

A current generic classification of sap beetles (Coleoptera, Nitidulidae)

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The list of generic and subgeneric taxa arranged into subfamilies and tribes proposed for sap beetles is given, which includes also new genera [*Parapocadius* gen. nov. (Nitidulinae: Nitidulini) and *Interfaxia* gen. nov. (Nitidulinae: Cylloidi)] and subgenera [*Semocarpolus* subgen. nov. *Gaplocarpolus* subgen. nov. *Askocarpolus* subgen. nov. (Carpophilinae: *Carpophilus* Stephens, 1829)]. The *Meoncerus* Sharp, 1891; *Apsectochilus* Reitter, 1874 and *Lordyrops* Reitter, 1875 are considered as quite distinct each from other above mentioned as from all other generic taxa. In the list there are given the complete synonymy, including new synonymy of generic and subgeneric names [*Crepuraea* Kirejtshuk, 1990 and *Nyujwa* Perkovsky, 1990 syn. nov.; *Haptoncus* Murray, 1864 and *Haptoncurina* Jelínek, 1977, syn. nov.; *Ecnomaeus* Erichson, 1843 and *Somaphorus* Murray, 1864, syn. nov.; *Ecnomorphus* Motschulsky, 1858; *Tribrachys* LeConte, 1861 syn. nov.; *Stauroglossicus* Murray, 1864, syn. nov. and *Microxanthus* Murray, 1864, syn. nov.; *Pria* Stephens, 1829 and *Allopra* Kirejtshuk, 1980, syn. nov.; *Megauchenia* Macleay, 1825 and *Orvoenia* Dajoz, 1980, syn. nov.; *Tetrisus* Murray, 1864 and *Pseudoischaena* Grouvelle, 1897, syn. nov.; *Neopocadius* Grouvelle, 1906 and *Pseudostelidota* Grouvelle, 1906, syn. nov.; *Cychramus* Kugelann, 1794 and *Aethinopsis* Grouvelle, 1908, syn. nov.; *Mystrops* Erichson, 1843, and *Cryptoraea* Retter, 1873, syn. nov.; *Cyllodes* Erichson, 1843 and *Mecyllodes* Sharp, 1891, syn. nov.; *Grammorus* Murray, 1868 and *Colopteroidea* Watrous, 1982, syn. nov.; *Cryptarcha* Shuckard, 1839 and *Priatelus* Broun, 1881, syn. nov.]. For some taxa the rank is changed, namely, *Lordyra* Gemminger & Harold, 1868, stat. nov. is regarded as a subgenus of *Lasiodactylus* Perty, 1830-1834; *Brounthina* Kirejtshuk, 1997, stat. nov. as a subgenus *Neopocadius* Grouvelle, 1906 and *Teichostethus* Sharp, 1891, stat. nov. as a subgenus of *Hebascus* Erichson, 1843, while the taxa *Coxalodes* Kirejtshuk, 1987 (stat. nov.) and *Onicotis* Murray, 1864 (stat. nov.) are regarded as separate genera. The new taxa and new taxonomical proposals are supplied with corresponding data in the notes below the list. In these notes there are also proposed the new synonymy for the following species names: *Carpophilus* (*Ecnomorphus*) *acutangulus* Reitter, 1884 and *C. (E.) cingulatus* Reitter, 1884, syn. nov.; *C. (E.) bakeweli* Murray, 1864; *C. (E.) planatus* Murray, 1864, syn. nov. and *C. (E.) aterrimus* Macleay, 1864, syn. nov.; *C. (E.) debilis* Grouvelle, 1897 and *C. (E.) opaculus* Grouvelle, 1897, syn. nov.; *C. (E.) luridipennis* Macleay, 1873 and *C. (E.) lorlai* Grouvelle, 1906, syn. nov.; *C. (E.) murrayi* Grouvelle, 1892 and *C. (E.) hebetatus* Grouvelle, 1908, syn. nov.; *C. (E.) plagiatipennis* (Motschulsky, 1858) and *C. (E.) nigricans* Grouvelle, 1897, syn. nov.; *C. (E.) terminalis* Murray, 1864 and *C. (E.) gentilis* Murray, 1864, syn. nov.; *Lasiodactylus brunneus* Perty, 1830; *L. centralis* Cline et Carlton, 2004, syn. nov.; *L. falini* Cline et Carlton, 2004, syn. nov. and *L. kelleri* Cline et Carlton, 2004, syn. nov.; *Pallodes opacus* Grouvelle, 1906 and *P. lorlai* Grouvelle, 1906, syn. nov.; *Cyllodes fauveli* Grouvelle, 1903 and *Pallodes vagepunctus* Grouvelle, 1903, syn. nov.; *Pallodes jucundus* Reitter, 1873 and *Mecyllodes nigropictus* Sharp, 1891, syn. nov.; *Pallodes birmanicus* Grouvelle, 1892 and *P. kalingus* Kirejtshuk, 1987, syn. nov.; *P. gestroi* Grouvelle, 1906 and *P. misellus* Grouvelle, 1906, syn. nov.; *P. ruficollis* Reitter, 1873 and *P. cyanescens* Grouvelle, 1898, syn. nov.; *Grammophorus caelatus* Gerstäcker, 1864 and *Colopterus striaticollis* Murray, 1864, syn. nov. In connection with a preliminary revision of many type series of the family and the mentioned taxonomical changes for some species names are established new taxonomical interpretation, namely: *Pleoronia nitida* (Grouvelle, 1898), comb. nov. (*Axyra* : *Axyrodes*); *Parapocadius immerizi* (Grouvelle, 1899), comb. nov. (*Pallodes*); *Camptodes ruficornis* (Grouvelle, 1898), comb. nov. (*Pallodes*); *Neopallodes aestimabilis* (Grouvelle, 1906), comb. nov. (*Pallodes*); *N. alluaudi* (Grouvelle, 1899), comb. nov. (*Pallodes*); *N. aterrimus* (Grouvelle, 1906), comb. nov. (*Pallodes*); *N. dorsalis* (Grouvelle, 1896), comb. nov. (*Pallodes*); *N. fairmairei* (Grouvelle, 1906), comb. nov. (*Pallodes*); *N. incertus* (Grouvelle, 1906), comb. nov. (*Pallodes*); *N. klugi* (Grouvelle, 1896), comb. nov. (*Pallodes*); *N. limbicollis* (Reitter, 1880), comb. nov. (*Pallodes*); *N. militaris* (Grouvelle, 1906), comb. nov. (*Pallodes*); *N. niger* (Grouvelle, 1906), comb. nov. (*Pallodes*); *N. nigrocyaneus* (Grouvelle, 1906), comb. nov. (*Pallodes*); *N. nitidus* (Grouvelle, 1906), comb. nov. (*Pallodes*); *N. orthogonus* (Grouvelle, 1906), comb. nov. (*Pallodes*); *N. perrieri* (Grouvelle, 1906), comb. nov. (*Pallodes*); *N. scutellaris* (Grouvelle, 1906), comb. nov. (*Pallodes*); *N.*

sicardi (Grouvelle, 1906), comb. nov. (*Pallodes*); *N. sikordi* (Grouvelle, 1896), comb. nov. (*Pallodes*); *N. variabilis* (Grouvelle, 1896), comb. nov. (*Pallodes*); *Coxollobes cyrtusoides* (Reitter, 1884), comb. nov. (*Pallodes*); *C. amamiensis* (Hisamatsu, 1956), comb. nov. (*Pallodes*); *Coxollobes opacus* (Grouvelle, 1906), comb. nov. (*Pallodes*); *C. parvulus* (Grouvelle, 1908), comb. nov. (*Pallodes*); *C. reitteri* Kirejtshuk, 1987, comb. nov. (*Pallodes*); *Pallodes fauveli* (Grouvelle, 1903), comb. nov. (*Cyllodes*); *Cyllodes jucundus* (Reitter, 1873), comb. nov. (*Pallodes*); *Interfaxia fasciata* (Sharp, 1891), comb. nov.; *Onicotis auritus* Murray, 1864 comb. nov.; *Platyarcha biguttata* (Motschulsky, 1858), comb. nov. (*Carphophilus: Ecnomorphus*); *Cryptarcha optanda* (Broun, 1881), comb. nov. (*Priateles*). Besides, because of the new interpretation for *Pallodes laetus* Grouvelle, 1898, which should be transferred to the genus *Camptodes*, *C. grouvellei* nom. nov. (non *Camptodes laetus* Kirsch, 1873) is proposed. For the generic names *Perilopa* Erichson, 1843 and *Meoncerus* Sharp, 1891 the type species are designated as well as for *Pallodes laetus* Grouvelle, 1898 (*Camptodes grouvellei* nom. nov.) the lectotype designation is made.

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The system of the family Nitidulidae has been greatly changed by efforts of many students and essentially improved during the last 20-30 years. However there are no comprehensive publications devoted a general view on the system of this family. It is partly connected with the fact that some important aspects of the system of this group are still needed to be considered. Recently the chapter on Nitidulidae in the Palaearctic "catalogue" appeared (Jelínek & Audisio, 2007). It contains some principal deficiencies stimulated a preparation of this paper. These deficiencies can be explained that not all necessary taxonomic data achieved were taken into account by the author of the catalogue and a part of published information was dropped from the author's consideration. The author of this paper is aware that such a situation became possible because he having known nearly all groups of this family obtained from the recent and past faunas could publish only a small portion of these data and he has paid not enough attention for preparation of detailed generalizations on the family system. This paper aims partly to compensate the mentioned defects, although a more thorough analysis of the systematic blocks of this family will be discussed in the coming monographs (Kirejtshuk, in preparation). These monographs will cover a detailed review of bibliography, and therefore the writer restricted the references only by the list of most appropriate sources supplementary to the notes here included and the publications with authors and years of taxa available in the Zoological Records and different catalogues (Grouvelle, 1913; Jelínek & Audisio, 2007; Ponomarenko & Kirejtshuk, 2008 etc.) are mostly omitted to make this paper as compact as possible.

The core of the paper includes the list of generic names arranged into subfamilies, tribes (when they can be outlined) and the synonyms of each taxon are put together according to dates of their

publication (the principle of priority). Besides, if a genus can be divided into recognizable subgenera, the latter were listed as well. To prepare such a complete arrangement of the taxa above the species level the author was obliged to include some new data (new synonymy or other taxonomic propositions) which are explained below the list of taxa and these explanations in the necessary cases are provided with appropriate comments (diagnoses, composition and so on). In all cases new synonymy is proposed on base of re-testing the type species of genera and type series of all synonymised species names. Nevertheless, some new taxa of the tribe and genus rank are still in preparation by the author and his collaborators and not included in the list and notes to it. In some important cases the type species are designated, although in other cases, when they have already designated in previous publications, the mention of them are omitted to shorten the volume of this paper.

The systematic construction of the family here represented should be regarded as a preliminary version of a system based on the phylogeny and history. At the moment, not-convergent (monophyletic) origin of Cillaeinae and Cryptarchinae is accepted only because they have the formal structural characters uniting these subfamilies. It can be expected that a more detailed study of historic development of these groups and more detailed comparison of their structures will demonstrate their polyphyletic state. While the origin of the family in general remains rather obscure, the relationship of *Nitidulina ecliva* Martynov, 1927 is not clear and this name is omitted in the list below. To clarify the systematic position of this and some other fossil species needs a further careful research of many Cucujoiformian groups from the Jurassic and Cretaceous. The recent subfamilies Calonecrinae and Maynipeplinae

are certainly closely related to other sap beetles are provisionally regarded in the composition of the Nitidulidae, although these small groups are so distinct that they could be excluded from this family as two taxa with the family rank. Finally, the palaeoendemic genera with unclear familiar attribution described among the Nitidulidae which should be regarded rather far from this family are also omitted in the list [f.i., *Sinonitidulina* Hong, 1983; *Sinosoronia* Zhang, 1992 etc.]

I. Subfamily CALONECRINAE Kirejtshuk, 1982

Calonecrus Thomson, 1857

II. Subfamily MAYNIPEPLINAE Kirejtshuk, 1998

Maynipeplus Kirejtshuk, 1998

Carpophilinae-lineage

III. Subfamily EPURAEINAE Kirejtshuk, 1986

Tribe **Epuraeini** Kirejtshuk, 1986

Crepuraea Kirejtshuk in Kirejtshuk et Ponomarenko, 1990 (*Nyujwa* Perkovsky, 1990, **syn. nov.**)⁽¹⁾

Epanuraea Scudder, 1892

Epuraea Erichson, 1843

Subgenera

Epuraea Erichson, 1843

Ceroncurea Kirejtshuk, 1994

Dadopora Thomson, 1859

Strophoraea Kirejtshuk et Kvamme, 2001

Epuraeanella Crotch, 1874 (= *Omosiphora* Reitter, 1875)

Ommoraea Kirejtshuk, 1998

Micruria Reitter, 1874 (= *Micrurula* Reitter, 1884)

Aphenolia Reitter, 1884

Africaraea Kirejtshuk, 1989

Apria Grouvelle, 1919

Haptoncus Murray, 1864 (= *Haptoncurea* Reitter, 1875;

Haptoncurina Jelínek, 1977, **syn. nov.**)⁽²⁾

Blackburnaea Kirejtshuk et Kvamme, 2001

Marinexa Kirejtshuk, 1989

Polinexa Kirejtshuk, 1989

Horniraea Kirejtshuk et Pakaluk, 1996

Orthopeplus Horn, 1879

Grouvellia Kirejtshuk, 1984

Mystronoma Kirejtshuk, 1990

Amedanyraea Kirejtshuk et Pakaluk, 1996

Amystrops Grouvelle, 1906 (= *Propetes* Reitter, 1875, non Walker 1851; *Amystrops* Grouvelle, 1906; *Platychorinus* Grouvelle, 1906; *Platy-*

choropsis Grouvelle, 1912; *Haptoncognathus* Gillogly, 1962)

Subgenera

Amystrops Grouvelle, 1906

Mandipetes Kirejtshuk, 1997

Parepuraea Jelínek, 1977

Ceratomea Kirejtshuk, 1990

Trimenus Murray, 1864

Ecnomaeus Erichson, 1843 (= *Somaphorus* Murray, 1864, **syn. nov.**)⁽³⁾

Platychorina Grouvelle, 1905

Baloghmena Kirejtshuk, 1987

Stauromenus Kirejtshuk et Kvamme, 2001

Tribe **Taenioncini** Kirejtshuk, 1998

Taenioncus Kirejtshuk, 1984

Raspinotus Kirejtshuk, 1990

Taeniolinus Kirejtshuk, 1998

Carpocryraea Kirejtshuk, 1998

Csiromenus Kirejtshuk et Kvamme, 2001

Eutaenioncus Kirejtshuk et Kvamme, 2001

IV. Subfamily CARPOPHILINAE Erichson, 1943

Procarophilus de Jong, 1953

Carpophilus Stephens, 1829

Subgenera

Carpophilus Stephens, 1829

Megacarpolus Reitter, 1919

Semocarpolus Kirejtshuk, **subgen. nov.**⁽⁴⁾

Gaplocarpolus Kirejtshuk, **subgen. nov.**⁽⁵⁾

Askocarpolus Kirejtshuk, **subgen. nov.**⁽⁶⁾

Plapennipolus Kirejtshuk, 1997

Ecnomorphus Motschulsky, 1858 (= *Tri-*

brachys LeConte, 1861, **syn. nov.**; *Eidocolas-*

tus Murray, 1864, **syn. nov.**; *Stauroglossicus*

Murray, 1864, **syn. nov.**; *Microxanthus* Mur-

ray, 1864, **syn. nov.**; *Idocolastus* Gemminger

et Harold, 1868)⁽⁷⁾

Caplothorax Kirejtshuk, 1997

Myothorax Murray, 1864

Nitops Murray, 1864 (= *Endomerus* Murray, 1864)

Subgenera

Nitops Murray, 1864

Urocarpolus Kirejtshuk, 1997

Ctilodes Murray, 1864

Loriarulus Kirejtshuk, 1987

Vulpixenus Kirejtshuk, 1990

Urophorus Murray, 1864 (?= *Heterodontus* Murray, 1864, nom. nudum)

Subgenera

Urophorus Murray, 1864

Anophorus Kirejtshuk, 1990

V. Subfamily AMPHICROSSINAE Kirejtshuk, 1986

Amphicrossus Erichson, 1843 (= *Cametis* Motschulsky, 1863; *Lobostoma* Fairmaire, 1892;

Rhacostoma Berg, 1898; *Nitidopecten* Reichensperger, 1913)

Nitidulinae-lineage

VI. Subfamily MELIGETHINAE Thomson, 1859 (Meligethina)

Meligethinus Grouvelle, 1906 (= *Prianella* Reitter, 1919)

Pria Stephens, 1829 (= *Laria* Scopoli, 1763, *Cormyphora* Laporte de Castelleau, 1840; pars; *Allopra* Kirejtshuk, 1980, **syn. nov.**)⁽⁸⁾

Microporodes Endrödy-Younga, 1978

Anthystrix Kirejtshuk, 1984

Micropria Grouvelle, 1899 (= *Metapria* Grouvelle, 1908/1909)

Cyclogethes Kirejtshuk, 1979

Cryptarchopria Jelínek, 1975

Kabakovia Kirejtshuk, 1979

Horakia Jelínek, 2000

Microporum C. Waterhouse, 1876 (= *Probaenus* C. Waterhouse, 1876; *Microporellus* Endrödy-Younga, 1978)

Palmopria Endrödy-Younga, 1978

Cornutopria Endrödy-Younga, 1978

Lechanteuria Endrödy-Younga, 1978 (= *Prianelia* Lechanteur, 1955, non Reitter, 1919)

Meligethes Stephens, 1829

Subgenera

Chromogethes Kirejtshuk, 1989

Lariopsis Kirejtshuk, 1989

Clypeogethes Scholtz, 1932 (= *Idiogethes* Kirejtshuk, 1977)

Meligethes Stephens, 1829 (= *Odontogethes* Reitter, 1871)

Astylogethes Kirejtshuk, 1992

Acanthogethes Reitter, 1871

VII. Subfamily NITIDULINAE Latreille, 1802

A. Tribe **Nitidulini** Erichson, 1843 (= *Thalycrina* Thomson, 1859; *Pocadiini* Seidlitz, 1872; *Orvoenini* Dajoz, 1980, **syn. nov.**)⁽¹⁰⁾

Nitidula-complex

Nitidula Fabricius 1775

Omosita Erichson, 1843 (= *Saprobia* Ganglbauer, 1899)

Soronia-complex

+ *Microsoronia* Kirejtshuk et Kurochkin, 2008
Soronia Erichson, 1843 (= *Platipidia* Broun, 1893)

Lobiopa Erichson, 1843 (= *Axyrodes* Murray, 1867, nom. nudum)⁽⁹⁾

Omosiphila Kirejtshuk, 1990

Temnoracta Kirejtshuk, 1988

Hisparonia Kirejtshuk, 2003

Ornosia Grouvelle, 1899

Pleoronia Kirejtshuk, 2003 (= *Axyrodes* Murray, 1867, nom. nudum)⁽⁹⁾

Amphotis Erichson, 1843

Macleayania Kirejtshuk, 2003

Sebastianiella Kirejtshuk, 1995

Annachramus Kirejtshuk, 1995

Stenoronia Kirejtshuk, 2003

Prometopia-complex

Prometopia Erichson, 1843

Subgenera

Prometopia Erichson, 1843

Parametopia Reitter, 1884

+ *Palaeometopia* Kirejtshuk et Poinar, 2007

Cacconia Sharp, 1890

Megauchenia-complex

Axyra Erichson, 1843 (= *Galaor* Thomson, 1858)

Megauchenia Macleay, 1825 (= *Ischaena* Erichson, 1843; *Orvoenia* Dojz, 1980, **syn. nov.**)⁽¹⁰⁾

Tetrisus Murray, 1864 (= *Pseudoischaena* Grouvelle, 1897, **syn. nov.**)⁽¹¹⁾

Megaucheniodes Audisio et Jelínek, 1993

Taraphia Audisio et Jelínek, 1993

Pseudoplatychora Grouvelle, 1890

Ipidia-complex

Ipidia Erichson, 1843

Subgenera

Ipidia Erichson, 1843

Hemipidia Kirejtshuk, 1992

Platychora Erichson, 1843 (= *Pherocopis* Thomson, 1858)⁽¹²⁾

Taracta Murray, 1867

Psilotus Fischer, 1829 (= *Cerophorus* Laporte de Castelleau, 1840)

Perilopa Erichson, 1843

Phenolia-complex

Stelidota Erichson, 1843

Phenolia Erichson, 1843 (*Lordites* auctorum, non Erichson, 1843; *Lasiodactylus* auctorum, non Perty, 1830-1834)

Subgenera

Aethinodes Blackburn, 1891

Lasiodites Jelínek, 1999

Phenolia Erichson, 1843

Plesiothina Kirejtshuk, 1990

Gaulodes Erichson, 1843

Ussuriphia Kirejtshuk, 1992

Ostomarcha Kirejtshuk, 2006

Perilopsis-complex

- Epuraeopsis* Reitter, 1875
Perilopsis Reitter, 1875
 Subgenera
 Perilopsis Reitter, 1875
 Testudoraea Kirejtshuk, 1986
Cratonura Reitter, 1875

Aethina-complex

- Psilonitidula* Heller, 1916
Lasiodactylus Perty, 1830-1834 (= *Nitiduligena* Gillogly, 1965)⁽¹³⁾
 Subgenera
 Lasiodactylus Perty, 1830-1834
 Lordyra Gemminger & Harold, 1868, **stat. nov.**⁽¹³⁾
Neopocadius Grouvelle, 1906⁽¹³⁾
 Subgenera
 Neopocadius Grouvelle, 1906 (= *Pseudostelidota* Grouvelle, 1906, **syn. nov.**)⁽¹³⁾
 Brounthina Kirejtshuk, 1997, **stat. nov.**⁽¹³⁾
 Australaethina Kirejtshuk et Lawrence, 1999 (= *Idaethina* Reitter, 1875, non Gemminger et Harold, 1868, et non Olliff, 1884)
Aethina Erichson, 1843 (= *Aethinopa* Reitter, 1875; *Pseudomystraps* Grouvelle, 1912/1913; *Meligethopsis* Rebmann, 1944)
 Subgenera
 Aethina Erichson, 1843
 Cleidorura Kirejtshuk et Lawrence, 1999
 Idaethina Gemminger et Harold, 1868, (= *Macroura* Reitter, 1873, non Meuschen, 1778, non Loew, 1845; *Idaethina* Olliff, 1884, non Reitter, 1875; *Olliffura* Jelínek et Kirejtshuk, 1986)
 Circopes Reitter, 1873
 Ithyra Reitter, 1873
Anister Grouvelle, 1901 (= *Oturovana* Reitter, 1915)

Pocadius-complex⁽¹⁴⁾

- + *Omositoidea* Schaufuss, 1891
Atarphia Reitter, 1884
Hebasculinus Kirejtshuk, 1992
Hebascus Erichson, 1843
 Subgenera
 Hebascus Erichson, 1843
 Teichostethus Sharp, 1891, **stat. nov.** (*Trichostethus*)⁽¹⁵⁾
Hyleopocadius Jelínek, 1977
Kryzhanovskiella Kirejtshuk, 2006
Niliodes Murray, 1868
Physoronia Reitter, 1884 (= *Lordyodes* Reitter, 1884; *Pocadioides* Ganglbauer, 1899; *Osotima* Rebmann, 1944)

- Pocadites* Reitter, 1884
Pocadius Erichson, 1843
Tagmolykra Kirejtshuk et Leschen, 1998
Parapocadius **gen. nov.**⁽¹⁶⁾
Pleuroneces Olliff, 1891
Thalycra Erichson, 1843 (= *Perthalycra* Horn, 1879)
Pseudothalycra Howden, 1962
Quadrifrons Blatchley, 1916
Neothalycra Grouvelle, 1899
Thalycrinella Kirejtshuk in Kirejtshuk et Leschen, 1998
Pocadionta Lucas, 1920 (= *Pocadiopsis* Grouvelle, 1898, non Fairmaire, 1896)
Thalycrodes Blackburn, 1891
Rixerodes Kirejtshuk et Lawrence, 1992
Australycra Kirejtshuk et Lawrence, 1992
Pocadiolykra Kirejtshuk et Leschen, 1998

B. Tribe Cychramini Lacordaire, 1854 (1855) (Cychramides)

- + *Cychramites* Wickham, 1913
Cychramus Kugelann, 1794 (= *Campta* Stephens, 1830; *Aethinopsis* Grouvelle, 1908, **syn. nov.**)⁽¹⁷⁾
Xenostromylus Wollston, 1854 (= *Strongylodes* Kirejtshuk, 1992)
 Subgenera
 Xenostromylus Wollston, 1854
 Strongylolastus Reitter, 1911
 Oxystrongylus Reitter, 1911
 Kirejtshukostrongylus Audisio et Jelínek in Audisio, Mariotti, Jelínek & DeBiase 2001
 Aychramus Kirejtshuk, 1996
 Ceratochramus Kirejtshuk, 1986

C. Tribe Mystropini Murray, 1864 (Mystropidae)

- Mystrops* Erichson, 1943 (= *Priops* Reitter, 1873; *Cryptoraea* Reitter, 1873, **syn. nov.**; *Eumystrops* Sharp, 1889)⁽¹⁸⁾
Anthepurops Kirejtshuk, 1996
Anthocorcina Kirejtshuk, 1996
Platychorodes Reitter, 1884
Cychrocephalus Reitter, 1873 (= *Cychropiestus* Reitter, 1875)
Nitidulora Reitter, 1873
Palmostrops Kirejtshuk et Jelínek, 2000

D. Tribe Cyllodini Everts, 1898 (= Strongylini Sturm, 1844 (Strongylinae), non Müller, 1780; Arborotubini Leschen et Carlton, 2004)

- + *Cyllolithus* Kirejtshuk in Kirejtshuk et Ponomarenko, 1990
Somatoxus Sharp, 1891 (= *Somatorus* Grouvelle, 1891, err.)
Cyclocaccus Sharp, 1891

Cyllodes-complex

Camptodes Erichson, 1843 (= *Eucamptodes* Sharp, 1890)
Meoncerus Sharp, 1891 ⁽¹⁹⁾
Apsectochilus Reitter, 1874, distinct genus ⁽¹⁹⁾
Lordyrops Reitter, 1875, distinct genus ⁽¹⁹⁾
Carinocyllodes Leschen, 1999
Cyllodes Erichson, 1843 (= *Strongylus* Herbst, 1792, non Muller, 1780; *Volvoxis* Kugelann, 1794; *Mecyllodes* Sharp, 1891, **syn. nov.**; *Pseudocamp-*
todes Grouvelle, 1896) ⁽²⁰⁾
Eusphaerius Sharp, 1891
Viettherchnus Kirejtshuk, 1985
Ceramphosia Kirejtshuk et Kirk-Spriggs, 1996
Camptomorphus Grouvelle, 1908
Pallodes Erichson, 1843 ⁽²¹⁾
Coxolodes Kirejtshuk, 1987, **stat. nov.** ⁽²¹⁾
Neopallodes Reitter, 1884
Cyllodesus Reitter, 1877 (= *Strongylomorphus* Reitter, 1875, non Motschulsky, 1853)

Oxycnemus-complex

Oxycnemus Erichson, 1843 ⁽²²⁾
Eugoniopus Reitter, 1884 ⁽²²⁾
Psilopyga LeConte, 1853 ⁽²²⁾
Interfaxia **gen. nov.** ⁽²²⁾
Triacanus Erichson, 1843 (= *Tricanus* auctorum)
Monafricus Kirejtshuk, 1995
Gymnocychramus Lea, 1922
Pycnocnemus Sharp, 1891

Arborotubus-complex

Arborotubus Leschen et Carlton, 2004

E. Tribe **Cychramptodini** Kirejtshuk et Lawrence, 1992

Cychramptodes Reitter, 1874
Miskoramus Kirejtshuk et Lawrence, 1992
Cylindroramus Kirejtshuk et Lawrence, 1992

F. Tribe **Lawrencerosini** Kirejtshuk, 1990

Lawrencerosus Kirejtshuk, 1990
Krakingus Kirejtshuk, 1990
Koryaga Kirejtshuk, 1990
Koryaginus Kirejtshuk, 1990

VIII. Subfamily CILLAEINAE Kirejtshuk et Audisio, 1986

Goniorcyctus Sharp, 1878 (= *Goniothorax* Sharp, 1908; *Nesapterus* Sharp, 1908; *Eunitidula* Sharp, 1908)
Orthostolus Sharp, 1908
Apetasimus Sharp, 1908 (= *Cyrtostolus* Sharp, 1908)

Eupetinus Sharp, 1908 (= *Apetinus* Scott, 1908)
Prosopeus Murray, 1864 (= *Prosopius* Gemminger et Harold, 1868; *Nesopeplus* Sharp, 1908; *Nesopetinus* Sharp, 1908)
Cillaeopeplus Sharp, 1908 (= *Notopeplus* Sharp, 1908)
Colopterus Erichson, 1842 (= *Colastus* Erichson, 1843)
Colopterus Erichson, 1843
Cyllopodes Murray, 1864
Grammorus Murray, 1868 (= *Grammophorus* Gerstäcker, 1864, nec Solier, 1851; *Colopteroides* Watrous, 1982, **syn. nov.**) ⁽²³⁾
Grouvellepeplus Kirejtshuk, 2001
Brachypeplus Erichson, 1842 (= *Nitidulopsis* Walker, 1858; *Tasmus* Murray, 1864)

Subgenera

Brachypeplus Erichson, 1842
Selis Murray, 1864
Leiopeplus Murray, 1864
Idosoronia Schaufuss, 1891
Teloconus Grouvelle, 1916
Tokocillaeus Kirejtshuk, 2001
Onicotis Murray, 1864, **stat. nov.** ⁽²⁴⁾
Campsopyga Murray, 1864 (= *Hypodetus* Murray, 1964).
Cillaeus Laporte de Castelneau, 1835
Subgenera
Cillaeus Laporte de Castelneau, 1835
Xanthopeplus Fairmaire, 1880
Paracillaeopsis Kirejtshuk, 2001
Cillaeopsis Grouvelle, 1899
Halepopeplus Murray, 1864 (= *Chalepopeplus* Gemminger et Harold, 1868)
Liparopeplus Murray, 1864 (= *Carpophilops* Grouvelle, 1898)
Halepopeplus Murray, 1864
Adocinus Murray, 1864
Platynema Ritsema, 1885 (= *Orthogramma* Murray, 1864, not Guenée 1852 et nec R. L. (Reichenbach, Leipzig), 1817)
Ithyphenes Murray, 1864
Macrostola Murray, 1864
Macrostolops Grouvelle, 1916
Conotelus Erichson, 1843

X. Subfamily CRYPTARCHINAE Thomson, 1859 (= *Ipsinae* Erichson, 1843; *Ipsomorpha* Reitter, 1873)

A. Tribe **Cryptarchini** (= *Pityophagini* Fauconnet, 1896; *Glischrochilini* Iablokoff-Khinzoryan, 1966)

Cnips Philippi, 1864
Cnipsarcha Jelínek, 1982
Cryptarcha Shuckard, 1839 (= *Cryptarchus* Heer, 1843; *Priatelus* Broun, 1882 (pro *Priateles* Broun, 1881), **syn. nov.**; *Lepiarcha* Sharp, 1891; *Liarcha* Sharp, 1891; *Cryptarchula* Ganglbauer,

1899; *Africanips* Lechanteur, 1959; *Cryptarchina* Iablokoff-Khnzoryan, 1966)⁽²⁵⁾

Homepura Broun, 1893 (= *Inopria* Broun, 1921)

Kaszabena Kirejtshuk, 1987

Paromia Westwood, 1850 (= *Lioschema* Fairmaire, 1861; *Aparomia* Redtenbacher, 1867)

Paromidia Reitter, 1873

Pityophagus Shuckard, 1839

Glischrochilus Reitter, 1873 (*Ips* Fabricius, 1777, non DeGeer, 1775)

Subgenera

Glischrochilus Reitter, 1873

Librodor Reitter, 1884 (= *Cryptarchips*

Reitter, 1911; *Cephalips* Arrow, 1931)

Gymnoparomius Kirejtshuk, 1987

B. Tribe *Platyarchini* Kirejtshuk, 1998

Platyarcha Kirejtshuk, 1987

Amlearcha Kirejtshuk, 1987

C. Tribe *Arhinini* Kirejtshuk, 1987

Ceratarhina Kirejtshuk, 1981

Arhina Murray, 1867

Arhinella Kirejtshuk, 1981

D. Tribe *Eucalospaerini* Kirejtshuk, 1987

Eucalospaera Jelínek, 1978 (= *Calospaera* Jelínek, 1974, non Campbell, 1951)

X. Subfamily CYBOCEPHALINAE Jaquelin du Val, 1858 (Cybocephalites)

Cybocephalus Erichson, 1844 (= *Phantazomerus* J. Duval, 1854; *Stagnomorpha* Wollaston, 1854; *Acribis* C. Waterhouse, 1877; *Dissia* Chobaut, 1896)

Subgenera

Cybocephalus Erichson, 1843

Theticephalus Kirejtshuk, 1988

Pycnocephalus Sharp, 1891

Hierronius Endrödy-Younga, 1968

Pastillodes Endrödy-Younga, 1968

Taxicephomerus Kirejtshuk, 1994

Horadion Endrödy-Younga, 1976

Pastillus Endrödy-Younga, 1962

Endrodiellus Endrödy-Younga, 1962

INCERTAE SEDIS

+ *Miophenolia* Wickham, 1916

Nodola Brethes 1925 (?= *Cybocephalus*)

+ *Oligamphotis* Theobald, 1937

Prioschema Reitter, 1976

Notes:

1. The name *Crepuraea* was published in the 2d issue of *Palaeontological Journal* in 1990

(type species: *Crepuraea archaica* Kirejtshuk in Kirejtshuk et Ponomarenko, 1990, by original designation), while *Nyujwa* **syn. nov.** (type species: *Nyujwa zherichini* Perkowsky, 1990, by monotypy) appeared in the 4th one of the same year. The latter completely corresponds the representatives of the former originated from the same site (Baissa), they should be regarded as synonyms. Another problem is that among the congeners described in composition of *Crepuraea* one species named as *C. zherichini* and in this case *N. zherichini* should be also recognized as a junior homonym of *C. zherichini*. At the present, the relation of the holotype of *N. zherichini* with other members of the genus is still unclear and a further comparison of the specimens collected in Baissa is needed.

2. The synonymy of names *Haptoncus* (type species: *Haptoncus tetragonus* Murray, 1864, designated by Parsons, 1843) and *Haptoncurina* **syn. nov.** (type species: *Epuraea angustula* Motschulsky, 1863, non *Epuraea angustula* Sturm, 1844, by original designation) should be regarded as evident, because some Indo-Malayan species of *Haptoncus* [*E. (H.) concolor* Murray, 1864 and *E. (H.) fallax* (Grouvelle, 1897)] and the members of *Haptoncurina* show a variability in the subgeneric disagnostic characters making the discrimination of the subgenera quite problematic.

3. The synonymy of names *Ecnomaeus* (type species: *Ecnomaeus planus* Erichson, 1843, by monotypy) and *Somaphorus* **syn. nov.** (type species: *Somaphorus ferrugineus* Murray, 1864, by monotypy) should be recognized, as both type species belong to the same group of clear relatives distributed in the subequatorial areas of the East Hemisphere.

This group was erroneously put into the subfamily Cilaeinae (Kirejtshuk, 1986), because the elytra of its species remain two last abdominal segments uncovered and somewhat more compact antennal club than in other groups of Epuraeinae. Although the structure of the male abdomen in *Ecnomaeus* species, including shape of the anal sclerite, ventral plate and genitalia, is certainly similar to that in other groups of the subfamily Epuraeinae, but not to that in Cillaeinae. Besides, the structure of thorax of *Ecnomaeus* species, particularly prosternal process and mesoventrite is certainly comparable with that in Epuraeinae rather than other sap beetles.

4. The subgenus *Semocarpolus* **subgen. nov.** (type species: *Carpophilus marginellus* Motschulsky, 1858)

Etymology. The name of the subgenus is formed from the Greek “*sema*” (character) and “*carpolus*” (*Megacarpolus* and other generic names with the end “*polus*”) formed in turn from the Greek “*carpus*” (fruit, foetus).

Diagnosis: This new subgenus is well characterized by a raised median carina of the mesoventrite, almost rectilinear submesocoxal line and undivided fork-sclerite of tegmen. It seems to be close to *Carpophilus* sensu str. differing from it only in the mentioned characters and very shallow and indistinct punctures on mesoventrite. Species of this new subgenus have some resemblance to those of *Megacarpolus*, but their bodies are reddish brown in coloration, smaller and more convex, with very steeply sloping pronotal and elytral unexplanate sides, less compact antennal club, hypopygidium of their males without any additional depression [although the Indo-Malayan species of *Megacarpolus* are also without clear depression on this sclerite in males]. Species of *Semocarpolus* subgen. nov. are also similar to the representatives of *Gaplocarpolus* subgen. nov., but, except for the mentioned distinguishing characters, also have rather distinct dorsal puncturation and only shallow punctures on mesoventrite as well as their females with simple pygidium. Also, the species of this new subgenus are clearly distinguished from *Askocarpolus* subgen. nov. by more robust and more convex body with very steeply sloping pronotal and elytral unexplanate sides, not projecting posterior pronotal angles, lack of raised depressions on pronotal and elytral disks, and also by lack of paramedian pockets on mesoventrite.

This new subgenus is also characterized by a somewhat loose antennal club between antennomeres 9 and 10, but less loose than that observed among members of *Ecnomorphus* or even in *Askocarpolus* subgen. nov. Nevertheless, the antennal club of species of this subgenus is less compact in comparison with that in the representatives of all subgenera which are here regarded as similar and probably related to it [i.e. *Megacarpolus*, *Gaplocarpolus* subgen. nov., *Askocarpolus* subgen. nov. and *Carpophilus*].

According to N. Hayashi (1978) the larvae of *C. (S.) marginellus*, in contrast to other groups of the subfamily, could be characterized by the indistinct or even absent ocelli and pair of transverse oval patches of sclerotized microscopic asperities on abdominal terga II-VIII.

Bionomy. The species of this new subgenus are associated with different decaying products of plant origin and *C. (S.) marginellus* is a characteristic pest of stored products with an almost world-wide range.

Composition and distribution. This new subgenus is represented only with 4 species: type species with subcosmopolitan range in human stores and under natural conditions mostly in the areas with tropical and subtropical climate; *C. (S.) rubescens* Murray, 1864 distributed in the Indo-Malayan region; *C. (S.) succisus* Erichson, 1943 from Neotropical Region (Central America and

Brazil) and one species under description from the Indo-Malayan Region.

5. The subgenus *Gaplocarpolus* **subgen. nov.** (type-species: *Carpophilus (Carpophilus) cuneiformis* Murray, 1864).

Etymology. The name for this taxon is created from the Greek “gaplos” (meaning simple, solitary, lonely) and “carpolus” used for some names of the Carpophilinae and formed from the Greek “carpus” (fruit, foetus).

Diagnosis. This new subgenus is more similar to the subgenera *Askocarpolus* subgen. nov., *Carpophilus* sensu str., *Megacarpolus* and *Semocarpolus* subgen. nov. than other groups of the subfamily. It is very distinct from the mentioned taxa by the comparatively sparse puncturation of integument, slightly loose antennal club between antennomeres 9 and 10, spiracles of tergite VI widely transverse, medially convex and moderately widened apex of prosternal process. This new subgenus is also characterized by the following characters: medium body size, subvertical pronotal and elytral sides, slightly curved along procoxae to subflattened prosternal process with strongly widened apex and simple mesoventrite. The members of *Gaplocarpolus* subgen. nov. have the similar outline of submesocoxal line. Externally species of this new subgenus are more similar to representatives of *Semocarpolus* **subgen. nov.** [especially to *C. (Semocarpolus) rubescens*], differing from them not only in the features listed above, but also in widely truncate labral lobes, transverse depression on male metaventrite before anterior edge, submesocoxal line gently curving and slightly deviating from posterior edge of cavities. Besides it, this new subgenus differs also from subgenera:

– *Carpophilus* sensu str. also in the simple mesoventrite bearing rather shallow indistinct punctures;

– *Megacarpolus* also in the lighter, smaller and more convex body, more distinct and very sparse puncturation of dorsum, distinct submesocoxal line deviating from the posterior edge of cavities;

– *Askocarpolus* subgen. nov. also in the even pronotal disk, simple mesoventrite (without trace of paramedian pockets), distinct submesocoxal line deviating from the posterior edge of cavities.

This new taxon is proposed in order to counterbalance the considered groups with comparable hiatus in characters. The combination of its peculiarities is corresponding to those of other subgenera of *Carpophilus* sensu lato.

Bionomy. Imagines of both species of this new subgenus were captured probably in montane forest at elevation of 200-2 300 m.

Composition and distribution. Three members of this new subgenus (type species and two species

under description) are known from the Indochinese and Malayan provinces.

6. The subgenus *Askocarpolus* **subgen. nov.** (type-species: *Carpophilus oblongopunctatus* Grouvelle, 1903)

Etymology. The name of the subgenus is composed from the Greek “askos” (chamber, cell, sac) and “carpolus” (*Megacarpolus* and other generic names with the end “polus”) transformed from the Greek “carpus” (fruit, foetus).

Diagnosis. This new subgenus is very distinct from all groups of the subfamily (and the family as a whole) due to a pair of deep paramedian pockets in the middle of mesoventrite situated at level of apex of prosternal process. It is also well characterized by more or less distinct oval paramedian depressions at base of the pronotum and very weak longitudinal depressions in anterior half of elytra, almost simple scarcely lobed meso- and metatarsi, posterior edge of metaventrite with a deep excision between metacoxae, not completely divided fork-sclerite of tegmen and articulated connection between ventral plate and spiculum gastrale of the male.

Appearance of its representatives is also rather similar to that of species in the subgenus *Gaplocarpolus* subgen. nov., but differs from that in the more or less expressed paramedian depressions at base of pronotum and longitudinal depressions on elytra as well as in distinct anterior angles of pronotum, less strongly sloping pronotal and elytral sides and in shape of the last labial palpomeres strongly widened to apex. This new subgenus shares a certain similarity (particularly in the body shape, characters of puncturation and sculpture of sclerites) to the subgenera *Megacarpolus* and *Semocarpolus* subgen. nov., although in addition to characteristic paramedian pockets on mesoventrite, depressions on pronotum and elytra, the representatives of *Askocarpolus* subgen. nov. differ from those of the first in their somewhat longer elytra, usually more asymmetrical last labial palpomere, lack of sexual dimorphism in structure of 3-segmented antennal club; and from the second – in the less robust and less convex body with more gently sloping pronotal and elytral sides to moderately explanate edges, strongly widened last labial palpomere and projecting posterior pronotal angles.

Besides the characteristic paramedian pockets on mesoventrite as well as depressions on pronotum and elytra, *Askocarpolus* subgen. nov. differs from other subgenera of the genus *Carpophilus* sensu lato:

– from *Carpophilus* sensu str. in the absence of isolated distal plate of mesoventrite divided by median ridge; less steeply sloping pronotal and elytral sides, wider last labial palpomeres, less widely separated of meso- and metacoxae,

narrower protarsus, more elongate last abdominal segment in females;

– from *Ecnomorphus* in the less flattened body and different characters of puncturation and sculpture of integument;

– from *Myothorax* in the less convex and usually elongate oval body, distinct anterior and posterior angles of pronotum.

Finally, the mentioned paramedian pockets on mesoventrite of the new subgenus under consideration have some analogy with depressions on mesoventrite in *Sebastianiella* spp. (Nitidulinae) from South Africa.

Bionomy. The species of this new subgenus seem to be associated with decaying fruits and other decaying products of plant origin.

Composition and distribution. This new subgenus is represented only with 5 species (4 of them under description) known from the south of the Palaearctic Province of Palaearctic Region and Indochinese Province of Indo-Malayan Region, but the type species of the subgenus is described from Darjeeling.

7. The synonymy of the names *Ecnomorphus* (type-species: *Nitidula sexpustulata* Fabricius, 1791; designated by Jelínek & Audisio, 2003); *Tribrachys* **syn. nov.** (type-species: *Tribrachys caudalis* LeConte, 1859; designated by C.T. Parsons, 1943); *Eidocolastus* **syn. nov.** (type-species: *Colastus plagiatipennis* Motschulsky, 1858; designated by Jelínek & Audisio, 2003); *Stauroglossicus* **syn. nov.** (type-species: *Stauroglossicus terminalis* Murray, 1864: 398; designated by Jelínek & Audisio, 2003); *Microxanthus* **syn. nov.** (type species: *Carpophilus tempestivus* Erichson, 1843; designated by Jelínek & Audisio, 2003); *Idocolastus* (proposed for *Eidocolastus*) is based on wide comparison of many members of the genus.

The name *Tribrachys* was treated as a junior synonym of the name *Carpophilus* in general (Grouvelle, 1913), however, in accordance with the designations of type species the first of mentioned names should be regarded as a junior synonym of *Ecnomorphus*. The type-species of *Tribrachys* seems to be closely related to *C. (E.) ligneus* Murray, 1864, while the type-species of the *Ecnomorphus* is very distinct from other groups of the subgenus in some characters, which scarcely could make possible to regard it as a member of separate subgenus. The type-species of *Stauroglossicus* and *Eidocolastus* belong to the groups closely related each to another as well as quite similar to the rest groups of the subgenus and, therefore, the last two names should be regarded in composition of the same subgenus together with *Tribrachys* and *Ecnomorphus*.

V. Motschulsky (1858) proposed the name *Ecnomorphus* in connection with the description of *E. fulvipes* which he compared with the European

Nitidula sexpustulata Fabricius, 1792. A. Murray (1864) removed *E. fulvipes* from the subgenus *Ecnomorphus*, because he decided that the characters listed by V. Motschulsky for this subgenus fitted rather to the European than Indo-Malayan representatives. However, neither A. Murray nor V. Motschulsky designated the type-species of the taxon properly. V. Motschulsky included in *Ecnomorphus* also *E. biguttatus*, described by him in the same publication. A. Murray interpreted this name for species of the subgenus *Myothorax*, supposing that V. Motschulsky under this name described a variety of *C. (M.) vittiger* Murray, 1864. The recent examination of the type series of *E. biguttatus* showed that the species with this type series indeed should be regarded as a member of the genus *Platyarcha* Kirejtshuk, 1987 [*Platyarcha biguttata* (Motschulsky, 1858)], **comb. nov.**: Cryptarchinae, Platyarchini].

The groups which could be regarded as *Ecnomorphus* and *Microxanthus* do not show any clear hiatus. The alone character which can be used to discriminate them could be the distinctness of posterior angles of the pronotum. However this character sometimes is rather variable even within one species or within one series of the same species and, therefore, it can not be used for a reliable diagnosis. This is a reason to synonymize the taxa *Ecnomorphus* and *Microxanthus*.

Composition of the subgenus (in all cases new synonymy is based on re-testing type series): *C. (E.) acutangulus* Reitter, 1884 (= *cingulatus* Reitter, 1884, **syn. nov.**; ? *cingulatoides* Nakane, 1959 – the latter was proposed taken into consideration the studied variability of the species); *C. (E.) alticola* Sharp, 1889; *C. (E.) antiquus* Melsheimer, 1844; *C. (E.) apicipennis* Fairmaire, 1869; *C. (E.) bakeweli* Murray, 1864 (= *planatus* Murray, 1864, **syn. nov.**; *aterrimus* Macleay, 1864, **syn. nov.**); *C. (E.) brachypterus* (Say, 1825); *C. (E.) comatus* Sharp, 1889; *C. (E.) compressus* Murray, 1864; *C. (E.) confertus* Sharp, 1889; *C. (E.) corticinus* Erichson, 1843; *C. (E.) debilis* Grouvelle, 1897 (= *opaculus* Grouvelle, 1897, **syn. nov.**); *C. (E.) deplanatus* Boheman, 1854; *C. (E.) discoideus* LeConte, 1858; *C. (E.) dubitabilis* Grouvelle, 1897; *C. (E.) dufai* Grouvelle, 1908; *C. (E.) elaterinus* Sharp, 1889; *C. (E.) epuraeoides* Sharp, 1889; *C. (E.) extensus* Grouvelle, 1908 (= *trapezicollis* Kirejtshuk, 1995); *C. (E.) ferrugineus* Murray, 1864; *C. (E.) frivolis* Murray, 1864; *C. (E.) fulvipes* Motschulsky, 1858 (= *fuscus* Motschulsky, 1858); *C. (E.) humilis* Erichson, 1843; *C. (E.) inconspicuus* Murray, 1864; *C. (E.) lepidus* Murray, 1864; *C. (E.) ligneus* Murray, 1864 (= *decipiens* Horn, 1879); *C. (E.) luridipennis* Macleay, 1873 (= *loriai* Grouvelle, 1906, **syn. nov.**); *C. (E.) marginatus* Erichson, 1843; *C. (E.) mcnamarai* Dobson, 1993; *C. (E.)*

murrayi Grouvelle, 1892 (= *hebetatus* Grouvelle, 1908, **syn. nov.** proposed for *fulvipes* Grouvelle, 1894, non Motschulsky, 1858); *C. (E.) plagiati-pennis* (Motschulsky, 1858) (= *bosschai* Grouvelle, 1892; *dilutus* Motschulsky, 1858, non Murray, 1864; *nigricans* Grouvelle, 1897, **syn. nov.**); *C. (E.) proximus* Grouvelle, 1906; *C. (E.) senex* Murray, 1864; *C. (E.) sexpustulatus* (Fabricius, 1791) (= *abbreviatus* Panzer, 1793; *bimaculatus* Marsham, 1802); *C. (E.) sibiricus* Reitter, 1879; *C. (E.) sinuatus* Grouvelle, 1917; *C. (E.) subplanus* Grouvelle, 1917; *C. (E.) tempestivus* Erichson, 1843; *C. (E.) terminalis* Murray, 1864 (= *gentilis* Murray, 1864, **syn. nov.**); *C. (E.) ustulatus* Murray, 1864; *C. (E.) variabilis* Grouvelle, 1897; *C. (E.) waterhousei* Dobson, 1993; *C. (E.) zuni* Casey, 1884; and also some dozens of species which will be described in a future monograph of the author devoted to the fauna of the Indo-Malayan Region.

8. Because of variability in extent of the development of tarsal claws among some groups of related species the names *Pria* and *Allopria* **syn. nov.** would be reasonable to consider as synonyms.

9. The name *Axyrodes* was proposed for one undescribed Neotropical species (nomen nudum) and compared with the described African and Himalayan species of *Axyra*. Later A. Grouvelle put one species to this taxon [*Axyra (Axyrodes) nitida* Grouvelle, 1898], which indeed is a member of *Pleoronia* (**comb. nov.**). At the same time, the characters mentioned by Murray (1867: 170) make possible to assume that having proposed the “*Axyrodes*” was considered by him as one elongate member of *Pleoronia* or *Lobiopa*.

10. The synonymy of the names *Megauchenia* and *Orvoenia* **syn. nov.** (described among Colydiidae) is evident because the type species of the latter, *Orvoenia borneensis* Dajoz, 1980, is certainly very similar to *Megauchenia gracilis* Kirejtshuk, 1990. T.K. Pal & J.F. Lawrence (1986) wrote on similarity of the species of these taxa when they excluded the tribe Orvoenini from the family Colydiidae.

11. The synonymy of the names *Tetrisus* and *Pseudoischaena* **syn. nov.** is quite clear, because the type species of both (*Tetrisus cholevooides* Murray, 1864, by monotypy and *Pseudoischaena longula* Grouvelle, 1897, by nomotypy) are closely related and belong to the same species group. The taxa *Trimenus* and *Tetrisus* were regarded as subgenera of the same genus in the composition of the subfamily Epuraeinae (Kirejtshuk, 1998), as the type species of them have females looking like rather similar because of probable convergences of external structures. Nevertheless, the males of both are rather different and show a clear attribution of different subfamilies (Epuraeinae and

Nitidulinae – particularly after the structure of anal sclerite and aedeagus).

12. The genus *Perilopa* was proposed with 2 species (*P. peltidea* Erichson, 1843 from Columbia and *P. vestita* Erichson, 1843 from South Africa). Later some species close to the first species from the Neotropical Region were described in composition of this genus, and for the the second species was proposed a separate genus *Annachramus* (see above). Thus, as the type species of *Perilopa* should be recognised *P. peltidea* Erichson, 1843 (**here designated**).

13. The genus *Lasiodactylus* was confusedly interpreted in many publications (see comments in Kirejtshuk, 1996; Kirejtshuk & Lawrence, 1999; Jelínek, 1999). This taxon (sensu stricto) includes only one widely spread species [*L. brunneus* Perty, 1830 (= *procerus* Erichson, 1843; *meridionalis* Gillogly, 1965; *centralis* Cline et Carlton, 2004, **syn. nov.**; *falini* Cline et Carlton, 2004, **syn. nov.**; *kelleri* Cline et Carlton, 2004, **syn. nov.**)] rather variable in many characters, including the puncturation, dorsal pubescence, prosternal process, submetacoxal lines, as well as the characters of secondary sexual dimorphism and genitalia (these characters are sometimes used to separate “species”: Cline & Carlton, 2004). Besides, the taxon *Lordyra* **stat. nov.** is here regarded as a subgenus of the same genus because its differences from *Lasiodactylus* consist mainly in the smaller body size, outline and deepness of antennal grooves, flattened apex of prosternal process, confused puncturation and sculpture of its integument, aedeagus comparably shorter and with apex of tegmen isolated by preapical contraction. *Lordyra* can have 2-3 members [there are three described species names (see Kirejtshuk & Lawrence, 1999): *L. vilosa* (Blanchard in Brullé, 1842); *L. loretoensis* (Bruch, 1938); *L. americana* (Reitter, 1873) which need to be revised]. The name *Lordyra* was synonymized with *Neopocadius* by Kirejtshuk & Lawrence (1999), although in the current interpretation after additional study of the type species and other materials the first is considered as a subgenus of *Lasiodactylus*, while the second should be regarded separately. The *Neopocadius* (type species: *Neopocadius nitiduloides* Grouvelle, 1906, by monotypy) with a junior synonym *Pseudostelidota* **syn. nov.** (type species *Pseudostelidota setosa* Grouvelle, 1906, by monotypy) is known by two mentioned species and should be regarded as a genus closely related to *Lasiodactylus* and differing from both in the smaller body, submetacoxal lines following closely posterior edge of metacoxal cavity, head without trace of parocullar lines, narrowly lobed tarsi and excised apex of tegmen, and also from *Lordyra* in the nearly unexpressed antennal grooves, prosternal process roof-shaped at apex.

On the other hand, the *Neopocadius* is very similar to *Brounthina* differing from the latter only in the squamose dorsal pubescence, unraised antennal grooves, wider tarsi and longer tegmen without apical excision. It is a reason to regard this Nevazealandian taxon (*Brounthina* **stat. nov.**) as a subgenus of *Neopocadius*.

14. The *Pocadius*-complex and *Thalycra*-complex of genera were preliminarily proposed (Kirejtshuk & Lawrence, 1992; Kirejtshuk, 1996 etc.) for restricted set of genera studied at that time. A. Cline (2005) used these preliminarily proposals for “phylogenetic analysis” of the tribe “Pocadiini”, which was treated by him without any diagnosis making possible to discriminate it among other groups of the tribe Nitidulini. At this level of knowledge on diversity of the groups formerly included in the mentioned complexes demonstrates lack of any hiatus between them and, therefore, it seems to be reasonable to consider the only complex of related genera united groups of both complexes recognized before.

15. The related groups included in the taxa *Hebascus* Erichson, 1843 and *Trichostethus* Sharp, 1891, **stat. nov.** show some differences mentioned by J. Jelínek (1975), however, they are not so expressive and, therefore, in order to make ranks of different taxa comparable these taxa are regarded as subgenera of the same generic taxon.

16. The genus *Parapocadius* **gen. nov.** (type species: *Pallodes emmerezi* Grouvelle, 1899)

[the writer studied the lectotype of the type species, ♂ **here designated** (in collection of Museum National d’Histoire Naturelle, Paris designated by S. Endrödy-Younga) – “I. Maurice (I. Emmerezi)”, “coll. Alluaud”, “Lectotypus 1899-1966, *Pallodes emmerezi* Grouvelle, Dr. Endrödy-Younga” and 7 paralectotypes (♂♂, ♀♀) in the same collection and with the same labels (except the designation one)].

Etymology. The name of this new genus is formed from the Greek “para” (near, next to, close by, nearly, along) and generic name *Pocadius*.

Diagnosis. This genus is rather close to *Pocadius* and seems to be aberrant insular deviation of it. Nevertheless, the type species of the new genus differs from the members of *Pocadius* in the antennae longer than head width; subparamental grooves not expressed; mentum very small, somewhat elevated and with emarginate anterior edge; antennal grooves very fine and long, strongly convergent in anterior half and rather divergent posteriorly; slightly convex anterior part of prosternum; distinct intermesocoxal line behind the mesocoxae; shallowly emarginate posterior edge of metaventrite between coxae; narrow tibiae without outer subapical process; metatarsi particularly narrow and somewhat longer than a half of metatibia. On the other hand, this new genus

is rather similar to the Neotropical *Tagmolykra* and *Pocadiolykra*, but distinct from them in the moderately convex body, explanate pronotal and elytral sides, distinct border along pronotal base at sides of scutellum, more prominent anterior and almost distinct posterior pronotal angles, conspicuous dorsal pubescence; and also from the first *Parapocadius* gen. nov. differs from in rather convergent antennal grooves and narrow tibiae, including mesotibia and not sharply acute apex of ovipositor; from the second differs in the distinct longitudinal rows on elytra.

Composition. The new genus includes the only species.

Distribution. The range of this new genus is yet restricted by the type locality of its type species.

17. The synonymy *Cychramus* and *Aethinopsis* **syn. nov.** is evident, because the „differences“ used for the proposal of the latter (4-segmented antennal club in males and contrasting coloration of pubescence) are quite characteristic of representatives of *Cychramus*. A. Grouvelle (1908) erroneously regarded *Aethinopsis* as close to *Aethina* and different from the latter in the long antennae.

18. The groups formerly considered as *Mystrops* and *Cryptoraea* **syn. nov.** distinguished mostly presence of the characters of sexual dimorphism in some structures of the members of the first and absence of it in the second (Kirejtshuk & Jelínek, 2000). Indeed expression of all characters of sexual dimorphism in many species is quite variable and in many cases small males have appearance scarcely different from the females of the same species (Kirejtshuk & Couturier, in press).

19. The genus *Meoncerus* (type species: *Meoncerus salvini* Sharp, 1891, **here designated**) is quite different from *Apsectochilus* and *Lordyrops*, but all these names erroneously synonymized by Leschen, 1999. Indeed the *Meoncerus* is very similar and seems to be closely related to the genus *Camptodes* (the rank of this taxon would be better estimated as a subgeneric, however this change should be done after a more detailed comparison of members of *Camptodes*).

The names *Apsectochilus* and *Lordyrops* were proposed for quite distinct taxa, because *Apsectochilus hydroporoides* Reitter, 1874 (type species according to designation by Leschen, 1999), in contrast to the members *Meoncerus* and *Lordyrops* (the latter is known after the study of the probable type specimen of its type species: *Lordyrops deyrollei* Reitter, 1875 deposited in the Museum National d'Histoire Naturelle, Paris), demonstrates the essential differences, consisting in the flat prosternal process with rounded posterior edge, diffuse puncturation of elytra, parallel antennal grooves and submetacoxal line following closely posterior edge of coxal cavity. Besides, the

pattern of coloration of *Lordyrops*, in contrast to *Apsectochilus* and *Meoncerus*, is more similar to that in species of *Phenolia*-complex (Nitidulini sensu str.), but not in representatives of Cylloдини in general. These differences should be treated as quite considerable to regard the *Apsectochilus* and *Lordyrops* as separate genera.

20. The synonymy of taxa *Cyllodes* and *Mecyllodes* **syn. nov.** is evident because all characters of the latter can be traced in different species of the first. D. Sharp (1891) having proposed *Mecyllodes* pointed out that this taxon is close to “*Strongylus*”, but distinct from the latter in the narrowly separate meso- and metacoxae. Besides, the posterior edge of metaventre of *Mecyllodes nigropictus* Sharp, 1891 is comparatively deeply excised, while in most species of *Cyllodes* this edge nearly straight or slightly emarginate. Perhaps, this taxon could be recognized as a subgenus of *Cyllodes*, however at the moment it is difficult to outline the scope of this subgenus and its hiatus from *Cyllodes* sensu str.

21. The genus *Pallodes* is rather diverse and includes many species (mostly still undescribed). They widely spread through all continents, except Antarctica, although the most species occur in the areas with subtropical and tropical climate. Different groups of the genus seem to be characterized by constant structural features and could be regarded as separate taxa, while few related species with very short prosternum are united in the subgenus *Coxollodes* (**stat. nov.**) spread in the Eastern Hemisphere. The current taxonomic distribution of the species formerly put in the *Pallodes* in Grouvelle, 1913 and composition of *Neopallodes* and *Pallodes* is given taking into consideration the further descriptions:

Camptodes: *C. ruficornis* (Grouvelle, 1898), **comb. nov.** (*Pallodes*); *C. grouvellei* **nom. nov.** (pro *Pallodes laetus* Grouvelle, 1898, non Kirsch, 1873) [This species is distinct according to the **here designated** lectotype deposited in the Natural History Museum in London (“Amazon, Bates”, “Mus. Murray”, “Type”, “*Pallodes laetus* Grouv. ty.”, written by A. Grouvelle) due to the dull reddish dorsum with slight iridescence on elytra, rather long antennal club, prosternal process rather widened before widely rounded apex, aracteristic shape of tibiae and aedeagus].

Coxollodes: *C. cyrtusoides* (Reitter, 1884) (?=*amamiensis* Hisamatsu, 1956), **comb. nov.** (*Pallodes*); *C. opacus* (Grouvelle, 1906), **comb. nov.** (*Pallodes*) (= *loriai* Grouvelle, 1906, **syn. nov.**); *C. parvulus* (Grouvelle, 1908), **comb. nov.** (*Pallodes*); *C. reitteri* Kirejtshuk, 1987, **comb. nov.** (*Pallodes*);

Cyllodes: *C. jucundus* (Reitter, 1873), **comb. nov.** (*Pallodes*) (= *nigropictus* Sharp, 1891, **syn. nov.**, *Mecyllodes*);

Neopallodes: *N. adornans* Kirejtshuk, 1987; *N. aestimabilis* (Grouvelle, 1906), **comb. nov.** (*Pallodes*); *N. affinis* Kirejtshuk, 1994; *N. alluaudi* (Grouvelle, 1899), **comb. nov.** (*Pallodes*); *N. aterrimus* (Grouvelle, 1906), **comb. nov.** (*Pallodes*); *N. clavatus* (Reitter, 1884) (*Pallodes*); *N. dentatus* Grouvelle, 1892; *N. diffusus* Kirejtshuk, 1994; *N. dorsalis* (Grouvelle, 1896), **comb. nov.** (*Pallodes*); *N. ebenus* Kirejtshuk, 1994; *N. fairmairei* (Grouvelle, 1906), **comb. nov.** (*Pallodes*); *N. falsus* (Grouvelle, 1912) (*Pallodes*) (=harmandi Grouvelle, 1903, non Grouvelle, 1902; *lindskogii* Kirejtshuk, 1987); *N. glaesus* Kirejtshuk, 1994; *N. globosus* Kirejtshuk, 1994; *N. grouvellei* Kirejtshuk, 1987; *N. harmandi* Grouvelle, 1902; *N. hilleri* (Reitter, 1877) (*Pallodes*) (=circumflexus Reitter, 1879); *N. incertus* (Grouvelle, 1906), **comb. nov.** (*Pallodes*); *N. inermis* Reitter, 1884; *N. klugi* (Grouvelle, 1896), **comb. nov.** (*Pallodes*); *N. limbicollis* (Reitter, 1880), **comb. nov.** (*Pallodes*); *N. militaris* (Grouvelle, 1906), **comb. nov.** (*Pallodes*); *N. niger* (Grouvelle, 1906), **comb. nov.** (*Pallodes*); *N. nigrocyanus* (Grouvelle, 1906), **comb. nov.** (*Pallodes*); *N. nitidus* (Grouvelle, 1906), **comb. nov.** (*Pallodes*); *N. omogonis* Hisamatsu, 1953; *N. orthogonus* (Grouvelle, 1906), **comb. nov.** (*Pallodes*); *N. perrieri* (Grouvelle, 1906), **comb. nov.** (*Pallodes*); *N. scutellaris* (Grouvelle, 1906), **comb. nov.** (*Pallodes*); *N. sicardi* (Grouvelle, 1906), **comb. nov.** (*Pallodes*); *N. sikordi* (Grouvelle, 1896), **comb. nov.** (*Pallodes*); *N. simillimus* Kirejtshuk, 1994; *N. solaris* Kirejtshuk, 1987; *N. striatopunctatus* Kirrejtshuk, 1994; *N. subdentatus* Kirejtshuk, 1994; *N. turulosus* Kirejtshuk, 1994; *N. variabilis* (Grouvelle, 1896), **comb. nov.** (*Pallodes*); *N. vicinus* Grouvelle, 1892; *N. vietnamicus* Kirejtshuk, 1987;

Pallodes: *P. antipodum* Grouvelle, 1903; *P. alutaceus* Kirejtshuk, 1987; *P. austrianus* Leschen, 1988; *P. beccarii* Grouvelle, 1906; *P. birmanicus* Grouvelle, 1892 (=kalingus Kirejtshuk, 1987, **syn. nov.**); *P. castaneus* Grouvelle, 1914; *P. cinctus* Grouvelle, 1914; *P. discoideus* Grouvelle, 1898; *P. fauveli* (Grouvelle, 1903), **comb. nov.** (*Cyllodes*) (=vagepunctus Grouvelle, 1903, **syn. nov.**); *P. feai* Grouvelle, 1892 (emmend. *Feae*); *P. flaccus* Kirejtshuk, 1987; *P. gestroi* Grouvelle, 1906 (=misellus Grouvelle, 1906, **syn. nov.**); *P. hieki* Kirejtshuk, 1987; *P. kaszabi* Kirejtshuk, 1987; *P. mexicanus* Sharp, 1891; *P. oleosus* Kirejtshuk, 1987; *P. pallidus* (Beauvois, 1805) (*Sphaeridius*) (=silaceus Erichson, 1843; *unistriatus* Horn, 1885); *P. parvus* Grouvelle, 1903; *P. pictus* Sharp, 1891; *P. plateosus* Schaeffer, 1931; *P. ruficollis* Reitter, 1873 (=cyanescens Grouvelle, 1898, **syn. nov.**); *P. rufidorsis* Grouvelle, 1903; *P. silaceus* Erichson, 1843; *Pallodes suffuscus* Kirejtshuk, 1987; *P. umbratilis* Reitter, 1873;

Provisionally *Pallodes* (not tested by the writer): *P. abdominalis* Sharp, 1891; *P. annulifer* (Laporte de Castelneau, 1840) (*Strongylus*); *P. bohemani* Grouvelle, 1898; *P. bouvieri* Grouvelle, 1902; *P. brunnipennis* Kirsch, 1873; *P. cyrcynoides* Sharp, 1891; *P. deletus* Sharp, 1891; *P. filipes* Sharp, 1891; *P. gracilipes* Kirsch, 1873; *P. guttatus* Sharp, 1891; *P. marginicollis* Reitter, 1875; *P. micans* Sharp, 1891; *P. obscurus* Sharp, 1891; *P. pallidus* Reitter, 1875 non Beauvois, 1805; *P. punctatus* Sharp, 1891; *P. regularis* Sharp, 1891; *P. reversus* Sharp, 1891; *P. scutatus* Grouvelle, 1906; *P. sellatus* Sharp, 1891; *P. signaticollis* Sharp, 1891; *P. sjoestedti* Grouvelle, 1909; *P. smithi* Sharp, 1891; *P. strongyliformis* Sharp, 1891; *P. translatus* Grouvelle, 1912 (=smithi Grouvelle, 1898, non Sharp, 1891); *P. viridus* Sharp, 1891;

Parapocadius gen. nov.: *P. immerzi* (Grouvelle, 1899), **comb. nov.** (*Pallodes*) – see notes 16;

Erotylidae incertae sedis (tested by the writer): “*Pallodes cardoni*” Grouvelle, 1894.

22. The genus *Interfaxia gen. nov.* (type species: *Psilopyga fasciata* Sharp, 1891) [*Interfaxia fasciata* (Sharp, 1891), **comb. nov.**]

[the author studied the holotype *Psilopyga fasciata* (Mexico, “Truqui”), ♂, deposited in the Natural History Museum in London].

Etymology. The name of this new genus is devoted to the agency “Interfax Information Service”, where the friends of the author since school-days work, M.V. Komissar, V.A. Polyak and M.L. Andelman.

Remarks. This genus is proposed to counterbalance the related groups of large Cyllodini spread at both side of Pacific and Indian Oceans. A. Grouvelle (1913) united *Oxycnemus*, *Eugoniopus* and *Psilopyga* in one genus without subgeneric separation. Later K. Spornraft (1971) found reasonable to consider to subgenera *Oxycnemus* and *Psilopyga* (the species of *Eugoniopus* were put into the latter). However, these three names can be attributed to the groups which should be regarded as separate genera, while one group described in the composition of *Psilopyga* (*P. fasciata*) shares some characters from different groups of Eastern and Western Hemispheres. Besides, this species, in contrast to all mentioned groups and most other Cyllodini, has antennal grooves distinctly divergent, while its submental ridges convergent. Therefore this species would be better to interpret as a form isolated from all mentioned and propose for it a separate genus.

Diagnosis. Four groups here regarded as genera *Eugoniopus*, *Interfaxia gen. nov.*, *Oxycnemus* and *Psilopyga* are closely related and could be discriminated according to the following characters:

Interfaxia gen. nov.:

- widely truncate elytral apices;
- male pygidium with rounded apex;

- metacoxae about as widely separated as procoxae;
- antennal grooves slightly and rectilinearly convergent;
- submental ridges distinctly raised and convergent;
- distance between mesocoxae about as great as that between procoxae and markedly smaller than that between metacoxae;
- posterior edge of metaventrite between coxae nearly straight;
- outer angle of tibiae strongly projecting;
- length of penis trunk markedly smaller than that of tegmen;
- distributed in the Western Hemisphere.

Oxycnemus:

- more or less rounded elytral apices;
- male pygidium with rounded apex;
- metacoxae about as widely separated as procoxae;
- antennal grooves subparallel-sided;
- submental ridges not raised;
- distance between mesocoxae more or less greater than that between pro- and metacoxae;
- posterior edge of metaventrite between coxae deeply emarginate to angularly excised;
- outer angle of tibiae at most slightly projecting;
- length of penis trunk comparable with that of tegmen;
- distributed in the Western Hemisphere.

Psilopyga:

- widely truncate elytral apices;
- male pygidium with widely truncate apex (from under which the anal sclerite is exposed);
- metacoxae much more widely separated than procoxae;
- antennal grooves distinctly divergent;
- submental ridges not raised;
- distance between mesocoxae greater than that between procoxae;
- distance between mesocoxae more or less greater than that between procoxae, but distinctly smaller than that between metacoxae;
- posterior edge of metaventrite between coxae nearly straight;
- outer angle of tibiae slightly projecting;
- length of penis trunk markedly smaller than that of tegmen;
- distributed in the Western Hemisphere.

Eugonipus:

- widely truncate elytral apices;
- male pygidium with widely truncate apex (from under which the anal sclerite is exposed);
- metacoxae much more widely separated than procoxae;
- antennal grooves strongly and arcuately convergent;
- submental ridges not raised;

- distance between mesocoxae about as great as or slightly greater than that between procoxae, but much smaller than that between metacoxae;
- posterior edge of metaventrite between coxae nearly straight to slightly emarginate;
- outer angle of tibiae not strongly projecting;
- length of penis trunk markedly smaller than that of tegmen;
- distributed in the Eastern Hemisphere.

Interfascia fasciata **comb. nov.** somewhat looks like the members of the Eastern Hemispherean *Triacanus* (Indo-Malayan Region and Palaearctic Province), *Monafricus* (Afrotropical Region) and *Gymnocychramus* (Australian Region), but differs from all of them in the presence of distinct submental ridges and rather widely separated metacoxae; and also differs from the first in the oval antennal club, not sharply triacuminat apex of prosternal process; from the second in the narrow antennal club, not sharply pointed apex of prosternal process; and from the third in the divergent antennal grooves, not narrow prosternal process, markedly shorter elytra remaining uncovered most part of pygidium, widely truncate apex of male pygidium and anal sclerite well exposed from under it, strongly projecting outer angle of tibiae and rather narrow metatarsi.

Finally, each of the above considered groups of *Cyllodini* as other *Cyllodini* in general have the quite characteristic structure of anterior part of metaventrite, which is congruous to the apex of prosternal process, and respectively the peculiar outline of the intercoxal line (if present).

23. The names *Grammorus* Murray, 1868 and *Colopteroides* Watrous, 1982, **syn. nov.** were proposed as monotypic and for the same species named as *Grammophorus caelatus* Gerstäcker, 1864 and *Colopterus striaticollis* Murray, 1864, **syn. nov.** The latter synonymy is based on study of the holotype of *G. caelatus*, ♀, deposited in the Museum f. Naturkunde an der Humboldt-Universität, Berlin – “*caelatus* N., Columb., Mor.”, “8330” and holotype of *C. striaticollis* deposited in Naturhistoriska Riksmuseet, Stockholm – “Rio Jan”, “F. Sahlb.” There have been studied also 2 ♀♀ – “Dr Moritz, 1858, Venezuela”, “*caelatus* Gerst., Columb.” and 1 specimen without abdomen – black quadrangle, “720” deposited in the Naturhistorisches Museum, Vienna. The further 3 specimens are in the Canadian Museum of Nature (Ottawa) and Zoological Institute of the Russian Academy of Sciences, St. Petersburg (1 ex. – “C.R., Alajela, Penas Blancas, 9.VII.1987, E. Cruz MT”; 2 exx. – “Ecu.: Pich. Prov., 47 km S Sto. Domingo, Rio Palenco Stn., 18-30.V.1975, S. & J. Peck”).

24. The subgenus *Onicotis* Murray, 1864 was proposed for one species, strongly different from other members of the genus, therefore it is here

regarded as a separate genus (**stat. nov.**). The greatest difference of *Onicotis auritus* Murray, 1864, **comb. nov.** from all groups of the subfamily is concave underside, including slopping externally prohypomera and epipleura. Its scape strongly is exposed externally and the apex of extended process is reaching the anterior angle of pronotum. Its genae outside antennal grooves are strongly projecting anteriorly and reaching the level of outer angle of the mandibles and forming with the latter and external edge of scape a joint continuous curve. These features are also unique among the members of the subfamily. Besides, the tarsi of its legs are rather wide and outline of body (sides and apex of abdomen, sides of pronotum and elytra) with long cilia reminiscent of those in *Amphicrossus* and some representatives of tribe Nitidulini.

25. The names *Cryptarcha* and *Priatelus* **syn. nov.** are certainly synonyms, because the type species of the latter represent a slender member of *Cryptarcha*, very similar to *C. minima* (Sharp, 1886). Thus, the type species of *Priatelus* should obtain the name *Cryptarcha optanda* (Broun, 1881), **comb. nov.** [syntype of *Priateles optandus* Broun, 1881, ♀, deposited in the the Natural History Museum in London – “1166”, “Wellington”, “*Priatelus optandus*”; 1 syntype, ♀ in the same collection – “1166”, “Silverstream, 8-1-1917”]. T. Broun.

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References

- Cline, A.R. & Carlton, C.E. 2004. Review of *Lasiodactylus* Perty, with description of three new species (Coleoptera: Nitidulidae: Nitidulinae). *The Coleopterists Bull.*, **58**(3): 355-368.
- Cline, A.R. 2005. Revision of *Pocadius* Erichson (Coleoptera: Nitidulidae). A dissertation submitted to the Graduate Faculty of Louisiana State University and Agricultural and Mechanical College in partial fulfillment requirements for the degree of Doctor of Philosophy. http://etd.lsu.edu/docs/available/etd-11042005-122348/u_nrestricted/Cline_dis.pdf
- Dajoz, R. 1980. Description de *Orvoenia borneensis* n. gen. n. sp., Coléoptère Colydiidae appartenant a une tribu nouvelle. *Revue ent fr.* (N.S.), **2**(4): 190-192.
- Grouvelle, A. 1908. Coléoptères de la region Indienne. Rhizodidae, Trogositidae, Nitidulidae, Colydiidae, Cucujidae. (1ere memoire). *Ann. Soc. Ent. Fr.*, **77**: 315-495, pls.
- Grouvelle, A. 1913. Byturidae, Nitidulidae. In: W. Junk (ed.). *Coleopterorum Catalogus*. Berlin, **15**, **56**: 1-223.
- Hayashi, N. 1978. A contribution to the knowledge of the larvae of Nitidulidae occurring in Japan (Coleoptera: Cucujoidea). *Insecta Matsum.*, N.S., **14**: 1-97.
- Jelínek, J. 1975. Redescriptions of genera Hebasacus Er. And Teichostethus Sharp with designations of their type species (Coleoptera, Nitidulidae). *Annatationes Zool. et Bot.*, **101**: 1-12.
- Jelínek, J. 1999. Contribution to taxonomy of the beetle subfamily Nitidulinae (Coleoptera: Nitidulidae). *Folia Herovskiana*, **7**(5): 251-281.
- Jelínek, J. & Audisio, P. 2003. Type species fixation and nomenclatural corrections in some taxa of Palaearctic Nitidulidae and Kateretidae (Coleoptera). *Folia Heyrovskiana*, **11**(3-4): 159-171.
- Jelínek, J. & Audisio, P. 2007. Nitidulidae. 459-491. In: Lobl I. & Smetana A. *Catalogue of Palaearctic Coleoptera*, Apollo Books, Stenstrup, **4**: 935 p.
- Kirejtshuk, A.G. 1986. Analysis of structure of genitalia for reconstruction of phylogeny and substantiation of system of the family of sap beetles (Nitidulidae, Coleoptera). *Proc. All-Union Ent. Soc.*, **68**: 22-28. (In Russian).
- Kirejtshuk, A.G. 1987. New species of the *Cyllodes* complex of genera (Coleoptera, Nitidulidae) from Indochina and adjacent territories. In: *Entomofauna Vietnam* [Entomofauna of Vietnam], Moscow, Nauka, 137-170. (In Russian).
- Kirejtshuk, A.G. 1996. System, evolution of mode of life and phylogeny of the order Coleoptera. II. *Ent. Obozr.*, **75**(1): 39-62. (in Russian) [translation – 1997. System, evolution of mode of life, and phylogeny of the order Coleoptera. II. *Ent. review*, **76**(1): 1-20].
- Kirejtshuk, A.G. 1998/1999. *Nitidulidae (Coleoptera) of the Himalayas and Northern Indochina. Part 1:*

- subfamily *Epuraeinae*. Koenigstein, Koeltz Scientific Books (Theses Zoologicae, Vol. 28): 1-489.
- Kirejtshuk, A.G.** 2001. Notes on the systematics of the African Nitidulidae (Coleoptera). *Ann. Hist. Nat. Mus. Nation. Hung.*, **93**: 17-89.
- Kirejtshuk, A.G. & Couturier, G.** in press. Sap beetles of the tribe Mystropini (Coleoptera, Nitidulidae) associated with inflorescences of the palms cultivated in South America. *Ann. Soc. Ent. Fr.*
- Kirejtshuk, A.G. & Jelínek, J.** 2000. Preliminary review of genera of the tribe Mystropini with redescriptions and new descriptions of some genera, subgenera and species (Coleoptera: Nitidulidae: Nitidulinae). *Folia Heyrovskyana*, **8**(3-4): 171-192.
- Kirejtshuk, A.G. & Lawrence, J.F.** 1992. Review of the Thalycrodes-complex of genera (Coleoptera, Nitidulidae), endemic to the Australian region. *J. Austral. Ent. Soc.*, **31**: 119-142.
- Kirejtshuk, A.G. & Lawrence, J.F.** 1999. Notes on the *Aethina* complex (Coleoptera: Nitidulidae: Nitidulinae) with a review of the *Aethina* (*Cleidorura*) subgen.n. and *Aethina* (*Idaethina*) Gemminger & Harold. *Ann. Zool.*, **49**(3): 233-254.
- Kirejtshuk, A.G. & Ponomarenko, A.G.** 1990. Fossil beetles of the families Peltidae and Nitidulidae. *Paleontolog. Zhurnal*, **2**: 78-88 + 1 pl.
- Leschen, R.A.B.** 1999. Systematics of Nitidulinae (Coleoptera: Nitidulidae): phylogenetic relationships, convexity and the origin of phallophagy. *Invertebrate Taxonomy*, **13**: 845-882.
- Motschulsky, V.** 1858. *Etudes Entomologiques*. Helsingfors, 7: 192 pp. + Taf. 2.
- Murray, A.** 1864. Monograph of the family Nitidulidulariae. *Trans. Linn. Soc. London*, **24**: 212-414, pls. 32-36.
- Pal, T.K. and Lawrence, J.F.** 1986. A new genus and subfamily of the mycophagous Bothrideridae (Coleoptera: Cucujoidea) from the Indo-Australian region, with notes on related families. *Journal of Australian Entomological Society*, **25**(3): 185-210.
- Parsons, C.T.** 1943. A revision of Nearctic Nitidulidae (Coleoptera). *Bull. Mus. Compar. Zool.*, **92**(3): 121-278 + 13 pls.
- Perkovsky, E.E.** 1990. First discovering of Cretaceous insects of the family Leiodidae (Coleoptera) *Paleontolog. Zhurnal*, **4**: 118-120. (In Russian).
- Ponomarenko, A.G. & Kirejtshuk, A.G.** 2008. Taxonomic list of fossil beetles of suborder Scarabaeina (Part 3) <http://www.zin.ru/Animalia/Coleoptera/eng/paleosys2.htm> (April 2008).
- Sharp, D.** 1891. Fam. Nitidulidae. 265-388, 8-12 tabs. In: Sharp D., Matthews A. & Lewis G. 1887-1905. *Biologia Centrali-Americana. Insecta. Coleoptera*, **2**(1): 717 p., 19 tabs.
- Spornraft, K.** 1971. Zwei neue Arten der Gattung *Oxycnemus* Er. Und Bestimmungstabelle für die bisher bekannten Arten (Coleoptera, Nitidulidae). *Opacula Zool.*, **116**: 1-10.

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