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Description of two new genera and a taxonomic key to the world genera of Cybocephalidae (Coleoptera)

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Description of two new genera and a taxonomic key to the world genera of Cybocephalidae (Coleoptera)

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Abstract. The sixteen genera of Cybocephalidae (Coleoptera) occurring worldwide are listed and keyed. The genera included are *Amedissia* Kirejtshuk and Mantič, *Apastillus* Kirejtshuk and Mantič, *Cybocephalus* Erichson, *Endrodiellus* Endrödy-Younga, *Eupastillus* Lawrence, *Hierronius* Endrödy-Younga, *Horadion* Endrödy-Younga, *Pacicephalus* Kirejtshuk and Mantič, *Pastillocenicus* Kirejtshuk and Nel, *Pastillodes* Endrödy-Younga, *Pastillus* Endrödy-Younga, *Pycnocephalus* Sharp, *Taxicephomerus* Kirejtshuk, *Theticephalus* Kirejtshuk, a description of a **new genus**, *Microthomas* T. R. Smith, with one **new species**, *M. brevicornis* T. R. Smith, from Bolivia, and a **new genus**, *Conglobatus* T. R. Smith, with two **new species**, *C. armatus* T. R. Smith from Central and South America and *C. fullertoni* T. R. Smith from Dominica. A key to genera, illustrations of morphological features, and distributional data are provided. The genus *Nodola* Bréthes is found to be a **new synonym** of *Cybocephalus* Erichson. The transfer of *Nodola chilensis* Bréthes into *Cybocephalus* creates a secondary homonymy with *C. chilensis* Reitter. *Nodola chilensis* Bréthes is here given a **new name**, *Cybocephalus brethesi* T. R. Smith.

Key words. *Cybocephalus*, *Microthomas*, *Conglobatus*, scale predator, taxonomy.

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Introduction

Beetles in the family Cybocephalidae are globally distributed and can be found in habitats as diverse as arboreal forests, tropical rainforests and deserts (Smith and Cave 2006a). They are a specialized predatory family that feeds primarily on armored scale insects (Homoptera: Diaspididae) (Vinson 1959; Endrödy-Younga 1968; Alvarez and Van Driesche 1998; Smith and Cave 2006b), but have also been known to feed on soft scales (Homoptera: Coccidae) (Bréthes 1922; Parker 1951), mealybugs (Homoptera: Pseudococcidae) (Flanders 1934; Kartman 1946; Endrödy-Younga 1982), whiteflies (Homoptera: Aleyrodidae) (Chandra and Avasthy 1978; Kirejtshuk et al. 1997; Tian and Ramani 2003), and mites (Acari: Tetranychidae) (Tanaka and Inoue 1980). Cybocephalids may also supplement their diet with pollen as evidenced by *Cybocephalus kathrynae* T. R. Smith feeding extensively on *Mammillaria nivosa* Link ex N. R. Pfeiffer (Cactaceae) pollen in Puerto Rico (Curbelo-Rodríguez et al. 2012).

The oldest example of this family in the fossil record dates to the early Eocene Epoch (53 mya) from French amber (Kirejtshuk and Nel 2008). Cybocephalids have also been found in Baltic amber deposits from the late Eocene (40 mya) (Kurochkin and Kirejtshuk 2010), Mojave Desert amber deposits from the middle Miocene (15 mya) (Palmer et al. 1957) and from peat bogs in southern Finland from the early Holocene (10,000 ya) (Koponen and Nuorteva 1973).

The taxonomic history of this family is discussed extensively in Cave and Smith (2006a) and Cline et al. (2014). Erichson first described *Cybocephalus* in 1844 and placed it in the family Nitidulidae based on a perceived 5-5-5 tarsal formula. Jacquelin du Val (1858) later moved *Cybocephalus* into a separate subfamily and clarified that this genus did, in fact, have a 4-4-4 tarsal formula. The subfamily remained in Nitidulidae until Bøving and Craighead's (1931) extensive study of coleoptera larvae led the authors to elevate the subfamily to family status.

Some general phylogenetic works have continued to place the cybocephalids in the subfamily Cybocephalinae (Lawrence and Newton 1995; Jelinek et al. 2010) almost exclusively based on the work of Kirejtshuk (1984, 1986, 1988, 1992, 1994) and Kirejtshuk and Mantič (2015). However, virtually all major taxonomic works specific to this group over the last 90 years have supported the placement of this group of beetles in its own family (Endrödy-Younga 1962a,b, 1964, 1965, 1967, 1968, 1969, 1971a,b, 1974, 1976, 1982, 1984; Smith and Cave 2006a, 2007a,b; Hisamatsu 2013; Cline et al. 2014; Lawrence 2019). The most-recent work of Zhang et al. (2018) found that Cybocephalidae formed a clade with Kateretidae, which was sister to the clade containing Nitidulidae clearly demonstrating the separation of Cybocephalidae from Nitidulidae.

Currently the family Cybocephalidae has 207 species described from 15 extant genera, including the two described herein, and one extinct genus (Smith, catalog in prep.). Prior to this study there were three genera documented from the western hemisphere: *Amedissia* Kirejtshuk and Mantič, *Cybocephalus* Erichson and *Pycnocephalus* Sharp. This paper presents the description of two new genera in the family Cybocephalidae from the West Indies, Central and South America and a taxonomic key to the cybocephalid genera of the world.

Materials and Methods

Materials. For this study, thousands of specimens belonging to the family Cybocephalidae were examined from collections all over the world. For all genera not examined, the original descriptions and subsequent publications were used to develop the taxonomic key. The author relied heavily on the works of Endrödy-Younga (1968, 1976) and Kirejtshuk and Mantič (2015) for generic descriptions and diagnoses. The holotypes described herein were deposited in the United States National Museum, Smithsonian Institute, Washington D.C. (USNM) and paratypes were deposited in the Florida State Collection of Arthropods, Florida Department of Agriculture and Consumer Services, Division of Plant Industry, Gainesville, Florida (FSCA).

Methods. Disarticulation was achieved using minuten pins attached to wooden applicator sticks. The minutens were bent and twisted into various shapes to create the necessary tools for this extremely sensitive work. Most genera were softened by placing specimens in lactic acid and heated to approximately 60° C for about 4 hours. However, *Pycncocephalus* and *Amedissia* often required more than 4 hours to soften sufficiently for disarticulation. All dissections took place in glycerin due to the convex body form of cybocephalid beetles. Each individual part of the specimen was glued to a card. Total length was measured from apex of mandibles to apex of the elytra and width was measured at the base of elytra. Label data were copied verbatim for the holotype with label breaks indicated by a slash (/).

Key to the extant genera of the Cybocephalidae of the World

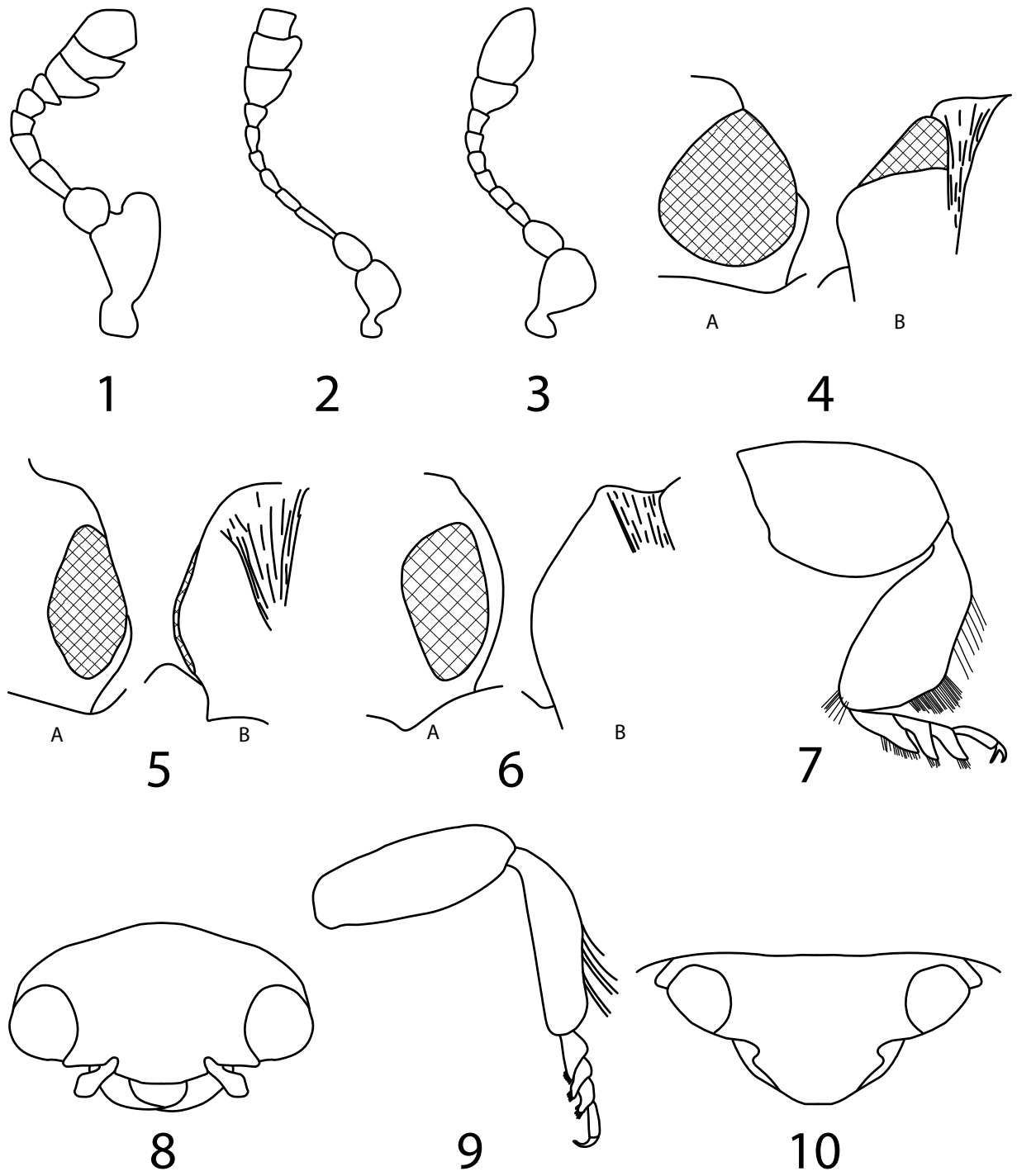
1. Antennae with 10 antennomeres (Fig. 1) **2**
— Antennae with 11 antennomeres (Fig. 2) **6**

2(1). Antennal club with 2 antennomeres (Fig. 3) ..... ***Apastillus* Kirejtshuk and Mantič**
— Antennal club with 3 antennomeres (Fig. 1) **3**

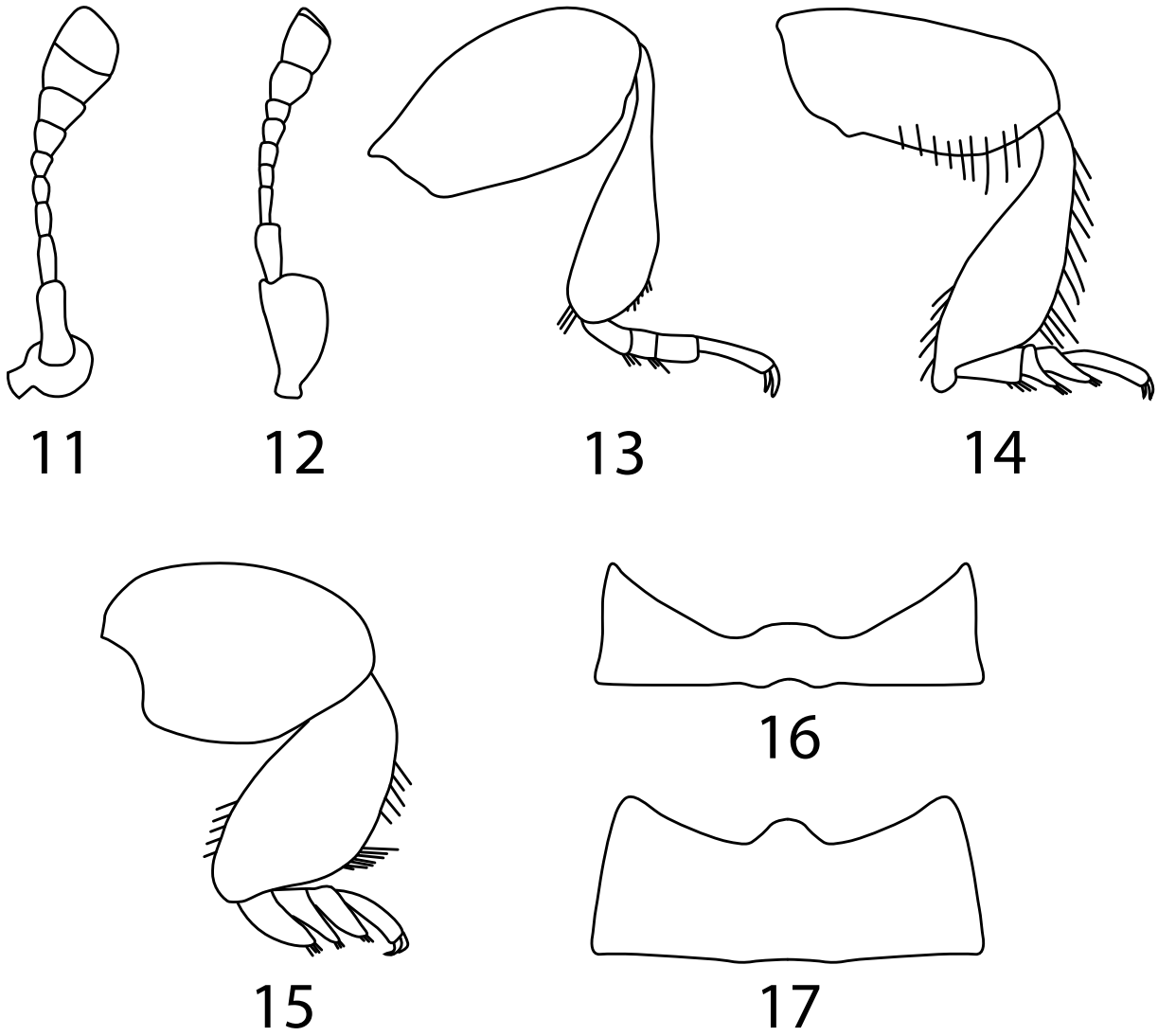
3(2). Eyes with facets distinctly visible in ventral aspect (Fig. 4) **4**
— Eyes with facets not distinctly visible in ventral aspect (Fig. 5–6) **5**

4(3). Metatibia dilated (Fig. 7), clypeus short and barely produced beyond antennal fossae (Fig. 8) ..... ***Amedissia* Kirejtshuk and Mantič**
— Metatibia not dilated similar to *Cybocephalus* (Fig. 9), clypeus strongly produced and extending well beyond antennal fossa (Fig. 10) ..... ***Theticephalus* Kirejtshuk**

5(3). Scape shorter than pedicel, terminal antennomere clearly visible and not at all recessed within penultimate antennomere (Fig. 11) ..... ***Pacicephalus* Kirejtshuk and Mantič**
— Scape longer than pedicel, terminal antennomere almost entirely recessed within penultimate antennomere (Fig. 12) ..... ***Horadion* Endrödy-Younga**



Figures 1–10. Key Characters. **1)** *Amedissia argentinus* (Bréthes) antenna. **2)** *Cybocephalus championi* T. R. Smith antenna. **3)** *Apastillus eminentithorax* Hisamatsu antenna (redrawn from Hisamatsu 2013). **4)** Eye of *Theticephalus decamerus* (Endrödy-Younga), dorsal and ventral view (redrawn from Endrödy-Younga 1968). **5)** Eye of *Heirronius laevis* (Wollaston), dorsal and ventral view (redrawn from Endrödy-Younga 1968). **6)** Eye of *Pastillodes agathidioides* (Peyerimhoff), dorsal and ventral view (redrawn from Endrödy-Younga 1968). **7)** *Amedissia argentinus* (Bréthes) metaleg. **8)** *Amedissia argentinus* (Bréthes) head. **9)** *Cybocephalus chilensis* Reitter metaleg. **10)** Head of *Theticephalus decamerus* (Endrödy-Younga) (redrawn from Endrödy-Younga 1968).

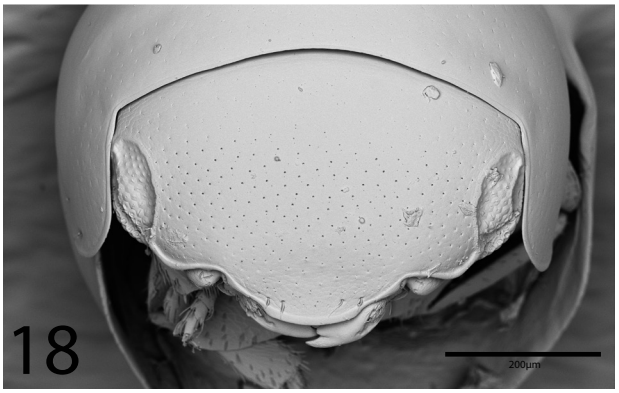


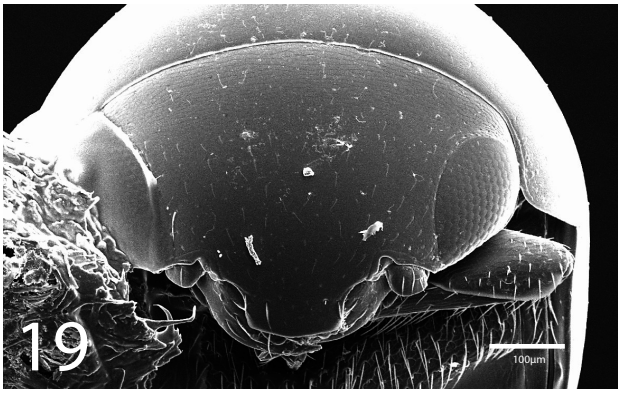
Figures 11–17. Key Characters. **11)** Antenna of *Pacicephalus gresetti* (Endrödy-Younga) (redrawn from Endrödy-Younga 1971). **12)** Antenna of *Horadion villiersi* Endrödy-Younga (redrawn from Endrödy-Younga 1976). **13)** Metaleg of *Conglobatus fullertoni* T. R. Smith. **14)** Metaleg of *Eupastillus minimus* Lawrence. **15)** Metaleg of *Pycnocephalus deryrollei* (Reitter). **16)** Metaventrite of *Conglobatus armatus* T. R. Smith. **17)** Metaventrite of *Cybocephalus californicus* Horn.

6(1). Eyes with facets distinctly visible in ventral aspect (Fig. 4) **7**
— Eyes with facets not distinctly visible in ventral aspect (Fig. 5–6) **10**

7(6). Metatibia slightly to moderately dilated (Fig. 9, 13) **8**
— Metatibia greatly dilated (Fig. 14–15) **9**

8(7). Metatventrite shorter than mesoventrite and without distinct apical process (Fig. 16), clypeus produced and with a broadly rounded apical margin with distinct marginal bead (Fig. 18) . . . . . ***Conglobatus* T. R. Smith, new genus**
— Metaventrite longer than mesoventrite and with distinct apical process (Fig. 17), clypeus produced but with a squared apical margin and no marginal bead (Fig. 19) . . . . . ***Cybocephalus* Erichson**





Figures 18–19. Key Characters. **18)** Head of *Conglobatus armatus* T. R. Smith (SEM). **19)** Head of *Cybocephalus nigritulus* LeConte (SEM).

9(7). Clypeus strongly produced extending well beyond antennal fossae similar to *Cybocephalus* (Fig. 19), protibia with smooth outer margin (Fig. 20), pedicel elongate (Fig. 21) .... ***Eupastillus* Lawrence**

— Clypeus short and hardly produced beyond antennal fossae (Fig. 22), protibia crenulate along outer margin (Fig. 23), pedicel globular (Fig. 24) ..... ***Pycnocephalus* Sharp**

10(6). Metatibia not dilated (Fig. 25) ..... ***Heirronius* Endrödy-Younga**

— Metatibia dilated (Fig. 26) **11**

11(10). At least tarsomeres 2–3 ventrally lobed (Fig. 27) ..... ***Microthomas* T. R. Smith, new genus**

— Tarsomeres 2–3 may be dilated but not ventrally lobed (Fig. 28) **12**

12(11). Protibia crenulate along outer margin (Fig. 29) ..... ***Taxicephomerus* Kirejtshuk**

— Protibia with smooth outer margin similar to *Cybocephalus* (Fig. 30) **13**

13(12). Metacoxae widely separated, anterior process on abdominal ventrite 1 between metacoxae widely rounded or truncate, similar to *Cybocephalus* (Fig. 31) ..... ***Endrodiellus* Endrödy-Younga**

— Metacoxae closer together, anterior process on abdominal ventrite 1 small, triangular, anteriorly pointed or narrowly rounded (Fig. 32–33) **13**

14(13). Metaventrite convex, abdominal ventrite I with femoral lines not expressed beyond anterior margin, mesotibia can be completely concealed into the depression on dorsal side of mesofemur (Fig. 32) ..... ***Pastillus* Endrödy-Younga**

— Metaventrite concave, abdominal ventrite I with femoral lines strongly expressed beyond anterior margin; mesotibia cannot be completely concealed into the depression on dorsal side of mesofemur (Fig. 33) ..... ***Pastillodes* Endrödy-Younga**

World Genera of Cybocephalidae

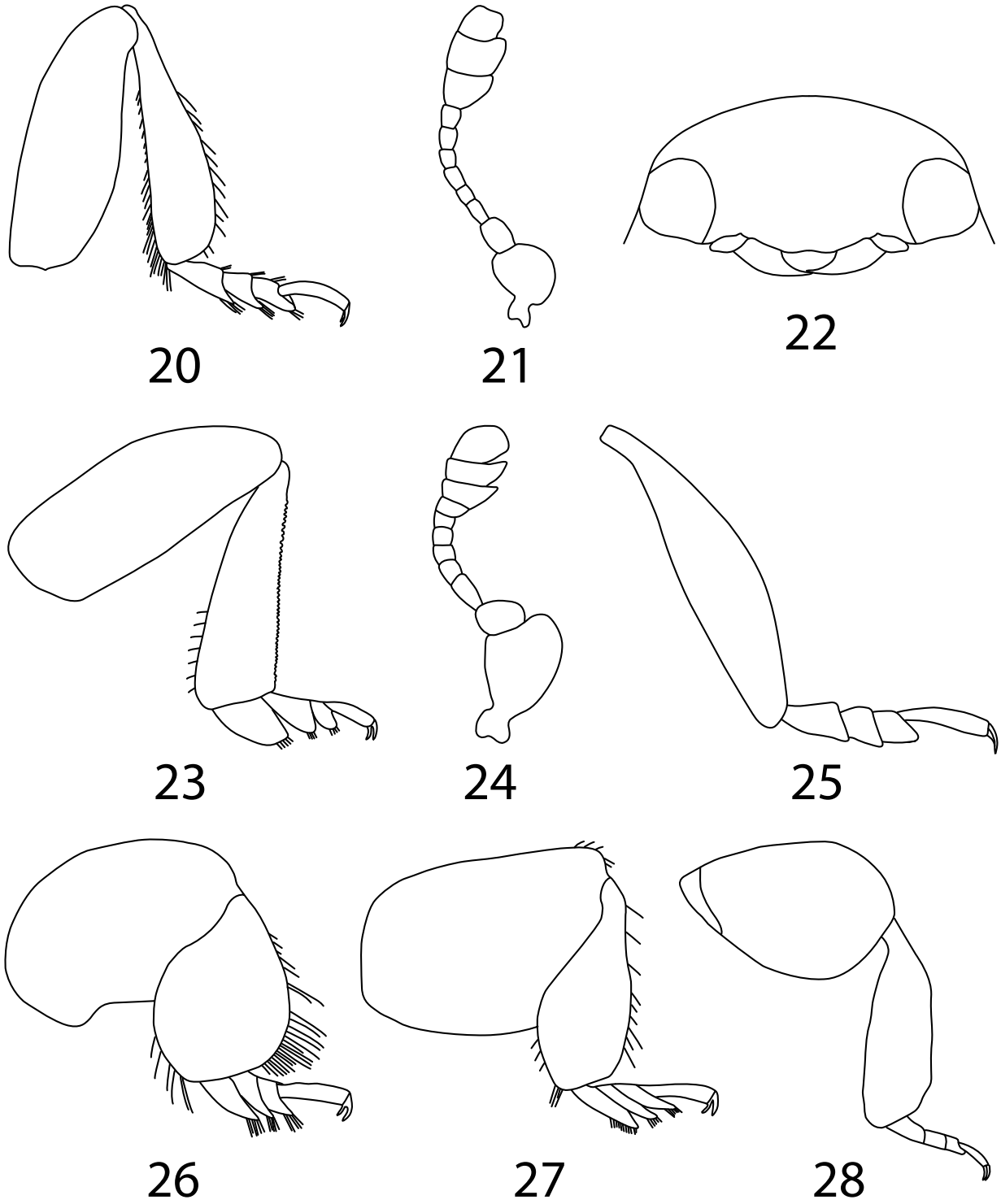
Amedissia Kirejtshuk and Mantič, 2015

(Fig. 1, 7, 8)

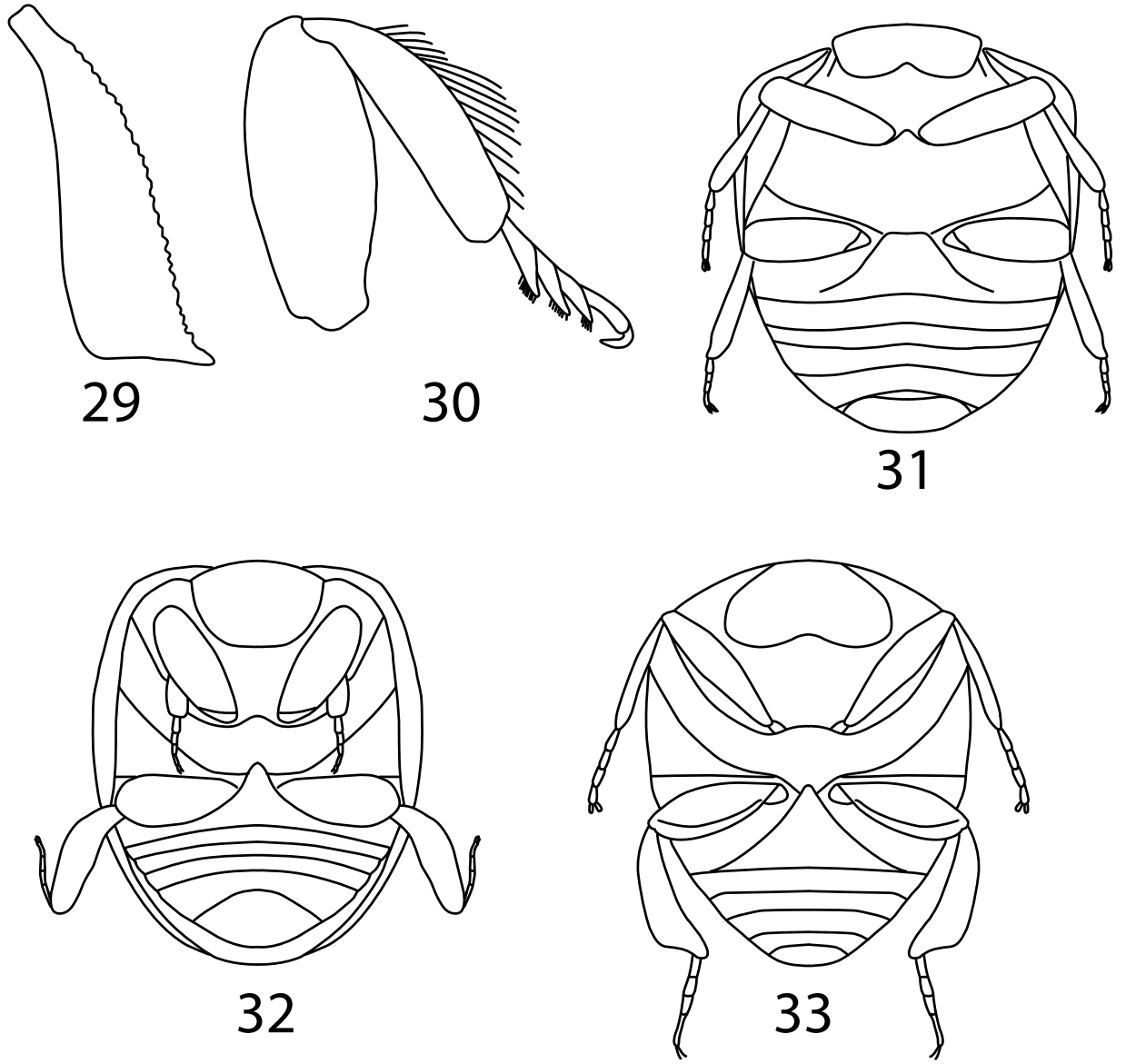
Amedissia Kirejtshuk and Mantič 2015: 201. Type species: *Pycnocephalus argentinus* Bréthes 1922: 265; by original designation.

Distribution. Central and South America

Remarks. This genus is monotypic. However, there are many undescribed species from Central and South America (personal observation). For a description of the genus see Kirejtshuk and Mantič (2015).



Figures 20–28. Key Characters. **20)** Proleg of *Eupastillus minimus* Lawrence. **21)** Antenna of *Eupastillus minimus* Lawrence. **22)** Head of *Pycnocephalus deryrollei* (Reitter). **23)** Proleg of *Pycnocephalus deryrollei* (Reitter). **24)** Antenna of *Pycnocephalus deryrollei* (Reitter). **25)** Metatibia and tarsus of *Heirronius madeiraensis* Kirejtshuk and Mantič (redrawn from Kirejtshuk and Mantič 2015). **26)** Metaleg *Microthomas brevicornis* T. R. Smith. **27)** Mesoleg *Microthomas brevicornis* T. R. Smith. **28)** Metaleg of *Endrodiellus speciosus* Endrödy-Younga (redrawn from Endrödy-Younga, 1962b).



Figures 29–33. Key Characters. **29)** Protibia of *Taxicephomerus porrectus* Kirejtshuk (redrawn from Kirejtshuk 1994). **30)** Proleg of *Cybocephalus chilensis* Reitter. **31)** *Cybocephalus regalis* Endrödy-Younga venter (redrawn from Endrödy-Younga 1962b). **32)** *Pastillus confexus* Endrödy-Younga venter (redrawn from Endrödy-Younga 1962b). **33)** *Pastillodes agathidioides* (Peyerimhoff) venter, (redrawn from Endrödy-Younga 1968).

Apastillus Kirejtshuk and Mantič, 2015

(Fig. 3)

Apastillus Kirejtshuk and Mantič 2015: 201–203. Type species: *Pastillus eminentithorax* Hisamatsu 2013: 264–266; by original designation.

Distribution. Japan.

Remarks. This genus is monotypic. For a description of the genus see Kirejtshuk and Mantič (2015).

Genus *Conglobatus* T. R. Smith, new genus

(Fig. 13, 16, 18, 34–49)

Type species. *Conglobatus armatus* T. R. Smith, here designated.

Diagnosis. *Conglobatus* is easily distinguished from the other four genera in the Western Hemisphere *Amedissia*, *Cybocephalus, Microthomas* and *Pycnocephalus* by having a metaventrite shorter than the mesoventrite with the inner-mesocoxal distance being about equal to the inner-metacoxal distance (Fig. 16). The combination of this shortened metaventrite, unlobed tarsomeres (Fig. 37–39, 44–46) and the rounded apical margin of the clypeus with a marginal bead (Fig. 18) clearly differentiates this genus from the aforementioned genera of the Western Hemisphere. Additionally, the antennae have an unusual slightly inflated three antennomere club, with a slightly serrated interior margin and a rounded terminal club antennomere (Fig. 36, 43). Tibiae are expanded towards the apical end, and metatibia has a highly curved exterior margin (Fig. 37–39, 44–46). The body form is ovate and strongly convex (Fig. 34) with the length being 1.5 times the width.

Description. Body about 0.9 mm long (excluding head) and 0.6 mm wide; elongate oval and convex; brown over almost the entire body aside from antennomeres II–XI, maxillary palpi, labial palpi, procoxae and protrochanters which are light brown to tan. Head large, with a clypeus distinctly produced extending well beyond the apices of the eyes with a broadly rounded and sinuate apical margin with a border. Labrum not visible from above and completely concealed by the clypeus. Mandibles large and exposed with evenly curved outer edge, apex unidentate, with a distinct subapical tooth (Fig. 18). Maxillary palpi expanded in the middle with terminal palpomere subconical and gradually narrowing towards apex. Maxillary palpomere I shortest and maxillary palpomeres II and terminal palpomere of equal length. Terminal maxillary palpomere longer than terminal labial palpomere. Labial palpi expanded at the base with terminal palpomere short and truncate at the apex. Antennae with 11 antennomeres and a large ovate club consisting of 3 antennomeres, a subtly serrate club margin and indistinct margin between club antennomeres; scape globular and pedicel conical (Fig. 36, 43). Eyes rather small and distinctly visible ventrally. Lateral edge of pronotum emarginate and bordered. Scutellar shield triangular and widest at base. Elytron rounded at apex and almost truncate. Hindwing fully developed. Metaventrite shorter than mesoventrite with a very short and slightly rounded apical process (Fig. 16) and asetose except for a few setae in the middle. Abdominal ventrite I about as long as the combined length of abdominal ventrites II–IV in the middle; each abdominal ventrite with a row of stout setae along the posterior edge. Profemur moderately enlarged, protibia thickened and expanded toward the apical end. Mesofemur laminiform and expanded, mesotibia expanded toward the apical end. Metafemur slightly enlarged, metatibia curved and expanded towards the apical end. Tarsomeres I–II dilated; tarsomere III is bifurcated but none of the tarsomeres are lobiform (Fig. 37–39, 44–46).

Distribution. Central America, South America and the West Indies.

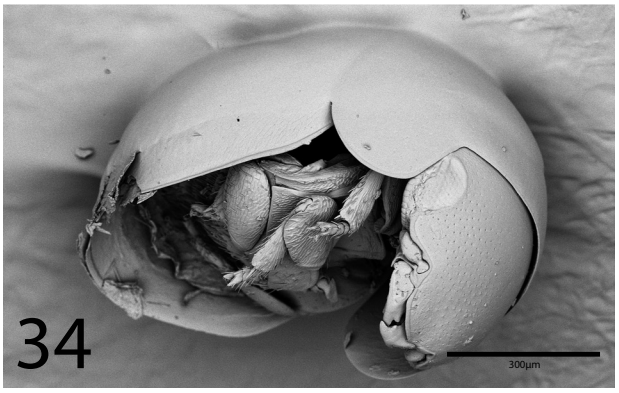
Etymology. This genus is named after the organism's ability to conglobate. Gender masculine.

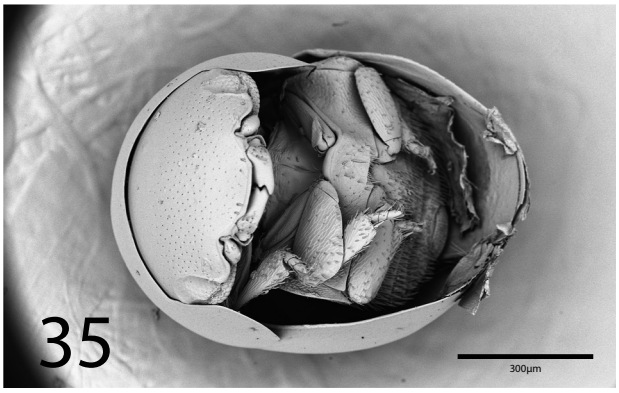
Remarks. Only six specimens of this genus have been collected and very little is known about them.

Conglobatus armatus T. R. Smith, new species

(Figures 16, 18, 34–42)

Diagnosis. Body convex and ovate (Fig. 34–35). Antennae with 11 antennomeres, with an asymmetrical, 3-antennomere club with a vaguely serrate inner margin and a rounded terminal antennomere (Fig. 36). The club is slightly inflated and segmentation between 3 club antenomeres is difficult to discern without extreme magnification. Head produced with a rounded clypeus extending well beyond antennal fossae (Fig. 18). Elytron very wide and when combined 1.5 times as wide as long. Metaventrite asetose, narrowest in the center and flaring out laterally to 2 times the length in the middle, shorter than mesoventrite (Fig. 16). Intermesocoxal distance about equal to the intermetacoxal distance. Abdominal ventrite I longer than abdominal ventrites II–IV combined with a narrow rounded apical projection between the metacoxae (Fig. 16). All femora expanded medially with the mesofemur the most enlarged, all tibiae expanded towards the apical end (Fig. 37–39). Protibia with a small apical spur on the exterior and interior apical margin (Fig. 37). Mesotibia with large distinctive apical spur at the exterior apical margin (Fig. 38). Metatibia with a strongly curved margin and a large apical spur on the inner and outer margin (Fig. 39). Tarsi dilated but not lobed, tarsomere III with distinctive lateral bifurcated (Fig. 37–39).





Figures 34–35. *Conglobatus armatus* T. R. Smith. **34)** Ventro-lateral habitus, female (SEM). **35)** Ventral habitus, female (SEM).

The tibial spurs clearly distinguish this species from *C. fullertoni* T. R. Smith the only other species described in this genus.

Description. Length (excluding head) 0.90 mm, width 0.65 mm.

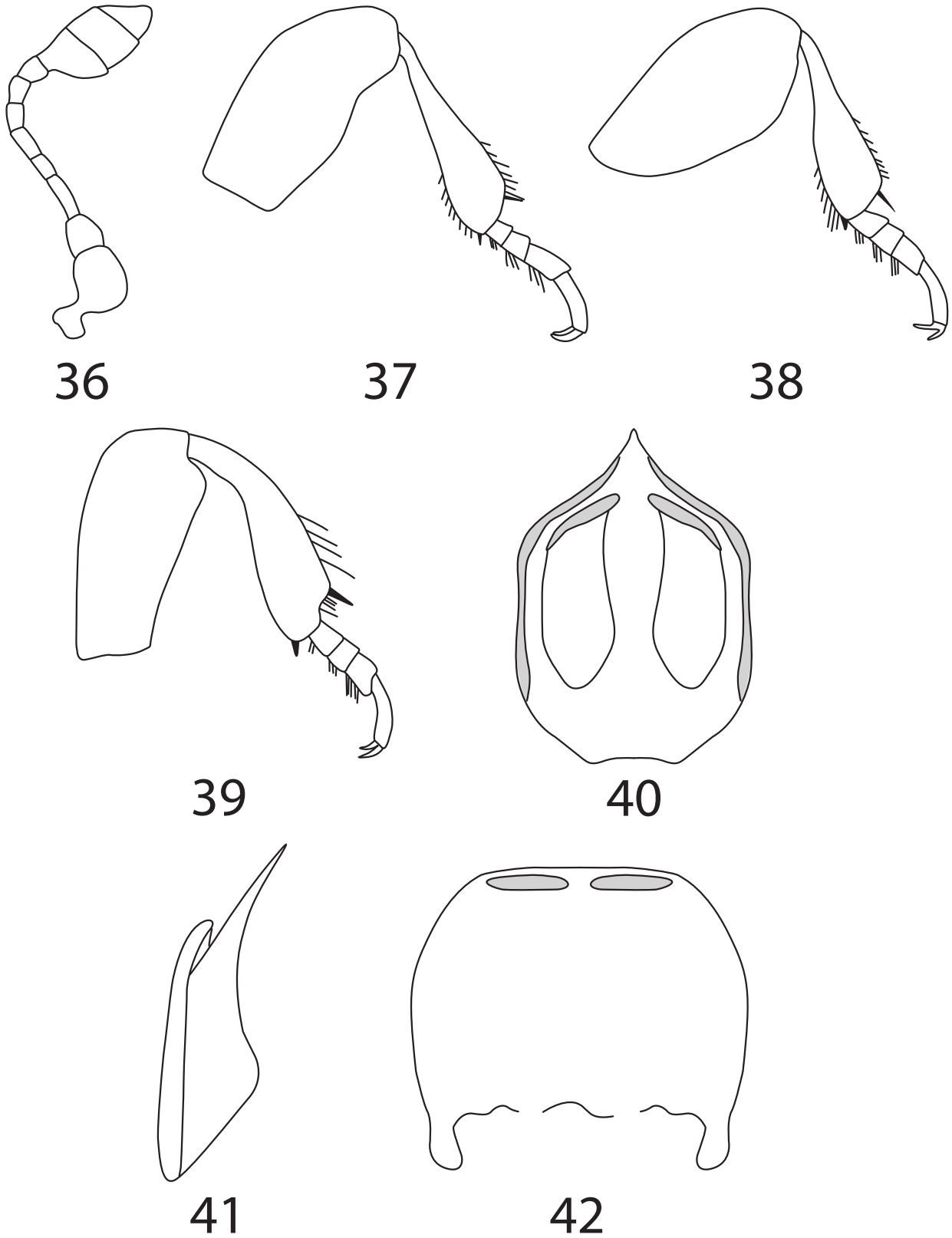
Male. Body small, ovate and convex (Fig. 34–35). Coloration brown and glossy; antennae, maxillary and labial palpi, prosternum, procoxae, protrochanters, mesoventrite, mesocoxae and mesotrochanters, abdominal ventrites and extreme apical margin of elytra light brown; head, mandibles, pronotum, scutellar shield and elytra brown.

Head large and produced (width = 0.53, length = 0.38 mm) width 1.4 times length, deflexed; antennal fossae and bordered and moderately emarginated, inwardly sloping for reception of scape. Surface strongly punctate in apical ⅔ becoming minute at base, interspaces smooth. Clypeus broadly produced, extending well beyond apex of eyes, with a bordered apical margin. Labrum hidden and genae not visible. (Fig. 18). Antennae with 11 antennomeres, asymmetrical, 3-antennomere club with a slightly serrate inner margin with a rounded terminal antennomere. Antennomere III longer than pedicel and about the same length as antennomeres IV and V combined. Scape globular and pedicel conical (Fig. 36). Antennal length about 0.66 times the width of the head and about equal to length of head. Eyes ovate and small, length about 0.36 times the width of head, visible ventrally, with distinct ommatidia. Mandibles "heavily built," produced and exposed (Fig. 18). Maxillary palpi expanded in the middle with terminal palpomere subconical and gradually narrowing towards apex. Maxillary palpomere I shortest and maxillary palpomeres II and III of equal length. Terminal maxillary palpomere longer than terminal labial palpomere. Labial palpi expanded at the base with terminal palpomere short and truncate at the apex.

Pronotum strongly convex, 1.42 times as wide as long; lateral margins in dorsal view arcuate converging anteriorly. Lateral lobe deplanate, anterior and lateral margins distinctly bordered; both lateral angles rounded creating a sub-rectangular lateral lobe (18, 34–35); surface uniformly and minutely punctured with short recumbent sparse setae; interspaces smooth. Scutellar shield small and triangular with slightly convex margins.

Elytra evenly convex in lateral aspect (Fig. 34), combined width much wider than long (1.5 times as wide as long). Apical margins separately arcuate to a nearly truncate apex (Fig. 31, 40). Suture bordered behind scutellar shield all the way to the apical margin. Lateral portions strongly deplanate, almost vertical and bordered. Epipleuron not distinct (Fig. 35). Punctures of elytral disc larger than on pronotum, generally distinct at base, gradually becoming less distinct towards the apex with short recumbent sparse setae; interspaces smooth. Hindwings present and well-developed.

Prosternum strongly carinate at middle. Mesoventrite asetose, depressed and longer than metaventrite. Metaventrite narrowest in the center and flaring out to 2 times longer at the lateral margins. Metaventrite slightly convex, asetose (except for a few setae in the middle) and extremely rugose and alutaceous. Inter-metacoxal distance narrow, and about equal to the inter-mesocoxal distance. A slightly rounded apical process of metaventrite separating mesocoxae (Fig. 16, 35). Abdominal ventrites covered with long, brownish setae (Fig. 35); anterior



Figures 36–42. *Conglobatus armatus* T. R. Smith. **36)** Antenna. **37)** Proleg. **38)** Mesoleg. **39)** Metaleg. **40)** Median lobe. **41)** Median lobe, lateral view. **42)** Basal plate.

process of abdominal ventrite I narrow and rounded; femoral lines strongly expressed beyond anterior margin of abdominal ventrite I. Abdominal ventrite I longer than abdominal ventrites II–IV combined and with a concave apical margin to accommodate male anal plate. Pygidium broadly rounded at apex.

Profemur expanded (2.2 times longer than wide) and protibia greatly expanded and dilated apically (3.2 times wider at apex than base) (Fig. 37); mesofemur expanded and deplanate (1.8 times longer than wide) and mesotibia expanded and dilated at the apical end (3.1 times wider at apex than base) (Fig. 38); metafemur expanded (2.1 times longer than wide) and deplanate and metatibia dilated and expanded at the apical end (2.5 times wider at the apex than base) (Fig. 39). Tarsomeres unlobed and with a few sparse setae, claws simple. Tarsomere III bifurcated (Fig. 34) and terminal tarsomere longest and longer than tarsomeres II–III combined (Fig. 37–39).

Median lobe: Sides parallel and curving into a sharp point, apical curve slightly convex (Fig. 40). In profile, slightly curved from apical third (Fig. 41). Median plate on surface slightly elevated. *Basal plate*: Sides parallel curving at the apex and rounded along the apical margin. (Fig. 42).

Female. Similar to male but with abdominal ventrite V longer than in male and with a rounded convex apical margin.

Type material examined. The male holotype, deposited in the USNM, is a disarticulated male specimen glued to a card proceeded by another card with a proleg, mesoleg and metaleg glued to it with the following labels: Panama, Colón Pr., San Lorenzo Forest, STRI crane site. 9°17′N - 79°58′W; F.I.T. 0 m. FL-B1A0s. 12–23 Sep 2004. M. Rapp. IBISCA'04. X-3-2007 (printed) [white rectangular label] / HOLOTYPE *Conglobatus armatus* T. R. Smith Det: Trevor Smith (printed) [red rectangular label]. The allotype, deposited in the USNM, is a female specimen glued to a card with the following labels: Ecuador, Orellana, Transect Ent. 1 km S. Onkonegare Camp, Reserva Ethica Waorani, Onkone Gare Camp (printed) [white rectangular label] / 220-250 m; 1/26/1994; 0.6566°S - 76.4490°W; T.L. Erwin et al; t-5…7; fogging; terre firme forest; Lot 656. (printed) [white rectangular label] / ALLOTYPE *Coglobatus armatus* T. R. Smith Det: Trevor Smith (printed) [blue rectangular label]. Paratypes: Ecuador: Orellana, Transect Ent. 1 km S. Onkonegare Camp, Reserva Ethica Waorani, Onkone Gare Camp, 220-250 m, VI-21-1994, 0.6545°S - 76.4460°W, T.L. Erwin et al, t-9…2; fogging, terre firme forest, Lot 711 (1♂, FSCA); Orellana, Transect Ent. 1 km S. Onkonegare Camp, Reserva Ethica Waorani, Onkone Gare Camp, 220-250 m, I-22-1994, 0.6581°S - 76.4513°W, T.L. Erwin et al, t-2…6; fogging, terre firme forest, Lot 625 (1♀, USNM); Peru: Madre de Dios, Pakitza, 250 m, 12°7′S - 70°58′W, Zone 4; IX-11-1989, insecticidal fogging, canopy of *Callophylum*, Erwin and Farrell Colls., BIOLA to 41806XX. (1♀, USNM).

Distribution. Ecuador, Panama, Peru.

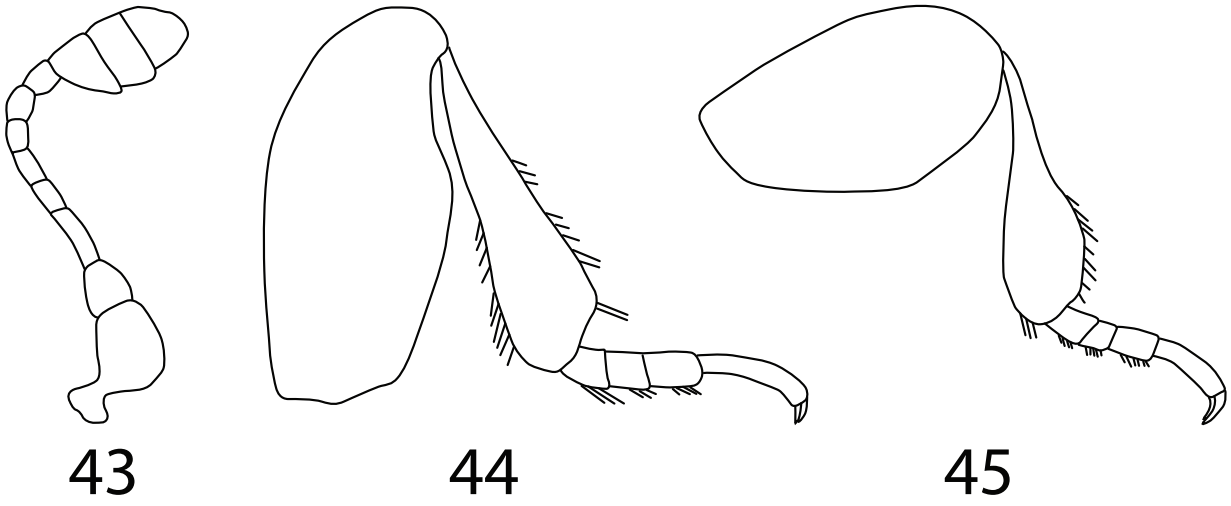
Etymology. This new species is named for its prominent tibial spurs, its name derived from the Latin "armatus" meaning armed.

Remarks. The four specimens collected in Ecuador and Peru were all collected from the forest canopy using insecticidal fogging. The holotype was collected in a flight intercept trap in Panama. Nothing is known about the biology of this species.

Conglobatus fullertoni T. R. Smith, new species

(Fig. 13, 43–49)

Diagnosis. Body convex and ovate. Antennae with 11 antennomeres, with an asymmetrical, 3-antennomere club with a slightly serrate inner margin and a rounded terminal antennomere (Fig. 43). The club is slightly inflated and the segmentation between the 3 club antennomeres is difficult to discern without extreme magnification. Head produced with a generally rounded clypeus with a bordered apical margin extending well beyond the antennal fossae. Elytron very wide and when combined 1.6 times as wide as long. Metaventrite very narrow in the middle and flaring out laterally to 2.3 times the length in the middle. Metaventrite mostly asetose with a few sparse setae in the center, narrowest in the center and shorter than mesoventrite. Intermesocoxal distance about equal to the intermetacoxal distance. All femora expanded medially and deplanate, tibiae dilated towards the apical end but lacking tibial spurs. (Fig. 44–46). Abdominal ventrite I longer than abdominal ventrites II–IV combined with a narrow rounded apical projection between the metacoxae. Tarsi dilated but not lobed, tarsomere



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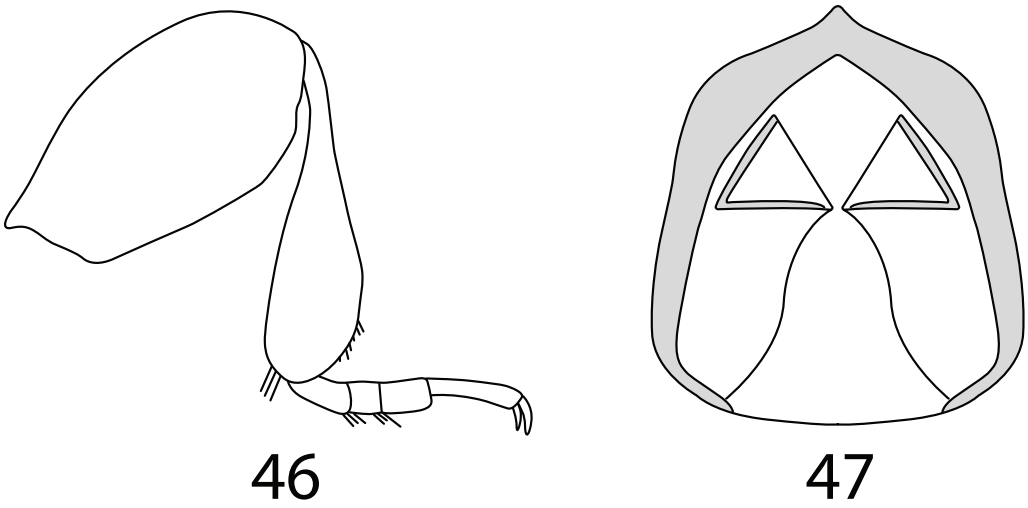

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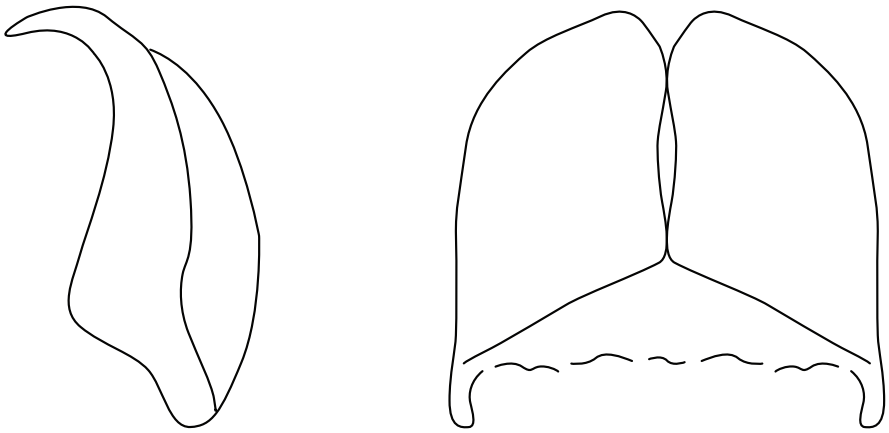

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Figures 43–49. *Congoblatus fullertoni* T. R. Smith. **43)** Antenna. **44)** Proleg. **45)** Mesoleg. **46)** Metaleg. **47)** Median lobe. **48)** Median lobe, lateral view. **49)** Basal plate.

III bifurcate (Fig. 44–46). The lack of tibial spurs clearly distinguishes this species from *C. armatus* T. R. Smith the only other species described in this genus.

Description. Length (excluding head) 0.92 mm, width 0.62 mm.

Male. Body small, ovate and convex. Coloration brown and glossy; antennae, maxillary and labial palpi, prosternum, procoxae, protrochanters, mesoventrite, mesocoxae and mesotrochanters, abdominal ventrites and extreme apical margin of elytra light brown; head, mandibles, pronotum, scutellar shield and elytra brown.

Head large and produced (width = 0.56 mm; length = 0.36 mm) width 1.5 times length, deflexed; the entire margin of the labrum and antennal fossae bordered, fossae moderately emarginated and inwardly sloping for reception of scape. Surface uniformly and strongly punctate, interspaces smooth. Punctation minute at base and becoming much larger and distinct apically. Clypeus produced, extending well beyond apex of eyes, with a rounded and bordered apical margin. Labrum hidden and genae not visible. Antennae with 11 antennomeres, asymmetrical, 3-antennomere club with slightly serrate inner margin and rounded terminal antennomere. Antennomere III longer than pedicel and about the same length as antennomeres IV and V combined. Scape globular and pedicel conical (Fig. 43). Antennal length about 0.87 times the width of the head and about equal to length of head. Eyes ovate and small, length about 0.26 times the width of head, visible ventrally, with distinct ommatidia. Mandibles "heavily built," produced and exposed. Maxillary palpi expanded in the middle with ultimate palpomere subconical and gradually narrowing towards apex. Maxillary palpomere I shortest and maxillary palpomeres II and III of equal length. Terminal maxillary palpomere longer than terminal labial palpomere. Labial palpi expanded at the base with terminal palpomere short and truncate at the apex.

Pronotum strongly convex, 1.37 times as wide as long; lateral margins in dorsal view arcuate converging anteriorly. Lateral lobe deplanate, anterior and lateral margin distinctly bordered; both lateral angles rounded creating a sub-rectangular lateral lobe; surface uniformly and minutely punctured with short recumbent sparse setae; interspaces smooth. Scutellar shield small and triangular with slightly convex margins.

Elytra evenly convex in lateral aspect, combined width much wider than long (1.61 times as wide as long). Apical margins separately arcuate to a nearly truncate apex. Suture bordered behind scutellar shield all the way to the apical margin. Lateral portions strongly deplanate, almost vertical and bordered. Epipleuron not distinct. Punctures of elytral disc larger than on pronotum, generally distinct at base, gradually becoming less distinct towards the apex with short recumbent sparse setae; interspaces smooth. Hindwings present and well-developed.

Prosternum strongly carinate at middle. Mesoventrite asetose, depressed and longer than metaventrite. Metaventrite narrowest in the center and flaring out to 2.3 times longer at the lateral margins. Metaventrite slightly convex, asetose (except for a few setae in the middle) and extremely rugose and alutaceous. Inter-metacoxal distance narrow, and about equal to the inter-mesocoxal distance. A slightly rounded apical process of the metaventrite separates mesocoxae. Abdominal ventrites covered with long, brownish setae; anterior process of abdominal ventrite I narrow and rounded; femoral lines strongly expressed beyond anterior margin of abdominal ventrite I. Abdominal ventrite I longer than abdominal ventrites II–IV combined and with a slightly concave apical margin to accommodate male anal plate. Pygidium broadly rounded at apex.

Tibiae lacking spurs at apex. Profemur expanded (2.14 times longer than wide) and dilated and protibia thick and expanded apically (3 times wider at apex) (Fig. 44); mesofemur expanded and deplanate, mesotibia expanded and dilated at the apical end (3 times wider at apex) (Fig. 45); metafemur expanded (1.75 times longer than wide) and deplanate and metatibia dilated and expanded at the apical end (3 times wider at the apex) (Fig. 46). Tarsomeres unlobed and slightly setose, tarsomere III bifurcate, claws simple. Terminal tarsomere longest and longer than tarsomeres II–III combined (Fig. 44–46).

Median lobe: Sides parallel and curving into a sharp point, apical curve slightly convex (Fig. 47). In profile, slightly curved from apical third (Fig. 48). Median plate on surface slightly elevated. *Basal plate*: Sides parallel curving at the apex and emarginate along the apical margin. (Fig. 49).

Female. Unknown.

Type material examined. The holotype, deposited in the USNM, is a partly disarticulated male specimen glued to a card with the following labels: Dominica, WI, Tiperie, Sept. 6, 1965, D.L. Jackson (printed) [white rectangular label] / Bredin-Archbold-Smiths-Biol.-Survey, Dominica, WI (printed) [white rectangular label] / HOLOTYPE *Conglobatus fullertoni* T. R. Smith Det: Trevor Smith (printed) [red rectangular label].

Distribution. Dominica.

Etymology. This species is named in honor of Mr. Stuart Fullerton, a generous soul whose kindness and support lead to a scholarship and other academic opportunities allowing me to pursue a career in entomology. I recall, with great fondness, my undergraduate years working in the "Bug Closet" alongside Stuart building the arthropod collection at the University of Central Florida, Orlando.

Remarks. Only one specimen of this species has been collected in a heavily forested region of Dominica. Nothing is known about the biology of this species.

Cybocephalus Erichson, 1844

(Fig. 2, 9, 17, 19, 30, 31)

Cybocephalus Erichson 1844: 441. Type species: *Anistoma exigua* C. R. Sahlberg 1834: 473; by subsequent designation of Endrödy-Younga 1968: 37. [=*Nitidula polita* Gyllenhal 1813: 680; synonymy by Reitter 1874: 6]

Phantazomerus Jaquelin Du Val 1854: xxxvii. Type species: *Phantazomerus aeneiceps* Jaquelin Du Val 1854: xxxviii; by monotypy. Synonymy by Jaquelin Du Val 1858: 151.

Stagonomorpha Wollaston 1854: 482. Type species: *Stagonomorpha sphaerula* Wollaston 1854: 484–485; **here designated**. Synonymy by Wollaston 1864: 115–116.

Acribis Waterhouse 1877: 78. Type species: *Acribis serrativentris* Waterhouse 1877: 78; by monotypy. Synonymy by Champion 1913: 70–71.

Dissia Chobaut 1896: 167. Type species: *Dissia albopilosa* Chobaut 1896:167–168; by monotypy. Synonymy by Endrödy-Younga 1962b: 271–272.

Nodola Brèthes 1925: 198–199. Type species *Nodola chilensis* Brèthes 1925: 200; by monotypy. **New synonymy.** [**new name** *Cybocephalus brethesi* T. R. Smith]

Distribution. Worldwide.

Remarks. This is by far the largest and most diverse genus in the family with about 180 described species. For a description of the genus see Smith and Cave (2006a).

Erichson (1844: 441) synonymized *Anistoma exigua* C. R. Sahlberg, 1834 and *Anistoma ruficeps* C. R. Sahlberg, 1834 as *Cybocephalus exiguus* (Sahlberg). Types of both C. R. Sahlberg's species were subsequently labeled as being "*Cybocephalus politus* Gyllenhal det. J. Sahlberg" (see Endrödy-Younga 1968: 72) [C. R. Sahlberg and J. Sahlberg are both notable 19th century coleopterists, see Bousquet 2016]. Reitter (1874: 6) officially synonymized *Nitidula polita* Gyllenhal (1813: 680) and *C. exiguus* under the new name *Cybocephalus politus* (Gyllenhal) as *N. polita* had precedence. Endrödy-Younga (1968: 72) designated lectotypes of three species: *N. polita*, *A. exigua*, *A. ruficeps*.

There has been confusion regarding the name "*politus*" which has been proposed for two different species in the genus: *Nitidula polita* Gyllenhal (1813: 680) and *Cybocephalus politus* Erichson (1844: 441). A secondary homonym was created when Reitter (1874: 6) transferred *N. polita* Gyllenhal into *Cybocephalus*. However, Reitter (1874: 8) recognized *C. politus* Erichson (not *C. politus* (Gyllenhal)) as a synonym of *Cybocephalus atomus* Brisout de Barneville (1866: 369) and correctly used the junior name (*C. atomus*) for the species, which resolved the duplication of names and negated the need to rename *C. politus* Erichson.

After reading the original description of *Nodola* Brèthes and the type species *Nodola chilensis* Brèthes (Brèthes 1925), it is clear this genus and species belong in the genus *Cybocephalus*. With the synonymy of *Nodola* and *Cybocephalus*, *Cybocephalus chilensis* (Brèthes) becomes a secondary homonym of *Cybocephalus chilensis* Reitter (1874: 56). The **new name**, *Cybocephalus brethesi*, is here proposed to replace *Cybocephalus chilensis* (Brèthes). It is suspected that the type specimen is in the Museo Argentino de Ciencias Naturales Bernardino Rivadavia along with most of the Brèthes types; however, due the global COVID-19 pandemic the curators were unable to return to the museum to either photograph or send the specimen to the author.

Endrodiellus Endrödy-Younga, 1962

(Fig. 28)

Endrodiellus Endrödy-Younga 1962b: 275–276. Type species: *Endrodiellus speciosus* Endrödy-Younga 1962b: 276–277; by original designation.

Distribution. Madagascar.

Remarks. This genus is monotypic. For a description of the genus see Endrödy-Younga (1962b).

Eupastillus Lawrence, 2019

(Fig. 14, 20, 21)

Eupastillus Lawrence 2019: 77–82. Type species. *Eupastillus minimus* Lawrence 2019: 77–82; by original designation.

Distribution. Australia.

Remarks. This genus is monotypic. For a description of the genus see Lawrence (2019).

Hierronius Endrödy-Younga, 1968

(Fig. 5, 25)

Hierronius Endrödy-Younga 1968: 108. Type species: *Cybocephalus laevis* Wollaston 1864: 117; by original designation.

Distribution. Canary Islands and Madeira.

Remarks. Five species are described in this genus. For a description of the genus see Endrödy-Younga (1968).

Horadion Endrödy-Younga, 1976

(Fig. 12)

Horadion Endrödy-Younga 1976: 113. Type species. *Horadion villiersi* Endrödy-Younga 1976: 114–116; by original designation.

Distribution. Eastern Africa and southern Asia.

Remarks. This genus is monotypic. For a description of the genus see Endrödy-Younga (1976).

Genus *Microthomas* T. R. Smith, new genus

(Fig. 26–27, 50–61)

Type species. *Microthomas brevicornis* T. R. Smith, here designated.

Diagnosis. *Microthomas* differs from all other cybocephalid genera in the extremely compact antennae (Fig. 58), with scape and pedicel together as long as the 9 antennomeres of the flagellum combined. Unlike any other genera in the Western Hemisphere the eyes are not visible in ventral aspect. Additionally, *Microthomas* has an extremely short and broad head 2 times wider than long, all femora and tibiae are dilated and the mesotibia is completely hidden and shielded by the mesofemur. The body form is comparatively elongated with the length being 1.75 times the width, not as convex as most other genera in this family (Fig. 50) and is seemingly incapable of conglobation as seen in many genera in Cybocephalidae.

Description. Body 1.2 mm long (excluding head), 0.8 mm wide; elongate oval and convex; black over almost the entire body aside from antennomeres II–XI, maxillary palpi, labial palpi, procoxae and protrochanters which are brown (Fig. 52, 56). Head short and wide, with a short clypeus extending only slightly beyond the apices of the eyes; eyes oval, relatively small and not visible in ventral aspect. Labrum shaped like a half-circle with an evenly curved apical margin (Fig. 54). Ultimate maxillary palpomere subconical and ultimate labial palpomere subcylindrical. Antennae with 11 antennomeres and compact with a club consisting of 3 antennomeres; scape large, larger than 3 club antennomeres combined (Fig. 58). Anterior edge of pronotum emarginate around eye and bordered (Fig. 50). Scutellar shield triangular and widest at base. Elytron about 1.8 times longer than wide. Hindwings present and well-developed. Metaventrite longer than mesoventrite (Fig. 57). Abdominal ventrite I longer than abdominal ventrites II–IV combined in middle; each abdominal ventrite with a row of stout setae along posterior edge. Profemur enlarged and expanded, protibia thickened and expanded toward the distal end (Fig. 59). Mesofemur laminiform and greatly expanded with a dorsal depression to receive dilated mesotibia (which can be completely concealed) (Fig. 60). Metafemur enlarged and dilated, with a dorsal depression to receive extremely dilated metatibia (which is only partly concealed) (Fig. 61). Tarsomeres I–III strongly and narrowly lobed ventrally (Fig. 59–61).

Distribution. Bolivia.

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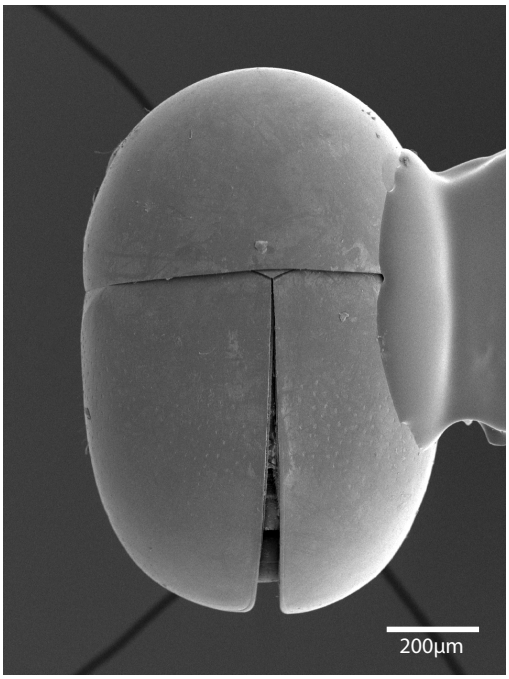

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Figures 50–53. *Microthomas brevicornis* T. R. Smith. **50)** Lateral habitus. **51)** Antero-lateral oblique habitus. **52)** Dorsal habitus. **53)** Dorsal habitus (SEM).

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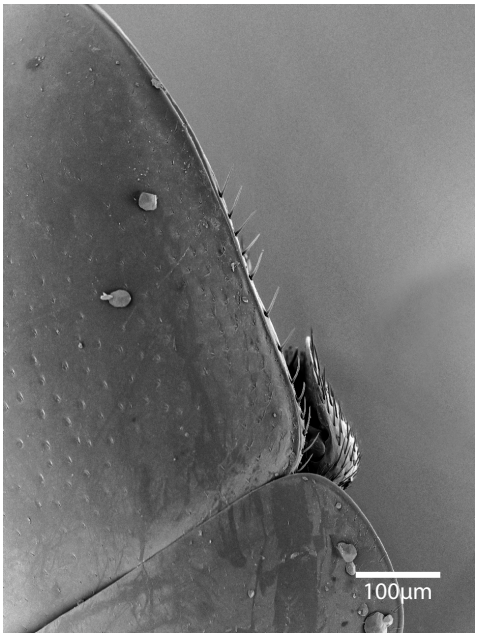

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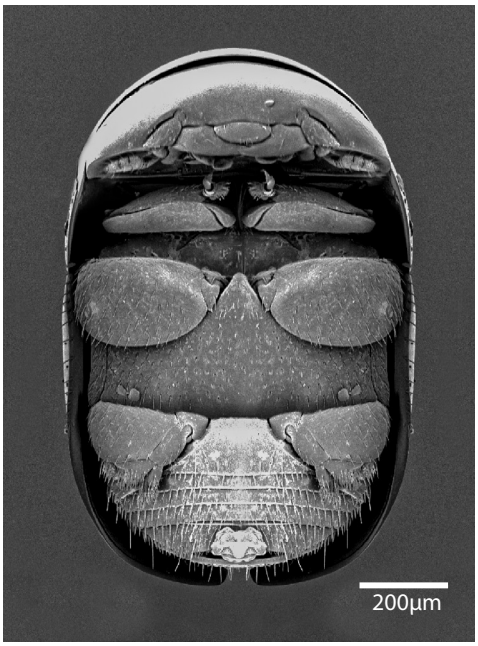

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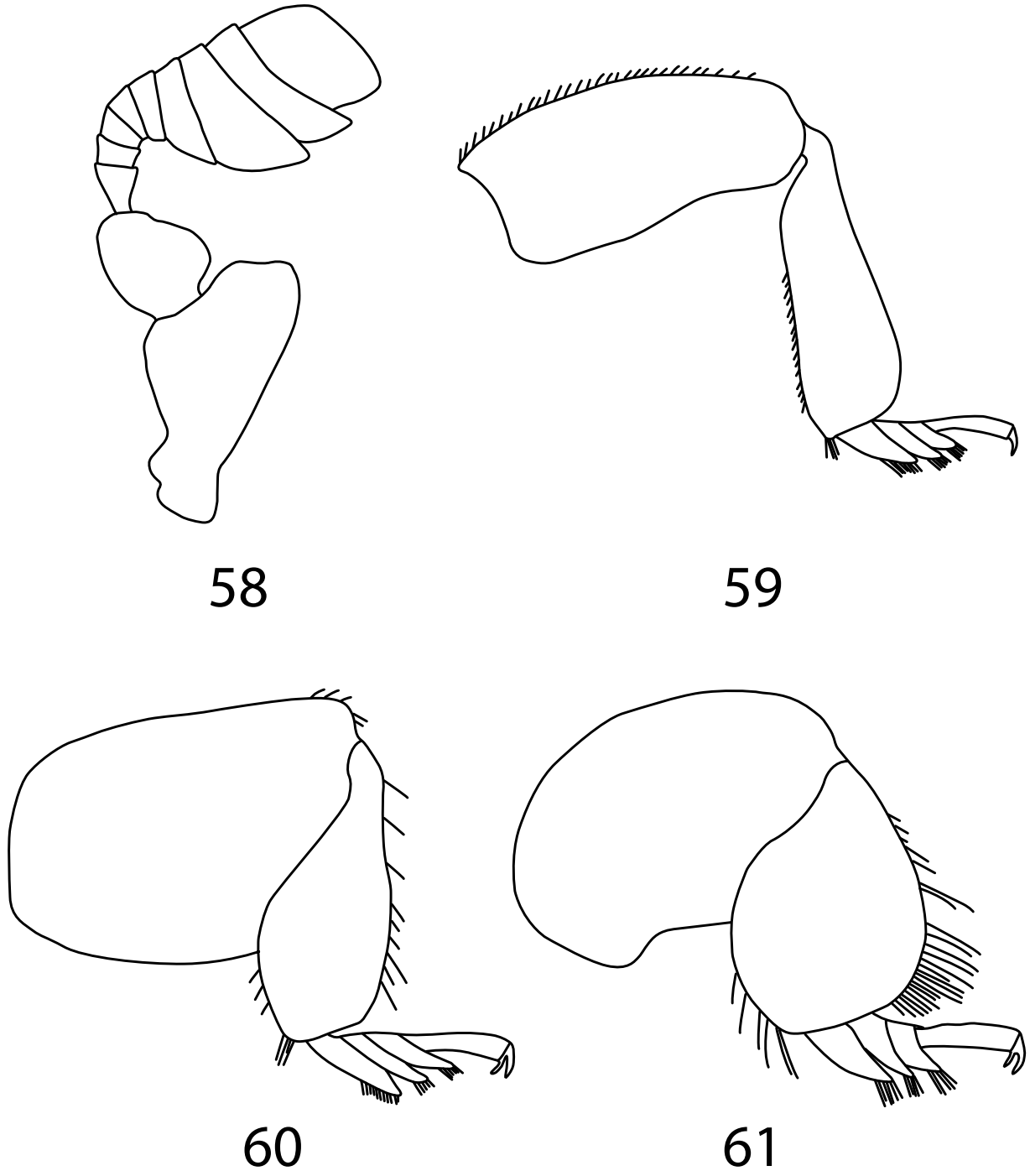
Figures 54–57. *Microthomas brevicornis* T. R. Smith. **54)** Head (SEM). **55)** Setae along epipleural fold (SEM). **56)** Ventral habitus. **57)** Ventral habitus (SEM).



Figures 58–61. *Microthomas brevicornis* T. R. Smith. **58)** Antenna. **59)** Proleg. **60)** Mesoleg. **61)** Metaleg.

Etymology. This genus is named in honor of my friend and mentor Dr. Michael Thomas; with the prefix *micro-* meaning small, due to the minute size of the beetle habitus. Dr. Thomas was a writer, an artist, a scientist and a naturalist but most importantly, and what I remember most, he was a thinker. His contributions to science are legion and he will be truly missed. The gender is neuter.

Remarks. This new genus represents only the fourth described from the Western Hemisphere. *Microthomas* is easily distinguished from the other three genera in the Western Hemisphere *Amedissia*, *Cybocephalus* and *Pycnocephalus* in overall body shape (comparatively elongate and not convex), extremely compact antennae and having eyes not visible on the ventral aspect of the head. With only one specimen collected at a light there is virtually nothing known about the biology of this genus.

Microthomas brevicornis T. R. Smith, new species

(Fig. 50–61)

Diagnosis. Body convex and elongate (Fig. 50–53). Antennae with 11 antennomeres, with a 3-antennomere club; antennae extremely compact with scape and pedicel together as long or slightly longer than the 9 antennomeres of the flagellum combined (Fig. 58). Head very short and wide (Fig. 54). Elytron with a row of large setae along the margin of the epipleural fold (Fig. 55). Wings present, and well-developed. All legs, both femora and tibiae deplanate and dilated to varying degrees (Fig. 59–61). Metaventrite much longer than mesoventrite. Abdominal ventrite I longer than abdominal ventrites II–IV combined with a truncate apical projection between the metacoxae (Fig. 56–57). Tarsi narrow dorsoventrally with distinctly lobed tarsomeres (Fig. 59–61).

Description. Length (excluding head) 1.22 mm, width 0.83 mm.

Female. Body small and comparatively elongate (Fig. 50–53). Coloration black and glossy (Fig. 52); pedicel, antennomeres III–XI, maxillary and labial palpi, prosternum, procoxae and protrochanters brown (Fig. 56).

Head short, wide (width 2 times length), deflexed; antennal fossae not bordered but deeply emarginated, inwardly sloping for reception of scape. Surface uniformly and minutely punctate, interspaces smooth. Margin of genae narrowly visible (Fig. 54). Antennae compact, with 11 small antennomeres, asymmetrical, 3-antennomere club with serrated inner margin and terminal antennomere truncate. Antennomere VIII enlarged. Scape expanded medially and lobed, pedicel globular (Fig. 58). Length of scape and pedicel combined about equal in length to the 9 antennomeres of the flagellum combined. Antennal length half width of head. Clypeus short and broad, barely extending beyond apex of eyes, with slightly concave apical margin. Labrum exposed and distinctly visible, hemispherical in shape with apical margin uniformly curved and entire (Fig. 54). Eyes ovate and small, length a third of head width, not visible ventrally, with distinct ommatidia. Mandibles "heavily built" and moderately produced (Fig. 54). Maxillary palpi dilated with ultimate palpomere subconical and gradually narrowing towards apex, slightly longer than ultimate labial palpomere. Labial palpi dilated with ultimate palpomere expanding towards truncate apex.

Pronotum strongly convex, 2.15 times as wide as long; lateral margins in dorsal view arcuate converging anteriorly. Lateral lobe deplanate, antero-lateral and lateral margin distinctly bordered; both lateral angles rounded creating a subrectangular lateral lobe; surface uniformly and minutely punctured with short recumbent sparse setae; interspaces smooth (Fig. 52–53). Scutellar shield small and triangular (Fig. 52–53).

Elytra evenly convex in lateral aspect (Fig. 50), longer than combined width (1.07 times as long as wide). Apical margins separately arcuate to a nearly truncate apex (Fig. 52–53). Suture indistinctly bordered behind scutellar shield, becoming more distinct in second half. Lateral portions strongly deplanate, almost vertical. Epipleuron distinct at base, gradually more inflexed and fuses with plate of elytron near the metacoxae (Fig. 56–57). Epipleural fold lateral margin with a row of long stiff setae at the basal half (Fig. 51, 55). Punctures of elytral disc larger than on pronotum, generally distinct at base, gradually becoming less distinct towards the apex with short recumbent sparse setae; interspaces smooth (Fig. 52–53). Wings present and well-developed.

Prosternum strongly carinate at middle. Mesoventrite asetose, depressed and shorter than metaventrite. Metaventrite slightly concave, uniformly punctate and setose; setae long and pronounced on lateral third becoming smaller and eventually minute in the center. Inter-metacoxal distance wide, 2.35 times as wide as inter-mesocoxal distance. Inter-mesocoxal distance narrow with sharply triangular apical process of metaventrite separating coxae (Fig. 56–57). Abdominal ventrites covered with long, brownish setae along the posterior margins (Fig. 56–57); anterior process of abdominal ventrite I wide, truncate; femoral lines strongly expressed beyond anterior margin of abdominal ventrite I. Abdominal ventrite I longer than abdominal ventrites II–IV combined. Pygidium broadly rounded at apex (Fig. 57).

Legs with profemora expanded with very short setae along outer margin and dilated and protibiae thick and expanded distally with short row of setae along inner margin (Fig. 59); mesofemora covered in long brown setae on dorsal surface (Fig. 56), extremely expanded and deplanate completely covering the dilated and laminiform mesotibiae which is only sparsely setose along margins (Fig. 56, 60); metafemora dilated with long brown setae on dorsal surface (Fig. 56) and metatibiae greatly expanded and laminiform with distinctive patch of setae along the apical outer margin (Fig. 61). Tarsomeres lobed and setose, claws simple. Terminal tarsomere longest and as long as tarsomeres I–III combined (Fig. 59–61).

Male. Unknown.

Type material examined. The holotype, deposited in the USNM, is a partly disarticulated female specimen glued to a card, proceeded by another card with a proleg, mesoleg and metaleg glued to it with the following labels: Bolivia: Santa Cruz, Poterillos del Guendá; 40 km. NW. Santa Cruz, 17°40.3′S - 063°27.4′W; X-3-2007; Coll: R. Morris; Light [printed on white rectangular label] / HOLOTYPE *Microthomas brevicornis* T. R. Smith Det: Trevor Smith (printed) [printed on red rectangular label].

Distribution. Bolivia, Santa Cruz region.

Etymology. The name of this new species is derived from *brevis-* meaning short combined with *-cornus* meaning horn in reference to the extremely short and compact antennae exhibited by this species.

Remarks. This new species was collected at night on a sheet laid on the ground underneath a vertically hanging sheet illuminated with an ultra-violet/mercury vapor light. While collecting these beetles in light traps is extremely rare, the effectiveness of light sheet collecting is not well documented as most collectors using this technique do not collect minute coleoptera. In general, cybocephalids are typically collected by hand, often with fogging and occasionally by beating vegetation, flight intercept traps and Malaise traps. Species with wingless or reduced wing forms such as *Cybocephalus randalli* T. R. Smith are regularly collected in pitfall traps.

Pacicephalus Kirejtshuk and Mantič, 2015

(Fig. 11)

Pacicephalus Kirejtshuk and Mantič 2015: 203. Type species. *Cybocephalus gressitti* Endrödy-Younga 1971b: 284–285; by original designation.

Distribution. Micronesia.

Remarks. This genus is monotypic. For a description of the genus see Kirejtshuk and Mantič (2015).

Pastillocenicus Kirejtshuk and Nel, 2008

Pastillocenicus Kirejtshuk and Nel 2008: 427–429. Type species. *Pastillocenicus grandiclavis* Kirejtshuk and Nel 2008: 431–432; by original designation.

Distribution. French Eocene amber.

Remarks. This is an extinct genus with three described species discovered in amber from the lowermost Eocene and estimated to be 53 million years old (not included in the above taxonomic key). For a description of the genus see Kirejtshuk and Nel (2008).

Pastillodes Endrödy-Younga, 1968

(Fig. 6, 33)

Pastillodes Endrödy-Younga 1968: 112. Type species. *Cybocephalus agathidioides* Peyerimhoff 1927: 238–239; by original designation.

Distribution. Northern Africa.

Remarks. Two species are described in this genus. For a description of the genus see Endrödy-Younga (1968).

Pastillus Endrödy-Younga, 1962

(Fig. 32)

Pastillus Endrödy-Younga 1962b: 272. Type species. *Pastillus basilewskyi* Endrödy-Younga 1962b: 273–274; by original designation.

Distribution. Tropical and southern Africa.

Remarks. Three species are described in this genus. For a description of the genus see Endrödy-Younga (1962b).

Pycnocephalus Sharp, 1891

(Fig. 15, 22–24)

Pycnocephalus Sharp 1891: 373. Type species. *Pycnocephalus metallicus* Sharp 1891: 373; by monotypy.

Distribution. Mexico, Central America and South America.

Remarks. Two species are described in this genus, however; there are many undescribed species from Central and South America (personal observation). For a description of the genus see Smith and Cave (2007a).

Taxicephomerus Kirejtshuk, 1994

(Fig. 29)

Taxicephomerus Kirejtshuk 1994: 125. Type species. *Taxicephomerus porrectus* Kirejtshuk 1994: 125–126; by original designation.

Distribution. Vietnam.

Remarks. This genus is monotypic. For a description of the genus see Kirejtshuk (1994).

Theticephalus Kirejtshuk, 1988

(Fig. 4, 10)

Cybocephalus (*Theticephalus*) Kirejtshuk 1988: 95. Type species. *Cybocephalus aurocupreus* Reitter 1900: 219; by original designation. Generic status by Kirejtshuk and Mantič 2015: 204.

Distribution. Northern Africa, Middle East and Central Asia.

Remarks. Six species are described in this genus. For a description of the genus see Kirejtshuk (1988).

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