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Platygastroidea in the
Oxford University Museum of Natural History:
taxonomic updates and a photographic catalog
of type specimens

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Date of issue: January 26, 2024

Center for Systematic Entomology, Inc., Gainesville, FL
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Abstract. High resolution images are provided for type specimens of Platygastroidea (Hymenoptera: Apocrita) in the Hope Entomological Collections, Oxford University. We formally resurrect *Trissoscelio* Kieffer revised status to accommodate *T. bifasciata* (Dodd) new combination, *T. indica* (Mani) new combination, *T. nigriceps* Kieffer revised combination, *T. ruficeps* Kieffer revised combination, and *T. punctaticeps* Kieffer revised combination. *Paridris subplana* (Dodd) new combination is transferred from *Sceliacantha* Dodd to *Paridris* Kieffer and treated as a senior synonym of *P. coorgensis* Sharma.

ZooBank registration. urn:lsid:zoobank.org:pub:EB97FE10-B01D-4D45-AF6E-D247ED0040BE

Introduction

The Hope Entomological Collections, Oxford University, contain a modest number of type specimens of Platygastroidea that are disproportionately important due to their antiquity. These old specimens have undeniable relevance to taxonomic research that supports systematics, faunistic studies and biological control programs. Of particular importance are the last remnants of the collection of Nees von Esenbeck. His types that were deposited in continental Europe were destroyed, and only the specimens preserved by J.O. Westwood in Oxford remain. These represent some of the earliest described species of Platygastroidea (Graham 1988a). Other important types include those described by Westwood himself, and by Alan P. Dodd (1920). The latter were collected by Alfred Russel Wallace during his travels in the Indomalayan archipelago. The oldest type specimen is certainly that of *Teleas clivicornis* (Latreille), the type of its genus and subfamily, which was probably borrowed from Paris by Westwood before the donation of Latreille’s micro-Hymenoptera to Spinola in Turin. This specimen had not previously been recorded from Oxford, and its whereabouts were unknown. It has important taxonomic value because the generic limits of *Teleas* Latreille with respect to *Trimorus* Förster are nebulous and require re-evaluation on a world scale. The images of *Teleas clivicornis* now provide an unambiguous means to anchor the generic name to a morphological concept, in turn facilitating refinement of these taxa.
Materials and Methods

In addition to specimens from Oxford University (OXUM, OUMNH), this work is based on material housed in the Canadian National Collection of Insects, Ottawa, Canada (CNCI); Muséum National d’Histoire Naturelle, Paris, France (MNHN); and the US National Museum, Smithsonian Institution, Washington, DC, USA (USNM).

Photographs were captured with two imaging systems: a Z16 Leica lens with a JVC KY-F75U digital camera using Cartograph and Automontage software, and a Macropod imaging system with a Canon EOS 70D digital SLR camera. Specimens were illuminated with a dome equipped with LEDs or with a combination of flashes and mylar light dispersers. Images were rendered from Z-stacks with Automontage or Helicon Focus software. In some cases, multiple montage images were stitched together in Photoshop to produce larger images at high resolution and magnification.

The species epithets for *Platygaster* authored by Nees von Esenbeck (1834) were nouns, adjectives of ambiguous gender, or masculine adjectives. We consider this usage to indicate that *Platygaster* was erroneously treated as masculine, and the adjectival nature of the names is sufficiently decisive that they do not need to be treated as nouns in apposition (ICZN 1999, Art. 31.2.2). The subsequent spelling changes by Dalla Torre (1898) are thus mandatory changes of gender agreement (ICZN 1999, Art. 34.2). Westwood (1833a) provided no evidence that he intended “*ensifer*” to be adjectival. Because this name is not decisively an adjective, it is treated as an appositional noun (ICZN 1999, Art. 31.2.2).

Results

Platygastridae

*Amblyaspis aliena* (Nees von Esenbeck)

*Platygaster alienus* Nees von Esenbeck, 1834: 301 (original description); Graham, 1988a: 28 (lectotype designation).

*Platygaster aliena* Nees von Esenbeck: Dalla Torre, 1898: 470 (mandatory change).

*Amblyaspis Obliqua* Kieffer, 1914: 399 (original description).


*Amblyaspis aliena obliqua* Kieffer: Kieffer, 1926: 616 (description, keyed); Vlug, 1995: 13 (cataloged).


Material examined. Lectotype male (OXUM 0006), Sickershausen, Bavaria, Germany.

*Platygastrus ensifer* (Westwood)

*Epimeces ensifer* Westwood 1833a: 421 (original description).

*Platygaster ensifer* (Westwood): Walker, 1835: 243 (description, generic transfer); Masner, 1965: 136 (type information, generic transfer); Buhl and Notton, 2009: 1674 (cataloged); Vlug, 1995: 52 (cataloged, type information).

*Platygaster ensifera* (Westwood): Dalla Torre, 1898: 472 (emendation); O’Connor, Nash, Notton and Fergusson, 2004: 19 (catalog of Irish species).


Material examined. Syntype female (OXUM 0003), Coombe, London Borough of Croydon, England, MAY.

*Platygaster mutica* Nees von Esenbeck

*Platygaster muticus* Nees von Esenbeck, 1834: 308 (original description); Vlug, 1973: 181 (material in Förster’s collection, NHMW); Graham, 1988a: 28 (lectotype designation).


Platygaster mutica (Nees von Esenbeck): Awad et al., 2023: 36 (generic transfer, type information).

Material examined. Lectotype female (OXUM 0008), Sickershausen, Bavaria, Germany.

Comments. The identity and generic placement of this species is uncertain. Thomson (1859) transferred it to Synopeas based on the description, and an original exemplar in the NHMW is identifiable as Synopeas (Awad et al., 2023). However, the lectotype designated by Graham (1988a), consisting only of a metasoma and legs, does not belong in Synopeas based on the visible suture between T1 and T2. In the absence of further diagnostic characters, this species was returned to Platygaster by Awad et al. (2023).

Synopeas affine (Nees von Esenbeck)

Platygaster affinis Nees von Esenbeck, 1834: 310 (original description); Graham, 1988a: 28 (lectotype designation).

Synopeas affinis (Nees von Esenbeck): Thomson, 1859: 75 (description, generic transfer); Buhl, 1999: 41 (keyed); Vlug, 1995: 76 (cataloged, type information).


Material examined. Lectotype female (OXUM 0007), Sickershausen, Bavaria, Germany, NOV 1809.

Synopeas ventrale (Westwood)

Epimeces ventralis Westwood 1833a: 421 (original description).

Platygaster Abaris Walker, 1835: 230 (original description).


Sactogaster ventralis (Westwood): Masner, 1965: 140 (type information); Vlug, 1973: 182 (material in Förster’s collection, NHMW); Walker, 1873: 542 (keyed); Kieffer, 1926: 664 (description, keyed); Förster, 1856: 152 (generic transfer, keyed); Fabritius and Grellmann, 1972: 55 (description).

Platygaster ventralis (Westwood): Walker, 1835: 223 (description, generic transfer); Vlug, 1973: 182 (material in Förster’s collection, NHMW).


Synopeas ventrale (Westwood): Buhl and Nottion, 2009: 1700 (description, cataloged, synonymy, distribution); Buhl and Bennett, 2011: 63 (new distribution record from Isle of Man); Awad et al., 2023: 33 (type information).


Table 1. Type specimens of Platygastroidea in OUMNH.

<table>
<thead>
<tr>
<th>Platygastroidea</th>
<th>Valid combination</th>
<th>Original combination</th>
<th>Images of type specimen(s)</th>
</tr>
</thead>
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<tr>
<td>Amblyaspis aliena (Nees von Esenbeck)</td>
<td>Platygaster alienus Nees von Esenbeck</td>
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<tr>
<td>Platygaster ensifer (Westwood)</td>
<td>Epimeces ensifer Westwood</td>
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<tr>
<td>Platygaster mutica Nees von Esenbeck</td>
<td>Platygaster muticus Nees von Esenbeck</td>
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<td>Synopeas affine (Nees von Esenbeck)</td>
<td>Platygaster affinis Nees von Esenbeck</td>
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<tr>
<td>Synopeas ventrale (Westwood)</td>
<td>Epimeces ventralis Westwood</td>
<td>[link to image]</td>
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</tbody>
</table>
Scelionidae

Baryconus atripes (Dodd)

Trichoteleia atripes Dodd, 1920: 337 (original description).
Baryconus atripes (Dodd): Masner, 1976: 68 (generic transfer, type information); Johnson, 1992: 349 (cataloged, type information).


Hadronotus muscaeformis (Nees von Esenbeck)

Teleas muscaeformis Nees von Esenbeck, 1834: 290 (original description); Graham, 1988a: 28 (type information).
Hadronotus muscaeformis (Nees von Esenbeck): Mayr, 1879: 698 (generic transfer, description); Kieffer, 1926: 453, 459 (description, keyed); Szabó, 1966: 430–431 (description, synonymy, lectotype designation, keyed); Hellén, 1971: 22 (description); Talamas et al., 2021 (generic transfer).
Hadronotus Pubescens Kieffer: Kieffer, 1913: 241 (description).

Material examined. Holotype female (OXUM 0009), Sickershausen, Bavaria, Germany, AUG–OCT.

Hadronotus rugostriatus (Dodd)

Hadronotoides rugostriatus Dodd, 1920: 352 (original description); Masner, 1965: 78 (type information); Johnson, 1992: 400 (cataloged, type information).
Hadronotus rugostriatus (Dodd): Talamas et al., 2021: 444 (generic transfer).


Paridris subplana (Dodd) new combination

Sceliacantha subplana Dodd, 1920: 336 (original description); Masner, 1965: 91 (type information); Johnson, 1992: 471 (cataloged, type information).
Paridris circulus Kozlov and Lê, 2000, in Lê, 2000: 65, 66, 336 (original description, keyed); Talamas and Pham, 2017: 228 (junior synonym of Paridris coorgensis Sharma).
Paridris striaelectron Kozlov and Lê, 2000 in Lê, 2000: 65, 71, 339 (original description, keyed); Talamas and Pham, 2017: 228 (junior synonym of Paridris coorgensis Sharma).


Comments. The transverse carina at the anterior margin of T2 (Figs. 1–3) unambiguously places Sceliacantha subplana in the genus Paridris Kieffer (Talamas et al., 2011). We determined that it is conspecific with P. coorgensis using the images and key to species in Talamas and Pham (2017): the metascutellum is glabrous (Fig. 3), the horn of T1 does not have a spine (Fig. 1), and T6 is apically constricted (Fig. 3).
Probaryconus pictus (Dodd)

*Baryconus pictus* Dodd, 1920: 334 (original description).

**Material examined.** Holotype female (OUMNH HYME0043), Sri Lanka, coll. Thwaites.

Macroteleia cleonymoides Westwood

*Macroteleia Cleonymoides* Westwood, 1835: 70 (original description).
Macroteleia cleonymoides Westwood: Kieffer, 1926: 531 (description, keyed); Masner, 1965: 82 (type information); Johnson, 1992: 425 (cataloged, type information).

Material examined. Syntype female (OXUM 0001), Mauritius.

Scelio wallacei Dodd

Scelio wallacei Dodd, 1920: 344 (original description); Masner, 1965: 95 (type information); Dangerfield et al., 2001: 254 (keyed); Johnson, 1992: 491 (cataloged, type information).


Teleas clavicornis (Latreille)

Teleas clavicornis Latreille, 1805: 432 (original description).

Material examined. Holotype female (OXUM 0005), Paris.
Figures 7–9. *Trissoscelio nigriceps*, male (CNC494888), fresh specimen collected from the type locality. 7) Head, mesosoma, metasoma, ventrolateral view. 8) Head, mesosoma, metasoma, dorsal view. 9) Head, mesosoma, metasoma, lateral view.

Table 2. Links to images of *Trissoscelio*.

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<th>Species</th>
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*Telenomus minutus* (Westwood)

*Hemisius minutus* Westwood 1833b: 445 (original description); Nees von Esenbeck, 1834: 411 (description); Westwood, 1840: 77 (description); Blanchard, 1840: 291 (not seen: reference from Dalla Torre, 1898); Kieffer, 1926: 131 (description).


Comments. NFJ first examined the only known syntype during a visit to Oxford in 1979. At that time the specimen was glued to a small card mount and was entire, i.e., not disarticulated. The elongate clavomeres suggest that the species is related to the *floridanus* species group of Johnson (1984), parasitoids of lygaeid eggs.
Telenomus phalaenarum (Nees von Esenbeck)

Teleas phalaenarum Nees von Esenbeck, 1834: 287 (original description); Graham, 1988a: 29 (type information).

Teleas phalaenarum Nees von Esenbeck; Blanchard, 1840: 290 (description, synonymy, spelling error).

Asolcus phalaenarum (Nees von Esenbeck); Szabó, 1976: 176, 182 (generic transfer, keyed).

Prophanurus phalaenarum (Nees von Esenbeck); Kieffer, 1912: 44, 57 (description, generic transfer).

Telenomus phalaenarum (Nees von Esenbeck); Mayr, 1879: 700, 701, 709 (description, generic transfer, keyed); Kieffer, 1926: 80 (description, keyed); Hueniken, 1930: 52 (German translation of Nees (1834)); Masner, 1958: 42 (keyed); Petrov, 1994: 276 (keyed); Mineo, 2005a: 42 (host, new distribution record); Samin et al., 2010: 1440 (new distribution record for Iran); Johnson, 1992: 607 (cataloged, type information).

Material examined. Teleas phalaenarum: Syntypes, 1 male, 2 females, (OXUM 0012), Sickershausen, Bavaria, Germany, AUG–OCT.

Table 3. Type specimens of Scelionidae in OUMNH.

<table>
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<tr>
<th>Scelionidae</th>
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Material examined. Teleas phalaenarum: Syntypes, 1 male, 2 females, (OXUM 0012), Sickershausen, Bavaria, Germany, AUG–OCT. Teleas linnei: Lectotype female (OXUM 0010), Sickershausen, Bavaria, Germany, SEP–OCT.
**Telenomus truncatus** (Nees von Esenbeck)

*Telenomus truncatus* Nees von Esenbeck, 1834: 289–290 (original description); Graham, 1988a: 28 (type information); Graham, 1988b: 88 (lectotype designation).

**Teleas truncatus** Nees von Esenbeck, 1834: 288 (original description); Mayr, 1879: 707 (synonym of *Telenomus truncatus* (Nees von Esenbeck)); Graham, 1988a: 28 (type information); Johnson, 1992: 617 (type information).

**Teleas Zetterstedtii** Ratzburg, 1844: 185 (original description). Mayr, 1879: 707 (synonym of *Telenomus truncatus* (Nees von Esenbeck)).

**Prophanurus truncatus** (Nees von Esenbeck): Kieffer, 1912: 47, 58 (description, generic transfer).


**Teleas linnei** Nees von Esenbeck: Graham, 1988b: 88 (lectotype designation).

**Material examined.** Lectotype female (OXUM 0011), Sickershausen, Bavaria, Germany.

**Comments.** Johnson (1984) provided a detailed description of taxonomic issues surrounding *Telenomus truncatus* (Nees von Esenbeck), one of which was the loss of a neotype designated by Szabó (1978). Given the morphological similarity of *Te. truncatus* to some other species of Palearctic *Telenomus* Haliday and potential for confusion, it was perhaps fortuitous that no concepts based on the neotype were perpetuated. Johnson (1984) also stated that no reviser had ever dealt with both *Te. chloropus* (Thomson) and *Te. truncatus*, which has remained true up to the present. Such an effort is underway, and the images of *Te. truncatus* have proven to be essential for analyzing European species of *Telenomus* that parasitize stink bug eggs, some of which are pests of agriculture.

**Trissoscelio** Kieffer, revised status

*Trissoscelio* Kieffer, 1917: 52 (original description. Type: *Trissoscelio nigriceps* Kieffer, by original designation. Key to species); Kieffer, 1926: 419 (description, keyed, key to species); Muesebeck and Walkley, 1956: 407 (citation of type species); Baltazar, 1966: 181 (cataloged, catalog of species of the Philippines); Masner, 1976: 45 (junior synonym of *Opisthacantha* Ashmead).

**Comments.** *Trissoscelio* is widespread in the Old World, primarily in the tropics. A very large number of species are apparent, and the limits of the genus are not fully established. A robust delimitation of *Trissoscelio* as a monophyletic taxon will require critical review of numerous genera that appear closely related to it and may be congeneric. Some of these genera are micropterous forms that exhibit a general reduction in external characters, suggesting the need for molecular data to untangle homoplasy from shared ancestry. Named genera in this category include *Chakra* Rajmohana and Veenakumari, *Anokha* Rajmohana and Veenakumari, *Apterosecalio* Kieffer, *Platyscellidris* Szabó, *Jarabambius* Galloway and *Lidgbirdius* Galloway. Resolution of relationships between these taxa is well beyond the scope of this publication. However, we have gathered enough data to confidently propose that *Trissoscelio* should be removed from synonymy with *Opisthacantha* Ashmead as a prelude to a more comprehensive revision.

**Justification for resurrection.** *Trissoscelio* was treated as a junior synonym of *Opisthacantha* by Masner (1976). Both genera are characterized by the absence of a hyperoccipital carina; 12-merous antennae in both sexes; mesoscutellum without medial or lateral processes; metascullum with 1–3 medial processes (variously called spines, teeth, plates, or more generally armature); fore wings with typical venation, i.e., submarginal, marginal, postmarginal and stigmal veins; and hind wings with a complete submarginal vein extending from the base of the wing to the hamuli. These two genera can be separated by the number of metasomal segments visible in females (excluding those extruded with the ovipositor): six in *Trissoscelio*, and seven in *Opisthacantha*. This difference in the number of visible tergites corresponds with their ovipositor types: a telescoping, *Scelio*-type ovipositor in *Trissoscelio* (Fig. 10) and a non-telescoping, *Ceratobaeus*-type in *Opisthacantha*. (See Austin and Field 1997 for a discussion of these structures.) *Trissoscelio* does not have a skaphion, whereas this structure is found in nearly all *Opisthacantha*. Notauli are often found in *Opisthacantha* but are usually absent in *Trissoscelio*; there are very rare exceptions in *Trissoscelio* in which the notauli are weakly indicated posteriorly.
The molecular analysis of Chen et al. (2021) retrieved *Trissoscelio* and *Opisthacantha* in disparate parts of the phylogeny. *Trissoscelio* was in a clade of genera of with *Scelio*-type ovipositors, and *Opisthacantha* groups with a clade of genera with *Ceratobaeus*-type ovipositors, congruent with the treatment of this character as invariant within a genus. Although we would prefer to resurrect *Trissoscelio* in the context of a revision, we also prefer not to delay this act any further. Images are available for the holotype of the type species (*T. nigriceps*, Figs 4–6), and with totopypical specimens that are conducive to photography, the genus can be diagnosed from *Opisthacantha*. There is also a need to transfer species from *Opisthacantha* because, at present, it is almost certainly a polyphyletic taxon.

*Trissoscelio bifasciatus* (Dodd) new combination

*Opisthacantha bifasciata* Dodd, 1920: 335 (original description); Masner, 1965: 86 (type information); Johnson, 1992: 447 (cataloged, type information).

**Material examined.** Holotype female (OUMNH HYME0042), Sri Lanka, coll. Thwaites.

*Trissoscelio indicus* (Mani) new combination

*Baryconus* (*Holoteleia*) *indica* Mani, 1975: 73 (original description).


*Opisthacantha nomados* Talamas: Talamas et al., 2017: 202 (replacement name for *Baryconus* (*Holoteleia*) *indica* Mani, type information, generic transfer)

**Material examined.** Holotype female (USNMENT01109813), INDIA: Maharashtra St., Khandala, 21.IX–22. IX.1971, Mani (USNM).

**Comments.** The transfer of this species out of *Opisthacantha* renders the replacement name unnecessary and the original species epithet is restored.

*Trissoscelio nigriceps* Kieffer revised status


*Opisthacantha nigriceps* (Kieffer): Masner, 1976: 47 (generic transfer, type information, description); Johnson, 1992: 448 (cataloged, type information).


**Comments.** The original description of *T. nigriceps* (Kieffer 1917) was based on specimen that Kieffer reported as a female, leading us to initially conclude that specimen MNHN 0080 could not be the holotype. Kieffer (1926) indicated that the specimen used in the description of *T. nigriceps* from 1917 was a male. This, and matching label data, indicate that Kieffer’s initial report of the holotype as a female was an error. The holotype specimen of *T. nigriceps* (Figs 4–6) has what appears to be mild fungal growth, as do Kieffer’s other *Trissoscelio* types. We compared material from the type locality, Luzon, Philippines, directly to the holotype with the goal of photographing conspecific specimens so that the morphology of this important species can be more clearly seen. These images are provided in Figs 7–12. Additional images of these specimens can be retrieved via the links in Table 2.

*Trissoscelio punctaticeps* Kieffer, revised status


**Material examined.** Holotype male, MNHN EY32626, Los Baños, Laguna Prov., Philippines, coll. Baker (MNHN).
Comments. *Trissoscelio punctaticeps* and *T. ruficeps* are extremely similar, likely conspecific. Given that they are of opposite sex, we prefer for a hypothesis of synonymy to be based on a more thorough examination of these types and in the context of more specimens.

*Trissoscelio ruficeps* Kieffer, revised status


*Triteleia atrella* (Dodd)

*Prosapegus atrellus* Dodd, 1920: 322 (original description); Masner, 1965: 91 (type information).


Material examined. Holotype female (OUMNH HYME0036 ⅓), Indonesia, coll. Wallace; Paratype male (OUMNH HYME0036 ⅔), Indonesia, coll. A. R. Wallace.

*Triteleia metatarsalis* (Dodd)

*Prosapegus metatarsalis* Dodd, 1920: 323 (original description); Masner, 1965: 91 (type information).


Material examined. Holotype male (OUMNH HYME0037 ½), Indonesia, coll. A. R. Wallace.

*Triteleia violacea* (Dodd)

*Prosapegus violaceus* Dodd, 1920: 321 (original description); Masner 1965: 91 (type information).


Acknowledgments

We thank James Hogan, Oxford University, for providing access to the collection and Virgilio Caleca, University of Palermo, for facilitating photography of *Hadronotoides rugostriatus*, and Natalie McGathey, Florida Department of Agriculture and Consumer Services, Division of Plant Industry, for rendering specimen images, and Jonathan Bremer, Zachary Lahey, Huayan Chen and Davide Dal Pos for reviewing the manuscript. Elijah Talamas was supported by the Florida Department of Agriculture and Consumer Services, Division of Plant Industry and by a USDA-APHIS Farm Bill: Biological Control of Bagrada Bug. Jessica Awad was supported by the Bundesministerium für Bildung und Forschung, Berlin, Germany, project “German Barcode of Life III: Dark Taxa” (FKZ 16LI1901C).
Literature Cited


Westwood JO. 1833a. Further notices of the British parasitic hymenopterous insects; together with the “Transactions of a fly with a long tail,” observed by Mr. E. W. Lewis; and additional observations. Magazine of Natural History 6: 414–421.


Received November 3, 2023; accepted December 11, 2023.
Review editor Davide Dal Pos.