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## BOLIVIAN RHINOTRAGINI VIII: NEW GENERA AND SPECIES RELATED TO *PSEUDOPHYGOPODA* TAVAKILIAN & PEÑAHERRERA-LEIVA, 2007 (COLEOPTERA, CERAMBYCIDAE)

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### ABSTRACT

*Pseudophygopoda* Tavakilian & Peñaherrera-Leiva, 2007 is redescribed. Four new, closely related genera are described. *Panamapoda* gen. nov., with *P. panamensis* (Giesbert, 1996); *Paraphygopoda* gen. nov., with *Paraphygopoda nappae* sp. nov., *P. albitarsis* (Klug, 1825), *P. viridimicans* (Fisher, 1952), and, provisionally, *P. longipennis* (Zajciw, 1963); *Paramelitta* gen. nov., with *Paramelitta wappesi* sp. nov., and *P. aglaia* (Newman, 1840); and *Phygomelitta* gen. nov., with one species, *P. triangularis* (Fuchs, 1961). All the species are illustrated (including genitalia); and keys to the genera, and their species, are provided.

KEY-WORDS: Cerambycinae; New combinations; New genera; New species.

### INTRODUCTION

This paper, the eighth on Bolivian Rhinotragini Thomson, 1861, describes two new species from Bolivia, and perforce (as part of an on-going revision of the genera *Epimelitta* Bates, 1870 and *Phygopoda* Thomson, 1864), also revises the taxonomic status of six South American and one Panamanian species related to *Pseudophygopoda* Tavakilian & Peñaherrera-Leiva, 2007. The new Bolivian species are described from the humid Amazonian Forest of the Department of Santa Cruz.

Klug (1825) described *Stenopterus albitarsis* from Brazil (Pará); transferred by White (1855) to *Odontocera* Audinet-Serville, 1833; then to *Acypoderes* Audinet-Serville, 1833 by Lacordaire (1868); and finally to *Phygopoda* by Bates (1870).

Newman (1840) described *Charis aglaia* from the Brazil; this species, together with the others of this genus, transferred to *Charisia* by Champion (as

an editor's note in Bates, 1892); and, since *Charis* was preoccupied by a genus of Lepidoptera, and *Charisia* shown to be a junior synonym of *Epimelitta* Bates, eventually transferred to the genus *Epimelitta* by Aurivillius (1912).

White, 1855 described *Odontocera subvestita* from Brazil (Pará); later transferred to *Phygopoda* by Bates (1870), with the following remark: "resembles *Ph. albitarsis* closely in form, in the small thorax and subulate elytra; but differs in the less abruptly clavate hind femora". Bates (1873), apparently still unsure about the placement of this species and that of Klug's, goes on to say: "this species would be almost equally well placed in the genus *Charis* [now *Epimelitta*], sect. II. The hind thighs are longer and rather more abruptly clavate than in any species of *Charis*, but they are less so than in *Phygopoda albitarsis*".

Fisher (1952) described *Epimelitta* (?) *viridimicans* from Brazil (Paraná), adding (author's paraphrase): "this species differs from others of the genus

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*Epimelitta*. It seems to be out of place in this genus, but since the genera are so badly confused, it does not seem advisable to erect a new genus for this unique female until a revisional study of the Rhinotragini can be made".

Fuchs (1961) described *Epimelitta triangularis* from the Brazilian state of Mato Grosso. In 1979 this state was divided in two, the southern area (including the type locality for this species), became known as the state of Mato Grosso do Sul. Since then, this species has also been recorded for the states of Santa Catarina and Rio Grande do Sul.

Gounelle (1913) described *Charisia aglaia rufofemorata*, a new variety of this species [but in the author's opinion, of little taxonomic value, since, individuals of the same *Epimelitta*-like species (collected together by him), often have blackish or rufous femora].

Zajciw (1963) described *Epimelitta longipennis* from Brazil (Rio de Janeiro), together with a diagnostic comparison between his new species and *Epimelitta aglaia*.

Giesbert (1996) described *Phygopoda panamensis* from Panama; at the time, the first record of this genus outside South America.

Tavakilian & Peñaherrera-Leiva (2007) described the genus *Pseudophygopoda* to accommodate *Phygopoda subvestita* (White, 1855); originally described as *Odontocera subvestita* by White (1855). They diagnosed their new genus as follows (author's abbreviated version): rostrum moderately long. Inferior lobes of eyes not contiguous. Apex of antennae not passing middle of urosternite II. Pronotum transverse. Prosternal process laminate and abruptly bent upwards towards apex. Procoxal cavities broadly open behind. Elytra dehiscent for more than half their length, and extended into long, rounded lobe towards apex; the latter not passing base of urosternite II. *Hind leg*: apex of metafemur not passing apex of abdomen; femoral peduncle short; tibia with dense brush on apical half; first tarsal segment about three times longer than second. Last abdominal segment in male excavate at apex; in female apex truncate.

## MATERIAL AND METHODS

The new Bolivian species were collected in the humid tropical forest of the Department of Santa Cruz; the remaining species examined, from Brazil and Peru, in the MZUSP and USNM collections. One species, *Epimelitta longicollis*, with specimens de-

posited in MNRJ, has not been examined by the author (as they will not lend specimens to non-museum personnel); but the original description, with figure, together with rather poor photographs available on the internet, suggest the provisional placement of this species to be in the new genus *Paraphygopoda*.

*Terminology*: the terms "dehiscent" or "fissate" as used in this revision are best understood in the following way. Elytra that are dehiscent have straight, or outwardly curved, sutural margins; and can be strongly dehiscent, leaving the apices of the elytra widely separated (see *P. aglaia* Fig. 6A), or narrowly dehiscent, leaving the apices of the elytra weakly separated (see *P. triangularis* Fig. 8A). Elytra that are fissate have recurved sutural margins; and can be widely fissate, leaving the apices of the elytra well separated (see *P. viridimicans* Fig. 4A), or narrowly fissate, leaving elytral apices weakly separated (see *P. panamensis* Fig. 2A). Having established their meaning, it must be said, that the difference between fissate and dehiscent is not always obvious; and in some species (compare male and female *P. viridimicans* Figs. 4A, 4B) both conditions may be manifested.

One character, commonly used in descriptions of Rhinotragini is the point at which the prothorax is widest. In an attempt to reduce inconsistency this character is presented in numerical form; and from here it will be referred to as the "prothoracic quotient" (the result of dividing the length of the prothorax by the distance from the front border to its widest point). For example, in a specimen length of prothorax is 2.6 mm/widest point at 1.3 mm (precisely at middle), resulting in a quotient of 2.0. Theoretically, a prothorax of equal length (2.6 mm), but widest adjacent to apical border (1.0 mm), would produce a quotient of about 2.6; and if widest adjacent to basal border (2.5 mm) the quotient would be about 1.0. In other words the prothorax is widest before middle when the quotient is more than 2.0 (and the higher this number, the more the widest point will move towards the apex of the prothorax); and widest behind middle when quotient is less than 2.0 (and the lower this number, the more the widest point will move towards the base of the prothorax).

The terminology used to describe the male genital tube follow those used by Sharp and Muir (1912, reprint edition 1969): aedeagus = the median lobe and tegmen together; tegmen = the term applied to the lateral lobes and basal piece together; median lobe = the central portion of the aedeagus upon which the median orifice is situated.

*Measurements* (were made using a cross-piece micrometer disc, 5 mm × 0.1 mm): total length = tip of mandibles to apex of abdomen. Forebody length (estimated with head straight, not deflexed) = apex of gena to middle of posterior margin of metasternum. Length of abdomen = base of urosternite I (apex of abdominal process) to apex of urosternite V. Length of rostrum = genal length (from apex of side to where it meets inferior lobe of eye). Length of inferior lobe of eye (viewed from above with the scale along side of gena): from the lobes most forward position to its hind margin (adjacent to, and slightly to the side of, antennal insertion). Width of inferior lobe of eye (with head horizontal and level viewed from directly above) = width of head with eyes at its widest point, minus width of interocular space, and divided by two. Interocular space between inferior lobes = its width at the narrowest point (including smooth lateral margins). References to antennal length in relation to body parts are made, as far as is possible, with head planar to dorsad and antenna straightened. Length of leg (does not include coxae) = length of femur (from base of femoral peduncle to apex of claw) + length of tibia + length of tarsus (does not include claws).

Specimens seen by the author have been divided into two groups. Material analyzed refers to those specimens (one of each sex when both available) which have been used for the data set down in the descriptions of the genera, and in the identification keys. It should be remembered that intraspecific variation may vary with smaller or larger specimens. Material examined refers to those species that have been examined for intraspecific and sexual variation; mostly differences of colour and surface ornamentation, but also data contributing to the general measurements given for each species.

The acronyms used in the text are as follows: American Coleoptera Museum, San Antonio, Texas, USA (**ACMT**); Florida State Collection of Arthropods, Gainesville, Florida, USA (**FSCA**); Museo Noel Kempff Mercado, Universidad Autónoma Gabriel René Moreno, Santa Cruz de la Sierra, Bolivia (**MNKM**); Museu Nacional, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil (**MNRJ**); Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil (**MZUSP**); National Museum of Natural History, Smithsonian Institution, Washington, DC, USA (**USNM**); Robin Clarke/Sonia Zamalloa private collection, Hotel Flora & Fauna, Buena Vista, Santa Cruz, Bolivia (**RCSZ**).

The bibliographic references for each taxon correspond to the original descriptions as cited in the catalogue by Monné (2005), and additions to this catalogue.

## RESULTS AND DISCUSSION

The four new genera described below, *Panama-poda*, *Paramelitta*, *Paraphygopoda*, and *Phygomelitta*, and the monotypic genus *Pseudophygopoda* Tavakilian & Peñaherrera-Leiva, 2007, share a combination of characters of special diagnostic value: prosternal process in males entirely laminate or weakly golf tee-shaped (as in most females); procoxal cavities widely open behind, and acutely angled at sides; elytra subulate (the apical third narrowly lobate), rather short, subfissate, or strongly dehiscent; mesosternum not declivous (weakly inclined to, and almost planar with mesosternal process); in male procoxae surmounted by conical tubercle; metatibia with long-haired, dense brush (but see *Phygomelitta*); lateral lobes of tegmen tongs-shaped, with abruptly widened, somewhat flattened apices.

With this diagnosis, it would be inappropriate for any of the species in these five genera to be maintained in *Epimelitta* or *Phygopoda* (genera with short, cuneate elytra, rounded procoxal cavities, and abruptly declivous mesosterna; and, it can be added, closed procoxal cavities in *Phygopoda*).

Some species of *Xenocrasis* Bates, 1873 and *Stenopseustes* Bates, 1873 share several diagnostic characters with the five genera described in this paper; these are: prosternal process entirely laminate; procoxal cavities open behind (and sometimes angled laterally); and mesosternum planar with its process; but present characters not found in these five genera: antennae filiform and long (in male passing apex of elytra); midline, or disc of pronotum strongly convex; elytra long, complete, and not dehiscent in *Stenopseustes*, in some species of *Xenocrasis* somewhat subulate and lobed at apex (but these species have long and filiform antennae); and, as far as is known, tegmen of aedeagus not tongs-shaped.

The monotypic genus *Pseudisthmiade* Tavakilian & Peñaherrera-Leiva, 2005 was described for an ichneumon wasp mimic; characterised by broadly open procoxal cavities, and mesosternum regularly inclined (without declivity) and planar with mesosternal process; both characters suggesting that this genus might be included with those related to *Pseudophygopoda*. Amongst the latter, most of the genera differ from *Pseudisthmiade* by having well developed metatibial brushes; and *Phygomelitta*, which lacks a brush, has subcylindrical metafemora; and body shape and sombre colouring unlike those of an ichneumon wasp.

The descriptions of the five genera can be abridged since they share many of the additional characters described below:

*General description of the five genera:* medium sized species, elongate, and rather narrow. Head with eyes narrower than width of prothorax. Mentum-submentum represented by well demarcated transverse area (not so well demarcated in *P. panamensis*), about two times wider than long in males, 2.5 times wider in females, and in both sexes of *P. aglaia*. Galea, and maxillary palps rather short to moderately long, apical palpomeres subcylindrical (with slightly rounded sides), and truncate at apex. Labrum projecting, nearly rectangular (with weakly rounded sides), about two times wider than long; front margin not emarginate (but slightly declivous); disc usually with band of punctures across middle. Clypeus convex (less so in male *Paramelitta wappesi* sp. nov., and in some females), inclined to labrum, glabrous and usually impunctate; and separated from frons by abrupt declivity (usually less abrupt in females), since apical margin of frons depressed. Frons in males with characteristic, bilobed callus lying between front margins of inferior lobes and base of clypeus; the callus moderately prominent, or rather flat (in *P. aglaia*), and rather small (in *Phygomelitta*); surface of frons sparsely punctured (in *Panamapoda* and *P. albitarsis*), moderately densely punctured (in female *P. albitarsis* and *P. nappae*), and densely punctured (in both sexes of *Pseudophygopoda*, *P. viridimicans*, *P. aglaia* and *Phygomelitta*). Frontal suture rather deep (less so in females); narrow, well defined, and long (lying between antennal tubercles and apical depression of frons), shorter in females, and in males of *P. wappesi* and *Pseudophygopoda subvestita*. In males inferior lobes of eyes large (moderately so in *P. triangularis*), rather round (somewhat rectangular in *P. albitarsis* and *P. wappesi*), and flattish (more convex in *P. panamensis*); hind margins oblique; front margins lying towards side of frons (but not on genae). Superior lobes of eyes narrow, and irrespective of genera or sex, may be lobate, or fusiform; and not narrowed, to rather strongly narrowed laterally; and separated by less than three times to nearly four times their own width. Antennal tubercles not strongly prominent; rounded at apex; in males the space between them usually about 2.0 width of scape (1.7 in *P. subvestita*); in male *P. nappae*, and in females about 2.5 times width of scape (2.8 in *P. aglaia*). Scape subcylindrical with weakly bent base. Antennal segments I-V fimbriate, the apices of these, and those that follow with a few longer setae; antennomere III the longest; III-V filiform (but see *Paramelitta*); VI slightly wider at apex; VII-X forming a loose club, the segments variable in shape (in some species elongate and rather narrow, in others subcrassate), each segment widening to apex, and serrate; XI as long as, or slightly longer than X, with small, and often narrow, apical cone.

Prothorax cylindrical to subcylindrical (rather obovate in female *P. aglaia*); the sides widened at, or well before middle, prothoracic quotient 2.05-2.84 (but see female *P. albitarsis* for mild exception); the surface convex (strongly in female *P. aglaia*, somewhat flattened in *Phygomelitta* and males of *Paramelitta*), rather weakly callose (slightly stronger in *Panamapoda* and *Pseudophygopoda*); with a pair of broad calli forming an arc to either side of distinct callus at midline (the latter very narrow in *Phygomelitta* and *Paramelitta*), but often incomplete; apical and basal constrictions weak, but not obsolete (and the latter almost planar with pronotal disc towards middle, and not fossate); front border narrow and hardly raised; front margin narrower than hind margin (0.8-0.9 width of hind margin); hind angles subacute to moderately oblique.

Prosternum rather flat to moderately declivous across middle. Prosternal process flat or arched; 13-17 times narrower than width of procoxal cavity.

Elytra rather dehiscent or fissate, flat; broad at base, from behind humeri strongly narrowed towards apex, then apical quarter to apical third abruptly drawn out to form narrow, divergent lobes (weakly divergent in *Panamapoda* and *Phygomelitta*); apical margins of lobes somewhat truncate or rounded. Humeri square and distinctly projecting, but hardly prominent. Humero-apical costa represented by narrow callus running from middle of elytra to apex of lobe (in most species), or somewhat shorter anteriorly (in *Phygomelitta*), or almost restricted to apical lobe (in *Paramelitta*). Each elytron with well-defined, broad translucent panel (in *P. wappesi* the panels small and narrow; in female *P. viridimicans* obfuscated).

Base of mesosternal process flattish and moderately wide, towards apex slightly narrower and more depressed at midline; and apex apparently lanciform. Mesocoxal cavities moderately widely open to epimeron. Mesosternum 0.6-0.9 length of metasternum. Metathorax relatively long and rather narrow (in most genera); metasternum moderately strongly tumid (sometimes only posteriorly), planar with, or slightly more prominent than mesocoxae (in most females), or slightly less prominent than mesocoxae (in most males); metepisternum broadly cuneate.

Abdomen in male variable, fusiform, cylindrical, or vespiform, in female fusiform; but narrowest at base of urosternite I (in most species, and all females), or narrowest at II/III (in *P. panamensis*). In males urosternite V similar in most species (but see *Paramelitta wappesi* for exception), trapezoidal, usually transverse, but more quadrate (in *P. panamensis* and *P. viridimicans*), soleate depression usually represented by weak U-shaped, or V-shaped flattening; and apex broadly emarginate, and

somewhat winged laterally (when viewed from side). Abdominal process short and triangular; in male usually somewhat inclined to abdomen, in female usually planar with abdomen; and usually intimately inserted between metacoxae (in females less so).

Legs usually slender (but see *Paramelitta*); pro- and mesofemoral claws fusiform, somewhat tumid in males (more so in *Paramelitta*), less so in females, and widest at middle (when viewed from above); metafemoral claw not strongly, or abruptly narrowed at apex. Front and middle legs moderately long and pedunculate-clavate; apico-lateral margin of protibia hardly oblique, nor toothed; mesotibia shorter than mesofemur (more so in females). *Hind legs*: long (but shorter or longer than body length); metafemora subcylindrical or pedunculate-clavate; metafemora and metatibia subequal in length. Metatibiae almost straight (when viewed from above), and apical half to apical two-thirds (except extreme apex) with, or without dense, sepia-coloured brush. Metatarsus

rather short (about 2.5-3.0 shorter than metatibia), much narrower, or about as wide as, apex of metatibia; metatarsomere I as long as, or longer than II + III (with considerable variation).

*Genitalia* (Figs. 10-14): aedeagus with characteristic tegmen, tongs-shaped in appearance.

*Tegmen*: lateral lobes (parameres) paddle-shaped, moderately long (length of lateral lobe 0.9-1.5 mm); basal two-thirds triangular (but see *P. aglaia*), with curved mesal margin; apical third lobate, abruptly widened and flattened; and long, narrow, Y-shaped basal piece (the stem short, the fork long).

*Median lobe of aedeagus*: moderately long (about 2-3 mm), slender, modestly arched, with acuminate apex (when viewed laterally), acuminate or subacuminate apex (when viewed dorsally); and dark bodies not evident.

### Key to the genera related to *Pseudophygopoda*

1. Pronotum with dense patches of recumbent pubescence, the hairs brassy or golden in colour.....2
- Pronotum may be pubescent, but the hairs not brightly coloured, and not in dense, recumbent patches (but see *Paramelitta aglaia* Figs. 6A, 6C).....3
2. Abdomen in both sexes fusiform; pronotal pubescence brassy. N. Brazil, French Guiana. Figs. 1A-1D .....  
.....*Pseudophygopoda* Tavakilian & Peñaherrera-Leiva, 2007.
- Abdomen in male almost cylindrical; pronotal pubescence golden. Panama. Figs. 2A, 2B.....  
.....*Panamapoda* gen. nov.
3. Metafemur strongly pedunculate clavate, and the claw much shorter than peduncle; metatarsi about as wide as apex of metatibia. Bolivia, Brazil, French Guiana, Peru. Figs. 3-5, 11, 13.....*Paraphygopoda* gen. nov.
- Metafemur subcylindrical, and the claw longer than the peduncle; metatarsi narrower than apex of metatibia .....4
4. Metatibia with large, dense brush; in males mesofemoral claws strongly broadened (when viewed laterally). Bolivia, Brazil. Figs. 6-7, 14 .....*Paramelitta* gen. nov.
- Metatibia without brush; in males mesofemoral claws not strongly broadened (when viewed laterally). Brazil. Figs. 8, 12 .....*Phygomelitta* gen. nov.

### *Pseudophygopoda* Tavakilian & Peñaherrera-Leiva, 2007 Figs. 1A-1D

*Pseudophygopoda* Tavakilian & Peñaherrera-Leiva, 2007: 103.

*Type species*: *Odontocera subvestita* White, 1855, original designation.

*Diagnosis*: in *Pseudophygopoda* male inferior lobes of eyes contiguous, the width of one lobe more than ten

times wider than interocular (in the other four genera inferior lobes of eyes less contiguous, to rather far apart, the width of one lobe three to eight times wider than interocular); pronotum almost entirely covered with dense, recumbent, pubescence (only *Panamapoda* shares this diagnostic); and in *Pseudophygopoda* male abdomen fusiform (in the other four genera male abdomen cylindrical, or almost so).

*Pseudophygopoda* can also be separated from *Panamapoda* by the colour of the pronotal pubescence (brassy in the former, golden in the latter); and the shape of elytra (in the former widely fissate and



sides strongly curved outwards, to leave the apical lobes widely separated, in the latter narrowly fissate and hardly curved outwards, to leave the apical lobes almost parallel and closer to each other).

*Redescription of the genus:* total length 11.5–14.7 mm. Forebody (f) shorter than abdomen (a), f/a 0.94–0.97.

*Head:* rostrum rather short, width/length 2.40–2.50. Galea rather short. Inferior lobes of eyes contiguous in male, width of one lobe/interocular distance 10.7; well separated in female, width of one lobe/interocular distance 0.92. Superior lobes of eyes in male fusiform, and not narrowed laterally, in female more lobate, and laterally narrowed by about half their mesal width; in male separated by 2.75 times the width of one lobe, in female 3.20 times the width of one lobe. Apex of antennae in males reaching middle of urosternite III; in female reaching apex of II. Length of scape 0.7 mm; antennomere III 1.4–1.5 longer than scape (longer in males); XI with narrow apical cone.

Prothorax transverse (length/width 0.86–0.88); subcylindrical, with rounded sides, widest well in front of middle, prothoracic quotient in male 2.57, in female 2.50; callus at midline incomplete, weakly raised, impunctate, and partly widened. Prosternum moderately declivous across middle. Prosternal process not arced; 15 times narrower than width of procoxal cavity.

Elytra 1.8 longer than width of humeri; in male apex reaching middle of urosternite II, in females reaching apical third of urosternite I; subfissate for about half their length; in male laterally strongly arced and divergent apically (less so in female). Each elytron strongly narrowed to apical third; the latter drawn out to form lobe with weakly rounded sides, and somewhat truncate apical margin; translucent panel commencing well behind humeri.

Widths of mesocoxal cavity/base of process 2.3–2.60 in male, 2.33 in female. Lengths of mesosternum/metasternum 0.79 in male, 0.65 in female. Metathorax with subparallel sides, almost truncate to middle of metasternum in male, or obliquely rounded to middle of metasternum (in female); metasternum rather flat basally, and tumid for apical half.

Abdomen in both sexes fusiform, flatter and wider in female (in male widest at urosternites III/IV, in female at II/III); urosternite I conical; II–IV rectangular and transverse (less so in female). Urosternite V in male with apical margin weakly emarginate; surface hardly differentiated, slightly flattened from midline towards sides (but lacking vestiges of soleate depres-

sion). Abdominal process in male nearly planar with abdomen (planar in female).

*Legs:* ratio lengths front/middle/hind leg 1.0:1.4:2.7–2.8. *Front and middle legs:* body length/length of front leg 2.4–2.8 and body length/length of middle leg 1.8–2.0. *Front leg:* in male tibia shorter than femur (only slightly shorter in female); slender, narrow at base, widening to middle, parallel-sided to apex. *Middle leg:* femur moderately long, especially in males, 1.28–1.43 longer than length of tibia; length of femur/lateral width of femoral clave 3.33 (in male), or 4.27 (in female); tibia slender, and parallel-sided for apical half. *Hind leg:* rather robust; body length/length of leg in male 0.9, in female 1.0; femur subcylindrical, apex just passing apex of abdomen; peduncle narrow, flattened, and short (length clave/peduncle about 1.30). Metatibiae slightly shorter than metafemora in male, slightly longer in female; somewhat robust, gradually, and only slightly, widening towards middle, almost parallel-sided to apex; and apical half with long-haired brush. Metatarsus distinctly narrower than apex of metatibia; tarsomere I subcylindrical, II trapezoidal and not pediculate, III moderately long, the lobes hardly rounded at sides, and weakly divergent; tarsomere I 1.5 longer than II + III.

*Genitalia* (Fig. 10): very similar to *P. albitarsis*; lateral lobes less rounded mesally, but rather abruptly excavate before apical lobes; and the latter rounder than in most species. Length of lateral lobe 1.25 mm.

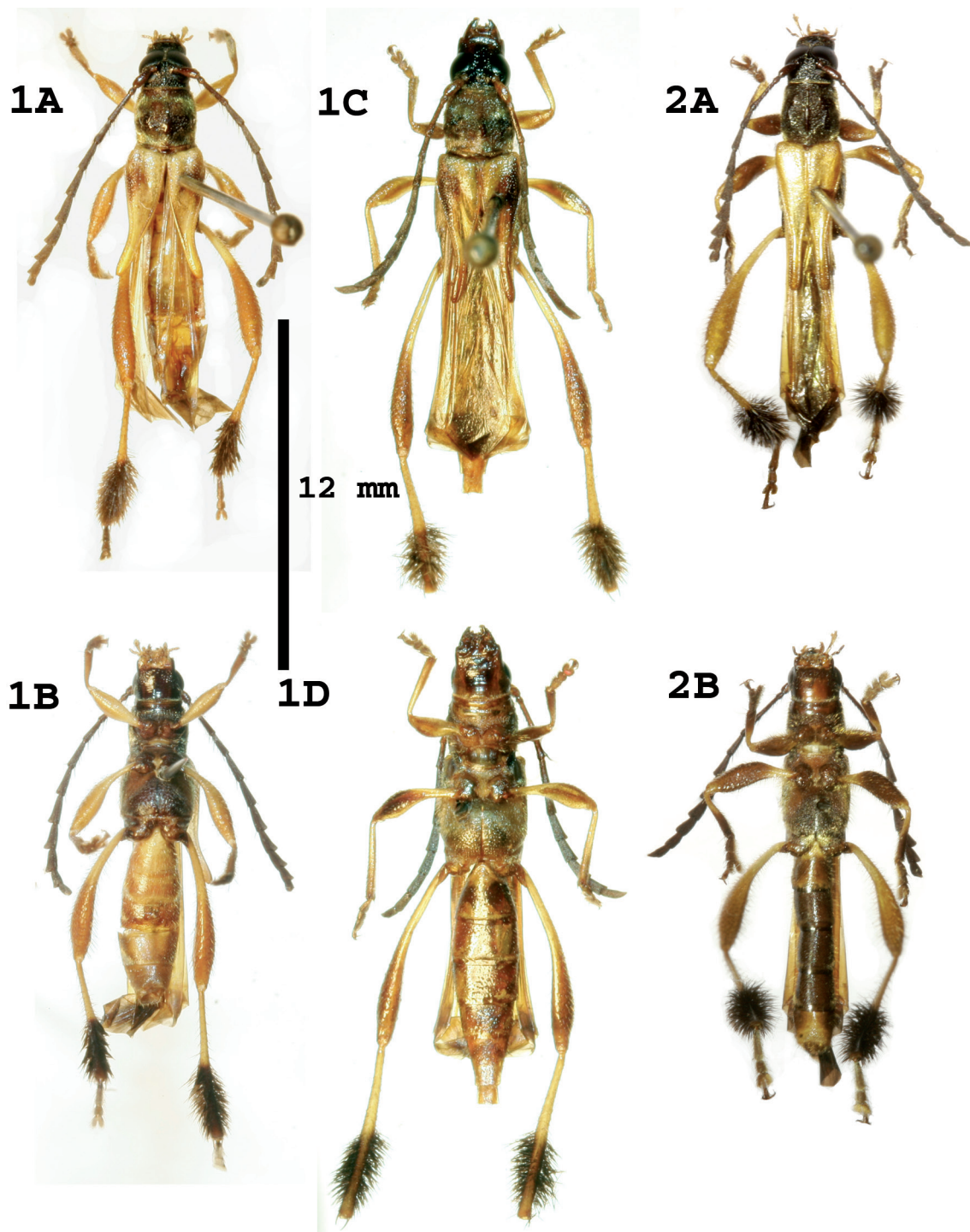
*Surface ornamentation:* pronotum with dense patches of brassy coloured pubescence covering most of surface; elytra almost glabrous in male, distinctly pubescent for basal third in female. Underside almost devoid of long hairs; with dense, recumbent, brassy pubescence as follows: on mesepimeron (and semi-recumbent, slightly longer hairs on metepisternum); on basal half of metasternum (the shorter recumbent hairs overlaid by longer suberect ones); on apico-lateral margins of abdominal segments I–IV (the rest of the abdomen rather uniformly clothed with rather sparse, erect hairs).

Puncturation on vertex of head and pronotum dense small, alveolate and rugose; on frons and pronotal calli (at least in male) partly impunctate; on basal third of elytra moderately dense and scabrous across base, and translucent panels almost impunctate. Underside puncturation often hidden by pubescence; but usually dense and small (lacking any larger punctures), and embedded in matrix of micropunctures as follows: on prosternum smooth and carinate

anteriorly, densely punctate posteriorly (the punctures very dense, small and alveolate); almost entirely micropunctate on mesosternum; in both sexes on metasternum the finer puncturation confused, but liberally perforated by deep, semi-alveolate, large punctures,

becoming scabrous where mixed with small tubercles. On abdomen punctures uniformly shallow, small, somewhat beveled, and sparse (even towards sides).

This monotypic genus is represented by *Pseudophygopoda subvestita* (White, 1855).



FIGURES 1-2: 1, *Pseudophygopoda subvestita* (White, 1855): A, male; B, male ventral aspect; C, female; D, female ventral aspect. 2, *Panamapoda panamensis* (Giesbert, 1996): A, male paratype; B, male ventral aspect.

*Discussion:* the original description of the genus *Pseudophygopoda* refers to two characters at variance with specimens examined in this study: inferior lobes of eyes not contiguous (in author's only female specimen this is true, width of one inferior lobe/interocular distance almost equal; but in the single male examined the inferior lobes are contiguous, width of one inferior lobe/interocular distance 10.7); and apex of antennae do not pass middle of second ventrite (in author's only male specimen antennae reach middle of urosternite III, in female base of III).

## SPECIES EXAMINED

### *Pseudophygopoda subvestita* Tavakilian & Peñaherrera-Leiva, 2007

**Figs. 1A-1D, 10**

*Odontocera subvestita* White, 1855: 190.

*Phygopoda subvestita*; Monné, 2005: 499 (cat.).

*Pseudophygopoda subvestita* Tavakilian & Peñaherrera-Leiva, 2007: 104.

*Specimens analysed:* BRAZIL, *Amazonas*: S. Gabriel, Rio Negro, 1 male, 05.X.1927, J.F. Zikán col. (MZUSP); *Pará*: Óbidos, 1 female, XI.1921, H.C. Boy col. (MZUSP).

*Colour:* in male forebody entirely black above, in female with small chestnut areas; elytra testaceous with chestnut on humeri, and in male on apical lobes; sterna (and abdomen in female) chestnut and pale chestnut, generally darker towards sides and on apical half of metasternum, abdomen in male yellow. Legs yellowish (with pale chestnut femoral claws in female); metatarsi uniformly chestnut.

### *Panamapoda* gen. nov.

**Figs. 2A, 2B**

*Type species:* *Phygopoda panamensis* Giesbert, 1996, designated here by monotypy.

*Etymology:* the generic name is to remind us that this genus comes from Panama, *Panama*, and *poda*, that it is closely related to *Pseudophygopoda*. The genus is female.

*Diagnosis:* separation of *Panamapoda* from *Pseudophygopoda* is set down under the description of the latter; their similarities to each other, and their difference from the other genera set down below.

*Panamapoda* is closest to *Pseudophygopoda*, with which it shares the following characters (not, or less often found among the remaining genera included in this revision): in male inferior lobes of eyes contiguous or nearly so (in *Paraphygopoda* nearly contiguous to further apart, in *Paramelitta* and *Phygomelitta* far from contiguous); pronotum almost entirely covered with dense, tidy, recumbent, metallic coloured pubescence (in the remaining genera pronotal pubescence not recumbent, in *Paramelitta* may be dense and rufous in colour, in *Phygomelitta* rather sparse, untidy, and ashy coloured, in *Paraphygopoda* pronotum almost glabrous); pronotum with shining, impunctate areas limited to median and paired lateral calli (in *Paraphygopoda* similar, but all of surface shining, in *Paramelitta* and *Phygomelitta* impunctate areas absent or limited to median callus); metafemoral claw about 1.3 longer than peduncle (in the remaining genera metafemoral claw either much shorter, 0.6-0.9 length of peduncle; or longer, 1.8-2.8 length of peduncle); and metatarsomere I distinctly longer than length of II and III together (in the remaining genera metatarsomere I, equal to, or only slightly longer than length of II and III together, but see female *P. viridimicans*).

*Description of the genus* (female not known): total length 10.0-12.3 mm. Forebody (f) shorter than abdomen (a), f/a 0.84.

*Head:* rostrum rather short, width/length 2.56. Galea rather long. Inferior lobes of eyes almost contiguous in male, width of one lobe/interocular distance 7.5. Superior lobes of eyes lobate, laterally narrowed by about one third their mesal width; and separated by 2.75 the width of one lobe. Apex of antennae reaching apical third of urosternite II. Length of scape 0.7 mm; antennomere III 1.4 longer than scape; XI with long, narrow apical cone.

Prothorax slightly elongate (length/width 1.06); cylindrical, with weakly rounded sides, widest at middle, prothoracic quotient 2.05; callus at midline almost complete, weakly raised, impunctate, and partly widened. Prosternum only moderately declivous across middle. Prosternal process weakly arched; 14 times narrower than width of procoxal cavity.

Elytra 2.2 longer than width of humeri; apex reaching basal third of urosternite II; subfissate for about half their length; laterally weakly arched and hardly divergent apically. Each elytron strongly narrowed to apical third, the latter drawn out to form lobe with weakly rounded sides; and rounded at apical margin; translucent panels poorly contrasting with rest of elytra, and commencing well behind humeri.



Widths of mesocoxal cavity/base of process 2.8. Lengths of mesosternum/metasternum 0.7. Metathorax with subparallel sides, hind margin obliquely rounded to middle of metasternum; metasternum rather flat basally, and tumid for apical half (and slightly less prominent than mesocoxae).

Abdomen narrow and almost cylindrical (with slight constriction between urosternites II and III) and widest at apex of urosternite IV/base of V; urosternite I cylindrical, and rather wide; II-V quadrate, and weakly trapezoidal. Urosternite V with apical margin weakly emarginate; surface hardly differentiated, with slightly flattened, short, V-shaped area (but lacking vestiges of soleate depression). Abdominal process weakly inclined, by about 15° to abdomen.

*Legs:* ratio lengths front/middle/hind leg 1.0:1.3:3.1. *Front and middle legs:* body length/length of legs 2.8 and 2.1 respectively. *Front leg:* tibia slightly shorter than femur; slender, narrow at base, widening to middle, parallel-sided to apex. *Middle leg:* femur moderately long, 1.42 longer than length of tibia; femoral clave rather narrow, length of femur/lateral width of femoral clave 4.15; tibia slender, and parallel-sided for apical half. *Hind leg:* rather elegant, body length/length of leg in male 0.9; femur subcylindrical, apex just passing apex of abdomen; clave long, peduncle short, narrow, and flattened (length clave/peduncle about 1.36). Metatibiae slender, gradually, and only slightly widening towards middle, almost parallel-sided to apex; and apical half with moderately short-haired brush. Metatarsus distinctly narrower than apex of metatibia; tarsomere I cylindrical, II pediculate and trapezoidal, III moderately long, the lobes rounded at sides, and weakly divergent; tarsomere I 1.3 longer than II + III.

*Male genitalia:* were not extracted from the abdomen, but the apices of the tegmen are exposed, and appear to be most similar to those of *P. viridimicans*.

*Surface ornamentation:* on pronotum with dense patches of recumbent, brassy pubescence covering much of surface, elytra almost glabrous. Underside with pale golden pubescence as follows: on prosternum sparse, moderately short, and suberect; becoming dense and recumbent (and overlaid by much longer suberect hairs) on sides of mesosternum, on basal half of metasternum, and most of metepisternum. Abdomen rather sparsely pubescent away from sides, towards sides with long erect hairs, and dense patches of recumbent pubescence on latero-basal margins of urosternites I-IV.

Puncturation on vertex of head and pronotum dense small, alveolate and rugose; on frons and pronotal calli partly impunctate; on basal two-thirds of elytra moderately dense and scabrous across base, simpler and shallower on translucent panels. Underside puncturation partly hidden by pubescence; but with dense, small, alveolate punctures embedded in matrix of micropunctures as follows: on prosternum smooth and carinate anteriorly, densely punctate posteriorly; on meso- and metasterna (towards apex of metasternum the puncturation becoming scabrous where mixed with small tubercles). On abdomen punctures small, shallow and somewhat beveled; generally sparse to moderately sparse away from sides, towards sides rather denser.

*Comment:* with the transference of *Phygopoda panamensis* to *Panamapoda*, the genus *Phygopoda* returns to its status as a South American endemic.

## SPECIMEN EXAMINED

### *Panamapoda panamensis* Giesbert (1996)

**Figs. 2A, 2B**

*Phygopoda panamensis* Giesbert, 1996: 332.

*Phygopoda panamensis*; Monné 2005: 499 (cat.).

*Specimen analysed:* paratype, PANAMA, Panama pt., 7-10 km N El Llano, 1 male, 14-22.V.1993, E. Giesbert col. (FSCA).

*Colour:* upper forebody entirely black, elytra almost entirely testaceous; sterna chestnut to pale chestnut, abdomen chestnut with extreme base and apex of abdomen yellowish. Antennae almost entirely blackish, scape and pedicel chestnut. Legs yellowish with chestnut pro- and mesofemora, yellow metafemora, and chestnut metatarsi.

### *Paraphygopoda* gen. nov.

**Figs. 3-5**

*Type species:* *Stenopterus albitarsis* Klug, 1825, here designated.

*Etymology:* the generic name is to remind us that this genus comes from Panama, *Panama*, and *poda*, that it is related to *Pseudopygopoda*. The genus is female.

*Diagnosis:* metafemora distinctly pedunculate clavate (in all other genera metafemora subcylindrical); meta-

tarsi about as wide as apex of metatibia (in all other genera metatarsi narrower than apex of metatibia); pronotal surface shining and almost glabrous (in all other genera the surface dull and pubescent).

*Description of the genus:* total length 9.0-16.0 mm. Forebody (f) shorter than abdomen (a), f/a 0.83-0.91 (in most species), to slightly longer than abdomen f/a 1.09 (in *P. nappae*).

*Head:* rostrum width/length 2.27-2.63 (shortest in *P. albitarsis*, longest in *P. nappae*). Galea long, or rather short (in *P. albitarsis*). Inferior lobes of eyes subcontiguous to contiguous in males, width of one lobe/interocular distance 5.83-7.75 (widest apart in *P. viridimicans*, nearest together in *P. nappae*); well separated in females, width of one lobe/interocular distance 0.83-1.00. Superior lobes of eyes usually lobate (but fusiform in male *P. nappae*); laterally usually narrowed by about one third their mesal width (but not narrowed in male *P. viridimicans*, and laterally narrowed by about half their mesal width in *P. albitarsis*); and separated by about three times the width of one lobe. Apex of antennae in males reaching from base of urosternite II (in *P. panamensis*) to apex of urosternite III (in *P. longipennis*); in females nearly reaching, or just passing, middle of II. Length of scape 1.4-1.7 mm; antennomere III 1.3-1.6 longer than scape (longer in males); XI as long as, or slightly longer than X, with narrow apical cone.

Prothorax quadrate (in females), hardly longer in males, length/width 1.04-1.11 (most elongate in *P. nappae*); subcylindrical, with sides slightly converging towards apex, and somewhat widened near middle, prothoracic quotient in male 2.05-2.16, in females 1.94-2.05; callus at midline incomplete, flatish, impunctate, and partly widened. Prosternum moderately declivous across middle, and inclined to prosternal process (in most species), flatter and abruptly inclined to process (in *P. viridimicans*). Prosternal process weakly arched in male, flat in female; 13-15 times narrower than width of procoxal cavity.

Elytra 2.0-2.3 longer than width of humeri (shortest in male *P. albitarsis*, longest in *P. viridimicans*); apex reaching apex of urosternite I (in females, and male *P. nappae*), from base to apex of II (in most males); subfissate for about half their length; laterally strongly arched and divergent apically (in most males), less so (in females, and in male of *P. nappae*). Apical third of each elytron lobed, the latter with moderately rounded sides, and rounded or obliquely truncate apical margin; each elytron with well-defined, broad translucent panel commencing near basal margin (in

*P. albitarsis* and *P. viridimicans*), or narrow and commencing just behind humeri (in *P. nappae*).

Widths of mesocoxal cavity/base of process 2.14-3.00 in male, 2.00 in female. Lengths of mesosternum 0.63-0.71 length of metasternum. Metathorax with subparallel sides, oblique, or almost truncate, to middle of metasternum (in *P. viridimicans*), or sides rounded from base to middle of metasternum (in *P. albitarsis* and *P. nappae*); metasternum uniformly tumid (in *P. albitarsis* and *P. nappae*), or rather flat basally, and tumid for apical half (in *P. viridimicans*).

Abdomen in male almost cylindrical, slightly wider for apical half, widest at middle of urosternites III. Urosternite I weakly conical, or cylindrical (in *P. viridimicans*); II-IV rectangular and transverse, or weakly trapezoidal, and like III and IV quadrate (in *P. viridimicans*). Urosternite V in male trapezoidal and strongly transverse, or weakly trapezoidal and quadrate (in *P. viridimicans*); surface weakly differentiated, slightly flattened from midline towards sides (but lacking vestiges of soleate depression); with apical margin strongly emarginate, and with acute apico-lateral angles (when viewed from the side). Abdomen in females fusiform; flattened, and widest near middle of III; urosternite I conical; II-IV transverse (in most species), with III quadrate (in *P. albitarsis*). Urosternite V narrow (in *P. nappae*), or very narrow (in *P. albitarsis* and *P. viridimicans*), conical, and slightly flared at apex. Abdominal process usually weakly inclined to abdomen in males (and see *P. nappae*), or narrowly triangular, and distinctly inclined to abdomen (in *P. viridimicans*).

*Legs:* ratio lengths front/middle/hind leg 1.0:1.3-1.5:3.2-3.7. *Front and middle legs:* body length/length of legs 2.6-3.3 and 2.0-2.3 respectively. *Front leg:* tibia slightly shorter than femur (in both sexes); slender, narrow at base, and widening to apex (somewhat abruptly in *P. albitarsis*). *Middle leg:* femur moderately long, especially in males, 1.33-1.47 longer than length of tibia; femoral clave moderately broad in males (less so in females), length of femur/lateral width of femoral clave 3.8-5.0; tibia slender, and parallel-sided for apical two-thirds, or gradually widened to apex (in *P. nappae*). *Hind leg:* slender, body length/length of leg 0.8-0.9 (in both sexes); femur abruptly pedunculate-clavate, with apex just passing apex of abdomen, or, with its short abdomen, apex passing abdomen near base of femoral clave (in *P. nappae*); femoral clave very short, peduncle narrow, flattened, and long to very long, lengths of femoral clave/peduncle about 0.62-0.86 (in *P. albitarsis* and *P. viridimicans*), or 0.56 (in *P. nappae*). Metatibiae slightly longer

than metafemora, or slightly shorter than metafemora (in *P. albitarsis*); somewhat robust, gradually, and only slightly, widening towards middle, almost parallel-sided to apex; and apical half with long-haired brush. Metatarsus about as broad as apex of metatibia; metatarsomere I subcylindrical, II trapezoidal and weakly pedunculate, III moderately long, the lobes slightly rounded at sides, and weakly divergent; tarsomere I longer than II + III (in *P. albitarsis* and *P. longipennis*), equal in length to II + III (in *P. nappae*), and 1.4-1.5 longer than II + III (in female *P. viridimicans*).

**Genitalia** (Figs. 11, 13): the tegmen of the two species examined rather different: that of *P. albitarsis* closer to that of *P. subvestita* (see below this species for details); and that of *P. viridimicans*, with lateral lobes more rounded mesally, but not abruptly excavate before apical lobes: and the latter more elongate than in most species. Length of lateral lobe in *P. albitarsis* 1.15 mm, *P. viridimicans* 1.50 mm.

**Surface ornamentation:** pronotum generally smooth and shining, and somewhat glabrous (males may have small patch of whitish hairs laterally; and in *P. longipennis* disc with sparse erect hairs; elytra glabrous. Underside generally less pubescent in females; in males clothed with suberect, moderately long, whitish pubescence (becoming untidy towards sides of prosternum, recumbent and dense on basal half of metasternum and sides of meso- and metathorax). Abdomen in female more glabrous; in males rather sparsely clothed with short pubescent (less sparse towards sides), with longer suberect hairs on basal urosternites; dense white patches of recumbent pubescence covering apico-lateral margins of urosternites I-IV (in *P. albitarsis* and *P. viridimicans*), these patches absent (in *P. nappae*, and in females).

Punctuation of dorsad alveolate and dense, as follows: on vertex of head small and rugose (except for narrow smooth line at midline); on pronotum small and dense (but not rugose), without larger punctures (in *P. viridimicans*), with larger punctures on lateral calli (in *P. nappae*), or spreading from lateral calli to median callus (in *P. albitarsis*). Punctuation on elytra generally small, subalveolate and dense (except on translucent panels and humero-apical costa); becoming somewhat rugose adjacent to humero-basal margin, sparser, simpler and shallower on translucent panels. Underside punctuation hardly hidden by pubescence; subalveolate, dense and small (lacking significantly larger punctures), and embedded in matrix of micropunctures, as follows: on prosternum smooth and carinate anteriorly, densely punctate posteriorly;

on mesosternum similar to prosternum; in males metasternal punctures becoming scabrous where mixed with small tubercles, in females the punctuation becoming granulate. On abdomen punctures small, shallow and somewhat beveled; generally sparse to moderately sparse (in *P. nappae*), or rather dense (in *P. albitarsis* and *P. viridimicans*).

The species included in this genus are: *Paraphygopoda albitarsis* (Klug, 1825), *Paraphygopoda nappae* sp. nov., *Paraphygopoda viridimicans* (Fisher, 1952); and, provisionally, *Paraphygopoda longipennis* (Zajciw, 1963).

**Comment:** in the original description by Zajciw (1963) of *Epimelitta longipennis* (Fig. 9) he remarks that the coxae lack distinct tubercles; without examining this species, the author assumes that, at least, vestigial tubercles are present on the procoxae.

## SPECIES EXAMINED

### *Paraphygopoda albitarsis* (Klug, 1825)

**Figs. 3A, 3B, 11**

*Stenopterus albitarsis* Klug, 1825: 475, pl. 44, fig. 12.

*Odontocera albitarsis*; White, 1855: 188.

*Acyphoderes albitarsis*; Lacordaire, 1868: 506.

*Phygopoda albitarsis*; Bates, 1870: 327.

*Phygopoda albitarsis*; Monné 2005: 499 (cat.).

**Specimens analysed:** PERU, Pucallpa, Rio Ucayali, 200 m, 1 male and 1 female, XII.1956, Dirings collection (MZUSP).

**Specimens examined:** BRAZIL, Pará: 1 male, Tippmann coll. '57 # 213112 (USNM).

**Colour:** body almost entirely black (with weak greenish metallic reflection on abdomen), becoming dark rufous-chestnut on mesosterna. Antennae entirely black. Elytra black with testaceous-brown, translucent panels. Legs black with creamy-yellow metatarsi.

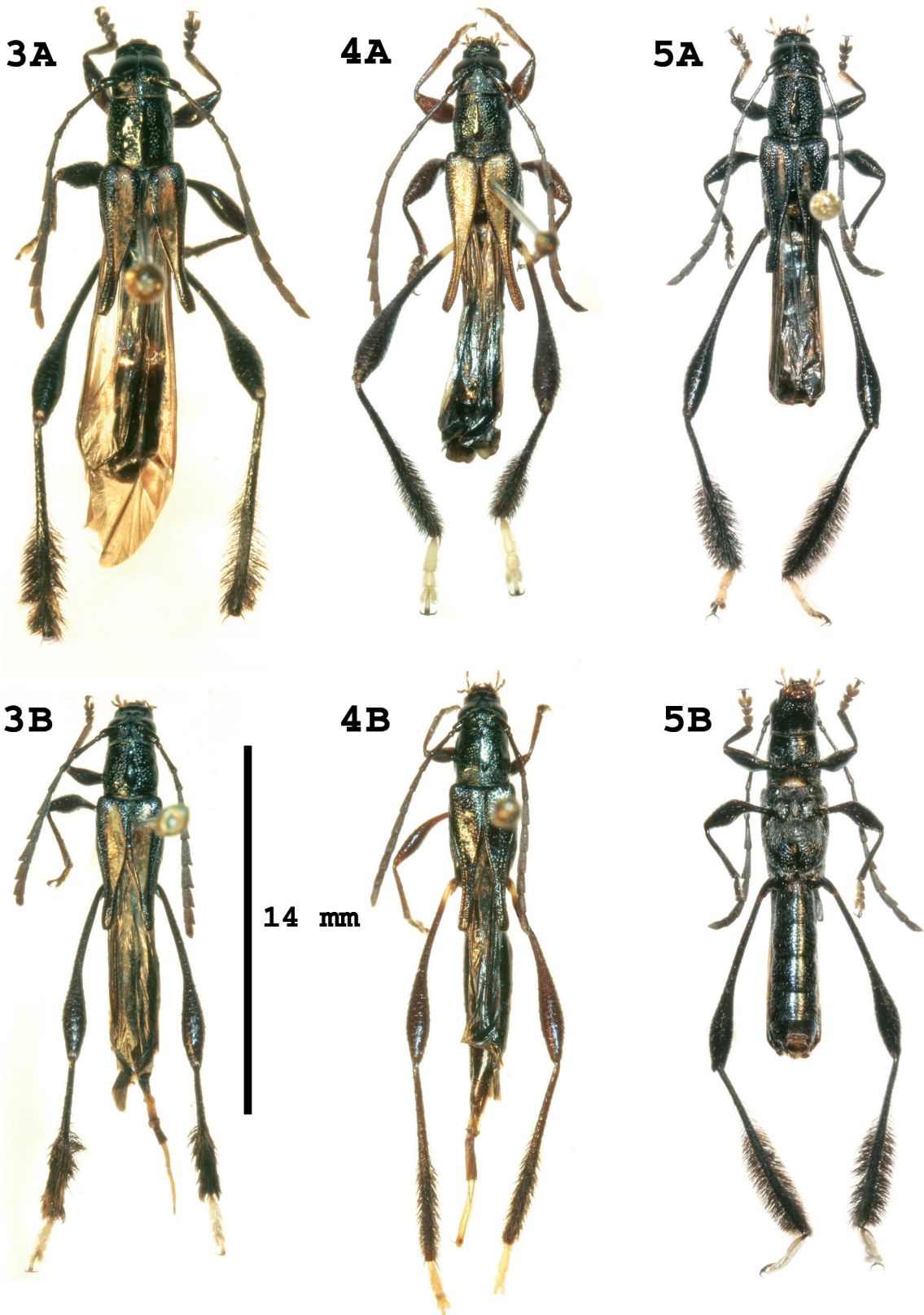
### *Paraphygopoda viridimicans* (Fisher, 1952)

**Figs. 4A, 4B, 13**

*Epimelitta* (?) *viridimicans* Fisher, 1952: 2.

*Epimelitta viridimicans*; Monné, 2005: 463 (cat.).

**Specimens analysed:** BRAZIL, Espírito Santo: Linhares, 1 male and 1 female, IX.1972, P.C. Elias col. (MZUSP).



FIGURES 3-5: 3, *Paraphygopoda albitarsis* (Klug, 1825): A, male; B, female. 4, *Paraphygopoda viridimicans* (Fisher, 1952): A, male; B, female. 5, *Paraphygopoda nappae* sp. nov.: A, male holotype; B, male ventral aspect.



*Colour:* body almost entirely black with blue reflection; in female abdomen with brassy reflection. Basal antennal segments black, becoming more chestnut towards apex. Elytra black with testaceous-brown translucent panels; somewhat reduced in size and clouded with dusky in female. Legs generally dark chestnut; base of mesofemoral peduncle yellow; metatarsi creamy-white, in female slightly suffused with brown.

***Paraphygopoda nappae* sp. nov.**

**Figs. 5A, 5B**

*Holotype male:* 13.6 mm. Deposited at MNKM. *Female:* not known.

*Diagnosis:* in *P. nappae* metafemora long, base of clava just passing apex of abdomen (in the other species of the genus apex of clava just passing apex of abdomen); in *P. nappae* translucent panels of elytra reduced to small, narrow fascia (in the other species of the genus broader and longer).

*Description of holotype:* elegant species; total length 13.6 mm. Prothorax subcylindrical, 1.12 wider than head with eyes.

*Colour:* almost entirely black; ligula and galea testaceous-yellow; translucent panels on elytra somewhat olive in colour; metatarsi creamy-yellow (lobes of metatarsomere III dusky at apex).

*Structure:* rostrum moderately wide, but long, width/length 2.27. Maxillary palps moderately long; galea long. Labrum rather large, nearly rectangular. Inferior lobes of eyes slightly longer than wide; and contiguous (width of one lobe/interocular distance 7.75). Superior lobes of eyes widely separated, distance between them/width of one lobe 3.4; mesally with small ommatidia, arranged in 9-10 rows. Antennae rather long (and more filiform than in most species); antennomere VI almost filiform; III long, 1.60 longer than scape; IV 0.71 length of III; V distinctly shorter than III, but longer than IV, and equal in length to VI and VII; VII very narrow at base, weakly widened at apex; VII-X incrementally shorter and crassate, but always elongate and only moderately serrate (the serrations of VII and VIII weakly clipped at apex).

Prothorax with sides converging for apical third, weakly emarginate for basal third, moderately rounded for middle third. Front margin 0.78 width of hind margin. Sides widest slightly before middle, prothoracic quotient 2.16. Surface of pronotum moderately

irregular; with prominent, long, acuminate, smooth callus at midline. Prosternum almost planar with weakly raised front border; with short, abrupt inclination to base of prosternal process. Prosternal process flat; base of process about 15 times narrower than width of procoxal cavity, hardly wider at apex (but surface details hidden by dense pubescence).

Elytra strongly subulate, subfissate for more than apical half; short (length/width 1.98); strongly narrowed to base of apical lobes; the latter moderately divergent; each lobe with almost parallel sides (slightly widened at pre-apex), obliquely truncate at apex (apical margin slightly longer laterally). Basal half of each elytron with rather ill-defined, small, translucent panel commencing from behind shoulders.

Width of mesocoxal cavity 2.16 wider than base of mesosternal process. Mesosternum rather short, length of mesosternum/length of metasternum 0.63. Metathorax not broad; anteriorly not strongly rounded at sides, posteriorly strongly rounded to middle of metasternum. Metasternum somewhat abruptly, broadly tumid to either side of midline, leaving metasternal process inclined to, and well below level of, mesosternal process; longitudinal suture short (hardly reaching basal half of metasternum, but rather deep for apical half). Metepisternum moderately convex; the sides rather strongly narrowed to subacuminate apex.

Abdomen relatively short, narrow basally, slightly widening to middle, parallel-sided towards apex; urosternite I elongate and subconical; II-IV transverse (about 1.5 wider than long), somewhat rectangular (sides parallel, but weakly constricted between segments). Urosternite V slightly down-turned; shorter than other segments, but as wide as IV at base; strongly contracted to broadly emarginate apex; the latter winged, but strongly rounded (when viewed from the side); soleate depression replaced by flat U-shaped area without raised sides. Abdominal process rather small, short, equilateral triangle (with small blunt apical extension), almost planar with rest of abdomen. Apical tergite rather short, trapezoidal; apical half depressed to either side of midline; apex strongly emarginate, not overlapping apex of urosternite V.

*Legs:* ratio length front/middle/hind leg 1.0:1.3:3.3. *Front and middle legs:* body length/length of legs 2.6 and 2.0, respectively. *Front leg:* tibia narrow, and gradually widening to apex. *Middle leg:* femur 1.4 longer than mesotibia; length of femur/lateral width of clava 4.1; tibia moderately slender, gradually widening to apex. *Hind leg:* noticeably slender, and long (body length 0.8 length of leg); femora moderately strongly pedunculate-clavate; clava weakly abrupt, peduncle

narrow and very long (lengths clava/peduncle 0.55); metatibia bisinuate (when viewed from the side); regularly, but rather weakly thickened to apex.; metatarsus rather short, about one third length of metatibia; metatarsomere I robust, moderately strongly widened to apex; II also widened and moderately short; lobes of metatarsomere III moderately small, somewhat acuminate, and divergent.

*Male genitalia*: aedeagus was not extracted from the abdomen, but apex of tegmen and middle lobe clearly visible; and most similar to aedeagus of *P. viridimicans*.

*Measurements (mm)*: 1 male: total length 13.6; length of pronotum 4.1; width of pronotum 3.7; length of elytra 9.1; width at humeri 4.6.

*Holotype*: male, BOLIVIA, Santa Cruz: Andreas Ibañez Province, Potrerillo de Guenda, 17°40'S/63°20'W, 06-08.XII.2011, Wappes, Lingafelter, Morris & Woodley col. (MNKM).

*Etymology*: this species is named after Dr. Dilma Solange Napp for her work on the Rhopalophorini.

### Key to the species of *Paraphygopoda*

1. Apex of metafemoral clava just passing apex of abdomen. Translucent panels of elytra occupying about half of surface area .....2
- Base of metafemoral clava just passing apex of abdomen. Translucent panels of elytra reduced to small, narrow fascia. Bolivia. Figs. 5A, 5B ..... *P. nappae* sp. nov.
2. Metatarsi white or creamy-white in colour. Apex of antenna reach middle of urosternite III. Translucent panels of elytra reach base of elytra.....3
- Metatarsi dark chestnut in colour. Apex of antenna reach apex of urosternite III. Translucent panels of elytra do not reach base of elytra. Brazil (RJ). Fig. 9 ..... *P. longipennis* (Zajciw, 1963) comb. nov.
3. Elytra about 2.0 longer than width of humeri; apical lobes relatively broad and short, with broad, impunctate carina at midline. Metafemora entirely black. Vertex of head and pronotal disc without metallic reflection. Brazil (PA, RO), Peru. Figs. 3, 11 ..... *P. albitarsis* (Klug, 1825) comb. nov.
- Elytra about 2.3 longer than width of humeri; apical lobes relatively long and narrow, with narrow, punctate carina at midline. Metafemora chestnut with base of peduncle yellow. Vertex of head and pronotal disc with metallic blue reflection. Brazil (ES-PR). Figs. 4, 13 ..... *P. viridimicans* (Fisher, 1952) comb. nov.

### *Paramelitta* gen. nov.

Figs. 6-7

*Type species*: *Charis aglaia* Newman, 1840, here designated.

*Etymology*: the generic name is to remind us that this genus is different from, *Para*, the genus *Epimelitta*, in which its type species was originally placed. The genus is female.

*Diagnosis*: separation of this genus from *Panamapoda*, *Paraphygopoda* and *Pseudophygopoda* is set down under the descriptions of these genera.

One other character which will separate males of *Paramelitta* from males of the other genera is the wide mesofemoral clavae (when viewed laterally), femur 2.7 times longer than width of clava (in all other genera femur 3.3-3.9 longer than width of clava).

*Paramelitta* is readily separated from *Phygomelitta* by the following characters: in *Paramelitta* metati-

bia with dense brush (in *Phygomelitta* furnished with rather dense hairs, but falls short of being a true brush); in *Paramelitta* antennomere III 1.3-1.6 longer than scape (in *Phygomelitta* 1.1 longer than scape); in *Paramelitta* male prothorax widest just before middle (in *Phygomelitta* widest well before middle); in *Paramelitta* side of elytron strongly curved outwards (in *Phygomelitta* weakly curved outwards); in *Paramelitta* width of mesocoxal cavity about three times width of mesosternal process (in *Phygomelitta* less than twice width of mesosternal process); in *Paramelitta* male metafemoral clava 2.3 longer than peduncle (in *Phygomelitta* 2.8 longer than peduncle).

*Description of the genus*: total length 11.5-16.7 mm. Forebody (f) shorter than abdomen (a), f/a 0.76-0.89 (in *P. aglaia*), or longer than abdomen (in *P. wappesi*).

*Head*: rostrum rather short, width/length 2.80 (in male *P. aglaia*), or rather long, width/length 2.13-2.36 (in *P. wappesi*, and in female *P. aglaia*). Maxillary palps

rather short, and galea moderately long (in *P. aglaia*), both short (in *P. wappesi*). Inferior lobes of eyes far from contiguous in males, width of one lobe/interocular distance 2.67-2.70; well separated in female, width of one lobe/interocular distance 0.93. Superior lobes of eyes lobate, laterally rather weakly narrowed (in males), or fusiform, and laterally narrowed by about one third their mesal width (in female); in males separated by 3.14 times the width of one lobe, in female separated by 3.78 times width of one lobe. Apex of antennae in males reaching from base of urosternite I to base of II; in female very short, only reaching metacoxae. Length of scape 0.6-0.7 mm; antennomere III 1.25-1.58 longer than scape; XI with moderately narrow apical cone (in *P. aglaia*) or with short, broad cone (in *P. wappesi*).

Prothorax in male quadrate (length/width 1.00-1.05), in female transverse (length/width 0.90); with rather rounded sides (in *P. aglaia*), or slightly rounded sides (in *P. wappesi*); in male widest before middle (prothoracic quotient 2.20-2.22), in female well before middle (prothoracic quotient 2.56); in female callus at midline very narrow, and almost complete (but before reaching level of basal constriction disintegrating and spreading into small patch of shining punctures), in male not as narrow and less complete (at middle, weakly raised, impunctate, somewhat widened). Prosternum weakly declivous across middle (in *P. aglaia*), or flat (in *P. wappesi*). Prosternal process almost flat (in *P. aglaia*), or strongly arched (in *P. wappesi*); 15-17 times narrower than width of procoxal cavity.

Elytra 2.0 longer than width of humeri, just reaching base of urosternite II (in *P. aglaia*), or 1.7 longer than width of humeri, just reaching apex of urosternite I (in *P. wappesi*); dehiscent (in *P. aglaia*) or subfissate (in *P. wappesi*), for about half their length (in female), for about two-thirds their length (in males); laterally strongly arched and divergent apically (in *P. aglaia*), or less so (in *P. wappesi*). Apical quarter of each elytron lobed, the latter with weakly rounded sides (in males), parallel sides (in female), and somewhat rounded at apical margin; each elytron with well-defined, broad translucent panel commencing well behind humeri.

Widths of mesocoxal cavity/base of process 2.8-3.0 (in males), 1.8 (in female). Lengths of mesosternum/metasternum 0.79-0.82 (in males), 0.70 (in female). Metathorax rounded from base to middle of metasternum; metasternum uniformly tumid, and disc slightly less prominent than mesocoxae in female.

Abdomen in male distinctly vespiform (in *P. aglaia*), weakly so (in *P. wappesi*); in female rather

narrow, slightly less convex than in other genera; widest at urosternite IV (in male), widest at middle of III (in female). Urosternite I somewhat conical (more so in female); II-IV rectangular and transverse (in female, and male *P. wappesi*), or subquadrate (in male *P. aglaia*). In males urosternite V not strongly differentiated (in *P. aglaia*), or very characteristic and somewhat irregularly trapezoidal (in *P. wappesi*, fig. 7C); apical margin with V-shaped excision, and surface of segment with weak V-shaped flattening (in *P. aglaia*), or V-shaped incision robust-looking, occupying most of segments' surface, and deeply excised (in *P. wappesi*). In female urosternite V elongate; very characteristic, with soleate-like, oval depression occupying apical half of segment; and apical margin moderately emarginate. Abdominal process moderately inclined (30°) to abdomen (in female, and male *P. wappesi*), or strongly inclined (70°) to abdomen (in male *P. aglaia*).

*Legs:* ratio lengths front/middle/hind leg 1.0:1.3-1.4:2.5-2.8. *Front and middle legs:* body length/length of legs 2.5-3.0 and 2.0-2.2 respectively. *Front leg:* tibia shorter than femur (in males), or only slightly shorter (in female); slender, narrow at base, widened and parallel-sided for apical two-thirds. *Middle leg:* femur moderately long, especially in males, about 1.3 longer than length of tibia; femoral clava very broad in males (when viewed from side), length of femur/lateral width of clava 2.7, distinctly less broad in female, length of femur/lateral width of clava 3.8; tibia moderately robust, and gradually widened to apex. *Hind leg:* rather robust (in male *P. aglaia*), distinctly less so (in male *P. wappesi* and female *P. aglaia*); in both sexes body length/length of leg 1.0-1.2; metafemora subcylindrical, apex reaching middle of urosternite IV to apex of abdomen; clava long; peduncle moderately robust, weakly flattened, and variable in length (length clava/peduncle about 2.15-2.34). Metatibiae equal in length to metafemora (in males), slightly shorter (in female), robust and gradually widening to apex (in male *P. aglaia*), or narrow at base, widened and parallel-sided for apical two-thirds (in *P. wappesi*), or somewhat narrower at base and at apex (in female); apical two-thirds of tibia with brush. Metatarsus distinctly narrower than apex of metatibia (more so in *P. wappesi*); metatarsomere I almost cylindrical, II pedicular and trapezoidal, III moderately long, the lobes hardly rounded at sides, and weakly divergent; in males tarsomere I 1.06 longer than II + III, in female 1.11 longer.

*Genitalia* (Fig. 14): in *P. aglaia* with distinct differences compared to those of other genera, but still

conforming to the general pattern. The tegmen with widely separated, very narrow, and strongly curved lateral lobes (with abrupt, large cordate apices). Length of lateral lobe 1.4 mm.

As the holotype is the only specimen of *P. wappesi* extraction of the genitalia is better left until further specimens become available with which to do so. The apices of the lateral lobes are just visible, and appear to be most like those of *P. viridimicans*, rather than those of *P. aglaia*.

*Surface ornamentation:* on dorsad rather glabrous (in *P. wappesi*), or rather pubescent (in *P. aglaia*); on pronotum somewhat uniformly clothed with long, somewhat recumbent, rufous hairs (in *P. aglaia*); or pronotal pubescence less uniform (in *P. wappesi*), as follows: restricted to apical constriction (with wide band of dense, untidy, recumbent, grey hairs) and disc and sides (with sparser more erect pubescence). Underside of head glabrous; sterna generally pubescent (with much denser and thicker, mostly rufous, hairs in *P. aglaia*) as follows: prosternum and most of mesosternum with some scattered long hairs, or hairs denser and thicker (in *P. aglaia*); on mesepimeron and metasternum almost entirely clothed with recumbent, glistening, white hairs, or both white and rufous hairs (in *P. aglaia*); margins of metasternum, and all of metepisternum clothed with moderately dense, long, suberect, ashy or rufous coloured hairs. Abdomen almost uniformly clothed with moderately dense, short (longer in female *P. aglaia*), recumbent, white hairs; these becoming longer and dense on apico-lateral margins of each segment. Scape almost glabrous; pedicel and antennomeres III and IV with moderately long black setae ventrally (at least at apex). Legs generally with rather sparse, semi-erect, rather short, white hairs (in *P. wappesi*), or generally covered with rather dense, rufous hairs (in *P. aglaia*), the hairs hardly longer on metafemora; lateral margins of protibia and mesal margins of mesotibia with dense long setae (in *P. wappesi*); metatibia with wide, long-haired, sepia coloured brush; metatarsus moderately glabrous, and lacking eye-catching pubescence (in *P. wappesi*), with few, but notable setae on each segment (in *P. aglaia*).

Puncturation on dorsad generally dense on vertex of head, pronotum, and parts of elytra (at sides, and narrow band adjacent to base); the punctures alveolate to subalveolate (and generally more rugose in *P. aglaia*), small to moderately small (mixed with large ones on parts of pronotum, and beveled ones on parts of elytra); and disc of elytra separated from front margin by characteristic band of vitrified punctures (in *P. wappesi*). Underside puncturation generally alveo-

late; with sparse (in *P. wappesi*), dense (in *P. aglaia*), large punctures on mentum-submentum; on rest of underside smaller, dense, and lying in matrix of micropunctures, as follows: on prosternum and middle of mesosternum (somewhat rugose in *P. wappesi*), on metasternum (very dense, the punctures smaller towards base, larger and deeper towards apex, where surface becomes scabrous with many small tubercles), on metepisternum dense and rugose (in *P. aglaia*), moderately dense, and mixed with simple punctures (in *P. wappesi*). On abdomen punctures a dense mix (very dense in *P. aglaia*) of very small to small, simple punctures, somewhat beveled and shallow away from sides.

Species included in this genus are *Paramelitta aglaia* (Newman, 1840) comb. nov., and *Paramelitta wappesi* sp. nov.

*Comment:* whether or not these two species should be placed in the same genus is open to question; they share many characters which suggest they should be, but, undeniably, others suggest they should not (see the diagnosis under *P. wappesi*).

## SPECIES EXAMINED

### *Paramelitta aglaia* (Newman, 1840)

**Figs. 6A-6C, 14**

*Charis aglaia* Newman, 1840: 22.

*Epimelitta aglaia*; Aurivillius, 1912: 283 (cat.).

*Epimelitta aglaia*; Monné, 2005: 460 (cat.).

*Specimens analysed:* BRAZIL, *Espírito Santo*: Córrego Itá, 1 male and 1 female, XI.1956, W. Zikán col. (MZUSP).

*Specimens examined:* BRAZIL, *Rio de Janeiro*: Muri-Nova Friburgo, 1 male, XII.1980, J.H. Guimorás col. (MZUSP).

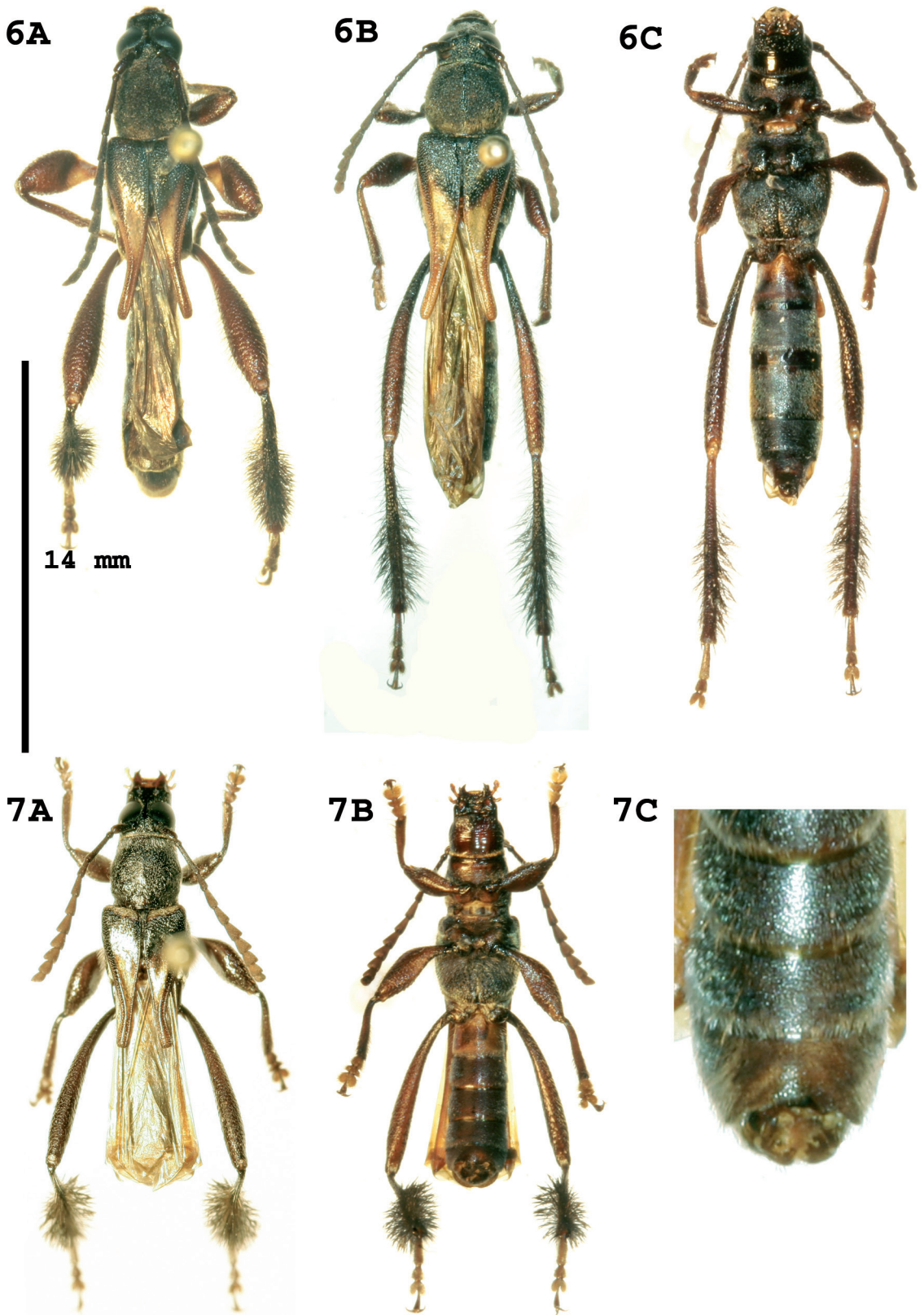
*Colour:* opaque and mostly dull; dorsad black, basal half of elytra black (and moderately shining), apical half chestnut, translucent panels bronzy; underside and legs black and chestnut (metatarsus black); mouthparts dusky; antennae black. Body generally clothed with dark rufous pubescence.

### *Paramelitta wappesi* sp. nov.

**Figs. 7A-7C**

*Holotype male:* 11.5 mm. Deposited at MNKM. *Female:* not known.





FIGURES 6-7: 6, *Paramelitta aglaia* (Newman, 1840): A, male; B, female; C, female ventral aspect. 7, *Paramelitta wappesi* sp. nov.: A, male holotype; B, male ventral aspect; C, male urosternites 3-5.

*Diagnosis* (for males): separation of this species from *P. aglaia* is as follows: in *P. wappesi* forebody slightly longer than abdomen (in *P. aglaia* distinctly shorter than abdomen); in *P. wappesi* frons rather impunctate (in *P. aglaia* moderately densely punctate); in *P. wappesi* rostrum long, length/width 2.36 (in *P. aglaia* short, length/width 2.8); in *P. wappesi* antennae reaching middle of urosternite I (in *P. aglaia* pass base of II); in *P. wappesi* antennomere III 1.6 longer than scape (in *P. aglaia* 1.3 longer than scape); in *P. wappesi* elytra short, 1.7 longer than width of humeri (in *P. aglaia* 2.1 longer than width of humeri); in *P. wappesi* urosternites II-IV distinctly transverse, and V very distinctive (in *P. aglaia* urosternites II-IV rather quadrate, and V weakly differentiated); in *P. wappesi* metafemora comparatively slender (in *P. aglaia* much more robust); in *P. wappesi* pubescence on dorsa and metafemora ashy or white (in *P. aglaia* rufous).

*Description of holotype*: moderately robust species; total length 11.5 mm. Prothorax subcylindrical, 1.19 wider than head with eyes.

*Colour*: opaque and somewhat shining (basal margins of elytra vitrified); almost entirely black and chestnut; mouthparts testaceous-yellow; translucent panel on elytra somewhat sepia in colour.

*Structure*: rostrum moderately wide and long (width/length 2.36). Galea moderately robust. Labrum rather large, nearly rectangular. Frons: bilobed calli lies between front margins of inferior lobes and pair of shallow fossae adjacent to clypeus (fossae round and densely micropunctate). Inferior lobes of eyes distinctly longer than wide; width of one lobe/interocular distance 2.60. Superior lobes of eyes with small ommatidia, mesally arranged in about 10 rows. Antennae short (reaching middle of urosternite I), and less filiform than in most species (only antennomere III filiform, the rest with apex about twice as wide as base); scape very short (0.6 mm); III 1.58 longer than scape; IV half as long as III; V (0.6 mm) not much longer than IV, slightly longer than VI and VII (the latter equal in length, 0.55 mm); VI trapezoidal; VII-X forming subcompact club, incrementally shorter and crassate, but only moderately serrate (serrations weakly clipped at apex); X slightly shorter than XI (0.4 mm); XI characteristically obovate, equal in length (0.45 mm) to IX.

Prothorax with sides subparallel for middle half, converging for apical third (and slightly sinuate, as apical constriction stronger than in other species), and rather strongly emarginate towards base (as lateral calli

just project beyond profile of sides). Front margin 0.89 width of hind margin. Prothoracic quotient 2.22. Surface of pronotum moderately irregular; with relatively short, flattish, spear-shaped callus at midline. Base of prosternal process about 14 times narrower than width of procoxal cavity; at apex hardly widened (but surface details hidden by dense pubescence).

Elytra strongly subulate, and weakly fissate for more than apical half; markedly short (length/width 1.74); strongly narrowed to base of apical lobes; the latter short, each lobe with almost parallel sides (slightly widening towards apex), and roundly truncate at apex.

Width of mesocoxal cavity 2.80 wider than base of mesosternal process. Mesosternum moderately long, length of mesosternum/length of metasternum 0.82. Metasternum somewhat abruptly, and broadly tumid to either side of midline; longitudinal suture long (nearly reaching base of metasternal process, and rather deep for much of its length). Metepisternum very broad, the surface irregular (flat in some areas, convex in others); the sides rather weakly narrowed to blunt apex.

Abdomen relatively short, narrow basally, slightly widening to middle, parallel-sided towards apex; urosternite I elongate and subconical; II-IV about 1.5 wider than long, with parallel sides (but weakly constricted between segments). Urosternite V very characteristic; slightly down-turned; shorter than other segments, but as wide as IV at base; strongly contracted to very broadly emarginate apex, this V-shaped emargination and its slightly raised sides occupying most of median surface (nearly reaching basal margin of segment); apices of V appear as broad, sharply pointed spines (when viewed from above), but well rounded (when viewed from the side).

Abdominal process rather small, short, equilateral triangle (with small blunt apical extension). Apical tergite rather short, broad and subcylindrical; apical margin probably regularly rounded.

*Legs*: ratio length front/middle/hind leg 1.0:1.3:2.6. *Front and middle legs*: moderately short (body length/length of legs 2.5 and 2.0, respectively). *Middle leg*: rather robust; length of femur/lateral width of clava 2.65; tibia moderately slender, gradually widening to apex. *Hind leg*: slender, long (equal to body length); femora moderately long, reaching apex of abdomen; femoral peduncle moderately robust, flattish, and short (length clava/peduncle 2.33); metatibia bisinuate (when viewed from the side); metatarsus rather short, 2.5 shorter than length of metatibia; metatarsomere I slender and subcylindrical, not widened

towards apex; II wider than I, almost triangular and short; III with narrow lobes (together the lobes hardly wider than II).

*Male genitalia*: aedeagus was not extracted from the abdomen, but apex of tegmen clearly visible, the apical lobes quadrate (in appearance midway between *P. albitarsis* and *P. viridimicans*).

*Measurements (mm)*: 1 male: total length 11.5; length of pronotum 4.0; width of pronotum 3.8; length of elytra 8.0; width at humeri 4.6.

*Holotype*: male, BOLIVIA, *Santa Cruz*: 5 km SSE Buena Vista, 17°29'96"S/63°39'13"W, 440 m, Hotel Flora & Fauna, Chiquitano Forest, on/flying to flowers of "Sapaimosi", 03.IX.2008, Clarke & Zamalloa col. (MNKM).

*Comment*: the host flower "Sapaimosi" is *Trichillia elegans* Adr. Juss. (Family MELIACEAE).

*Etymology*: this species is named after Jim Wappes for his work on the Photographic Manual of Bolivian Cerambycidae.

### Key to the species of *Paramelitta* (Female *P. wappesi* not known)

1. Frons densely punctured; in male rostrum short (length/width 2.8); in male antennae reach base of urosternite II; antennomere III about 1.3 longer than scape; pronotal pubescence rufous; prosternal process flat; in male both pronotum and elytra with rather dense, rufous pubescence; elytra short (length/width across humeri 2.0-2.1); in male urosternite V hardly differentiated; in male metafemur robust and clothed with rufous pubescence. Brazil (MG, ES). Figs. 6A-6C, 14..... *Paramelitta aglaia* (Newman, 1840) comb. nov.
- Frons mostly impunctate; rostrum moderately long (length/width 2.4); antennae reach middle of urosternite I; antennomere III about 1.6 longer than scape; in male pronotum with sparse, white pubescence, and elytra almost glabrous; prosternal process arched; elytra short (length/width across humeri 1.7), urosternite V strongly differentiated (with deep V-shaped incision occupying most of surface); metafemur comparatively slender and clothed with white pubescence. Bolivia. Figs. 7A-7C ..... *Paramelitta wappesi* sp. nov.

### *Phygomelitta* gen. nov. Figs. 8A-8C

*Type species*: *Epimelitta triangularis* Fuchs, 1961, here designated by monotypy.

*Etymology*: the generic name is a combination of *Phygo* and *melitta* to remind us that it is related to *Pseudophygopoda*, but its only species was originally placed in the genus *Epimelitta*. The genus is female.

*Diagnosis*: *Phygomelitta* differs from the four other genera by lacking a dense metatibial brush. Further characters separating this genus from *Panamapoda*, *Paraphygopoda*, *Pseudophygopoda* and *Paramelitta* are set down under the descriptions of these genera.

*Description of the genus*: total length 9.0-13.5 mm. Forebody (f) shorter than abdomen (a), f/a 0.76.

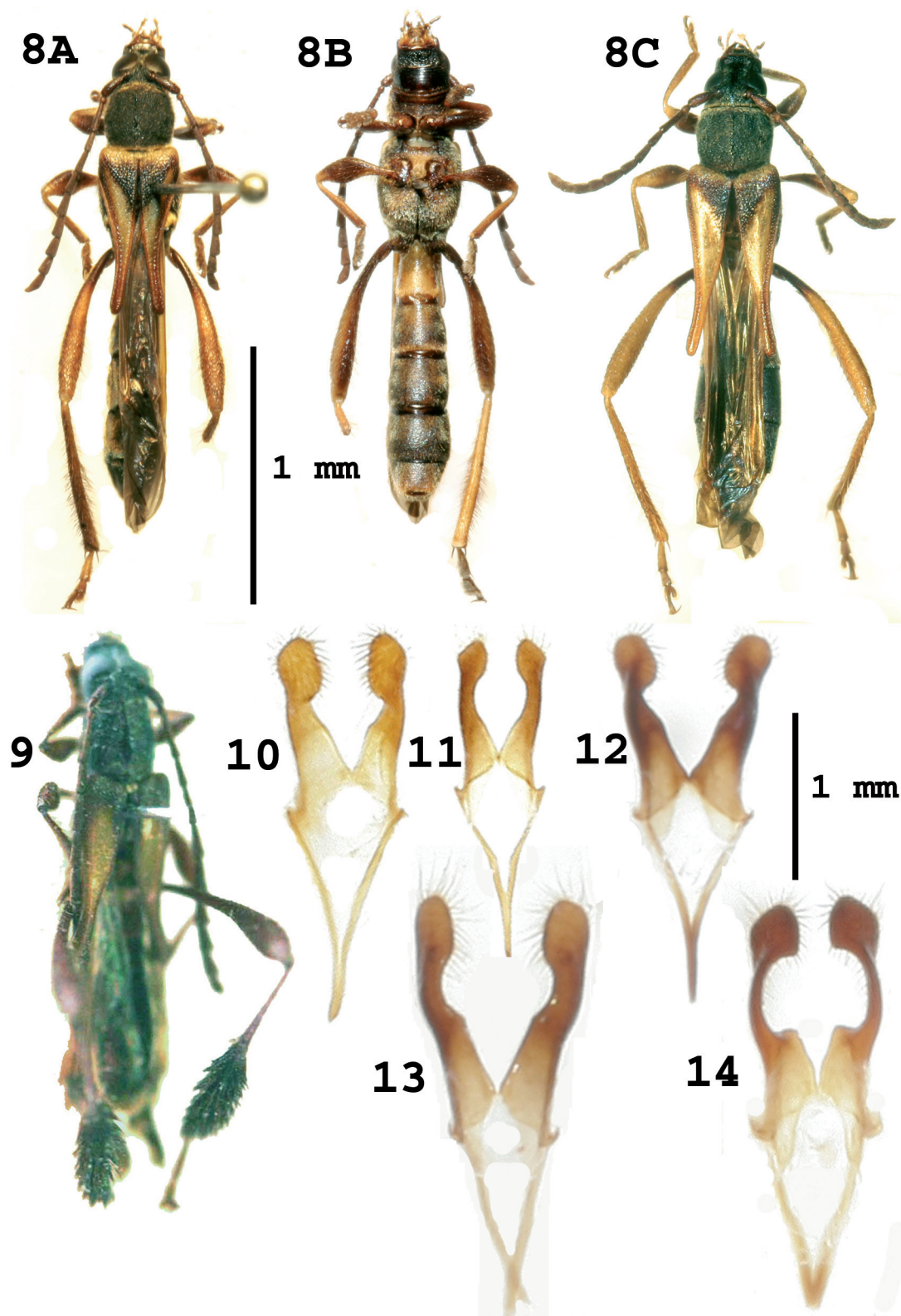
*Head*: rostrum short, width/length 2.66 (in male), and 2.78 (in female). Maxillary palps and galea rather long. Inferior lobes of eyes subcontiguous in males, width of one lobe/interocular distance 3.50; well

separated in females, width of one lobe/interocular distance 1.00. Superior lobes of eyes lobate, laterally narrowed by about one third their mesal width; and separated by 3.25 the width of one lobe. Apex of antennae in males reaching base of II; in female, short, reaching middle of I. Length of scape 0.75 mm; antennomere III 1.07-1.13 longer than scape; XI with narrow apical cone.

Prothorax quadrate (length/width 0.97); subcylindrical, with slightly rounded sides; widest well before middle, prothoracic quotient in male 2.84, in female 2.64; callus at midline very narrow, and incomplete. Prosternum moderately declivous across middle (in male), weakly declivous (in female). Prosternal process flat; 14 times narrower than width of procoxal cavity.

Elytra 2.1 longer than width of humeri (in male), or 2.2 longer (in female); apex reaching from base to apex of urosternite II; dehiscent for about half their length; laterally moderately arched and divergent apically. Apical third of each elytron lobed, the latter with parallel sides (in male), or rounded sides (in female); and rounded at apical margin; each elytron with well-defined, rather narrow translucent panel commencing behind humeri.





**FIGURES 8-14:** 8, *Phygomelitta triangularis* (Fuchs, 1961): A, male; B, male ventral aspect; C, female. 9, *Paraphygopoda longipennis* (Zajciw, 1963) male holotype. Figs. 10-14: Genitalia, tegmen of the aedeagus (dorsal aspect): 10, *Pseudophygopoda subvestita* (White, 1855). 11, *Paraphygopoda albitarsis* (Klug, 1825). 12, *Phygomelitta triangularis* (Fuchs, 1961). 13, *Paraphygopoda viridimicans* (Fisher, 1952). 14, *Paramelitta aglaia* (Newman, 1840).



Widths of mesocoxal cavity/base of process 1.8 (in male), 1.6 (in female). Lengths of mesosternum/metasternum 0.88 (in male), 0.85 (in female). Metathorax with subparallel sides, and very obliquely angled to middle of metasternum; metasternum weakly tumid posteriorly (in male), or uniformly tumid, but disc weakly flattened (in female).

Abdomen vespiform and convex (in male), fusiform and flattish (in female); widest at urostenite IV (in male), widest at middle of III (in female). Urosteronite I and II conical (in both sexes); III-IV rectangular and weakly transverse (in male), more transverse (in female). In male urosteronite V transverse; apical margin weakly emarginate; and surface hardly differentiated (only with vague U-shaped flattening). In female urosteronite V transverse, but broadly conical, contracted and bent across middle; and apical margin rounded.

Abdominal process in male moderately inclined (30°) to abdomen; in female similar, but very short.

*Legs:* ratio lengths front/middle/hind leg 1.0:1.4:2.6-2.8. *Front and middle legs:* in male body length/length of legs 3.2 and 2.3 respectively, in female legs very slightly longer. Front leg moderately robust; tibia slightly shorter than femur; narrow at base, widened and parallel-sided for apical two-thirds. *Middle leg:* femur moderately long, 1.26 longer than length of tibia (in male), 1.17 longer (in female); length of femur/lateral width of clava 3.8-4.0; tibia moderately robust in male, (less so in female), and gradually widened to apex. *Hind leg:* moderately robust; body length/length of leg 1.1-1.2; femur subcylindrical, apex reaching middle of urosteronite IV (in male), base of IV (in female); peduncle moderately robust, flattened, short in male (lengths clava/peduncle 2.8), longer in female (length clava/peduncle 1.8); metatibiae equal in length to metafemora (in male), or slightly shorter (in female), somewhat robust, and weakly widening to apex (in male), more slender, and hardly widening to apex (in female); tibia moderately strongly setose, the hairs long, and covering nearly all of tibia (but not dense enough to be called a brush); metatarsus distinctly narrower than apex of metatibia; tarsomere I almost cylindrical, II trapezoidal, not pedicular, III rather short, the lobes hardly rounded at sides, and weakly divergent; tarsomere I the same in both sexes, 1.07 longer than II + III.

*Genitalia* (Fig. 12): tegmen distinctly smaller than in other species (length of lateral lobe 0.9 mm); in appearance midway between *P. viridimicans* and *P. aglaia* (basal two-thirds of lateral lobes similar to the former, apical lobes similar to the latter).

*Surface ornamentation:* on pronotum with rather sparse, untidy, ashy coloured pubescence, covering much of surface; on base of elytra as for pronotum, the rest glabrous. Underside with brassy, somewhat untidy pubescence as follows: on prosternum sparse, moderately short, and suberect; becoming dense and recumbent (and overlaid by longer suberect hairs) at sides of mesosternum, basal half of metasternum, and sides of metepisternum; and golden recumbent pubescence on mesepimeron. Abdomen rather densely and uniformly pubescent, the hairs short and almost recumbent, towards sides mixed with longer, suberect hairs, and dense patches of recumbent pubescence on latero-basal margins of urosteronites I and II (in male), only on I (in female).

Puncturation on vertex of head and pronotum dense small, alveolate and rugose, as follows: on frons partly impunctate; on basal third of elytra moderately dense and rugose, and on translucent panels sparse, simpler, smaller and shallower. Underside puncturation alveolate or subalveolate; on mentum-submentum with dense rather small, alveolate punctures; on rest of underside partly hidden by pubescence, but generally with small, dense punctures embedded in matrix of micropunctures, as follows: on prosternum smooth and carinate anteriorly, densely punctate posteriorly; on meso- and metasterna (with some larger punctures towards apex of metasternum, these hardly rugose, and not scabrous). On abdomen surface appears uniformly shagreened, with very dense, shallow micropunctures.

The species included in this monotypic genus is *Phygomelitta triangularis* (Fuchs, 1961) comb. nov.

## SPECIES EXAMINED

*Phygomelitta triangularis* (Fuchs, 1961)  
comb. nov.

Figs. 8A-8C, 12

*Epimelitta triangularis* Fuchs, 1961: 6.

*Epimelitta triangularis*; Monné, 2005: 463 (cat.).

*Specimens analysed:* BRAZIL, Santa Catarina: Nova Teutonia, 1 male, 06.XII.1960, F. Tippmann, Wien col., Tippmann collection # 213112 (USNM); *ditto*, 1 female, X.1935, B. Pohl col. (MZUSP).

*Specimens examined:* BRAZIL, Santa Catarina: Mafra, 1 male and 1 female, Tippmann col '57 # 213112 (USNM); Nova Teutonia, 1 male, XI.1940, B. Pohl col. (RCSZ); *ditto*, 1 male and 1 female, 06.XII.1960,

F. Tippmann, Wien col., Tippmann collection # 213112 (USNM). *Paraná*: (?), P. Grossa, on flowers of "Guavirobeiria" (spell?), 1 female, IX.1946 (MZUSP).

*Colour*: opaque and dull; dorsad black, basal third of elytra with blackish triangle, basal margin and apical half pale chestnut, translucent panels brassy; under-side and legs black and pale chestnut (metatarsus pale chestnut); mouthparts chestnut and testaceous; antennae chestnut.

## RESUMO

Pseudophygopoda *Tavakilian* & *Peñaherrera-Leiva*, 2007 é rediscrito. Quatro gêneros novos aparentados são descritos. Panamapoda *gen. nov.*, com *P. panamensis* (Giesbert, 1996); Paraphygopoda *gen. nov.*, com Paraphygopoda nappae *sp. nov.*, *P. albitarsis* (Klug, 1825), *P. viridimicans* (Fisher, 1952), e *P. longipennis* (Zajciw, 1963), transferidas para este gênero (a última provisionalmente). Paramelitta *gen. nov.*, com Paramelitta wappesi *sp. nov.*, e *P. aglaia* (Newman, 1840); e Phygomelitta *gen. nov.*, com *P. triangularis* (Fuchs, 1961). Todas as espécies são ilustradas e chaves para los gêneros e suas espécies são fornecidas.

PALAVRAS-CHAVE: Cerambycinae; Espécies novas, Gêneros novos; Novas combinações.

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