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

Elijah J. Talamas

Florida Department of Agriculture and Consumer Services  
Division of Plant Industry, 1911 SW 34<sup>th</sup> St.  
Gainesville, FL 32608, USA

Jessica Awad

State Museum of Natural History Stuttgart  
Rosenstein 1, 70191  
Stuttgart, Germany

Francesco Tortorici

Department of Agricultural, Forest and Food Science  
University of Torino, Largo Paolo Braccini 2, 10095  
Grugliasco, Italy

Norman F. Johnson

The Ohio State University, Museum of Biological Diversity  
1315 Kinnear Rd.  
Columbus, OH 43212, USA

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

Elijah J. Talamas

Florida Department of Agriculture and Consumer Services  
Division of Plant Industry, 1911 SW 34th St.  
Gainesville, FL 32608, USA

Jessica Awad

State Museum of Natural History Stuttgart  
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Department of Agricultural, Forest and Food Science  
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Grugliasco, Italy

Norman F. Johnson

The Ohio State University, Museum of Biological Diversity  
1315 Kinnear Rd.  
Columbus, OH 43212, USA

**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 clavicornis* (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 clavicornis* 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* (Nees von Esenbeck): Kieffer, 1926: 615 (keyed, key to subspecies); Kozlov, 1978: 538–664 (description).

*Amblyaspis aliena aliena* (Nees von Esenbeck): Kieffer, 1926: 615 (description, keyed); Vlug, 1995: 13 (cataloged, type information).

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

*Amblyaspis alienus* (Nees von Esenbeck): Vlug, 1973: 180 (material in Förster's collection, NHMW).

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

#### *Platygaster 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 Nottion, 2009: 1674 (cataloged); Vlug, 1995: 52 (cataloged, type information).

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

*Parepimeces ensifer* (Westwood): Kieffer, 1926: 761 (generic transfer, description).

**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).

*Synopeas muticum* (Nees von Esenbeck): Buhl and Nottion, 2009: 1699 (type information).

*Synopeas Muticus* (Nees von Esenbeck): Kieffer, 1914: 435 (description).

*Synopeas muticus* (Nees von Esenbeck): Thomson, 1859: 74 (description, generic transfer); Kieffer, 1926: 685 (description, keyed); Vlug, 1973: 182 (material in Förster's collection, NHMW); Buhl, 1999: 41 (keyed): Buhl and O'Connor, 2010: 14 (distribution); Vlug, 1995: 80 (cataloged, type information).

*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 (catalogued, type information).

*Synopeas Affinis* (Nees von Esenbeck): Kieffer, 1914: 442 (description).

*Synopeas (Synopeas) affinis* (Nees von Esenbeck): Kozlov, 1978: 538–664 (description, subgeneric assignment).

**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).

*Synopeas Abaris* (Walker): Marshall, 1873: 27 (generic transfer); Kieffer, 1914: 430 (description).

*Sactogaster Ventralis* (Westwood): Kieffer, 1914: 446 (description).

*Synopeas abaris* (Walker): Masner, 1965: 140 (type information); Vlug and Graham, 1984: 128 (lectotype designation); Vlug, 1985: 207 (description of type, keyed); Buhl and Nottion, 2009: 1700 (junior synonym of *Synopeas ventrale* (Westwood)); Vlug, 1995: 75 (catalogued, type information).

*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 (Sactogaster) ventralis* (Westwood): Kozlov, 1978: 538–664 (description, subgeneric assignment).

*Synopeas ventralis* (Westwood): Vlug, 1995: 83 (catalogued, type information, generic transfer); Buhl, 1999: 38 (keyed).

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

**Material examined.** Syntype female (OXUM 0004), Cambridge, Cambridgeshire, England.

**Table 1.** Type specimens of Platygastriidae in OUMNH.

Platygastriidae		
Valid combination	Original combination	Images of type specimen(s)
<i>Amblyaspis aliena</i> (Nees von Esenbeck)	<i>Platygaster alienus</i> Nees von Esenbeck	<a href="https://zenodo.org/record/7622428">https://zenodo.org/record/7622428</a>
<i>Platygaster ensifer</i> (Westwood)	<i>Epimeces ensifer</i> Westwood	<a href="https://zenodo.org/record/7622467">https://zenodo.org/record/7622467</a>
<i>Platygaster mutica</i> Nees von Esenbeck	<i>Platygaster muticus</i> Nees von Esenbeck	<a href="https://zenodo.org/record/7622492">https://zenodo.org/record/7622492</a>
<i>Synopeas affine</i> (Nees von Esenbeck)	<i>Platygaster affinis</i> Nees von Esenbeck	<a href="https://zenodo.org/record/8252755">https://zenodo.org/record/8252755</a>
<i>Synopeas ventrale</i> (Westwood)	<i>Epimeces ventralis</i> Westwood	<a href="https://zenodo.org/record/8280410">https://zenodo.org/record/8280410</a>

## 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).

**Material examined.** Holotype male (OUMNH HYME0040), Dore, Papua (Dutch New Guinea), Indonesia, 1854–1862, coll. A.R. Wallace.

### ***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, 1909: 269 (original description. Synonymized by Mineo 1981); Kieffer, 1926: 453, 458 (description, keyed); Bin, 1974: 455 (type information); Mineo, 1981: 138 (type information).

*Hadronotus Pubescens* Kieffer: Kieffer, 1913: 241 (description).

*Hadronotus Muscaeformis* (Nees von Esenbeck): Kieffer, 1913: 243 (description).

*Gryon muscaeformis* (Nees von Esenbeck): Kozlov, 1971: 47 (generic transfer, distribution, host association); Viggiani and Mineo, 1974: 149, 160, 161 (description, keyed); Kozlov, 1978: 620 (keyed); Mineo, 1981: 120, 134 (synonymy, keyed); Kozlov and Kononova, 1989: 78 (keyed); Kozlov and Kononova, 1990: 266, 269 (description, keyed); Johnson, 1992: 390 (cataloged); Kononova and Petrov, 2002: 54 (keyed).

*Gryon muscaeforme* (Nees von Esenbeck): Kononova and Kozlov, 2008: 325, 365 (description, keyed); Timokhov, 2019: 48 (catalog of species of Russia).

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

### ***Hadronotus rugostriatus* (Dodd)**

*Hadronotooides 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).

**Material examined.** Holotype female, Ceylon, coll. Thwaites.

### ***Paridris subplana* (Dodd) new combination**

*Sceliacantha subplana* Dodd, 1920: 336 (original description); Masner, 1965: 91 (type information); Johnson, 1992: 471 (cataloged, type information).

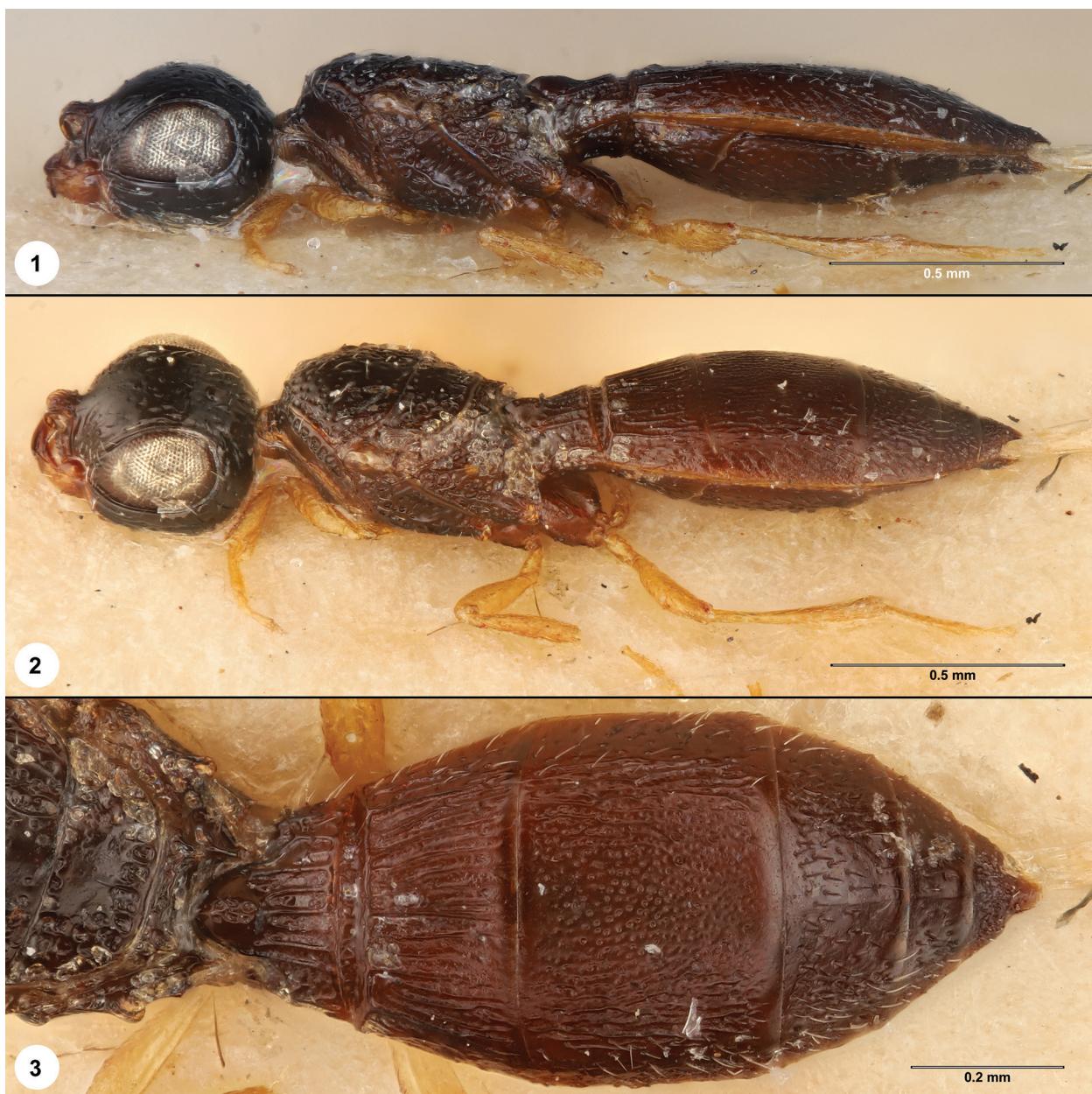
*Paridris coorgensis* Sharma 1978, in Saraswat and Sharma, 1978: 26 (original description) **new synonym**; Mani and Sharma, 1982: 177 (description); Johnson, 1992: 458 (cataloged); Rajmohana, 2007: 57 (keyed).

*Paridris circus* Kozlov and Lê, 2000, in Lê, 2000: 65, 66, 336 (original description, keyed); Talamas and Pham, 2017: 228 (junior synonym of *Paridris coorgenis* Sharma).

*Paridris striaefrons* Kozlov and Lê, 2000 in Lê, 2000: 65, 71, 339 (original description, keyed); Talamas and Pham, 2017: 228 (junior synonym of *Paridris coorgenis* Sharma).

**Material examined.** Holotype female (OUMNH HYME0033), Sri Lanka, coll. Thwaites.

**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).



**Figures 1–3.** *Paridris subplana*, holotype female. 1) Head, mesosoma, metasoma, lateral view. 2) Head, mesosoma, metasoma, dorsolateral view. 3) Mesosoma and metasoma, dorsal view.

#### *Probaryconus pictus* (Dodd)

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

*Probaryconus pictus* (Dodd): Masner, 1965: 90 (generic transfer, type information); Johnson, 1992: 465 (catalogued, type information).

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

#### *Macroteleia cleonymoides* Westwood

*Macroteleia Cleonymoides* Westwood, 1835: 70 (original description).



**Figures 4–6.** *Trissoscelio nigriceps*, holotype male (MNHN 0080). 4) Head, anterior view. 5) Head and mesosoma, lateral view. 6) Head, mesosoma, metasoma, dorsal view.

*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).

**Material examined.** Holotype male (OUMNH HYME0039), Dore, Papua (Dutch New Guinea), Indonesia, 1854–1862, coll. A.R. Wallace.

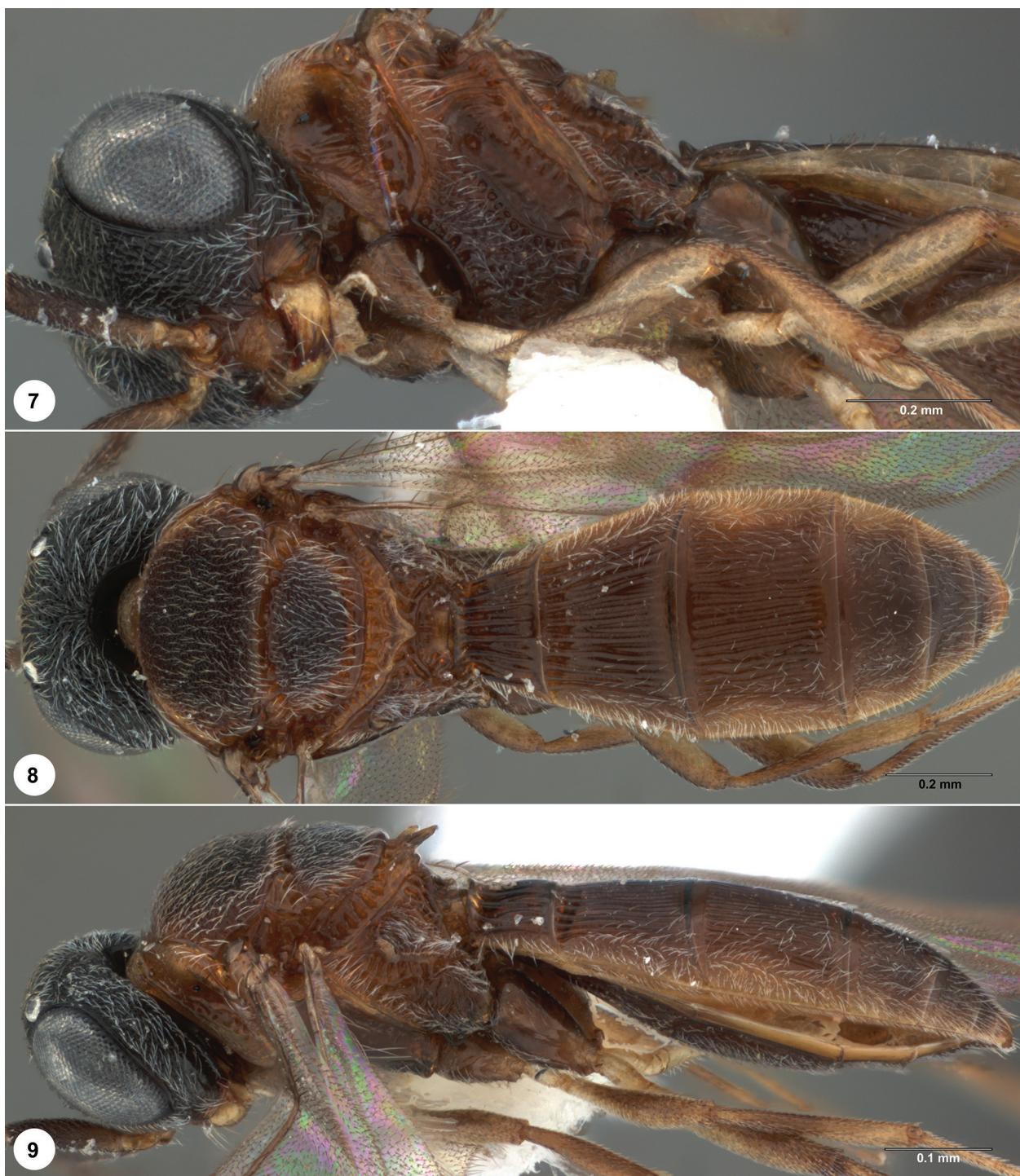
### *Teleas clavicornis* (Latreille)

*Scelio clavicornis* Latreille, 1805: 432 (original description).

*Teleas clavicornis* (Latreille): Latreille, 1809: 399 (generic transfer); Haliday, 1833: 271 (keyed); Walker, 1836: 364 (description, synonymy); Thomson, 1859: 423 (description); Walker, 1874: 6 (figure); Kieffer, 1926: 253 (description, keyed); Fabritius, 1964: 69 (keyed); Fabritius, 1970: 19 (description); Hellén, 1971: 5 (description); Johnson, 1992: 517 (cataloged); O'Connor et al., 2004: 27 (catalog of Irish species).

*Teleas Clavicornis* (Latreille): Kieffer, 1913: 181 (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.



**Figures 10–12.** *Trissoscelio nigriceps*, female, fresh specimen collected from the type locality. **10)** Head, mesosoma, metasoma with extruded ovipositor system, dorsal view. **11)** Head, anterolateral view. **12)** Head, ventrolateral view.

**Table 2.** Links to images of *Trissoscelio*.

Species	Type	Unique identifier	URL
<i>T. indicus</i>	holotype ♀	USNMENT01109813	<a href="https://zenodo.org/record/8284800">https://zenodo.org/record/8284800</a>
<i>T. nigriceps</i>	holotype ♂	MNHN 0080	<a href="https://zenodo.org/record/8253423">https://zenodo.org/record/8253423</a>
<i>T. nigriceps</i>	♂	CNC494888	<a href="https://zenodo.org/record/8253544">https://zenodo.org/record/8253544</a>
<i>T. nigriceps</i>	♀	OSUC 174174	<a href="https://zenodo.org/record/8253553">https://zenodo.org/record/8253553</a>
<i>T. punctaticeps</i>	holotype ♂	MNHN EY32626	<a href="https://zenodo.org/record/8284830">https://zenodo.org/record/8284830</a>
<i>T. ruficeps</i>	holotype ♀	MNHN EY32576	<a href="https://zenodo.org/record/8284836">https://zenodo.org/record/8284836</a>

### *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).

*Hemisius minutus?* Westwood: Walker, 1836: 344 (description).

*Hemisius Minutus* Westwood: Kieffer, 1912: 85 (description).

*Telenomus minutus* (Westwood): Masner, 1961: 167 (description, generic transfer); Masner, 1965: 116 (type information); Mineo, 2005b: 10 (description); Mineo, 2006: 29 (synonymy); Johnson, 1992: 599 (cataloged, type information).

**Material examined.** Syntype female (OUMNH HYME0024), Hammersmith, The Grove, Hammersmith and Fulham Borough, Greater London Reg., England, UK. 24-APR-1833

**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 (catalogued, type information).

**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.

**Table 3.** Type specimens of Scelionidae in OUMNH.

<b>Scelionidae</b>		
<b>Valid combination</b>	<b>Original combination</b>	<b>Images of type specimen(s)</b>
<i>Baryconus atripes</i> (Dodd)	<i>Trichoteleia atripes</i> Dodd	<a href="https://zenodo.org/record/8250482">https://zenodo.org/record/8250482</a>
<i>Hadronotus muscaeformis</i> (Nees von Esenbeck)	<i>Teleas muscaeformis</i> Nees von Esenbeck	<a href="https://zenodo.org/record/7443131">https://zenodo.org/record/7443131</a>
<i>Hadronotus rugostriatus</i> (Dodd)	<i>Hadronotoides rugostriatus</i> Dodd	<a href="https://zenodo.org/record/8247800">https://zenodo.org/record/8247800</a>
<i>Macroteleia cleonymoides</i> Westwood	<i>Macroteleia Cleonymoides</i> Westwood	<a href="https://zenodo.org/record/7622555">https://zenodo.org/record/7622555</a> <a href="https://mbd-db.osu.edu/hol/collecting_units/0eae5d0b-1a74-3aaa-e053-0100007f2cc9?&amp;search_type=fast">https://mbd-db.osu.edu/hol/collecting_units/0eae5d0b-1a74-3aaa-e053-0100007f2cc9?&amp;search_type=fast</a>
<i>Paridris subplana</i> (Dodd)	<i>Sceliacantha subplana</i> Dodd	<a href="https://zenodo.org/record/7622586">https://zenodo.org/record/7622586</a>
<i>Probaryconus pictus</i> (Dodd)	<i>Baryconus pictus</i> Dodd	<a href="https://zenodo.org/record/7622521">https://zenodo.org/record/7622521</a>
<i>Scelio subpolitus</i> Dodd	<i>Scelio subpolitus</i> Dodd	<a href="https://zenodo.org/record/8252798">https://zenodo.org/record/8252798</a> <a href="https://mbd-db.osu.edu/hol/collecting_units/0eae5d0a-ca34-3aaa-e053-0100007f2cc9">https://mbd-db.osu.edu/hol/collecting_units/0eae5d0a-ca34-3aaa-e053-0100007f2cc9</a>
<i>Scelio wallacei</i> Dodd	<i>Scelio wallacei</i> Dodd	<a href="https://zenodo.org/record/7622566">https://zenodo.org/record/7622566</a>
<i>Teleas clavicornis</i> (Latreille)	<i>Scelio clavicornis</i> Latreille	<a href="https://zenodo.org/record/7622481">https://zenodo.org/record/7622481</a>
<i>Telenomus minutus</i> (Westwood)	<i>Hemisius minutus</i> Westwood	<a href="https://zenodo.org/record/8252778">https://zenodo.org/record/8252778</a>
<i>Telenomus phalaenarum</i> (Nees von Esenbeck)	<i>Teleas phalaenarum</i> Nees von Esenbeck	<a href="https://zenodo.org/record/7622591">https://zenodo.org/record/7622591</a>
<i>Telenomus truncatus</i> (Nees von Esenbeck)	<i>Teleas linnei</i> Nees von Esenbeck	<a href="https://zenodo.org/record/7622511">https://zenodo.org/record/7622511</a>
<i>Telenomus truncatus</i> (Nees von Esenbeck)	<i>Teleas truncatus</i> Nees von Esenbeck	<a href="https://zenodo.org/record/7846207">https://zenodo.org/record/7846207</a>
<i>Trissoscelio bifasciatus</i> (Dodd)	<i>Opisthacantha bifasciata</i> Dodd	<a href="https://zenodo.org/record/7622533">https://zenodo.org/record/7622533</a>
<i>Triteleia atrella</i> (Dodd)	<i>Prosapegus atrellus</i> Dodd	♀: <a href="https://zenodo.org/record/8252761">https://zenodo.org/record/8252761</a> ♂: <a href="https://zenodo.org/record/8252773">https://zenodo.org/record/8252773</a>
<i>Triteleia metatarsalis</i> (Dodd)	<i>Prosapegus metatarsalis</i> Dodd	<a href="https://zenodo.org/record/8252775">https://zenodo.org/record/8252775</a>
<i>Triteleia violacea</i> (Dodd)	<i>Prosapegus violaceus</i> Dodd	<a href="https://zenodo.org/record/7622597">https://zenodo.org/record/7622597</a>

### ***Telenomus truncatus* (Nees von Esenbeck)**

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

*Teleas Linnei* 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* Ratzeburg, 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).

*Telenomus truncatus* (Nees von Esenbeck): Mayr, 1879: 700, 702, 707 (description, generic transfer, synonymy, keyed); Kieffer, 1926: 31 (description, keyed); Javahery, 1968: 431 (description, keyed); Szabó, 1978: 219, 222 (description, neotype designation, keyed); Johnson, 1984: 41 (taxonomic status, neotype information); Mineo, 2012: 61 (placed in *turensis* group); Johnson, 1992: 617 (cataloged, type information).

*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, *Apteroscelio* Kieffer, *Platyscelidris* 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; metascutellum 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 topotypical 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 (catalogued, 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).

*Holoteleia indica* (Mani): Mani and Sharma, 1982: 181 (description, generic transfer); Johnson, 1992: 401 (catalogued, type information).

*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

*Trissoscelio nigriceps* Kieffer, 1917: 52–53 (original description, keyed) Kieffer, 1926: 419 (description, keyed); Kelner-Pillault, 1958: 152 (type information); Baltazar, 1966: 181 (catalogued, type information, distribution).

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

**Material examined.** Holotype male (MNHN 0080), Mount Makiling (Maquiling), Laguna Prov., Philippines, coll. Baker (MNHN). (CNC494888, ♀; OSUC 174174 ♂), Philippines, Camarines, Sur. Panicuason, Naga (Luzon); 10–15.ii.1991; D. M. General, YPT (CNCI).

**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

*Trissoscelio punctaticeps* Kieffer, 1917: 53–54 (original description, keyed) Kieffer, 1926: 420 (description, keyed); Kelner-Pillault, 1958: 152 (type information); Baltazar, 1966: 181 (catalogued, type information, distribution).

*Opisthacantha punctaticeps* (Kieffer): Masner, 1976: 47 (generic transfer, type information, description); Johnson, 1992: 449 (catalogued, type information).

**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**

*Trissoscelio ruficeps* Kieffer, 1917: 53–54 (original description, keyed) Kieffer, 1926: 420 (description, keyed); Kelner-Pilault, 1958: 152 (type information); Baltazar, 1966: 181 (cataloged, type information, distribution).

*Opisthacantha ruficeps* (Kieffer): Masner, 1976: 47 (generic transfer, type information, description); Johnson, 1992: 449 (cataloged, type information).

**Material examined.** Holotype female, MNHN EY32576, Mount Makiling, Luzon Is., Laguna, Philippines, coll. Baker (MNHN).

### ***Triteleia atrella* (Dodd)**

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

*Triteleia atrella* (Dodd): Masner, 1976: 29 (generic transfer, type information); Johnson, 1992: 507 (cataloged, type information).

**Material examined.** Holotype female (OUMNH HYME0036 ½), Indonesia, coll. Wallace; Paratype male (OUMNH HYME0036 ½), Indonesia, coll. A. R. Wallace.

### ***Triteleia metatarsalis* (Dodd)**

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

*Triteleia metatarsalis* (Dodd): Masner, 1976: 29 (generic transfer); Johnson, 1992: 508 (cataloged, 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).

*Triteleia violacea* (Dodd): Masner, 1976: 29 (generic transfer, type information); Johnson, 1992: 509 (cataloged, type information).

**Material examined.** Paratype female (OUMNH HYME0035), Dore, Papua (Dutch New Guinea), Indonesia, 1854–1862, Coll. A. R. Wallace.

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