

## Fabrician types of Cassidinae (Coleoptera: Chrysomelidae) deposited in the Natural History Museum, London

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**Abstract.** All Fabrician types of Cassidinae found at the Natural History Museum, London were revised. The following new taxonomic changes were made: species status of *Basiprionota bipuncticollis* (Boheman, 1856) stat. restit., *Chelymorpha multipunctata* (Olivier, 1790) stat. restit., *Eugenysa decussata* (Fabricius, 1775) stat. restit., and *Aspidomorpha (Aspidomorpha) calligera* Boheman, 1854, stat. restit., are restored. The identities of *Cassida cincta* Fabricius, 1781, stat. nov., *Cassida dorsata* Fabricius, 1787, stat. nov., and *Cassida octopunctata* Fabricius, 1787, stat. nov., are corrected based on examination of type material. The following new synonymies are proposed: *Aspidomorpha isparetta* Boheman, 1854 = *Cassida cincta* Fabricius, 1781, syn. nov., *Aspidomorpha calligera* = *A. dorsata* sensu auctt., *Basiprionota bipuncticollis* = *B. privigna* (Boheman, 1862) syn. nov. = *B. octopunctata* sensu auctt., *Basiprionota octopunctata* (Fabricius, 1787) = *B. privigna* sensu auctt., *Cassida dorsata* Fabricius, 1787 = *Aspidomorpha fuscopunctata* Boheman, 1854, syn. nov. = *A. rubrodorsata* Boheman, 1854, syn. nov., *Cassida decussata* Fabricius, 1775 = *C. venosa* Fabricius, 1798, syn. nov., *Cassida marginella* Fabricius, 1775 = *Charidotis punctatostriata* Boheman, 1855, syn. nov. = *Charidotis herbida* Boheman, 1855, syn. nov., *Coccinella cassidea* Fabricius, 1775 = *Cassida cribraria* Fabricius, 1775, syn. nov. The species generally referred to as *Aspidomorpha cincta* (sensu auctt.) is left without a name, and is described here as *Aspidomorpha (Aspidomorpha) innominata* Sekerka sp. nov. A neotype is designated for *Coccinella cassidea* Fabricius, 1775 as the original type specimen is presumed lost. Lectotypes are designated for *Cassida cincta* Fabricius, 1781, *C. cribraria* Fabricius, 1775, *C. dorsata* Fabricius, 1787, *C. marginella* Fabricius, 1775 and *C. miliaris* Fabricius, 1775 to avoid further misinterpretations and to stabilize the current usage of the names. No type material of *Cassida sinuata* Fabricius, 1792 could be traced. Colour photographs of type specimens are provided.

**Key words.** Chrysomelidae, Johan Christian Fabricius, Joseph Banks, taxonomy, new synonymy, new species, new status, lectotype designation, neotype designation

## Introduction

Danish zoologist Johan Christian Fabricius (1745–1808) was one of the most prolific early entomologists, and named nearly 10,000 species, mostly insects. His original collection was divided between the Zoological Museum, University of Kiel, Germany (JFUK) and the Zoological Museum, University of Copenhagen, Denmark (ZMUC) because he had worked as a professor in both universities (TUXEN 1967). Often, even within the type series of various species, some specimens belong to JFUK, while others to ZMUC. In the 1960s ZMUC received the JFUK part of the Fabricius collection on permanent loan. Both parts (JFUK and ZMUC) of the collection were catalogued by ZMUC employee Ella Zimsen (ZIMSEN 1964). They are housed separately in ZMUC and well curated by the ZMUC staff. Specimens are organized in new drawers and a convenient unit tray system, except one original box that has been maintained in its original state for display (A. Solodovnikov, pers. comm.).

Fabricius was a regular visitor to London, where he studied the collection of the British Museum as well as that of Sir Joseph Banks (1743–1820). Banks was the President of the Royal Society and an eminent English naturalist and botanist, who had participated in Captain Cook's first Endeavour voyage (1768–1771). His collection, rich in Fabrician types, was originally left to the Linnean Society, but presented to the British Museum in 1863, and along with the other natural history material, transferred to the Natural History Museum, London (BMNH) in the 1880s, where it remains, described by ZIMSEN (1964) as 'well preserved and easily accessible'. The Coleoptera collection consists of 15 drawers, and is housed separately from the main collections.

Fabricius described 15 Cassidinae from collections in London, 14 in the genus *Cassida* Linnaeus, 1758 and one in *Coccinella* Linnaeus, 1758. Of these, 12 were from 'Mus. Dom. Banks' (collection of Master Banks) and three, including *Coccinella cassidea* Fabricius, 1775, in 'Mus. Britann.' (collection of the British Museum). Most of these specimens have never been examined by specialists working on Cassidinae. In many cases specimens standing under the same name in ZMUC and JFUK have been consulted instead, and present concepts have largely been based on these. However, in many cases specimens in Fabricius's own collections of species that he had described from other collections, are not in accordance with original descriptions, are often pinned on different pins, and were apparently acquired by him subsequently to description and should not be regarded as type material. Fabricius's concepts were broad, and specimens he may have regarded as conspecific, especially some years after the description, may not have been. We found discrepancies between BMNH and JFUK specimens of several species described from Banks's collection.

The first author had the opportunity to examine the ZMUC collections (including JFUK material) and to study all Fabrician types housed there. He also had the opportunity to study the Cassidinae collections of the BMNH including the Fabrician types in the Banks collection. As a result, we present below a list of Fabrician types of Cassidinae located in BMNH with necessary taxonomic changes and comments. All the taxonomic changes made are aimed to best serve the interests of nomenclatural stability, though, some major changes were required to keep the use of names in accordance with their type material.

## Material and methods

All specimens were studied using methods of standard comparative morphology and compared to additional type material whenever necessary. Original descriptions are cited as they appeared in the first edition of the respective work, except Gothic long letter 's' has been changed to normal letter 's' and letter 'v' was replaced with letter 'u' where necessary. Status given by ZIMSEN (1964) is also reproduced verbatim, with individual characters and comments discussed under 'Remarks'. Current status follows BOROWIEC'S (1999) catalogue or is adjusted according to new observations.

Type localities are cited as they appeared in the original descriptions. Label data for all specimens are verbatim as they appeared on the labels. Individual labels are separated by a double vertical bar ('||') while data on different rows by a single vertical bar ('|'). Additional comments and explanatory notes are given in the square brackets and following abbreviations are used for characteristics of the label: b – blue, bf – black frame, cb – cardboard paper, g – green, hw – handwritten, r – red, s – soft, w – white.

All type specimens are housed in the BMNH if not stated otherwise. Collection codens used in the paper:

BMNH	Natural History Museum, London, UK (formerly British Museum of Natural History);
DBET	Department of Biodiversity and Evolutionary Taxonomy, University of Wrocław, Poland (Lech Borowiec);
IRSN	Institut Royal des Sciences Naturelles de Belgique, Bruxelles, Belgium (Pol Limbourg);
JFUK	J. C. Fabricius collection, University of Kiel, Germany (currently in ZMUC);
LSPC	Lukáš Sekerka collection, Prague, Czech Republic;
MHNG	Muséum d'Histoire Naturelle, Genève, Switzerland (Ivan Löbl);
MRAC	Musée Royal de l'Afrique Centrale, Tervuren, Belgium (Eliane De Coninck);
NHMB	Naturhistorisches Museum, Basel, Switzerland (Eva Sprecher);
NHRS	Naturhistoriska Riksmuseet, Stockholm, Sweden (Johannes Bergsten);
NMPC	National Museum, Prague, Czech Republic (Jiří Hájek);
ZMUC	Zoological Museum, University of Copenhagen, Denmark (Alexey Solodovnikov).

## List of species described by Fabricius (in alphabetical order)

### *Cassida bidens* Fabricius, 1781

(Figs 1–3)

*Cassida bidens* Fabricius, 1781: 112.

**Type locality.** 'Brasilia'.

**Type material examined.** SYNTYPE: pinned, 'Cassida bidens | Fabr. Spec. 112. n. 32 [w, hw, s, bf]' (BMNH).

**Status in ZIMSEN (1964).** P. 91; No. 1345. 'London, 1 specimen'.

**Original description.** 'C. atra, elytris antice porrectis, spina suturali erecta.

Habitat in Brasilia. Mus. Dom. Banks.

Magna. Thoracis clypeus rotundatus, submarginatus dorso carinato niger maculis duabus ferrugineis obsoletis. Elytra reticulata, atra, immaculata, basi ultra caput porrecta, carinata, spinaque in medio suturae elongata, acuta, atra nitida. Corpus atrum femoribus anticis intus pallidis.' (FABRICIUS 1781).

**Current status.** *Dorynota* (*Dorynota*) *bidens* (Fabricius, 1781).

**Remarks.** The species was described from Banks's collection and ZIMSEN (1964) reported only a single specimen in BMNH, probably the only specimen Fabricius had for description.

*Dorynota bidens* has been correctly identified since its description. There is only one similar species, *D. nigra* (Boheman, 1856), which differs in its uniformly black dorsum with a dark green metallic sheen and a shorter dorsal spine, while *D. bidens* has dorsum black without metallic sheen and with a small reddish spot on the lateral slope of each elytron, and a long dorsal spine.

### *Cassida cincta* Fabricius, 1781

(Figs 4–6)

*Cassida cincta* Fabricius, 1781: 109 (junior primary homonym of *Cassida cincta* DeGeer, 1774).

**Type locality.** ‘Africa aequinoctiali’ [= equatorial Africa].

**Type material examined.** LECTOTYPE (here designated): ♀, pinned, ‘*Cassida cincta* | Fabr. Spec. 109. n. 9. [w, hw, s, bf]’ (BMNH). The specimen is provided with an additional label: ‘LECTOTYPUS | *Cassida* | *cincta* | Fabricius, 1781 | L. Sekerka & | M.V.L. Barclay des. 2014 [r, p, cb]’.

**Status in ZIMSEN (1964).** P. 89; No. 1295. ‘London, 1 specimen (Kiel 1 specimen)’.

**Original description.** ‘*C. thorace* elytrisq[ue] obscuris, margine flavescente, elytris ante marginem macula albo hyalina. Habitat in Africa aequinoctiali. Mus. Dom. Banks.

Statura omnino *C. interruptae*. Thorax rotundatus, integer obscurus margine flavescente. Elytra obscura margine flavo et ante marginem macula magna albo hyalina.

Variat rarius macula magna marginis ad basin et ante apicem.’ (FABRICIUS 1781).

**Current status.** New senior synonym of *Aspidomorpha isparetta* Boheman, 1854.

**Remarks.** BOHEMAN (1854) transferred this species to *Aspidomorpha* Hope, 1840 and placed *C. quadriremis* Gyllenhal, 1808 as its synonym. BOROWIEC (1999) used *A. quadriremis* as the valid name on the grounds that *Cassida cincta* Fabricius, 1781 was a junior homonym of *C. cincta* De Geer, 1775, and thus *C. quadriremis* was the next available synonym. However, this synonymy was based on a specimen of *A. quadriremis* housed in the NHRS which is not actually a type specimen. SEKERKA (2008) found that the true type of *A. quadriremis* is located in the Uppsala Museum where Gyllenhal’s collection is housed and that the specimen was conspecific with *A. tecta* Boheman, 1854. However because of the homonymy, SEKERKA (2008) proposed a new substitute name *A. fabricii* Sekerka, 2008 for *C. cincta* Fabricius not De Geer, 1775 and synonymized *A. tecta* with *A. quadriremis*.

FABRICIUS (1781) apparently based this species on more than one specimen, as he mentioned that the typical form was uniformly yellow with just the explanate margin of elytra with a hyaline spot, and mentioned a rare variety with large basal and postero-lateral spots on the explanate margin of elytra.

ZIMSEN (1964) mentioned one specimen in BMNH and one in JFUK (the latter placed in parentheses, suggesting it was possibly not mentioned in the original description). Both specimens have basal and postero-lateral spots on the explanate margin of elytra but each belongs to a different species. The JFUK specimen is in accordance with the widely applied concept of *A. cincta* (= *A. fabricii*), but does not agree with the original description of *A. cincta* as it does not have a large hyaline spot in the middle of the explanate margin of each elytron (this character is completely absent in this taxon). The BMNH specimen agrees with the original description as it has the hyaline spot. However, it is conspecific with *A. isparetta* Boheman, 1854. The latter is a widespread and very abundant species in Africa, displaying great variability in dorsal pattern (see BOROWIEC 1997), however, nearly all specimens have

more or less distinct hyaline spot on the explanate margin of elytra. The identification of some populations is complicated, but fortunately the BMNH specimen is a female possessing densely pubescent apex of the elytral epipleura, another typical character for *A. isparetta* which is present only in females.

We concur with ZIMSEN (1964) that Fabricius did not use the JFUK specimen in the description of *C. cincta* as it is very different from the BMNH one (pattern, convexity of elytra, body size, and general shape) and does not agree with the original description. Most likely Fabricius obtained the specimen later and included it under this species, however, it is also questionable whether this particular specimen was included in original Fabrician collection under *C. cincta*, because the collection was largely disorganized (ZIMSEN 1964). We were unable to trace any other specimen(s) which might belong to the original type series of *C. cincta*, so the BMNH specimen is the only one known to survive. The genus *Aspidimorpha* is rather complicated regarding its taxonomy and species identification, therefore we designate the BMNH specimen as the lectotype to avoid any further misapplications.

As we stated above, true *C. cincta* is conspecific with *A. isparetta*, so the two species need to be synonymized. However, because *C. cincta* Fabricius is a junior homonym of *C. cincta* De Geer, 1775, the name *A. isparetta* is the oldest available name for this species (see ICZN 1999: Article 60.2), and the recently proposed replacement name for *C. cincta* Fabricius, *A. fabricii* Sekerka, becomes its junior synonym. Due to the new synonymy, the species presently referred to as *A. fabricii/A. cincta* is without a name, and thus is here described as new species, *Aspidimorpha innominata* Sekerka sp. nov. (see p. 678).

### *Cassida cribraria* Fabricius, 1775

(Figs 7–9)

*Cassida cribraria* Fabricius, 1775: 90.

**Type locality.** ‘America’.

**Type material examined.** LECTOTYPE (hereby designated): ♀ (specimen with large spots on elytra), pinned, ‘*Cassida cribraria* | Fab. Entom. p. [printed] 90. n. 9. [w, hw, s, bf]’ (BMNH). PARALECTOTYPE: ♀ (specimen with small spots), without label and pinned next to the lectotype (BMNH). Both specimens are provided with an additional label: ‘LECTOTYPUS [or PARALECTOTYPUS, respectively] | *Cassida* | *cribraria* | Fabricius, 1775 | L. Sekerka & | M.V.L. Barclay des. 2014 [r, p, cb]’.

**Status in ZIMSEN (1964).** P. 90; No. 1315. ‘London, 2 specimens (Kiel 1 specimen)’.

**Original description.** ‘*C. rufescens*, thorace punctis quatuor, elytris numerioris, nigris, clypeo emarginato. Habitat in America. Mus. Dom. Banks.

Statura nostratum, at paulo major. Antennae apice nigrae. Clypeus emarginatus, rufescens, punctis quatuor dorsalibus nigris. Elytra laevia, gibba, rufescentia, punctis numerosis sparsis. Corpus nigrum.’ (FABRICIUS 1775).

**Current status.** New junior objective synonym of *Chelymorpha cassidea* (Fabricius, 1775).

**Remarks.** FABRICIUS (1775) proposed the species based on specimen(s) with four black spots on the pronotum and red elytra with black spots and black ventrites. BOHEMAN (1854) transferred the species to *Chelymorpha* Chevrolat, 1836 and used the name for South American specimens having the pronotum with two small spots and the elytra with numerous small black specks. ZIMSEN (1964) reported three specimens, two in the BMNH and one in JFUK (the latter placed in parentheses). The JFUK specimen is in accordance with BOHEMAN’S (1854) concept of *C. cribraria*, but, it does not agree with the original description.

*Chelymorpha cribraria* as defined and used since BOHEMAN (1854) is a very variable species, but the first author has never examined a specimen having four spots on pronotum in combination with numerous small black spots on the elytra, although BOHEMAN (1854) mentioned such a colour form as 'var. A'. Some populations have four irregular spots on the pronotum but these have a more or less black disc of the elytra. Moreover, *C. cribraria* sensu Boheman always has at least a slightly reddish or rust-coloured underside, like the JFUK specimen, but unlike the original description (FABRICIUS 1775) which mentions a black underside. Therefore we do not consider the JFUK specimen as part of the type series.

The two BMNH specimens agree with the original description having black body, red dorsum, and the pronotum with four black spots. What Fabricius meant by '[elytra] punctis numerosis sparsis' is questionable, since both specimens have each elytron with six spots and one common postscutellar spot. One specimen has these spots large and the other smaller, but still, the spots are at least sparsely distributed. In such cases Fabricius usually (though not always) gave a precise number of spots. Other characters are fully in accordance with the original description, and indeed 13 spots may be considered 'numerous', so we consider both specimens to be syntypes. Both specimens are conspecific with *Chelymorpha cassidea* (Fabricius, 1775) described in the same work as *C. cribraria* but in the genus *Coccinella* Linnaeus, 1758. We retain the name *C. cassidea* as valid with *C. cribraria* as its junior synonym following the First Reviser Principle, Article 24.2.1 of the Code (ICZN 1999), because *C. cassidea* has been correctly applied and refers to a common North American species (see further comments under *Coccinella cassidea*).

As we stated above, *C. cassidea* is a very variable species having several more or less distinct local races in the USA and the two Banks specimens of *C. cribraria* belong to different populations. Therefore we designate as the lectotype the specimen with larger elytral spots which represents the most common North American population, also characterized by fine punctuation of the elytra. The other specimen has, except for smaller spots, distinctly coarser punctuation thus certainly came from a different locality.

Due to the new synonymy, the taxon identified until now as *Chelymorpha cribraria* loses its name, and thus following the Code (ICZN 1999), the oldest available synonym *Chelymorpha multipunctata* (Olivier, 1790) becomes the valid name. This species was also designated as the type species of the genus *Chelymorpha* by DUPONCHEL & CHEVROLAT (1843).

### ***Cassida decussata* Fabricius, 1775**

(Figs 19–21)

*Cassida decussata* Fabricius, 1775: 93.

*Cassida venosa* Fabricius, 1798: 84, **syn. nov.**

**Type locality.** *Cassida decussata*: 'Jamaica'; *C. venosa*: 'Cajennae'.

**Type material examined.** *Cassida decussata*: SYNTYPE: ♂, pinned, '? [hw] Type [w, p, round label with red frame] || *venosa* Fabr. [b, hw by C. H. Boheman] || *Cassida*. | *decussata* [hw] | Fab. [hw] | Type? C.J.G. [hw] [w, p, cb, hw by C. J. Gahan]' (BMNH). *Cassida venosa*: SYNTYPE: pinned, '*venosa* [grey and hw by Fabricius pinned separately from the specimen]' (JFUK).

**Status in ZIMSEN (1964).** P. 237; No. 4100 (no material listed).

**Original description.** 'C. nigro coerulescens, elytris flavo maculatis: maculis dorsalibus reticulatis, lateralibus distinctis. Habitat in Jamaica. Mus. Brit.

Magna. Thoracis clypeus emarginatus, coerulescens, macula utrinque magna flava. Elytra dorso reticulata, margine maculis sex vel septem distinctis flavis.' (FABRICIUS 1775).



**Current status.** *Eugenysa decussata* (Fabricius, 1775) stat. restit.

**Remarks.** FABRICIUS (1775) described this species from BMNH material only. ZIMSEN (1964) did not locate any material of this species, but stated that it was considered a synonym of *Eugenysa grossa* (Linnaeus, 1758), a synonymy established by SCHÖNHERR (1808). Searching in the BMNH collection we found a single specimen which agrees with the original description, having pronotum with two reddish spots and explanate margin of the elytra with seven more or less defined red transverse spots. However, the specimen is conspecific with *E. venosa* (Fabricius, 1798) not *E. grossa* as suggested by SCHÖNHERR (1808). The specimen was also studied by C. H. Boheman as it has his original handwritten identification label stating '*E. venosa*'. However, Boheman apparently did not recognize the specimen as the Fabrician type. Charles Joseph Gahan, former BMNH Keeper of Entomology, labelled the specimen as a potential type around the turn of the 19<sup>th</sup> century. There is no other specimen in the BMNH collection which agrees with the original description. Particularly characteristic is the pronotum with large red spots, a rare feature in this species. Therefore we agree with Gahan and consider the specimen as syntype because Fabricius did not state how many specimens he used for description. However, quite likely this was the only specimen he had.

*Eugenysa grossa* always has a red pronotum (at most with two indistinct black specks) thus it is evident even from the original description that *C. decussata* could not be the same as *E. grossa*.

The syntype has a weakly convex elytra (gibbous in *E. grossa*) and the explanate margin of the elytra finely punctate (coarsely punctate in *E. grossa*). Because *C. decussata* is older name we restore its species status and place *E. venosa* as its junior synonym (the type in ZMUC has been seen).

The type locality of *E. decussata* is assumed to be erroneous as no species of *Eugenysa* is known from Antilles. The species is so far known only from French Guyana and Suriname.

### ***Cassida deusta* Fabricius, 1775**

(Figs 13–14)

*Cassida deusta* Fabricius, 1775: 89.

**Type locality.** 'nova Hollandia' [= Australia].

**Type material examined.** SYNTYPES (2 specimens): pinned, one with following label, the other without label: 'Cassida deusta | Fab. Entom. p. [printed] 89. n. 8. [w, hw, s, bf]' (BMNH): 1 specimen: pinned, 'deusta [grey and hw by Fabricius pinned separately from the specimen]' (JFUK).

**Status in ZIMSEN (1964).** P. 90; No. 1313. 'London, 2 specimens (Kiel 1 specimen)'.

**Original description.** 'C. rufescens, thorace punctis duobus, elytris numerosis cyaneo nigris, clypeo integro. Habitat in nova Hollandia. Dom. Banks.

Statura nostratum. Antennae apice nigrae. Clypeus rotundatus, integer, rufus, punctis duobus nigris in medio, elytra rufa, punctis circiter novem lateralibus majoribus nigro cyaneis. Margo subtus fasciis tribus. Corpus flavescens.' (FABRICIUS 1775).

**Current status.** *Aspidimorpha (Aspidimorpha) deusta* (Fabricius, 1775).

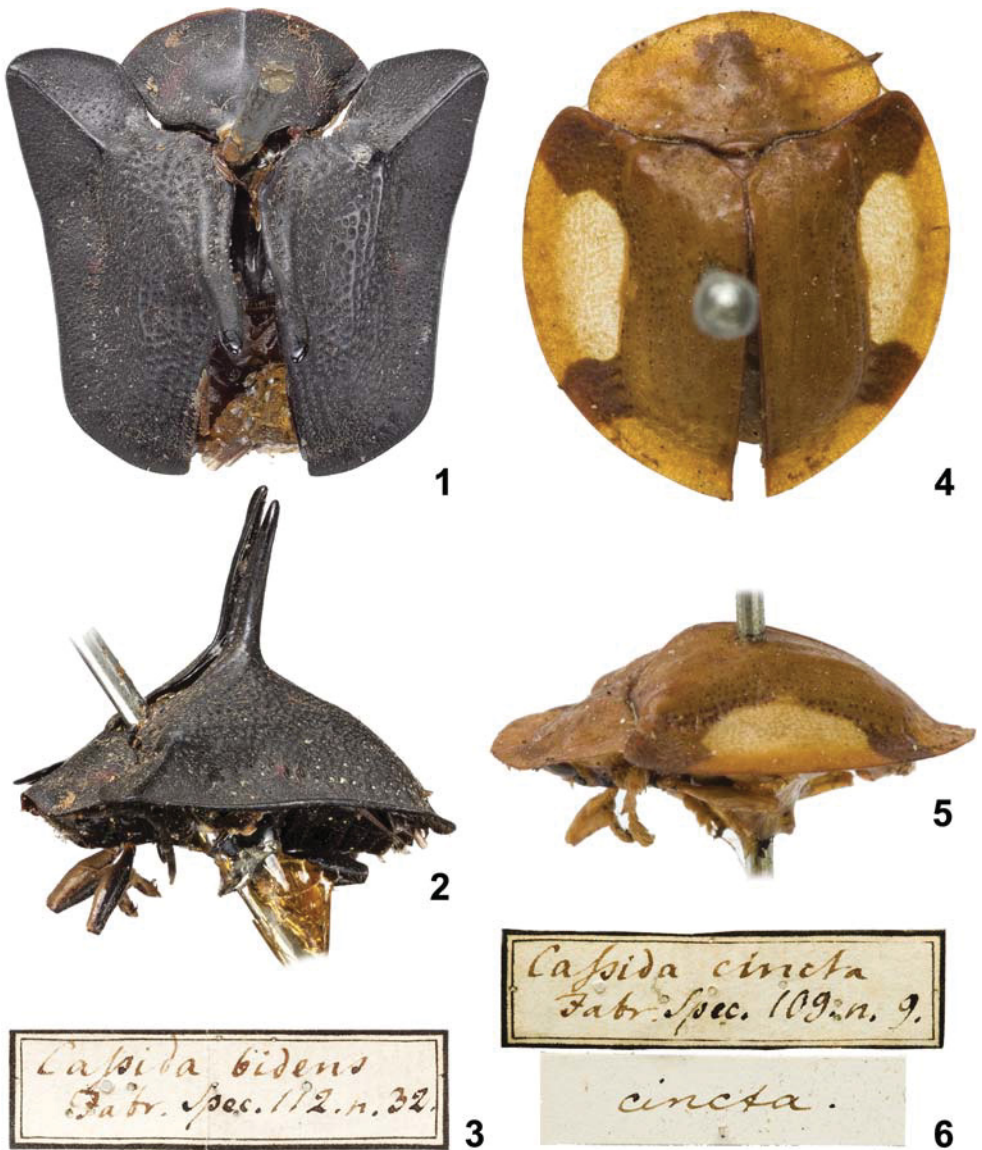
**Remarks.** *Cassida deusta* was described from the Banks collection and ZIMSEN (1964) reported two specimens in BMNH and one in JFUK. This is the only case when the JFUK specimen agrees morphologically with those in BMNH and is also pinned on the same kind of pin: therefore all three can probably be regarded as syntypes. The taxon is clearly distinct morphologically from other *Aspidimorpha* species and the name has been correctly applied since its description thus there is no need for a lectotype designation.

***Cassida dorsata* Fabricius, 1787**

(Figs 16–18)

*Cassida dorsata* Fabricius, 1787: 64.*Aspidimorpha fuscopunctata* Boheman, 1854: 298, **syn. nov.***Aspidimorpha rubrodorsata* Boheman, 1854: 310, **syn. nov.****Type locality.** *Cassida dorsata*: ‘Siam’; *A. fuscopunctata*: ‘Java’; *A. rubrodorsata*: ‘Java’.**Type material examined.** *Cassida dorsata*: LECTOTYPE (here designated): pinned, ‘*Cassida dorsata* | Fab. Mant Ins. 33. [w, hw, s, bf]’. The specimen is provided with an additional label: ‘LECTOTYPUS | *Cassida* | *dorsata* | Fabricius, 1787 | L. Sekerka & | M.V.L. Barclay des. 2014 [r, p, cb]’ (BMNH). *Aspidimorpha fuscopunctata*: LECTOTYPE (designated by BOROWIEC 1999): pinned, ‘Java. [w, p, s] || Mellb. [w, p, s] || Type. [w, p, s] || LECTOTYPE | des. L. Borowiec [r, p, cb] || NHRS-JLKB | 000020954 [w, p, cb]’ (NHRS). *Aspidimorpha rubrodorsata*: HOLOTYPE: pinned, ‘Java. [w, p, s] || Westerm [w, p, s] || Type. [w, p, s] || NHRS-JLKB | 000020956 [w, p, cb]’ (NHRS).**Status in ZIMSEN (1964).** P. 91; No. 1339. ‘London, 1 specimen’.**Original description.** ‘C. thorace elytrisque obscuris, elytris spina suturali margineque albi ante: basi obscuro. Habitat in Siam. Mus. Dom. Banks.’Statua omnino *C. iamaicensis* at duplo minor. Thoracis clypeus rotundatus, obscurus, nitens. Elytra antice ad suturam spinosa, fusca margine late albicante basi obscura. Corpus flavescens.’**Current status.** *Aspidimorpha (Aspidimorpha) dorsata* (Fabricius, 1787).**Remarks.** This species was described from the Banks collection and ZIMSEN (1964) mentioned only one specimen. *Cassida dorsata* was transferred by BOHEMAN (1854) to *Aspidimorpha* Hope, 1840 and since that time has been used for a common SE Asian species characterized by the elytra having only humeral spots, a sharp, high conical tubercle and elytra often with a dark pattern. However, Boheman most likely never studied the actual type specimen as his concept of *A. dorsata* is different from the type.*Cassida dorsata* sensu Fabricius is conspecific with *A. fuscopunctata* Boheman, 1854 as well as its synonym *A. rubrodorsata* Boheman, 1854, and both are here synonymized with it. Due to the new synonymy we restore specific status of *Aspidimorpha calligera* Boheman, 1854, stat. restit., which had been considered as a junior synonym of *A. dorsata*. Type specimens of all three discussed species have been examined and lectotype is designated for *C. dorsata* to avoid further misapplication of this taxon. All references (see BOROWIEC 1999, BOROWIEC & ŚWIĘTOJAŃSKA 2014) to *A. dorsata* since BOHEMAN (1854) therefore refer to *A. calligera*.Both species are widely distributed in SE Asia and some specimens are rather difficult to identify without series of properly identified specimens. Generally, *A. dorsata* is smaller (8–10 mm) and has body subcircular in outline while *A. calligera* is larger (9.3–12.6 mm) and has somewhat subtriangular body. *Aspidimorpha calligera* is a rather continental species which is not abundant in Indonesia (Java and Sumatra); all populations have distinct humeral spots on the explanate margin of elytra and frequently the disc of elytra with some dark markings. *Aspidimorpha dorsata* is abundantly distributed in both continental and insular Asia; insular populations usually do not have humeral spot on the explanate margin of the elytra and frequently have the disc of the elytra with dark markings, while continental populations usually have the humeral spot on the explanate margin of elytra (like the type) and the disc almost uniformly yellow. For detailed redescriptions, comparative notes, and key see ŚWIĘTOJAŃSKA (2001).





Figs 1–6. 1–3 – *Cassida bidens* Fabricius, 1781, syntype; 4–6 – *C. cincta* Fabricius, 1781, lectotype. (1, 4 – habitus dorsal; 2, 5 – habitus lateral; 3, 6 – labels).



7



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*Cassida cribraria*  
Fab. Entom. p. 90. n. 9.

9

*Cassida interrupta*  
Fab. Entom. p. 89. n. 7.

12

Figs 7–12. 7–9 – *Cassida cribraria* Fabricius, 1775, lectotype, and *Coccinella cassidea* Fabricius, 1775, neotype; 10–12 – *Cassida interrupta* Fabricius, 1775, syntype. (7, 10 – habitus dorsal; 8, 11 – habitus lateral; 9, 12 – labels).



Figs 13–18. 13–15 – *Cassida deusta* Fabricius, 1775, syntype; 16–18 – *Cassida dorsata* Fabricius, 1787, lectotype. (13, 16 – habitus dorsal; 14, 17 – habitus lateral; 15, 18 – labels).





19



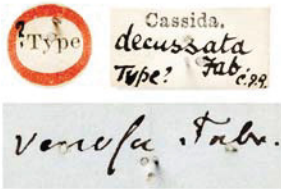
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Figs 19–24. 19–21 – *Cassida decussata* Fabricius, 1775, syntype; 22–24 – *Cassida gibbosa* Fabricius, 1781, syntype. (19, 22 – habitus dorsal; 20, 23 – habitus lateral; 21, 24 – labels).

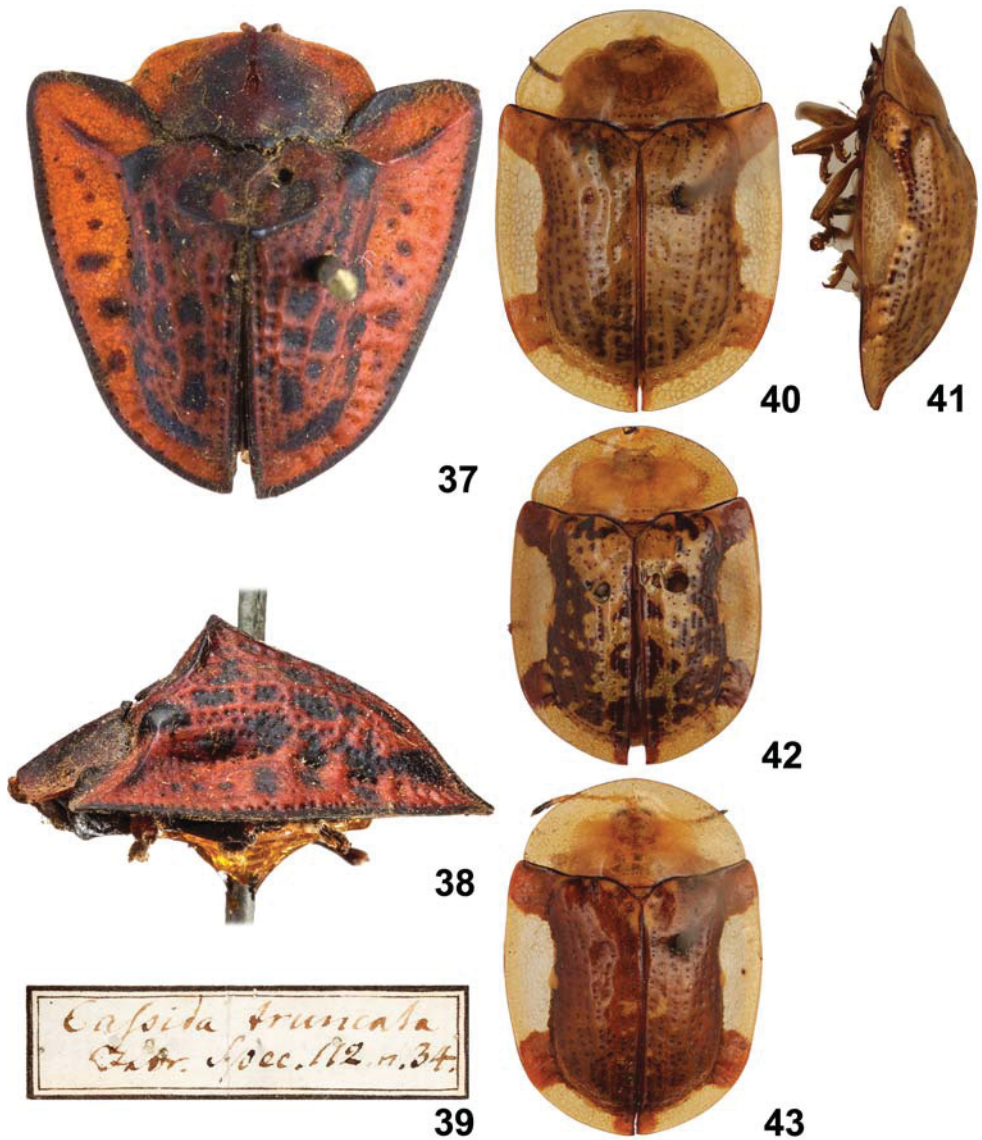


Figs 25–30. 25–27 – *Cassida marginella* Fabricius, 1775, lectotype; 28–30 – *Cassida miliaris* Fabricius, 1775, lectotype. (25, 28 – habitus dorsal; 26, 29 – habitus lateral; 27, 30 – labels).



Figs 31–36. 31–33 – *Cassida octopunctata* Fabricius, 1787, syntype; 34–36 – *Cassida sexpustulata* Fabricius, 1781, syntype. (31, 34 – habitus dorsal; 32, 35 – habitus lateral; 33, 36 – labels).





Figs 37–43. 37–39 – *Cassida truncata* Fabricius, 1781, syntype; 40–43 – *Aspidimorpha (Aspidimorpha) innominata* sp. nov.: 40–41 – holotype (Dakar, NMPC); 42 – paratype (Senegal, NMPC); 43 – paratype (Dakar, NMPC). (37, 40, 42–43 – habitus dorsal; 38, 41 – habitus lateral; 39 – label).

***Cassida gibbosa* Fabricius, 1781**

(Figs 22–24)

*Cassida gibbosa* Fabricius, 1781: 112.**Type locality.** ‘Brasilia’.**Type material examined.** SYNTYPE: pinned, ‘*Cassida gibbosa* | Fabr. Spec. 112. n. 33. [w, hw, s, bf]’ (BMNH).**Status in ZIMSEN (1964).** P. 91; No. 1346. ‘London, 1 specimen’.**Original description.** ‘*C. atra*, thorace maculis duabus villosis aureis, elytris virescenti reticulatis, spina suturali obtusa. Habitat in Brasilia. Mus. Dom. Banks.

Corpus magnum, atrum. Thoracis clypeus rotundatus, emarginatus maculis duabus magnis villosis aureis. Elytra atra viridi villosa reticulata margine nigro. Sutura in medio elevata in spinam obtusam. Pedes nigri plantis fuscis.’ (FABRICIUS 1781).

**Current status.** *Mesomphalia gibbosa* (Fabricius, 1781).**Remarks.** *Cassida gibbosa* was described from the Banks collection only and ZIMSEN (1964) reported just a single specimen in the BMNH, which was quite likely the only one Fabricius used for the description. HOPE (1840) placed it in *Mesomphalia* Hope, 1840 and since that time the name has been correctly applied and the present identification is in accordance with the type.***Cassida interrupta* Fabricius, 1775**

(Figs 10–12)

*Cassida interrupta* Fabricius, 1775: 89.**Type locality.** ‘nova Hollandia’ [= Australia].**Type material.** SYNTYPE: pinned, ‘*Cassida Interrupta* | Fab.Entom.p. [printed] 89. n. 7. [w, hw, s, bf]’ (BMNH).**Status in ZIMSEN (1964).** P. 90; No. 1309. ‘London, 1 specimen’.**Original description.** ‘*C. flavescens*, thorace immaculato, elytris ante marginem punctisque nigris. Habitat in nova Hollandia. Mus. Dom. Banks.Statura omnino praecedentis [*C. marginella*]. Antennae flavae, apice nigrae. Thoracis clypeus rotundatus, flavus, integer. Elytra flavescens, linea lata atra in medio interrupta, quae ante marginem a basi ad angulum ani excurrit. Margo ipse late flavescens fasciis duabus atris, altera ad basin, altera versus apicem. In disco obscuriore puncta aliquot nigra sparsa. Corpus subtus flavescens.’ (FABRICIUS 1775).**Current status.** *Aspidimorpha (Aspidimorpha) interrupta* (Fabricius, 1775).**Remarks.** This name has been correctly applied since its description and the present identification is in accordance with the type. A detailed redescription of *A. interrupta* was published by BOROWIEC (1992). ZIMSEN (1964) reported just a single specimen in the BMNH, which was quite likely the only one Fabricius used for the description.***Cassida marginella* Fabricius, 1775**

(Figs 25–27)

*Cassida marginella* Fabricius, 1775: 89.*Charidotis punctatostrata* Boheman, 1855: 49, **syn. nov.***Charidotis herbida* Boheman, 1855: 51, **syn. nov.****Type locality.** *Cassida marginella*: ‘Brasilia’; *Charidotis herbida*: ‘Saltogrande Brasiliae’; *Charidotis punctatostrata*: ‘Bolivia’.**Type material.** *Cassida marginella*: LECTOTYPE (here designated): pinned, ‘*Cass. Marginella* | Fab.Entom.p. [p] 89. n. 6. [w, hw, bf]’ (BMNH). PARALECTOTYPES: 1 spec., pinned (teneral specimen), without label but pinned in the same

series as previous specimen (BMNH). Both specimens are provided with an additional label: 'LECTOTYPUS [or PARALECTOTYPUS, respectively] | Cassida | marginella | Fabricius, 1775 | L. Sekerka & | M.V.L. Barclay des. 2014 [r, p, cb]'. *Charidotis herbida*: LECTOTYPE (designated by BOROWIEC 1999): pinned, 'Brasil [w, p, s] || Bhn. [w, p, s] || Type. [w, p, s] || NHRS-JLKB | 000021821 [w, p, cb]' (NHRS). *Charidotis punctatostrata*: LECTOTYPE (designated by BOROWIEC 1999): pinned, 'Boliv [w, p, s] || Guénil [w, p, s] || Type. [w, p, s] || NHRS-JLKB | 000021820 [w, p, cb]' (NHRS).

**Status in ZIMSEN (1964).** P. 89; No. 1293. 'London, 1 specimen. (Kiel 1 specimen)'.

**Original description.** 'C. viridis, thoracis elytrorumque marginibus flavis. Habitat in Brasilia. Mus. Dom. Banks.

Statura omnino C. nebulosae. Clypeus rotundatus, integer, viridis, margine flavo. Elytra punctata, viridia, margine flavo. Aliam vidimus simillimam, totam pallescentem, vix distinctam.' (FABRICIUS 1775).

**Current status.** *Charidotis marginella* (Fabricius, 1775).

**Remarks.** The species was described from the Banks collection and ZIMSEN (1964) mentioned one specimen in BMNH and one in JFUK. Based on the description, Fabricius must have had at least two specimens, as he mentioned one green specimen with a yellow margin and the other uniformly pale-yellow. The Banks Collection includes two specimens, on identical pins, and not one as listed by ZIMSEN (1964); one is apparently the green individual and the other the pale-yellow one mentioned by Fabricius, which is a teneral specimen. Both agree with the original description, as does the JFUK specimen, and there is an argument to include the latter as a syntype (on the assumption that Fabricius retained one).

*Charidotis marginella* forms together with two allies a natural group of three species defined by uniformly yellow-green dorsum (golden when alive) and latero-posterior slope of elytra irregularly punctate. BOHEMAN (1855) described the two species included in this group and separated them by pronotum finely punctate and elytra more convex with distinct postscutellar hump (*C. marginella* and *C. flavicans* Boheman, 1855) and *C. punctatostrata* Boheman, 1855 with pronotum distinctly punctate and elytra weakly convex. SPAETH (1936) also mentioned that the first two species have pronotum more rounded on sides. All three specimens have weakly convex elytra without a distinct hump and rather narrowly rounded lateral sides of pronotum but they differ in the punctuation of pronotum. The two BMNH specimens have densely punctate lateral sides of pronotum and are conspecific with typical *C. punctatostrata* specimens while the JFUK specimen has them weakly and finely punctate and is intermediate to *C. marginella* sensu BOHEMAN (1855). The punctuation of pronotum and convexity of elytra are evidently variable characters as we have studied long series of *C. punctatostrata* / *marginella* specimens collected in one locality and there are specimens with weakly convex elytra in combination with finely punctate pronotum while others show densely punctate pronotum and subgibbous elytra with distinct dorsal hump like in *C. marginella* sensu BOHEMAN (1855). BOHEMAN (1855) also mentioned that the species differs in broader or narrower body respectively, however, this seems to be at least partly affected by gender of specimens and this feature appears also to be different population to population. It is desirable to conduct more field studies to resolve status of these nominal taxa, however, we here synonymize *C. punctatostrata* and *C. herbida* Boheman, 1855 (previously synonym of the latter) with *C. marginella* because the two BMNH specimens agree with the types of *C. punctatostrata* and were certainly those used by Fabricius. As mentioned above the JFUK specimen is slightly different and most likely Fabricius obtained it after the description of *C. marginella*. Therefore we designate the fully sclerotized BMNH specimen as the lectotype and exclude the JFUK specimen from the type series.

***Cassida miliaris* Fabricius, 1775**

(Figs 28–30)

*Cassida miliaris* Fabricius, 1775: 91.**Type locality.** ‘insula St. Helenae’.**Type material examined.** LECTOTYPE (here designated): pinned, ‘Cassida Miliaris | Fab.Entom.p. [p] 91. n. 15. [w, hw, bf]’ (BMNH). The specimen is provided with an additional label: ‘LECTOTYPUS | Cassida | miliaris | Fabricius, 1775 | L. Sekerka & | M.V.L. Barclay des. 2014 [r, p, cb]’.**Status in ZIMSEN (1964).** P. 91; No. 1333. ‘London, 1 specimen. (Kiel 3 specimens)’.**Original description.** ‘C. flava, thorace immaculato, elytris nigro punctatis: margine bifasciato. Habitat in insula St. Helenae. Mus. Dom. Banks.

Statura C. marginatae. Antennae flavae, apice nigrae. Thoracis clypeus rotundatus, integer, immaculatus. Elytra laevia, flava, punctis circiter decem nigris sparsis. Margo uti in reliquis dilatatus fasciis duabus, altera ad basin, altera versus apicem nigris. Sutura apice nigra. Subtus nigra, margine flavescente. Pedes flavi.’ (FABRICIUS 1775).

**Current status.** *Aspidimorpha* (*Aspidimorpha*) *miliaris* (Fabricius, 1775).**Remarks.** ZIMSEN (1964) reported one BMNH and three JFUK specimens. It is unlikely that the three JFUK specimens were retained by Fabricius from the original Banks series as they do not agree well enough with the original description. FABRICIUS (1775) used for description specimen(s) with approximately ten black spots on each elytron. The BMNH specimen has the left elytron with eleven spots and right with ten while the JFUK specimens have larger and less numerous spots on the elytra. Therefore only the BMNH specimen is considered to be a syntype and is here fixed by lectotype designation to avoid any further confusions with JFUK specimens. The species has nearly always been identified and the name applied correctly.***Cassida octopunctata* Fabricius, 1787**

(Figs 31–33)

*Cassida octopunctata* Fabricius, 1787: 63.= *Basiprionota privigna* (Boheman, 1862) (misidentification): SPAETH (1925: 393), SPAETH (1926c: 117), BOROWIEC (2009: 447).**Type locality.** *Cassida octopunctata*: ‘Siam’ [= Thailand].**Type material examined.** *Cassida octopunctata*: SYNTYPE: ♀, pinned, ‘Cassida 8-punctata | e Siam | Fabr. Mant. Ins. n. 8 [w, hw, s, bf]’ (BMNH).*Prioptera bipuncticollis*: HOLOTYPE: ♀, pinned, ‘Type [w, p, s, circle label with red frame] || Java. | Horsfield. | 60–15. [w, p, cb] || Java | E.I.C. [w, hw, s] || 725 [w, hw, s] || 60•15 | E.I.C. [w, p, s] || Basiprionota | bipuncticollis | Bhn. n. sp. [b, hw, s, Boheman’s hw] || Prioptera | bipuncticollis | Type Bhn [w, hw by Gahan, cb]’ (BMNH).*Prioptera privigna*: Syntype: ♀, pinned, ‘Type [w, p, s, circle label with red frame] || Java [hw] | Baly Coll. | 1905–54. [w, p, cb] || Prioptera | Privigna | Boh | Java [w, hw by Baly, cb] || Coll | Horsfield | Type [hw by Baly on underside of previous label]’ (BMNH).**Status in ZIMSEN (1964).** P. 90; No. 1310. ‘London, 1 specimen’.**Original description.** ‘C. rufescens thorace punctis duobus, elytris quatuor cyaneo nigris. Habitat in Siam Mus. Dom. Banks.

Statura et magnitudo C. deustae. Antennae rufescentes apice nigrae. Thorax rufescens punctis duobus paruis nigris. Elytra punctata, rufescentia punctis quatuor maioribus cyaneo nigris 2. 2. Corpus rufescens.’ (FABRICIUS 1787).

**Current status.** *Basiprionota octopunctata* (Fabricius, 1787).**Remarks.** There is only a single specimen in the Banks collection, as reported by ZIMSEN (1964), and quite likely it is the only one Fabricius used for the description. BOHEMAN (1850)

transferred the species to *Prioptera* Hope, 1840 (now a synonym of *Basiprionota* Chevrolat, 1836) and placed it in the group of species with the convex basal part of the explanate pronotal margin connected to the disc. This concept was also followed by SPAETH (1925) in his revision of *Prioptera*. However, the type specimen has the pronotal disc completely separated from the explanate margin by a sulcus, and is conspecific with *B. privigna* Boheman, 1862 sensu SPAETH (1925). We have examined the type of *B. privigna*, also housed in BMNH, and found that it is conspecific with *B. bipuncticollis* (Boheman, 1856), which was until now considered as synonym of *B. octopunctata*.

As *B. octopunctata* and *B. bipuncticollis* are two distinct species, the latter is removed from synonymy and its specific status is restored. *Basiprionota privigna* was until now considered as a valid species (i.e. BOROWIEC & ŚWIĘTOJAŃSKA 2014) but it seems that Spaeth never examined its type as it falls according to his key (SPAETH 1925) under *B. octopunctata* (Fabricius, 1787). Most likely Spaeth followed BOHEMAN'S (1850) concept of the latter species as there is a specimen in the BMNH collection identified as *B. octopunctata* by Boheman but actually matching with *B. bipuncticollis* and *B. privigna*. BOHEMAN (1850, 1856) most likely did not examine the Fabrician type of *B. octopunctata*, as he stated that it had the explanate margin of the pronotum posteriorly convex, while the type specimen of *B. octopunctata* has it flat and completely separated from the disc.

The syntype of *B. privigna* was collected in Java by Horsfield, like the holotype of *B. bipuncticollis* (both also preserved in BMNH) and the latter differs only in the presence of two black spots on the disc of pronotum. The following new synonymy is proposed: *B. bipuncticollis* (Boheman, 1856) = *B. privigna* (Boheman, 1862) syn. nov. On the other hand, *B. privigna* sensu auctt. is conspecific with the true *B. octopunctata*. Therefore all published records of *B. octopunctata* since BOHEMAN (1850) refer to *B. bipuncticollis*.

Currently, true *B. octopunctata* is known with certainty only from Sumatra and Singapore. It is listed for Thailand because of the type, but that may be incorrectly labelled, since no other specimen is known from Thailand. The record from Java most likely refers to the type locality of *B. privigna*, as we were unable to assess any further records from this island.

### ***Cassida sexpustulata* Fabricius, 1781**

(Figs 34–36)

*Cassida 6 pustulata* Fabricius, 1781: 114.

**Type locality.** ‘Brasilia’.

**Type material examined.** SYNTYPE: pinned, ‘Cassida 6 pustulata | Fab.Entom.p. [printed]114. n. 46. [w, hw, s, bf]’ (BMNH).

**Status in ZIMSEN (1964).** P. 92; No. 1363. ‘London, 2 specimens’.

**Original description.** ‘C. cyanea, elytris maculis tribus rubris. Habitat in Brasilia. Mus. Dom. Banks.

Media. Thoracis clypeis transversus, cyaneus, immaculatus, antice subemarginatus. Elytra medio gibba, cyanea maculis tribus rubris, prima baseos, secunda in margine et tertia versus marginem.’ (FABRICIUS 1781).

**Current status.** *Cyrtonota sexpustulata* (Fabricius, 1781).

**Remarks.** ZIMSEN (1964) reported two specimens in BMNH, but apparently in error since there is only one (the opposite error occurred for *C. marginella*). This name has been correctly applied since its description and the present identification is in accordance with the type.



***Cassida sinuata* Fabricius, 1792**

*Cassida sinuata* Fabricius, 1792: 298.

**Type locality.** 'Asia'.

**Type material examined.** Presumably lost, not found in the BMNH collection.

**Status in ZIMSEN (1964),** P. 90; No. 1323 (no material listed).

**Original description.** 'C. flavescens ferruginea thorace postice sinuato, coleoptris punctis undecim nigris. Habitat in Asia Mus. Britann.

Media. Antennae, caput, thorax aut flava, aut ferruginea, immaculata. Thoracis margo posticus sinuatus. Elytra punctis quinque, primo baseos, secundo, ad suturam, tertio in medio, quatuor & quinto pari, & communi versus apicem.' (FABRICIUS 1792).

**Current status.** Junior synonym and primary junior homonym of *Basiprionota sinuata* (Olivier, 1790).

**Remarks.** So far, we have been unable to find any specimen in the collection which might represent potential type of *C. sinuata*. Judging from the description we are not sure whether the species was correctly synonymized with *B. sinuata* (Olivier, 1790) because the latter has differently positioned spots on elytra and with one spot on marginalia which was not mentioned by Fabricius. *Basiprionota sinuata* is a very variable species but it never has a spot on the suture, as in Fabricius's description.

ZIMSEN (1964) did not report any material for this species. However, it is possible that the species belongs to a quite different genus and any surviving type specimen(s) are standing unnoticed under a different species name. We processed in detail most of the BMNH Cassidinae, with the exception of the old world Cassidini and Aspidimorphini. There is a chance that the type could still be hidden among this material, but it is certainly not present in the main collection of *Basiprionota*.

***Cassida truncata* Fabricius, 1781**

(Figs 37–39)

*Cassida truncata* Fabricius, 1781: 112.

**Type locality.** Not given.

**Type material examined.** SYNTYPE: pinned, 'Cassida truncata | Fabr. Spec. 112. n. 34. [w, hw, bf]' (BMNH).

**Status in ZIMSEN (1964),** P. 91; No. 1347. 'London, 1 specimen'

**Original description.** 'C. rufa, elytris subreticulatis nigro maculatis dorso gibbis. Habitat ..... Mus. Dom. Banks.

Magna. Antennae nigrae. Thorax rufus maculis duabus dorsalibus nigris. Elytra basi truncata, gibba, rufa, subreticulata, nigro maculata, Margo rufus maculis simplicibus limboque ipso tenuissime nigro. Corpus nigrum.' (FABRICIUS 1781).

**Current status.** *Dorynota (Akantaka) truncata* (Fabricius, 1781).

**Remarks.** ZIMSEN (1964) reported just a single specimen (BMNH), which is quite likely to be the only one Fabricius used for the description. This name has been correctly applied since its description, and the present identification is in accordance with the type.

***Coccinella cassidea* Fabricius, 1775**

(Figs 7–9)

*Coccinella cassidea* Fabricius, 1775: 82.

*Cassida cribraria* Fabricius, 1775: 90, **syn. nov.**

**Type locality.** Original type locality of *C. cassidea*: 'Marylandia'. Due to the designation of neotype a new type locality is established: 'America', after the type locality of *C. cribraria* mentioned by FABRICIUS (1775: 90).



**Type material examined.** Original type material lost. NEOTYPE (present designation): ♀ (specimen with large spots on the elytra), pinned, 'Cassida cribraria | Fab. Entom. p. [p] 90. n. 9. [w, hw, s, bf] || LECTOTYPUS | Cassida | cribraria | Fabricius, 1775 | L. Sekerka & | M.V.L. Barclay des. 2014 [r, p, cb]' (BMNH). The specimen is provided with an additional label: 'NEOTYPE | Coccinella | cassidea | Fabricius, 1775 | L. Sekerka des. 2013 [r, p, cb]'.

**Status in ZIMSEN (1964).** P. 85; No. 1221 (no material listed).

**Original description.** 'C. oblonga rubra: coleoptris punctis duodecim, thorace quatuor nigris. Habitat in Marylandia. Mus. Brit.

Thorax ruber, punctis quatuor nigris, antice emarginatus, margine incrassato, postice tridentatus. Elytra punctis sex, antico minutissimo.' (FABRICIUS 1775).

**Current status.** *Chelymorpha cassidea* (Fabricius, 1775).

**Description of neotype.** Body elongate oval, 12 mm long (Fig. 7).

Pronotum red with four black spots. Scutellum brownish-black. Elytra red, each elytron with seven spots organized in three rows: first containing a single postscutellar spot forming a common spot; second row running along approximately internal third width of elytra and containing three spots, one at base, one at the level of postscutellar spot and one slightly behind; third row running along outer third of elytral width and containing three spots, one at humerus, one situated between 2nd and 3rd spot of the second row and one on apicolateral slope. Two internal spots, 2nd and 3rd of the second row, distinctly larger than other (Figs 7–8). Head yellow with black mouthparts, five basal antennomeres yellow with upper side infuscate, remaining antennomeres black. Thorax including legs black, only episterna of mesothorax slightly paler. Abdomen black, three apical ventrites with a small yellow spot on each side.

Disc of pronotum sparsely but distinctly micro-reticulate and dull. Anterior margin moderately emarginate, swollen. Lateral margins swollen. Basal corners of pronotum strongly projecting posteriorly, thus pronotum distinctly broader than base of elytra.

Scutellum smooth and shiny.

Elytra regularly convex, smooth, without any ribs or elevated structures. Punctuation dense, completely irregular. Punctures rather small but distinct, not particularly impressed. Interspaces two to four times wider than puncture diameter. Surface of elytra glabrous.

Clypeus approximately twice as wide as long, coarsely punctate. Prosternal collar moderately projecting towards mouthparts. Prosternal process moderately broad and slightly expanding apically. Tarsal claws divergent with large basal tooth.

**Differential diagnosis.** *Chelymorpha cassidea* belongs to a group of species characterized by a red dorsum with distinct black spots, elongate oval body, and weakly convex and finely to moderately punctate elytra. The group contains only three species: *C. cassidea* (Fabricius, 1775), *C. phytophagica* Crotch, 1873 and *C. rugicollis* Champion, 1893. *Chelymorpha cassidea* differs in bare elytra while *C. phytophagica* and *C. rugicollis* have pubescent elytra. The latter also has much coarser punctuation, more numerous spots on the elytra, and the postscutellar spot distinctly elongate. Mesoamerican species of the *C. comata* Boheman, 1854 group are similarly coloured, but this group differs in densely pubescent and gibbous elytra with coarse punctuation, with the exception of *C. comata*.

**Remarks.** FABRICIUS (1775) stated that the species was described only from BMNH material. ZIMSEN (1964) was not able to trace any surviving type specimens of this species, and we have also failed to find any potential type, and thus consider it as lost. Therefore we have designated a neotype.

CROTCH (1873) transferred *Coccinella cassidea* to *Chelymorpha* Chevrolat, 1836 and considered *C. cribraria* as its synonym, but without any additional comments. As the type is lost

we can judge only from the original description, and all characters listed apply to the species presently referred to as *C. cassidea* except Fabricius mentioned each elytron having six spots while the species has usually thirteen spots on elytra (six on each elytron plus one common postscutellar spot). The size of elytral spots is very variable in this species so it could be that Fabricius had some rare colour morph which was missing one of the elytral spots, and counted the postscutellar spot as two, making twelve in total. Regarding elytral punctures Fabricius also stated that the basal punctures are smaller, which is in accordance with most specimens that we have seen. Particularly important characters mentioned by Fabricius are those of the pronotum. He stated that it has thickened anterior and tridentate posterior margin. This is very characteristic of *Chelymormpha* species, which all have the hind angles of the pronotum projecting backwards, making the basal margin appear tridentate: no such pronotal shape is present in North American Coccinellidae. Fabricius also mentioned the oblong body which would be unusual for most coccinellids of this region. Moreover, Fabricius did not mention such characters in other *Coccinella* species described or treated in the same book (FABRICIUS 1775), and he must have considered them to be diagnostic for *C. cassidea*. Therefore we think that the transfer proposed by CROTCH (1873) was correct.

*Chelymormpha cassidea* is a widespread and very common North American species having several distinct local races, some of which might in the future be revealed as distinct species. Moreover, *C. cassidea* is synonymous with *C. cribraria* Fabricius, 1775, which had been used until now for a different species since BOHEMAN (1854). As the two names are published in the same work, we use the First Reviser Principle (ICZN 1999: Article 24.2.1) to select *C. cassidea* as the valid name for the taxon because it has been correctly applied, and this avoids changing the generally used name of a common species. In order to avoid any further misapplications of *C. cassidea* and *C. cribraria*, we have designated the lectotype of *C. cribraria* as the neotype of *C. cassidea*, making the names objective synonyms. Original descriptions of both species agree with the specimen in question.

## Description of a new species

### *Aspidimorpha innominata* Sekerka sp. nov.

(Figs 40–44)

*Aspidimorpha cincta* (Fabricius, 1781) (misidentification): BOHEMAN (1854: 251), SPAETH (1914: 73), BOROWIEC (1997: 230).

**Type locality.** Senegal, Dakar.

**Type material.** HOLOTYPE: pinned, 'Environs | de Dakar | Chissadon 1911 [w, hw, cb] || cincta F. [hw] | Spaeth det. [w, p, cb] || COLL.ACHARD | MUS.PRAGENSE [w, p, cb, bf]' (NMPC). PARATYPES: **BENIN:** **ZOU DEPARTMENT:** 1 spec., glued: 'Coll. R. I. Sc. N. B. | Le Moul't vendit [blue, p, cb] || Zagnanado, Dahomey [w, hw, s, glued on previous label]' (IRSN); 3 spec., pinned: 'Coll. R. I. Sc. N. B. | Dahomey | Zagnanado [hw] | Le Moul't vendit [blue, p, cb]' (IRSN). **BURKINA FASO:** **CENTRE REGION:** 2 spec., glued: 'COLL. MUS. TERVUREN | Haute-Volta : Ouaga- | dougou (lég. P.C. Fer- | nandez) X-70 [w, p, cb]' (DBET). **CAMEROON:** **NORTH REGION:** 1 spec., pinned: 'Kamerun int | Garua [= Garoua] | 19.-24.VII.09. | Riggerbach S.G. [b, p, cb] || Zool. Mus. | Berlin [w, p, cb] || ASPIDOMORPHA | 5-FAS-CIATA | DET.L.BOROWIEC [w, p]' (DBET). **CENTRAL AFRICAN REPUBLIC:** 11 spec., glued: 'Oubangui-Chari | Belg Congo | Coll Škulina [w, p, cb]' (NMPC, 2 LSPC). **NANA-GRÉBIZI PREFECTURE:** 14 spec., 11 glued and 3 pinned: 'Coll. R. I. Sc. N. B. | Rép. Centrafricaine | (Congo Français) | Fort Crampel [nowadays Kaga-Bandoro] | ex coll. Le

Moult [b, p, cb]' (7 IRSN, 6 DBET, 1 LSPC). **CHAD: N'DJAMENA REGION:** 7 spec., pinned: 'Fort Lamy | 30.IX.55 [w, p, cb] || Exped.Mus.G.Frey | Tchad A.E.F. | Bechyne 1955 [w, p, cb]' (NHMB, 1 LSPC); 12 spec., pinned: 'Fort Lamy | 1.X.55 [w, p, cb] || Exped.Mus.G.Frey | Tchad A.E.F. | Bechyne 1955 [w, p, cb]' (NHMB, 3 LSPC). **DEMOCRATIC REPUBLIC OF THE CONGO: ORIENTALE PROVINCE:** 1 spec., glued: 'Coll. R. I. Sc. N. B. | Congo belge Mahagi | Abok, 5-iii-1929 | A.Collart [b, p, cb, three last rows on w, p, cb label glued to the previous]' (DBET). **ERITREA: NORTHERN RED SEA REGION:** 1 spec., glued: 'Ghinda | Eritrea [w, p, cb] || cincta [w, hw, cb] || NHRS-JLKB | 000022818 [w, p, cb]' (NHRS). **THE GAMBIA: BANJUL AREA:** 1 spec., glued: 'The Gambia | BANJUL | T-E Leiler [w, p, cb] || 8.1. | 1968 [hw on underside of previous label] || NHRS-JLKB | 000022824 [w, p, cb] || Aspidimorpha | quadrimem Sch. | det. L. Borowiec [w, p]' (NHRS); 1 spec., pinned: 'THE GAMBIA | Kotu Stream | 7[hw].11.1981 | B. Gustafsson [w, p, cb] || NHRS-JLKB | 000022826 [w, p, cb] || Aspidimorpha | quadrimem Sch. | det. L. Borowiec [w, p]' (NHRS). **BRIKAMA AREA:** 2 spec., glued: 'Gambia. | Bakau [hw] | Jan. 06 [hw] | G.C.Dudgeon. | 1906-73. [w, p, cb]' (BMNH); 1 spec., glued: 'The Gambia | BAKAU | T-E.Leiler [w, hw] || 1.1. | 1968 [hw on underside of preceding label] || Riksmuseum | Stockholm [g, p]' (DBET); 1 spec., glued: 'The Gambia | BAKAU | T-E Leiler [w, p] || 7.1. | 1968 [hw on underside of previous label] || NHRS-JLKB | 000022823 [w, p, cb] || Aspidimorpha | quadrimem Sch. | det. L. Borowiec [w, p]' (NHRS); 1 spec., glued: 'Gambia. Kombo S.Mary | Bakau | 25[hw]-11-1976 G. Wängsjö [w, p, cb] || 1326 [hw on underside of previous label] || NHRS-JLKB | 000022827 [w, p, cb] || Aspidimorpha | quadrimem Sch. | det. L. Borowiec [w, p]' (NHRS); 1 spec., glued: 'GAMBIA Kombo North | Bijilo Forest Park | 26-11-1976 G. Wängsjö [w, p, cb] || 1327 [hw on underside of preceding label] || NHRS-JLKB | 000022825 [w, p, cb] || Aspidimorpha | quadrimem Sch. | det. L. Borowiec [w, p]' (NHRS). **JANJANBUREH AREA:** 1 spec., pinned: 'Gambia | Mc Carthy Isl. | G. Svenson [w, p, cb] || NHRS-JLKB | 000022819 [w, p, cb] || Aspidimorpha | quadrimem Sch. | det. L. Borowiec [w, p]' (NHRS); 1 spec., pinned: 'Gambia | Mc Carthy Isl. | G. Svenson [w, p, cb] || NHRS-JLKB | 000022820 [w, p, cb] || Aspidimorpha | quadrimem Sch. | det. L. Borowiec [w, p]' (NHRS); 1 spec., pinned: 'Gambia | Mc Carthy Isl. | G. Svenson [w, p, cb] || NHRS-JLKB | 000022821 [w, p, cb] || Aspidimorpha | quadrimem Sch. | det. L. Borowiec [w, p]' (NHRS). **KEREVAN AREA:** 1 spec., glued: 'The Gambia | M BOLLET | T-E Leiler [w, p, cb] || 8.1. | 1968 [hw on underside of previous label] || NHRS-JLKB | 000022822 [w, p, cb] || Aspidimorpha | quadrimem Sch. | det. L. Borowiec [w, p]' (NHRS). **GHANA:** 1 spec., pinned: 'Togo,Hinterland | Weg nach Salaga | Döring S. [b, p, cb] || Zool. Mus. | Berlin [w, p, cb]' (DBET). **GUINEA:** 1 spec., glued: 'Rep. de Guinée | Kandan 2-62 | Dr. Krýsa lgt [w, hw, cb]' (NMPC). **KINDIA REGION:** 1 spec., glued: 'Kindia 27 | Guinea franc. | Baum lgt. [w, p, cb]' (NMPC). **GUINEA-BISSAU:** 1 spec., pinned: 'Bocan; | Guin.Port. [w, hw by Clark, cb] || 213 [blue, hw, cb] || 67-56 [w, p]' (BMNH). **MALI: SIKASSO REGION:** 1 spec., glued: 'MALI Sikasso | 4 [hw] X 1994 | Longorola [hw] | J.M. MALDES [b, p, cb] || sur patate | douce [= on sweet potato] [b, hw, cb] || Aspidimorpha | quadrimem Sch. | det. L. Borowiec [w, p, cb, bf]' (DBET). **NIGERIA:** 2 spec., glued: 'Nigeria | II-1998 | leg. Balletto [w, p, cb]' (MDC). **BAUCHI STATE:** 2 spec., pinned: 'N.NIGERIA. | Azare. | 1925 | Dr.LI. Lloyd. [w, p, cb] || Pres. by | Imp.Inst.Ent. | Brit.Mus. | 1933-64. [w, p, cb]' (BMNH, LSPC); 1 spec., pinned: 'N.NIGERIA. | Azare. | 1925 | Dr.LI.Lloyd. [w, p, cb] || Pres. by | Imp.Inst.Ent. | Brit.Mus. | 1926-213. [w, p, cb]' (BMNH). **ENUGU STATE:** 7 spec., pinned: 'Enugu | 31.X.55 [w, p, cb] || Exped.Mus.G.Frey | Nigeria-Kamerun | Bechyne 1955.56 [w, p, cb]' (NHMB). **FEDERAL CAPITAL TERRITORY:** 1 spec., glued: 'NIGERIA Fed. Capital | Abuja 10.x.2009 | 9°12'49"N, 7°25'55"E | Kremítovský lgt. [w, p, cb]' (LSPC). **KADUNA STATE:** 1 spec., pinned: 'NIGERIA | Samaru. | 18-25.v.1970. | P.H.Ward. | B.M.1970-604. [w, p, cb]' (BMNH). **KANO STATE:** 1 spec., glued: 'W.E.S.Merrett. | B.M. 1967-270. [w, p, cb] || KANO [hw] | Lagos Dist. [w, p, cb] | N [hw] S.Nigeria | NOV [hw] 19[p]51[hw] | W.E.S.Merrett [w, p, cb]' (BMNH); 1 spec., glued: 'W.E.S.Merrett. | B.M. 1967-270. [w, p, cb] || Kano Dist. [w, p, cb] | N.Nigeria | JUNE [hw] 195[p]3[hw] | W.E.S.Merrett. [w, p, cb]' (BMNH); 2 spec., pinned: 'Kano | 4.X.55 [w, p, cb] || Exped.Mus.G.Frey | Nigeria-Kamerun | Bechyne 1955.56 [w, p, cb]' (NHMB); 1 spec., pinned: 'Kano | 5.X.55 [w, p, cb] || Exped.Mus.G.Frey | Nigeria-Kamerun | Bechyne 1955.56 [w, p, cb]' (NHMB). **NIGER STATE:** 1 spec., pinned: 'NIGERIA | Minna | G. Wilson. | (Proc.R.Ent.Soc. | 1934. p.7. [w, hw]' (BMNH); 1 spec., pinned: 'Zungeru, | N. Nigeria, | Dr. Williams. | 1910-289. [w, hw, cb]' (BMNH); 1 spec., glued: 'N.Nigeria, | Zungeru. | 2.11.10. [hw] | Dr.W.Morrison. | 1911-423. [w, p, cb]' (BMNH). **SENEGAL:** 1 spec., pinned: 'Seneg [w, p, cb] || Chevr [w, p, cb] || NHRS-SRAH | 000000041 [w, p, cb]' (NHRS); 1 spec., pinned: 'Seneg [w, p, cb] || Chevr [w, p, cb] || NHRS-JLKB | 000022811 [w, p, cb]' (NHRS); 1 spec., pinned: 'Seneg [w, p, cb] || Mhm. [w, p, cb] || NHRS-JLKB | 000022812 [w, p, cb]' (NHRS); 1 spec., pinned: 'Seneg [w, p, cb] || NHRS-JLKB | 000022813 [w, p, cb]' (NHRS); 1 spec., pinned: 'Seneg [w, p, cb] || M. Berl [w, p, cb] || NHRS-JLKB | 000022814 [w, p, cb]' (NHRS); 1 spec., glued: 'Aspidimorph | 5 fasciata | Senegal [w, hw, cb] || COLL.ACHARD | MUS.PRAGENSE [w, p, cb, bf]' (NMPC); 1 spec., glued: 'Aspidimorph | 5 fasciata | Senegal [w,

hw, cb) || COLL.ACHARD | MUS.PRAGENSE [w, p, cb, bf] (NMPC); 1 spec., glued: 'E. Coll. | Chev'. [w, p, cb] || Aspidimorph | cincta B | Senegal [w, hw, cb] || COLL.ACHARD | MUS.PRAGENSE [w, p, cb, bf] (NMPC); 1 spec., pinned: 'Senegal [w, hw, cb] || COLL.ACHARD | MUS.PRAGENSE [w, p, cb, bf] (NMPC); 4 spec., pinned: 'Senegal [w, p, cb] || COLL.ACHARD | MUS.PRAGENSE [w, p, cb, bf] (NMPC); 1 spec., pinned: 'Senegal [w, hw, cb] || COLL.ACHARD | MUS.PRAGENSE [w, p, cb, bf] || Aspidomorpha | cincta F. [hw] | Spaeth det. [w, p, cb] (NMPC); 2 spec., pinned: 'Sénégal [green, hw, cb, bf] || cincta F. [hw] | Spaeth det. [w, p, cb] || COLL.ACHARD | MUS.PRAGENSE [w, p, cb, bf] (NMPC, LSPC); 1 spec., pinned: 'West-Afrika | Senegal [hw] [w, p, cb, bf] || Aspidomorpha | cincta F. [Spaeth's hw] | Spaeth det. [w, p] || Zool. Mus. | Berlin [w, p, cb] (DBET); 1 spec., pinned: 'MUSÉE DU CONGO | Sénégal | Don Burgeon [w, p, cb] || R. DÉT. | M [hw] | 1258 [w, p, cb] || Aspidomorpha | cincta [hw by Spaeth] | Spaeth det. [w, p, cb] (MRAC); 2 spec., one glued other pinned: 'MUSÉE DU CONGO | Sénégal | Don Burgeon [w, p, cb] || R. DÉT. | M [hw] | 1258 [w, p, cb] (MRAC); 1 spec., pinned: 'MUSÉE DU CONGO | Sénégal: | Coll. Clavareau [w, p, cb] || Sénégal [w, hw, s] || Aspid. [hw by Spaeth] | cincta [hw by Spaeth] | det. Spaeth [w, p, cb] || Determination | Dr. F. Spaeth [w, hw, cb] || Aspidomorpha | Cincta | Fab. [w, hw, cb] (MRAC); 1 spec., pinned: 'Coll. R. I. Sc. N. B. [blue, p, cb] || Sénégal [w, hw, cb, glued on the previous label] (IRSN); 1 spec., pinned: 'Coll. R. I. Sc. N. B. | Sénégal | ex coll. F. Chapuis [blue, p, cb] || Senegal [w, hw, cb, glued on previous label] || det. [p] Chapuis [hw] [w, p, cb] || Aspidimorph | cincta [w, hw, s, glued on previous label] (IRSN); 3 spec., pinned: 'Coll. R. I. Sc. N. B. | Sénégal | ex coll. F. Chapuis [blue, p, cb] || D. Chapuis det. | ASPIDOMORPHA | cincta [hw] [w, p, cb] (IRSN); 1 spec., pinned: 'Coll. R. I. Sc. N. B. | Sénégal | ex coll. Bonneuil [blue, p, cb] (IRSN); 1 spec., pinned: 'Coll. R. I. Sc. N. B. | Sénégal | Le Moutl vendit [blue, p, cb] || Aspidimorph | cincta F. [hw] | det. L. Borowiec [w, p, cb] (IRSN); 1 spec., pinned: 'Coll. R. I. Sc. N. B. | Sénégal | Le Moutl vendit [blue, p, cb] || Aspidomorpha | cincta | Linn | Sénégal [w, hw, s] (IRSN); 1 spec., glued: 'ex dress | hem [w, hw, cb] || W. Africa | Senegal | NOV. 1975 | B.M. 1976-30 [w, hw, cb] || exhibited on | television programme | 'Blue Peter' [w, hw, cb] (BMNH). **DAKAR REGION:** 1 spec., pinned: 'Dakar | 12.09 [w, hw, cb] || COLL.ACHARD | MUS.PRAGENSE [w, p, cb, bf] (NMPC); 2 spec., pinned: 'Exped. Mus.G.Frey | Franz.Guinea 1951 | W.Afr.leg.Bechyne [w, p, cb] || Dakar | 4.6.51 [w, p, cb] (NHMB); 1 spec., pinned: 'IFAN [p] 1.XI. [hw] 19[p]63[hw] | DAKAR [hw] | FANN [hw] | R. ROY [w, p, cb] (DBET); 1 spec., glued: 'IFAN [p] 5.XI. [hw] 19[p]64[hw] | DAKAR [hw] | FANN [hw] | J. N. [hw] ROY [w, p, cb] (DBET); 1 spec., glued: 'DAKAR | Fin X.1964 | J. N. Roy [w, hw, cb] (DBET). **DIOURBEL REGION:** 2 spec., pinned: 'SENEGAL | Bambey | 19.-23. XII.1939 [hw] | J. Risbec [w, p, cb] || Pres. by | Imp. Ins. Ent. | B.M. 1942-102. [w, p, cb] (BMNH, LSPC); 14 spec., pinned: 'SENEGAL | Bambey | - XII. 2. 1. 1940 [hw] | J. Risbec [w, p, cb] || Pres. by | Imp. Ins. Ent. | B.M. 1942-102. [w, p, cb] (BMNH, 3 LSPC); 2 spec., pinned: 'SENEGAL | Bambey | II.1940 [hw] | J. Risbec | No. 9152- [w, p, cb] || Pres. by | Imp. Ins. Ent. | B.M. 1942-102. [w, p, cb] (BMNH); 2 spec., pinned: 'SENEGAL | Bambey | IV.1940 [hw] | J. Risbec | No. [p] 9197 [hw] [w, p, cb] || Pres. by | Com. Ins. Ent. | B.M. 1948-529. [w, p, cb] || Aspidomorpha [hw] | cincta [hw] | Boh. [hw] | Det. G.E.Bryant [w, p, cb] (BMNH); 4 spec., pinned: 'SENEGAL | Bambey | IV.1940 [hw] | J. Risbec | No. [p] 9197 [hw] [w, p, cb] || Pres. by | Com. Ins. Ent. | B.M. 1948-529. [w, p, cb] (BMNH); 12 spec., pinned: 'SENEGAL | Bambey | IV.1940 [hw] | J. Risbec | No. [p] 9194 [hw] [w, p, cb] || Pres. by | Com. Ins. Ent. | B.M. 1948-525. [w, p, cb] (BMNH, 2 LSPC); 1 spec., pinned: 'SENEGAL | Bambey | IV.1940 [hw] | J. Risbec | No. [p] 9194 [hw] [w, p, cb] || Pres. by | Com. Ins. Ent. | B.M. 1948-525. [w, p, cb] || Aspidomorpha [hw] | cincta [hw] | Boh. [hw] | Det. G.E.Bryant [w, p, cb] (BMNH); 1 spec., pinned: 'SENEGAL | Bambey | 1945 | J. Risbec [w, p, cb] || Pres. by | Com. Ins. Ent. | B.M. 1948-525. [w, p, cb] (BMNH); 1 spec., pinned: 'SENEGAL | Bambey | 1945 | J. Risbec. [w, hw, cb] || Pres. by | Com. Ins. Ent. | B.M. 1948-525. [w, p, cb] (BMNH); 1 spec., pinned: 'SENEGAL | Bambey | 1945 | J. Risbec [w, p, cb] || Pres. by | Com. Ins. Ent. | B.M.1948-143 [w, p, cb] (BMNH); 1 spec., pinned: 'COLL. MUS. CONGO | Senegal: M'Bambey | 1/11 [hw vertically on side] 7-III[hw]-1939 | M. Risbec [w, p, cb] || R. DÉT. | Z. [hw] | 4727 [w, p, cb] || cincta [hw by Spaeth] | Spaeth det. [w, p, cb] | Im | orange [blue, hw, cb, bf] (MRAC); 2 spec., pinned: 'COLL. MUS. CONGO | Senegal: M'Bambey | 22-IV[hw]-1939 | M. Risbec [w, p, cb] || R. DÉT. | Z. [hw] | 4727 [w, p, cb] || cincta [hw by Spaeth] | Spaeth det. [w, p, cb] (MRAC); 1 spec., pinned: 'COLL. MUS. CONGO | Senegal: M'Bambey | 11-20-VII[hw]-1939 | M. Risbec [w, p, cb] || R. DÉT. | Z. [hw] | 4727 [w, p, cb] || Aspidomorpha | cincta F. [hw by Spaeth] | Spaeth det. [w, p, cb] (MRAC); 2 spec., pinned: 'COLL. MUS. CONGO | Senegal: M'Bambey | 22-VII[hw]-1939 | M. Risbec [w, p, cb] || R. DÉT. | Z. [hw] | 4727 [w, p, cb] || Asp. [hw by Spaeth] | cincta [hw by Spaeth] | Spaeth det. [w, p, cb] (MRAC); 2 spec., glued: 'COLL. MUS. CONGO | Senegal: M'Bambey | 28-X-6-XI[hw]-19[p]39[hw] | M. Risbec [w, p, cb] || R. DÉT. | Z. [hw] | 4727 [w, p, cb] || Aspid. [hw by Spaeth] | cincta [hw by Spaeth] | Spaeth det. [w, p, cb] (MRAC); 3 spec., two pinned, one glued: 'COLL. MUS. CONGO | Senegal:

M'Bambey | 22-27-I[hw]-194[p]0[hw] | M. Risbec [w, p, cb] || R. DÉT. | Z. [hw] | 4727 [w, p, cb]' (MRAC); 2 spec., pinned: 'COLL. MUS. CONGO | Senegal: M'Bambey | 25-III-9-IV[hw]-194[p]0[hw] | M. Risbec [w, p, cb] || R. DÉT. | Z. [hw] | 4727 [w, p, cb]' (MRAC); 1 spec., glued: 'COLL. MUS. CONGO | Senegal: M'Bambey | 25-III-9-IV[hw]-194[p]0[hw] | M. Risbec [w, p, cb] || R. DÉT. | Z. [hw] | 4727 [w, p, cb]' || cincta [hw by Spaeth] | Spaeth det. [w, p, cb]' (MRAC); 1 spec., pinned: 'COLL. MUS. CONGO | Senegal: M'Bambey | 9-15-IV[hw]-194[p]0[hw] | M. Risbec [w, p, cb] || R. DÉT. | G [hw] | 4514 [w, p, cb] || Aspid. [hw by Spaeth] | cincta [hw by Spaeth] | Spaeth det. [w, p, cb]' (MRAC). SAINT-LOUIS REGION: 7 spec., pinned: 'SENEGAL | Guede [hw] | ii.1946 [hw] | J. Risbec. [w, p, cb] || Pres. by | Com. Ins. Ent. | B.M.1948-143 [w, p, cb]' (BMNH, 1 LSPC). UNKNOWN REGION: 1 spec., pinned: 'Coll. R. I. Sc. N. B. | Senegal: riv. Bao | 10-VII-1938 | Le Moul't vendit [blue, p, cb] || Aspidomorpha [hw] | cincta F. [hw] | det. L. Borowiec [w, p, cb]' (IRSN). SIERRA LEONE: 1 spec., pinned: 'MUSÉE DU CONGO | Sierra Leone [hw] | D. Ent. Nat. Mus. | Ex coll Kraatz [w, p, cb] || S<sup>o</sup> Leone [w, p, cb, bf] || Coll. Kraatz | Spaeth det. [w, p, cb] || R. DÉT. | F [hw] | 1336 [w, p, cb] || A. cincta F. [pink, hw, s]' (MRAC). SUDAN: DARFUR PROVINCE: 1 spec., pinned: 'W.DARFUR: | S.Jebel Murra, | Kallikitting. | 4,450 ft. 7[hw].vi.1932. | M.Steele. [w, p, cb] || 82. [w, hw] || Aspidomorpha | cincta F. [hw by F. Spaeth] | Spaeth det. [w, p, cb] || Pres.by | Imp.Inst.Ent. | B.M.1936-505. [w, p, cb]' (BMNH). TOGO: MARITIME REGION: 10 spec., pinned: 'Togo | Lome [w, p, cb]' (NHMB, 2 LSPC). UNKNOWN LOCALITIES: 1 spec., pinned: 'Niger | Benne [b, J. Weise's hw, cb] || Nigr. Benn. [w, hw, cb] || Zool. Mus. | Berlin [w, p, cb] || ASPIDOMORPHA | 5-FASCIATA | DET.L.BOROWIEC [w, p]' (DBET); 1 spec., pinned: 'Rafriqu [w, hw] || Späth | 1899 [w, hw, cb] || Aspidomorpha | cincta F. [p, hw] || COLL.NICKERL | MUS.PRAGENSE [w, p, cb, bf]' (NMPC); 1 spec., pinned: 'E. Coll. | Chev.<sup>1</sup> [w, p]' || Catein | Cazavr [blue, hw, circle label] || cincta | F. Bhn | col AK [w, hw by Chevrolat] || 67-56 [w, p]' (BMNH). WITHOUT LOCALITY DATA: 1 spec., pinned: '67-56 [w, p]' (BMNH); 1 spec., pinned: 'E. Coll. | Laferté [w, p] || 67-56 [w, p]' (BMNH); 1 spec., pinned: 'E. Coll. | Chev.<sup>1</sup> [w, p] || 67-56 [w, p]' (BMNH); 1 spec., pinned: 'E. Coll. | Chev.<sup>1</sup> [w, p] || Asp. | cincta | var. Bhn. | [illegible] [w, hw by Chevrolat, cb] || 67-56 [w, p]' (BMNH); 1 spec., pinned: 'E. Coll. | Chev.<sup>1</sup> [w, p] || Aspidomorpha | cincta F | Bhn Brasilia [w, hw by Chevrolat] || 67-56 [w, p]' (BMNH); 1 spec., pinned: 'E. Coll. | Chev.<sup>1</sup> [w, p] || Aspidom. | cincta | F Bhn. | Bayres [w, hw by Chevrolat, cb] || 67-56 [w, p]' (BMNH); 1 spec., pinned: 'D. [three or four illegible letters due to pinholes] ot [blue, hw, cb] || E. Coll. | Chev.<sup>1</sup> [w, p] || 67-56 [w, p] || Aspid. | cincta F. Bhn [w, hw by Chevrolat]' (BMNH); 1 spec., pinned: '3636. [w, p, cb]' (BMNH); 1 spec., pinned: '3636. [w, p, cb] || cincta Fabr. [blue, hw by Boheman] || Aspidomorpha. | = cincta Boh. [hw] | nec Fab. [hw] [w, p, cb]' (BMNH); 1 spec., pinned: 'Aspidom. | cincta. [w, hw, cb] || 57 [yellow, p] || 67-56 [w, p] || Aspidomorpha. | cincta. [hw] | sec.Boheman. [w, p, cb]' (BMNH); 1 spec., pinned: 'Nevinson Coll. | 1918-14 [w, p, cb] || cincta [w, hw, cb]' (BMNH); 1 spec., glued: 'THANH MOI | TONKIN | H. PERROT [w, p, cb; erroneous locality]' (MHNG); 1 spec., pinned: 'NHRS-JLKB | 000022816 [w, p, cb]' (NHRS); 1 spec., pinned: 'NHRS-JLKB | 000022817 [w, p, cb]' (NHRS).

**Description.** A detailed description and bibliography of this species was provided by BOROWIEC (1997: 230) under the name *Aspidomorpha cincta* Fabricius. We use the opportunity to establish this species with a reference to its detailed description accompanied with drawings according to the Article 13.1.2 of the ICZN (1999).

**Differential diagnosis.** *Aspidomorpha (Aspidomorpha) innominata* sp. nov. belongs to the *A. quinquefasciata* species group characterized by more or less parallel-sided body, base of the elytra only slightly wider than base of the pronotum, explanate margin of the elytra with both basal and postero-lateral spots, elytral disc depressed to weakly and regularly convex, punctuation of elytra regular, moderately dense and not impressed. The group currently contains nine species and was referred to as the *A. cincta* group in BOROWIEC's (1997) revision: *A. astraea* Spaeth, 1917, *A. ertli* Spaeth, 1906, *A. gruevi* Borowiec, 1985, *A. innominata* sp. nov., *A. katangana* Spaeth, 1932, *A. nigropunctata* (Klug, 1835), *A. quinquefasciata* (Fabricius, 1801), *A. sternalis* Weise, 1896, and *A. wahlbergi* Boheman, 1854. *Aspidomorpha nigropunctata* differs in its large size (9.9–12.0 mm) and disc of elytra and pronotum with black spots while *A. innominata* is small with size below 10.0 mm and dorsum never with black spots. *Aspidomorpha wahlbergi* differs in very small size (6.8–7.3 mm) and is separated



geographically, occurring in south and southeast Africa while *A. innominata* is larger, always above 7.5 mm and is distributed through western to central Africa. *Aspidimorpha astraeta*, *A. ertli*, *A. katangana*, and *A. sternalis* differ in larger size (mostly above 9.0 mm) and are separated geographically occurring from Angola and northern Namibia through the south of the Democratic Republic of the Congo and Zambia to Tanzania and Mozambique while *A. innominata* has size 7.8–9.7 mm but most specimens are below 9.0 mm, and is distributed through western Africa. *Aspidimorpha gruevi* has comparable size but differs in oval body (parallel-sided in *A. innominata*) and is restricted to northwestern Africa from Ethiopia to the Arabian Peninsula. The most similar species is *A. quinquefasciata* which is also sympatric with the new species, however, it can be separated by stouter body (length/width ratio 1.14–1.27) and by distinctly rounded sides of elytra while *A. innominata* has parallel-sided body and is slimmer (length/width ratio 1.30–1.39). *Aspidimorpha innominata* is also mostly smaller, particularly specimens from western Africa (Senegal, The Gambia, Guinea), however, specimens are gradually larger towards central Africa and separation of the two species requires longer series. *Aspidimorpha quinquefasciata* is more variable regarding dorsal pattern, often having black forms while *A. innominata* has more constant elytral pattern formed by red patches (Figs 40–43); of all examined specimens, only one had black maculation like *A. quinquefasciata*, and one had nearly the whole elytral disc black.

**Etymology.** The specific epithet is the Latin adjective *innominatus* (-a, -um) = nameless because the species was for long time recognized in collections, but until now was not correctly named.

**Distribution.** Benin, Burkina Faso, Cameroon, Chad, Central African Republic, Democratic Republic of Congo, Eritrea, The Gambia, Ghana, Guinea, Guinea-Bissau, Mali, Nigeria, Senegal, Sierra Leone, Sudan, Togo.

### Summary of proposed taxonomic changes

*Aspidimorpha* (*Aspidimorpha*) *calligera* Boheman, 1854 **stat. restit.** = *A. dorsata* sensu BOHEMAN (1854) not Fabricius

*Aspidimorpha* (*Aspidimorpha*) *dorsata* (Fabricius, 1781) **stat. nov.** = *A. (A.) fuscopunctata* Boheman, 1854: 298, **syn. nov.** = *A. (A.) rubrodorsata* Boheman, 1854, **syn. nov.**

*Aspidimorpha* (*Aspidimorpha*) *isparetta* Boheman, 1854 = *Cassida cincta* Fabricius, 1781 not DeGeer, 1775 = *A. (A.) fabricii* Sekerka, 2008, **syn. nov.**

*Aspidimorpha* (*Aspidimorpha*) *innominata* Sekerka **sp. nov.** = *A. (A.) cincta* sensu BOHEMAN (1854)

*Basiprionota bipuncticollis* (Boheman, 1856) **stat. restit.** = *B. privigna* (Boheman, 1862) **syn. nov.** = *B. octopunctata* sensu BOHEMAN (1850) not Fabricius

*Basiprionota octopunctata* (Fabricius, 1787) **stat. nov.** = *B. privigna* sensu SPAETH (1925) not Boheman

*Charidotis marginella* (Fabricius, 1775) = *C. punctatostriata* Boheman, 1855, **syn. nov.** = *C. herbida* Boheman, 1855, **syn. nov.**

*Chelymorpha cassidea* (Fabricius, 1775) = *C. cribraria* (Fabricius, 1775) **syn. nov.**

*Chelymorpha multipunctata* (Olivier, 1790) **stat. restit.** = *Ch. cribraria* sensu auctt.

*Eugenysa decussata* (Fabricius, 1775) **stat. restit.** = *E. venosa* (Fabricius, 1798) **syn. nov.**



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