pre-occupied name)

Scleroplax Rathbun, 1894
= *Scleroplax* Rathbun, 1894 (type species *Scleroplax granulatus* Rathbun, 1894, by monotypy; gender feminine) [Opinion 85, Direction 37]
Scleroplax granulata Rathbun, 1894 [Direction 36]

Serenotheres Ahyong & Ng, 2005
= *Serenotheres* Ahyong & Ng, 2005 (type species *Durckheimia besutensis* Serène, 1967, by original designation; gender masculine)
Serenotheres besutensis (Serène, 1967) [*Durckheimia*]

Sindheres Kazmi & Manning, 2003
= *Sindheres* Kazmi & Manning, 2003 (type species *Sindheres karachiensis* Kazmi & Manning, 2003, by original designation; gender masculine)
Sindheres karachiensis Kazmi & Manning, 2003

Tridacnatheres Ahyong & Ng, 2005
= *Tridacnatheres* Ahyong & Ng, 2005 (type species *Xanthasia whitei* De Man, 1888, by original designation; gender masculine)
Tridacnatheres whitei (De Man, 1888) [*Xanthasia*]

Tumidotheres Campos 1989
= *Tumidotheres* Campos 1989 (type species *Pinnotheres margarita* Smith, 1869, by original designation; gender masculine)
Tumidotheres margarita (Smith, 1869) [*Pinnotheres*]
Tumidotheres maculatus (Say, 1818) [*Pinnotheres*]
= ?*Cancer parasiticus* Linnaeus, 1763
= ?*Cancer pinnophylax* Linnaeus, 1767

Tunicotheres Campos, 1996
= *Tunicotheres* Campos, 1996 (type species *Pinnotheres moseri* Rathbun, 1918, by original designation; gender masculine)
Tunicotheres moseri (Rathbun, 1918) [*Pinnotheres*]

Viridotheres Manning, 1999
= *Viridotheres* Manning, 1999 (type species *Viridotheres marionae* Manning, 1999, by original designation; gender masculine)
Viridotheres buergeri (Rathbun, 1909) [*Pinnotheres*]
Viridotheres gracilis (Bürger, 1895) [*Pinnotheres*] {4}
Viridotheres lillyae (Manning, 1993) [*Nepinnotheres*]
Viridotheres marionae Manning, 1999
Viridotheres otto Ahyong & Ng, 2007
Viridotheres viridis (Manning, 1993) [*Nepinnotheres*]

Visayeres Ahyong & Ng, 2007
= *Visayeres* Ahyong & Ng, 2007 (type species *Visayeres acron* Ahyong & Ng, 2007, by original designation; gender masculine)
Visayeres acron Ahyong & Ng, 2007

Waldotheres Manning, 1993
= *Waldotheres* Manning, 1993 (type species *Pinnotheres mccainae* Schmitt, McCain & Davidson, 1973, by original designation; gender masculine)
Waldotheres mccainae (Schmitt, McCain & Davidson, 1973) [*Pinnotheres*]

Xanthasia White, 1846
= *Xanthasia* White, 1846 (type species *Xanthasia murigera* White, 1846, by monotypy; gender feminine) [Opinion 85, Direction 37]
Xanthasia murigera White, 1846 [Direction 36]

Zaops Rathbun, 1900
= *Zaops* Rathbun, 1900 (type species *Pinnotheres depressum* Say, 1817, by monotypy; gender masculine)
Zaops geddesi (Miers, 1880) [*Pinnotheres*]
= *Pinnotheres ostrearius* Rathbun, 1901
= *Pinnotheres holmesi* Rathbun, 1918
Zaops ostreus (Say, 1817) [*Pinnotheres*]
= *Pinnotheres depressum* Say, 1817

Incertae sedis

Pinnotheres orientalis White, 1847 (nomen nudum)
Pinnotheres orientalis Woodward, 1886 (nomen nudum)

Notes

{1} In the modern classification (e.g. see Schmitt et al., 1973), members of the Asthenognathinae (with four genera: *Asthenognathus*, *Tritodynamia*, *Aphanodactylus* and *Voeltzkowia*) are among the more peculiar members of the family Pinnotheridae, a group already known for having many unusual taxa. Števčić (2005) raised them to family level within the Grapsoidea without much

discussion, while Cuesta et al. (2005), in an abstract, suggested a close relationship with the Varunidae after looking at the molecular data for several species. Certainly, the general morphology of most of the asthenognathine species has "grapsoid tendencies", including the tendency of some to swarm like some varunids when they are at the megalopal stage (e.g. *Tritodynamia horvathi*, see Otani et al., 1996; Matsuo, 1998, 1999). The best known varunid that does this is *Varuna litterata* (see Connell & Robertson, 1986; Mana, 1988; Ryan & Choy, 1990). Examination of specimens of *Asthenognathus*, *Tritodynamia* and *Aphanodactylus* at our disposal revealed an interesting pattern. *Asthenognathus* is a varunid in almost all ways (e.g. form of the thoracic sternum and penial structure, abdomen, gonopods and general form of the pereiopods), and should be placed in the Varunidae. There appear to be two groups of *Tritodynamia*. One group, with eight species (including the type species), has all the characters of macrophthalmids, and can easily be accommodated in that family. None are known to swarm like varunids. On the other hand, the second group, with just two species (including *T. horvathi*), shows varunid relationships. This is currently under study by P. J. F. Davie and N. K. Ng. If the genus is to be split, then through a nomenclatural error on the part of Balss (1922b), a new name would not be needed. Balss (1922b) commented that the type species of *Tritodynamia* Ortmann, 1894, *Tritodynamia japonica* Ortmann, 1894, was a synonym of *Asthenognathus inaequipes* Stimpson, 1858, the type species of *Asthenognathus* Stimpson, 1858. Both genera thus became synonyms, with *Asthenognathus* having priority. However, Balss (1922b) recognised a group which he thought were real "*Tritodynamia*" as identified up to that time, and to conserve the concept as well as the name as much as possible, he proposed a new name for them, *Tritodynamea* Balss, 1922, and designated *Tritodynamia horvathi* Nobili, 1905, as the type species. Of couse, in this instance, Balss (1922b) was wrong, and *Asthenognathus inaequipes* and *Tritodynamia japonica* are not synonyms, and neither were *Asthenognathus* and *Tritodynamia*; and *Tritodynamea* Balss, 1922, became an unneccesary though available name (see Schmitt et al., 1973). *Tritodynamia* Ortmann, 1894, sensu lato is here placed in the Macrophthalmidae as a separate subfamily, the Tritodynamiinae Števčić, 2005. Otani & Muraoka (1990) compared the larvae of *Tritodynamia horvathi Tritodynamia*) with the larvae of *Asthenognathus japonicus* described by Terada (1987) and while there are differences in the structure of the antennule, telson, abdomen and maxilla; the significance of these differences will have to be weighed against other varunids when more is known. Certainly, they do not appear to be family-level differences (see Jeng et al., 2004). Interestingly, in a preliminary study, Cuesta et al. (2005) had larval and DNA datasets for several asthenognathids, and suggested their affinities are with varunids. They also noted that at least one species of *Pseudopinnixa*, *P. carinatus*, was also allied to varunids. For the moment, we retain *Pseudopinnixa* in the Pinnotheridae but clearly, its position needs reappraisal. *Tritodynamia*, *Tritodynamea* and *Asthenognathus* is now being revised by P. J. F. Davie and N. K. Ng, and the problems discussed above will be elaborated on later.

These changes leave two genera "in limbo", *Aphanodactylus* Tesch, 1918b, and *Voeltzkowia* Lenz, 1905. *Aphanodactylus* appears to be a typical pinnotherid in most ways, but is peculiar in having almost normal third maxillipeds (see Konishi & Noda, 1999). We are unsure about the status of *Voeltzkowia*. It was described by Lenz (1905) on a single partially damaged female from Zanzibar, and has a particularly unusual carapace. P. K. L. Ng is revising *Aphanodactylus* with S. T. Ahyong. So far, while it clearly thoracotreme, its numerous anomalous features seem to prevent its placement in any of the known pinnotherid subfamilies, or even in any of the other thoracotreme families. *Aphanodactylus* and *Voeltzkowia* may need to be referred to their own families when these studies are completed.

{2} In establishing *Pseudopinnixa*, Ortmann (1894) did not designate a type species, but *Pseudopinnixa carinata* Ortmann, 1894, should be regarded as the type species by monotypy. This is because the other species mentioned, *Pinnixa fischeri* A. Milne-Edwards "scheint hierher su gehören" [seems to belong here] is not a definite assignment of this species to his new genus. In any case, *Pinnixa fischeri* A. Milne-Edwards, 1867, is currently in *Tetrias*.

{3} The case of the authorship of *Arcotheres* is a challenge. The name was first used by Bürger (1895: 361) who wrote "Zur Aufstellung einer neuen Gattung schienen mir Anfangs unbedingt Formen aufzufordern, wie *Pinnotheres palaensis*, *exiguus* und *nudifrons*, welche durch einen sechseckigen Cephalothorax und längern Kralien ausgerüdtete hintere (3. und 4. Paar) Gehbeine ausgezichnet sind. NAUCK, welcher sich bereits mit den nämlichen Pinnotherinen beschäftigt und verschiedene Aufzeichnungen über sie hinterlassen hat, errichtete für sie das Genus *Arcotheres*, welches indessen nur in unsern Katalogen und auf unsern Etiketten figurirt. Ich habe dasselbe schliesslich nicht angenommen, weil es der Uebergänge zwischen dem runden Rückenschild der "typischen Pinnotheriden und dem sechseckigen der Arcotheren viele und allmähliche giebt und das Merkmal, welches die Gehbeine geben, den Arten mit sechseckigen Rückenschild keinewegs allein eigen ist und sie durchgehends charakterisirt". Translated, it basically means that Bürger noted that three species, *Pinnotheres palaensis*, *P. exiguus* and *P. nudifrons*, all of which were described in his paper, appeared to differ in having more hexagonal carapaces as well as longer third and fourth legs. Nauck, who had studied the material, had left Bürger unpublished notes that argue for establishing a genus called *Arcotheres* but the name had only been used in unpublished catalogues and labels thus far. Bürger, however, commented that he did not accept Nauck's new genus because of transitional characters seen in other pinnotherids. The name *Arcotheres* was not used again anywhere else in Bürger's (1895) paper. On the basis of Bürger's

comments and actions, as noted above, he clearly treats *Arcotheres* as a junior synonym of *Pinnotheres*. The next time the name *Arcotheres* was used was in a list by Rathbun (1918), who also treated it as a synonym of *Pinnotheres*. Although Rathbun (1918) noted that the type species was *Pinnotheres palaensis* Bürger, 1895, this action is invalid because at that time, *Arcotheres* was not an available name. *Arcotheres* was not used again until Manning's (1993b) reappraisal of the African Pinnotheridae when he resurrected *Arcotheres* as valid genus, but attributed it to Bürger (1895). Lipke Holthuis (in litt to R. B. Manning), highlighted a serious nomenclatural problem with Bürger's name. This pertained to Article 11.6 of the Code which treats names first published as a synonym: "A name which when first published in an available work was treated as a junior synonym of a name then used as valid is not thereby made available". Article 11.6.1 elaborates "However, if such a name published as a junior synonym had been treated before 1961 as an available name and either adopted as the name of the taxon or treated as a senior homonym, it is made available thereby but dates from its first publication as a synonym." Of course, the name *Arcotheres*, fails to fulfil Articles 11.6 and 11.6.1. Even if the comments by Bürger (1895: 361) can be construed as a diagnosis for the genus, the name *Arcotheres* Bürger, 1895, is still not available under the Code. Campos & Manning (2000) subsequently clarified the matter of the authorship for *Arcotheres*, and noted that the first valid use was by Manning (1993b), who also validly selected the type species, *Pinnotheres palaensis* Bürger, 1895.

{4} The pinnotherid collections described by Semper (1880), Nauck (1880) and Bürger (1895), and particularly by Bürger, are extremely important in the study of this family. Ahyong & Ng (2007) re-examined their specimens and clarified many long-standing nomenclatural and taxonomic problems with the various species they recognised.

{5} *Pinnotheres* is still heterogeneous despite the many recent studies. Many of the species currently placed in *Pinnotheres* belong elsewhere (many to *Nepinnotheres*), especially considering Manning's (1993b) restriction of *Pinnotheres* to species with a third maxilliped dactylus which articulates proximally on the propodus.

{6} Shen (1932) named *Pinnotheres gordoni* after Isabella Gordon, a woman. The specific name must therefore be altered to "*gordonae*".

{7} Scopoli (1763: 410) named a species from the Adriatic he called *Cancer nutrix* which lived inside shells of the oyster *Ostrea edulis*. He commented that this was based on a communication he received from de Wulfen. His diagnosis noted that the species was common and the animal was perhaps six-legged. Some years later, de Wulfen (1791: 334) published his accounts of the Adriatic fauna, and identified the same species as *Cancer minutus*, but also referring to Scopoli's "*Cancer nutrix*". De Wulfen commented that it "Frequens in Fucis, Spongilis, etc., etiam intra Ostream edulem L. majorem …" This wide spectrum of hosts is confusing, but his detailed account leaves no doubt he was referring to a species of pinnotherid. There seems little doubt that both men were referring to the same species, although de Wulfen makes no reference to the animal being six-legged.

Schmitt et al. (1973: 74) referred both Scopoli's and de Wulfen's records to *Pinnotheres pisum* (Linnaeus, 1767), and wrote as follows: "Cancer Nutrix SCOPOLI, 1763, Entomol. Carniolica: 410 ('Pinnotheres pisum?', *fide* Nardo, 1869: 229; with footnote: 'Gmelin lo riguarda corne il C. minutus L.' (the Gmelin identification is considered untenable by Dr. F. A. Chace, Jr., USNM [personal communication] because of the habitat mentioned by Scopoli: 'In *Ost. eis Edulibus* frequens, qua nutrit, ut ait Populus')" (Schmidtt et al., 1973: 73). Apparently, Schmitt et al. (1973) did not have access to Scopoli's (1763) original paper, and relied on subsequent literature. However, Schmitt et al. (1973) did not comment on the fact that the name *Cancer nutrix* Scopoli, 1763, was older than *Cancer pisum* Linnaeus, 1767.

While Scopoli's (1763) name has long been associated with *Pinnotheres pisum*, possibly because of geography, it is important to note that both *Cancer pinnotheres* Linnaeus, 1758 (at present in *Nepinnotheres*) and *Cancer pisum* Linnaeus, 1767 (at present in *Pinnotheres*) are both present in Italy. Moncharmont (1979) and Grippa (1993) recorded both species from "Golfo di Napoli" and "Arcipelago Toscano" respectively (see also d'Udekem d'Acoz, 1999). While there are indications that *Nepinnotheres pinnotheres* prefers shells of the bivalve *Pinna*, while *Pinnotheres pisum* prefers the oyster *Ostrea*, the relationship is by no means exclusive, with the latter species having a very wide host range (see review in d'Udekem d'Acoz, 1999: 243–244). While the two pinnotherid species are today separated into two distinct genera (Manning, 1993b), the descriptions of Linnaeus, Scopoli and de Wulfen are too simple to allow us to separate them. It is just as possible that *Cancer nutrix* Scopoli, 1763, is actually synonymous with *Nepinnotheres pinnotheres* (Linnaeus, 1758), in which case there is no nomenclatural problem. The absence of extant type specimens or material for Linnaeus (1758, 1767), Scopoli (1763) and de Wulfen (1791) makes the matter relatively easy to resolve with appropriate neotype designations at a later date. Probably the simplest and most parsimonious solution would be to select a specimen from the Mediterranean that is the simultaneous neotype of *Cancer pinnotheres* Linnaeus, 1758, and *Cancer nutrix* Scopoli, 1763. This would make both objective synonyms and resolve the matter. This should be done by someone familiar with the Mediterranean fauna and preferably using fresh material.

{8} *Cancer scopolinus* Herbst, 1783, described from the Adriatic Sea, has been neglected since its original publication. In the description the carapace, female abdomen, pleopods, and leg and cheliped features all match a *Pinnotheres* (Herbst, 1783: 97). In fact, Herbst

(1783) compares *C. scopolinus* to *Cancer nutrix* Scopoli, 1763, which he says is close. The anomaly is that he describes the specimen as having only six legs. This suggests a hexapodid crab, which is not possible as this family is not known from the Mediterranean. We have to believe that Herbst probably had a *Pinnotheres* specimen that had lost its last pair of small legs, not uncommon for such small crabs. We here synonymise *Cancer scopolinus* Herbst, 1783, under *Cancer pisum* Linnaeus, 1767. No types appear to be extant (see K. Sakai, 1999).

Fig. 192. *Tetrias fischerii*, central Philippines, found free-living in coral reef (photo: P. Ng)

Fig. 193. *Pinnixa tubicola*, Panama (photo: A. Anker)

Fig. 194. *Pinnixa* sp., Panama, from parchment worm tube (photo: A. Anker)

Fig. 195. *Fabia obtusidentata*, western Thailand, from inside scallops (photo: P. Ng)

Fig. 196. *Pinnaxodes major*, Japan, a rare male from inside *Pinna* (photo: P.K.L. Ng)

Fig. 197. *Alain* aff. *crosnieri*, central Philippines, this new species is now under study by P.K.L. Ng & S.T. Ahyong (photo: P. Ng)

Fig. 198. *Zaops ostreus*, Panama; in oyster (photo: A. Anker)

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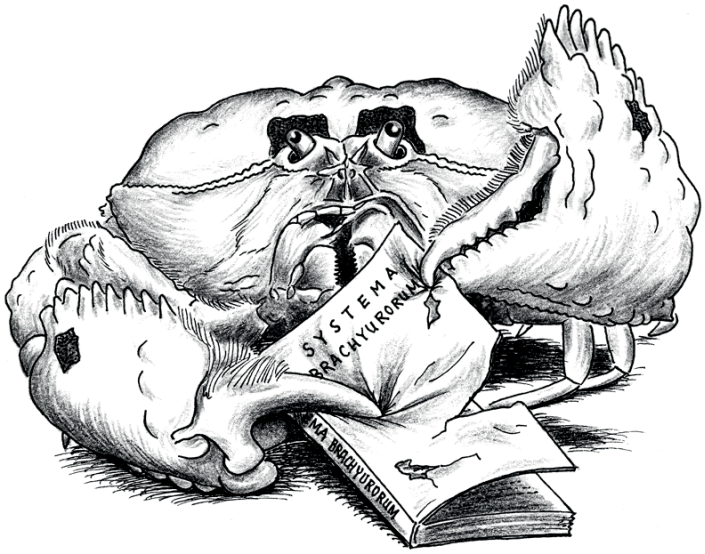

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