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Nomenclatural and taxonomic changes, new distribution and biological records for jewel beetles (Coleoptera: Buprestidae)

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Nomenclatural and taxonomic changes, new distribution and biological records for jewel beetles (Coleoptera: Buprestidae)

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Abstract: Replacement names, nomenclatural, distributional and biological notes are presented for 21 species of Buprestidae (Coleoptera). *Agrilodes strandi* ssp. *meranus* Obenberger, 1942, and *Polybothris (Amphisbeta) vitalisi* var. *stygia*, Obenberger, 1942, are proposed to allow the subspecies or variety names define the species, respectively, with *strandi* and *vitalisi* remaining in synonymy as nomina nuda. *Acmaeodera ruficaudis mactfadyeni* is proposed as a new replacement name for *Acmaeodera ruficaudis pinguis* Holm, 1985, preoccupied by *A. pinguis* Fairmaire, 1902; *Buprestis aenesens* Wiedmann, 1823 is synonymized under *Buprestis albomarginata* Herbst, 1801; *Buprestis planus* Fabricius, 1798 is transferred to *Dismorpha* Gistel, 1848; *Damsaris conturbata* Thomson, 1879 is removed from synonymy under *Buprestis anaurotica* Klug, 1855 and reinstated as a valid species; *Damsaris obsti* Cobos, 1957 is rejected as an unnecessary replacement name for *Psiloptera ornata* Obst, 1903; *Dicerca reticulatoides* is proposed as a new replacement name for *D. reticulata* Assmann, 1870, a fossil taxon, preoccupied by *Buprestis reticulata* Fabricius, 1794, a junior subjective synonym of *Dicerca aerena* (Linné, 1758); *Kamosia luciae* Obenberger, 1935, is synonymized under *Kamosiella dermestoides* (Thomson, 1878); *Melobasis novaequiniae* is proposed as a new replacement name for *Melobasis papuana* Obenberger, 1938, preoccupied by *M. (Briseis) papuana* Obenberger, 1924; *Sjoestedtius divisus* Obenberger, 1935, is transferred to *Malawiella* Bellamy, 1990, and *Sjoestedtius atakorensis* Descarpentries, 1952 is proposed as its new subjective synonym. *Buprestis albomarginata* Herbst, *Damsaris conturbata* Thomson, and *Psiloptera ornata* Obst are transferred to *Lampetis* Dejean, 1833. Biological or distributional notes are given for species of *Agrilaxia* Kerremans, 1903, *Agrilus* Curtis, 1825, *Conognatha* Eschscloltz, 1829, *Euplectalecia* Obenberger, 1924, *Halecia* Laporte and Gory, 1837, *Ovalisia* Kerremans, 1900, *Sambomorpha* Obenberger, 1924, and *Spectralia* Casey, 1909.

Introduction

With several large catalogue projects under way (e.g. world buprestids, Bellamy; North American (north of Mexico) buprestids, Nelson, both in prep.), the need to extend distribution, add biological associations and propose new synonyms and replacement names for numerous species continues. This paper continues in the style of data presented earlier by Bellamy (1998, 1999).

Materials and Methods

The species discussed below are presented in alphabetical sequence and the order should not imply any classification detail nor opinion.

The annotations used in the text are: (h) for handwritten label data; (p) for printed label data; the forward slash '/' to separate data from consecutive labels and subsequently added data are added in square brackets '[' and the following collection codens:

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<td>CLBC</td>
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<td>ZMUC</td>
<td>Zoological Museum, University of Copenhagen, Denmark</td>
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Nomenclatural and Taxonomic Changes

*Acmaeodera ruficaudis macfadyeni*, new replacement name

*Acmaeodera ruficaudis pinguis* Holm, 1985: 156 (name preoccupied).

**Remarks.** The subspecies epithet *Acmaeodera ruficaudis pinguis* Holm, 1985, is preoccupied by *Acmaeodera pinguis* Fairmaire, 1902, now placed in *Sponsor* Gory and Laporte, 1839, under the replacement name of *S. cobosi* Bellamy, 1998, itself preoccupied in that combination by *S. pinguis* Guérin-Méneville 1840: 357. The replacement name is chosen to honor Duncan MacFadyen, formerly of the Transvaal Museum, for his friendship, collecting prowess and many favors during the time we worked together.

*Agrioloides meranus* Obenberger, 1942

**Remarks.** Obenberger (1942a) described a new subspecies of *Agrioloides strandi* ssp. *meranus* from Ecuador, but as later noted by Cobos (1959), *A. strandi* itself was never described. There is no labelled type specimen of the nominate subspecies in the Obenberger collection (NMPC), so I propose the type of *A. meranus* should define the species, with the name *strandi* remaining in synonymy as a nomen nudum.

*Dismorpha plana* (Fabricius, 1798), new combination

**Remarks.** This species' name was noted as preoccupied (by *B. plana* Olivier, 1790, now *Latipalpis plana*), replaced by the epithet *planula* and transferred to *Stenogaster* Solier, 1833, by Saunders (1871). Obenberger (1934) transferred this species, with a question mark, to *Mychommatus* Murray, 1868. Théry (1947) noted the similarity between two species of *Mychommatus* and *S. planula*. The generic name *Dismorpha* was proposed by Gistel (1848), since *Stenogaster* was preoccupied by the hymenopteran *Stenogaster* Guérin-Méneville 1831, and this was first noted by Hespenheide (1979). Neither Hespenheide (1979) nor Cobos (1990), in his revision of *Dismorpha*, listed *S. planula*. In Cobos' revision, *Dismorpha* was presumed to have a Neotropical distribution. I have examined the type of *B. plana* F. (ZMUC) and note that it agrees well, in general facies and character states, to species placed in *Dismorpha*. It comes close to specimens in my possession identified as *D. irrorata* (Gory and Laporte, 1839) from Brazil. Since *B. plana* was originally described from Senegal, several conclusions are possible, including: 1) the original label data was transposed and 'Senegal' is an error; or 2) the range of *Dismorpha* actually includes West Africa. Since I am not aware of additional specimens of *B. plana* or any specimens of *Dismorpha* from West Africa, it seems more certain that this specimen must have been mislabeled or otherwise confused. Without the opportunity now to compare the Fabrician type to the types of other *Dismorpha* spp., I will simply note the change of combination.

*Dicerca reticulatoides*, new replacement name

*Dicerca reticulata* Assmann, 1870: 60 (name preoccupied).

**Remarks.** The fossil taxon *Dicerca reticulata* Assmann (1870) is preoccupied by *Buprestis reticulata* Fabricius, 1794, currently a junior subjective synonym of *Dicerca aenea* (Linnaeus, 1758) and this new name is proposed to replace it.

*Kamosiella dermestoides* (Thomson, 1878)

*Meliboeus dermestoides* Thomson, 1878: 81.

**Specimens examined.** The single type specimen (NMPC 23045) is labelled: "St. Lucia Lake, H W B-M Oct. 1927", although the description lists "Transvaal (sic): Sta Lucia".

**Remarks.** This South African species has been described three times. At the time Obenberger (1935) described *Kamosia luciae*, he related it to *K. originaria*.

*Lampetis albomarginata* (Herbst, 1801), new combination
**Buprestis albomarginata** Herbst, 1801: 132.

**Buprestis aenescens** Wiedemann, 1823: 100. new synonymy

**Type specimen:** sex undetermined (ZMUC), Mus. Westerm. (p)/Type (red, p)/Cap. b. sp., Aenescens Wiedem. (h).

**Remarks.** Following the original description, *Buprestis aenescens* Wiedemann has been an anomaly since it has only been listed in one subsequent work, that by Saunders (1871: 137) under “Species, the genera of which are doubtful”. I have not found it listed in the catalogues of Gemminger and Harold (1869), Kerremans (1903) nor Obenberger (1926, 1930) under *Buprestis* nor under any other combination. Since it is conspecific with the widespread African species *B. albomarginata* Herbst, 1801, the new synonymy is proposed. The placement of these taxa in the genus *Lampetis* Dejean, 1833, follows the proposals of Kurosawa (1993).

**Lampetis conturbata** Thomson, 1879, name resurrected and new combination

**Damarsila conturbata** Thomson, 1879: 171.

**Psiloptera (Damarsila) conturbata**: Théry, 1955: 392; Descarpentries, 1970: 199.


**Remarks.** At time of description, Thomson (1879) remarked that his new species was close to *Buprestis amaurotica* Klug, 1855. All subsequent authors regarded it as distinct until Obenberger (1926) listed it as a variety of *B. amaurotica* and he was followed in this by da Veiga-Ferreira (1959). However, both Théry (1955) and Descarpentries (1970) considered it a valid species. It is transferred to *Lampetis* following the concepts of Kurosawa (1993). This species is common in southern Africa and is collected from the foliage of *Terminalia sericea* Burch. ex DC (Combretaceae).

**Lampetis ornata** (Obst, 1903), new combination

**Psiloptera ornata** Obst, 1903: 144.

**Damarsila obsti** Cobos, 1957: 192 (superfluous replacement name for *P. ornata* Obst). new synonymy

**Remarks.** Cobos (1957) proposed this combination as a replacement name for *Psiloptera ornata* Obst (1903), erroneously concluding that the taxon currently known as *Chalcopoecila ornata* (Gory, 1840) had been originally described in the genus *Psiloptera* Dejean, 1833, when the original combination was in *Buprestis* L., 1758. The transfer to *Lampetis* follows Kurosawa (1993) as with the preceding two species.

**Malawiella divina** Obenberger, 1935, new combination

**Sjoestedtius divinus** Obenberger, 1935: 53.

**Sjoestedtiusatakorensis** Descarpentries, 1952: 1155. new synonymy

**Specimens examined.** Holotype of *divinus* (NMPC 24054): Kameroun; holotype, paratype of *atakorensis* (MNHN): [BENIN] Dahomey, Koussokoingou Atakore, 600-700m; 6 ex. (HNHM, CLBC): Ghana, Northern Region, Nyankpala 200m, N09.25 W01.00, 5.viii.1965, S. Endródy-Younga.

**Remarks.** The types of these two taxa were compared directly. The holotype and paratype of *S. atakorensis* are slightly smaller and more golden green but otherwise they are identical to the holotype of *S. divinus*. The collective locality data indicates that this species is distributed, at least, from Ghana to Cameroun. This species is transferred to *Malawiella* Bellamy, 1990, as it much better agrees with character states from the original generic diagnosis and in the key to African agriline genera by Bellamy (1990).

**Melobasis novaeguineae**, new replacement name

**Melobasis papuana** Obenberger, 1938: 80 (name preoccupied by *M. papuana* (Obenberger, 1924)).

**Remarks.** The Australasian genus *Melobasis* Laporte and Gory, 1837, originally a subgenus of *Buprestis*, is currently defined to contain four subgenera (sensu Obenberger 1930:427): s. str., *Briseis* Saunders, 1871, *Dicercopygus* Deyrolle, 1864 and *Paramelobasis* Théry, 1923. Since this subgeneric definition has become accepted, the combination *M. papuana* Obenberger, 1938 is preoccupied by *Briseis papuana* Obenberger, 1924 and a new name is proposed.
**Polybothris (Amphisbeta) stygia**
Obenberger, 1942

**Remarks.** In a similar situation to *Agriloides mer anus* (see above), in another work of the same year, Obenberger (1942b) described a new variety of *Polybothris (Amphisbeta) vitalisi*, var. *stygia*. According to Dr. S. Bilý, NMPC, there is no record that *P. vitalisi* was ever described and no types are present that would validate this name. The description of var. *stygia* is two lines in Latin, but would be sufficient to define the name and would require *vitalisi* be left in synonymy as a nomen nudum.

**Biological, Distributional and Predation Notes**

* Agrilaxia hespenheidei* (Bilý, 1984)

This species is known from the Huachuca Mountains of southeastern Arizona (Bilý, 1984) and from Chiapas, Mexico (Nelson, 1987), but nothing has been recorded about its biology. One specimen was collected at the type locality, Copper Canyon, 11.viii.2001, J. Rifkind, on flowers of thistle, *Cirsium* sp. (new adult host record).

* Agrilus restrictus* Waterhouse, 1889

This beautifully dichromatic species is known from Chihuahua, Mexico (Fisher, 1928) and the Huachuca Mountains, Arizona (Nelson, 1965) from foliage of *Rhus choriophylla* Woot. & Standl. (Anacardiaceae). Additional data are: Arizona, Santa Cruz Co., Madera Canyon, Santa Rita Mountains, 30.vii.1989, A. V. Evans, W. B. Warner, one specimen at rest on leaf of unidentified plant (CLBC); Sycamore Canyon, N31°25' W111°11', 12.viii.2001, C. L. Bellamy, male specimen beaten from *Quercus emoryi* Torr. (Fagaceae) (CLBC) (new adult host record).

* Conognatha (Pithiscus) vulnerata* (Perty, 1830)

Two specimens of this Brazilian species were collected recently with the following data: Brazil: Minas Gerais: Municipio de Santana do Rio do, Serras do Cipó, at km 118 along the road from Lagos Santa to Conceição do Mato Dentro, Campo rupestre and Camp graminoso at 1227m./ 19°18.802'S 43°33.479'W; feeding on anthers of *Lavosiera macrocarpa* Naud. (Melastomataceae); 24 October 2001, F. Almeda collector (CASC) (new adult host record).

* Euplectaceia belittii* (Saunders, 1874)

A single specimen purported to be this species, previously known only from Nicaragua, was erroneously recorded from Panamá by Bellamy and Westcott (1995). I have recently re-examined the types, or photographs of types, of all *Euplectalecia* spp. from Central America and must retract the record of *E. belittii* from Panamá. This specimen is actually *E. sordidenotata* (Obenberger, 1924), discussed below.

* Euplectalecia sordidenotata* (Obenberger, 1924)

This beautiful species was described from Costa Rica and additional specimens (CLBC) are from: Panamá: Panamá Prov., Cerro Campana, 550m, 8°40'N, 79°56'W, 27.vii.1972, Stockwell (1 ex.); 7.5-13 km N El Llano, 13/14.v.1994, F. T. Hovore, on *Cecropia* leaves (2 ex.); 12 km N El Llano, 4.i.1986, E. Giesbert (1 ex.); 8-10 km N El Llano, 26.iv.-4.v.1992, E. Giesbert (1 ex) (new country and adult host records). The last specimen is greenish, rather than the more typical red-cupreous of the other specimens and the type (NMPC), and was erroneously recorded earlier as *E. belittii* (Saunders, 1874) (see above).

* Euplectalecia suffusa* (Waterhouse, 1889)

This species was originally described from Chiriquí in Panamá, and a number of specimens have been examined from various localities in that country, including: Canal Zone, Barro Colorado Is., 3 km SSW Balboa, Farfan Beach, 7km SW Gatun Lock; Panamá Prov., Cerro Campana (CLBC, RLWE). One additional specimen (RLWE), compared to the type (BMNH), extends the distribution significantly north: México, Oaxaca, 8 mi. SW Tuxtepec, 200', 26.vi.1983, R. Anderson (new country record).

* Halecia chrysodemoides* Saunders, 1874

This species is recorded from Belize, Costa Rica, Honduras, Nicaragua and Panamá and was last discussed by Bellamy and Westcott (1995). It is not surprising to find that it occurs in Guatemala: Dept. Izabal, Finca Firmez, Sierra del Caral, N15°
23.79 W88° 44.18, 935 ft., 23.v.2001, J. F. Limón, flying around foliage of Cecropica (CLBC, LACM) (new country and adult host records).

**Ovalisia plasoni** (Théry, 1934)

This beautiful little species is apparently known only from the unique type from "Warco, New Guinea" (see Bilý, 1993). A short series was collected as follows: PAPUA NEW GUINEA GULF: Ivimka Res. Station, Lakekumu Basin, 120m, 7° 44'S, 146° 30'E, 21.iii.2000, T.A. Sears, malaise trap (UCDC, NMPC, CLBC, RLWE).

**Sambomorpha chiapas** Bellamy, 1997

This species was described from a single specimen from Chiapas, Mexico (Bellamy, 1997). Additional specimens are from: GUATEMALA: Baja Verapaz, 14.5 kn N, Salama 1620 m, 23.v.1991, R. Anderson, dry oak/pine woodland, 91-13; same data except 16 mi N. Salama, 1550 m, l.vi.1991, oak pastureland, 91-40 (new country record) (CMNC, CLBC).

**Spectralia purpurascens** (Schaeffer, 1905)

On June 19, 2001, approximately 2 mi W Ocotillo, along Interstate 8 in western Imperial County, California, U.S.A., while searching the foliage of Justicia californica (Benth.) D. Gibson (Acanthaceae) for this uncommon beetle, a male robber fly, Saropogon mohawki Wilcox, was observed with prey in its grasp. Since the prey appeared to be a buprestid, both were collected and I was surprised to find that the fly had collected the beetle I had not been able to locate on the host plant (new predator record).

**Spectralia sulcifera** (Laporte and Gory, 1837)

This species was originally described from Cayenne with subsequent records only for Para in Brazil. Material sent for identification included a number of specimens (INBC, CLBC): Costa Rica: Guanacaste Prov., Estacion Maritza, 600m, W side Volcan Orosi, malaise trap, 1988; same data except, R. Vargas, 27 feb. - 10 mar, 1992; 6 km W Santa Elena de Monte Verde, 4.vii.1983, W. Colby (CLBC) (new country record).

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