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On the transference of *Ataxia tibialis* Schaeffer  
to *Bisaltes* (*Bisaltes*) Thomson with synonymies  
and new records in the genus (Coleoptera: Cerambycidae)

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# On the transference of *Ataxia tibialis* Schaeffer to *Bisaltes* (*Bisaltes*) Thomson with synonymies and new records in the genus (Coleoptera: Cerambycidae)

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**Abstract.** *Ataxia tibialis* Schaeffer, 1908 (Coleoptera: Cerambycidae: Lamiinae: Pteropliini) is transferred to *Bisaltes* (*Bisaltes*) Thomson, 1868 (Apomecynini), **new combination**; the female is described for the first time. This extends the range of the genus, previously only known as far north as Costa Rica, to southern Texas. *Bisaltes* (*Bisaltes*) *obliquatus* Breuning, 1940 is found to be conspecific with *Bisaltes* (*Bisaltes*) *uniformis* Breuning, 1939, **new synonymy**, and recorded from Argentina and the Brazilian state of São Paulo. The holotypes of *Esthlogena pulvereus* Bates, 1866, and *Bisaltes posticalis* Thomson, 1868 (currently, both synonyms of *Bisaltes* (*Bisaltes*) *pulvereus*) are illustrated for the first time. The holotype of *Bisaltes* (*Bisaltes*) *bimaculatus* Aurivillius, 1904, as well as ventral and lateral habitus of this species are illustrated for the first time and it is newly recorded from the Brazilian state of Santa Catarina.

[The second author, James E. Wappes, submitted this manuscript and initially served as the corresponding author, but passed away prior to its publication.]

**Key words.** Lamiinae, Nearctic, Neotropical, taxonomy, USA.

**ZooBank registration.** urn:lsid:zoobank.org:pub:3076844B-79B7-4987-AF64-FA2988E31F91

## Introduction

Currently, *Bisaltes* (*Bisaltes*) Thomson, 1868 includes 31 species distributed from Costa Rica to South America. Although Breuning (1971) published a key to species of *Bisaltes* (*Bisaltes*) and only six species have been described since then, the subgenus remains problematic. This is primarily because some features used in his key are variable (e.g., shape of the elytral apex; length of antennomeres; color and distribution of pubescence), thus making it difficult or even impossible to be sure about the identity of some specimens.

## Materials and Methods

Photographs were taken in the MZSP with a Canon EOS Rebel T3i DSLR camera, Canon MP-E 65 mm f/2.8 1-5× macro lens, controlled by Zerene Stacker AutoMontage software. Measurements were taken in mm using a measuring ocular Hensoldt/Wetzlar - Mess 10 in the Leica MZ6 stereomicroscope, also used in the study of the specimens.

The acronyms used in the text are as follows:

**ACMT** American Coleoptera Museum (James Wappes), San Antonio, Texas, USA

**DZUP** Coleção de Entomologia Padre Jesus Santiago Moure, Departamento de Zoologia, Universidade Federal do Paraná, Curitiba, Paraná, Brazil

**MZSP** Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil

## Results

### *Bisaltes (Bisaltes) tibialis* (Schaeffer, 1908), new combination

(Fig. 1–7, 9–14)

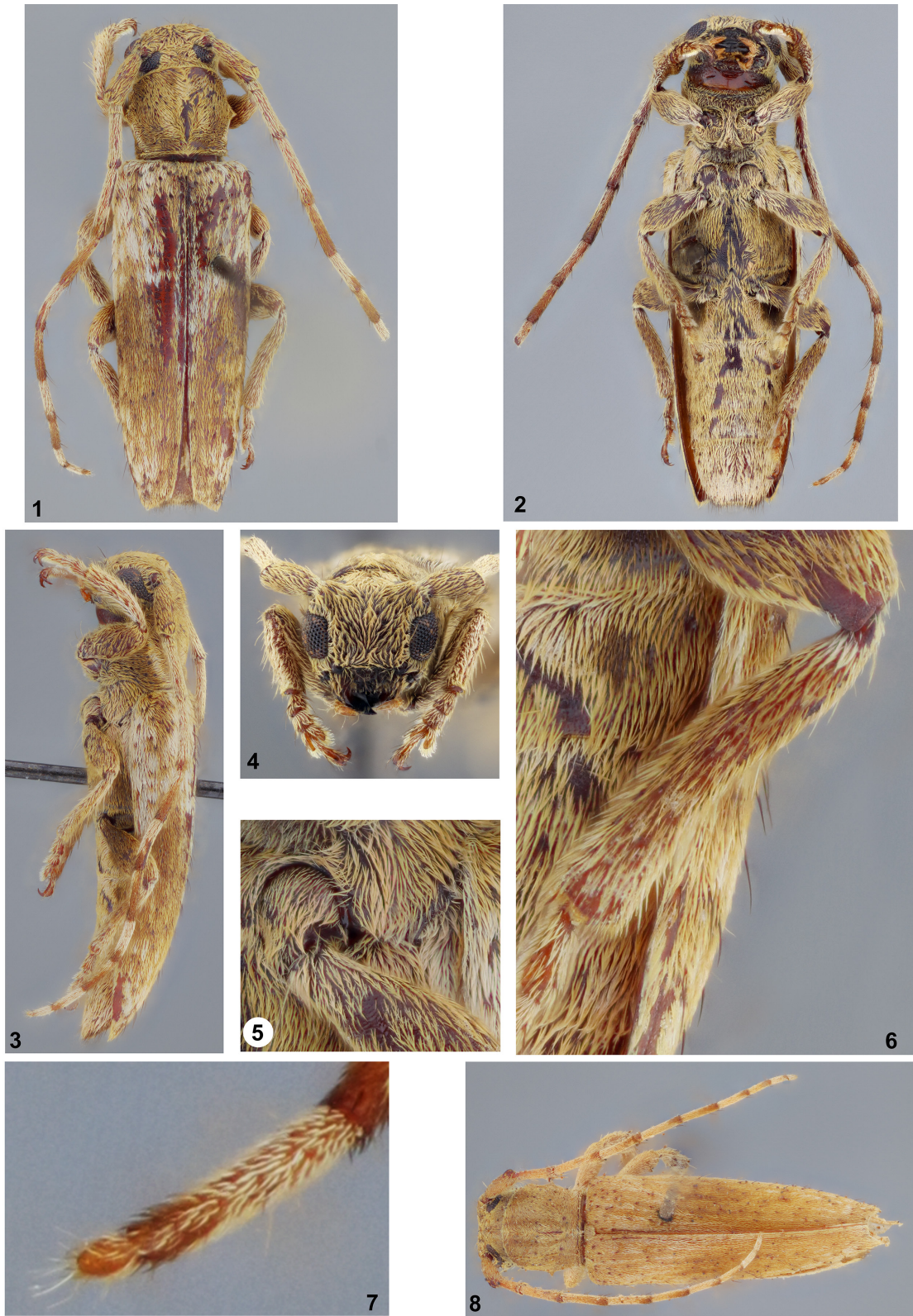
*Ataxia tibialis* Schaeffer 1908: 348; Aurivillius 1922: 292 (cat.); Linsley and Martin 1933: 183 (distr.); Breuning 1961: 47 (rev.); Linsley and Chemsak, 1985: 132; Hovore et al. 1987: 312; Chemsak et al. 1992: 117 (cat.); Monné 1994b: 72 (cat.); Monné and Giesbert 1994: 208 (checklist); Linsley and Chemsak, 1997: 348 (hosts); García Morales et al. 2014: 110 (distr.); Heffern et al. 2018: 748 (host); Monné 2020: 911 (cat.).

**Description. Female (Fig. 1–7).** Integument reddish-brown to dark brown; palpi orangish-brown; gulamentum reddish-brown posteriorly, gradually dark brown toward anterior margin; scape and pedicel dark brown; antennomeres III–XI reddish-brown with dark brown apex (reddish-brown and dark brown areas lighter toward distal segments); antennomere XII reddish-brown. Pronotum dark brown. Elytra dark brown with irregular dark reddish-brown areas interspersed.

**Head.** Frons finely, sparsely punctate; with yellowish-brown pubescence partially obscuring integument, except yellowish-white pubescent band close to eyes; with long, erect, sparse brownish setae interspersed. Vertex and area behind eyes with sculpturing as on frons; with yellowish-brown pubescence nearly obscuring integument, with a few long, erect yellowish-brown setae interspersed. Antennal tubercles with sculpturing and pubescence as on frons. Wide central area of postclypeus with pubescence as on frons close to it, sparser toward anteclypeus; sides glabrous; with one long, erect dark seta on each side of wide central area. Labrum finely punctate, coplanar with anteclypeus at posterior quarter, finely punctate (punctures slightly coarser than on coplanar area), oblique on remaining surface (posterior margin of oblique area arched); with yellowish-brown pubescence not obscuring integument, with long, erect, both dark and yellowish-brown setae interspersed and directed forward. Genae as long as 0.45 times length of lower eye lobes; finely, sparsely punctate, except apex smooth; with yellowish-brown pubescence obscuring integument, except apex glabrous. Gulamentum smooth, glabrous on wide posterior area, depressed, striated-punctate, with short, bristly, pale yellowish-brown pubescence not obscuring integument anteriorly. Distance between upper eye lobes 0.56 times length of scape (0.37 times distance between outer margins of eyes); in frontal view, distance between lower eye lobes 0.88 times length of scape (0.58 times distance between outer margins of eyes). Antennae 1.45 times elytral length, reaching elytral apex at basal third of antennomere X. Scape with yellowish-brown pubescence nearly obscuring integument. Pedicel and antennomere III with yellowish-white pubescence nearly obscuring integument; antennomeres IV, VI, VIII, and X with dense yellowish-white pubescence on anterior 4/5, yellowish-brown on dorsal posterior fifth, almost glabrous on ventral posterior fifth; antennomeres V, VII, and IX with dense yellowish-white pubescence basally (this area longer ventrally), dense, yellowish-brown on remaining surface; antennomere XI with dense yellowish-white pubescence, slightly sparser on apex; antennomere XII with yellowish-white pubescence not obscuring integument; antennomeres III–V with long, erect, sparse yellowish setae ventrally, and a few long, erect dark setae ventrally on apex; antennomeres VI–IX with a few long, erect dark setae ventrally on apex. Antennal formula (ratio) based on length of antennomere III: scape = 1.19; pedicel = 0.19; IV = 1.33; V = 1.14; VI = 1.09; VII = 0.90; VIII = 0.86; IX = 0.81; X = 0.71; XI = 0.59; XII = 0.17.

**Thorax.** Prothorax transverse, lateral tubercles conical, large, placed in middle. Pronotum convex, except in flattened well-marked posterior constriction; finely, sparsely punctate; with dense yellowish-brown pubescence, except each side with narrow, oblique yellowish-white pubescent band, from posterior margin to lateral tubercle of prothorax, wide, arched yellowish-white pubescent band on each side of central area, which are fused anteriorly and posteriorly following to margins, with glabrous, narrow, longitudinal central area from just before middle to posterior constriction. Sides of prothorax finely, sparsely punctate; with dense yellowish-brown pubescence, except narrow yellowish-white pubescent band close to pronotum, from anterior margin to lateral tubercle of the prothorax (following oblique band on sides of pronotum). Prosternum coarsely, sparsely punctate; with yellowish-brown pubescence centrally partially obscuring integument, denser laterally. Prosternal process with dense yellowish-white pubescence, and yellowish-brown pubescence interspersed; narrowest area 0.45 times width of procoxal cavity. Ventral surface of mesothorax with yellowish-brown pubescence, not obscuring integument on center of mesoventrite, denser on remaining surface (with yellowish-white pubescence on base and apex





**Figures 1–8.** *Bisaltes* spp. 1–7) *Bisaltes (Bisaltes) tibialis* (Schaeffer), female. 1) Dorsal habitus. 2) Ventral habitus. 3) Lateral habitus. 4) Head, frontal view. 5) Mesocoxal cavity. 6) Metatibia. 7) Antennomeres XI–XII. 8) *Bisaltes (Bisaltes) uniformis* Breuning, female, dorsal habitus.





**Figures 9–16.** *Bisaltes* spp. 9–14) *Bisaltes (Bisaltes) tibialis*, male. 9) Dorsal habitus. 10) Ventral habitus. 11) Lateral habitus. 12) Metatibia. 13) Head, frontal view. 14) Mesocoxal cavity. 15–16) *Bisaltes (Bisaltes) uniformis*, male. 15) Dorsal habitus. 16) Ventral habitus.

of mesanepisternum). Mesoventral process slightly narrower than mesocoxal cavity; abruptly elevated anteriorly. Metanepisternum with dense yellowish-white pubescence on anterior half, dense yellowish-brown pubescence on posterior half. Metaventricle with dense yellowish-brown pubescence. Scutellum with yellowish-brown pubescence partially obscuring integument. **Elytra.** Coarsely, sparsely punctate, punctures more distinct basally; apex

obliquely truncate; with dense white pubescence on anterior third, with yellowish-brown pubescence interspersed, with posterior margin of this area obliquely narrowed and following toward posterior third along suture as wide band; posterior quarter with irregular white pubescent maculae; remaining surface with dense yellowish-brown pubescence, and distinct white pubescence maculae interspersed; with long, erect dark setae throughout. **Legs.** Femora with yellowish-white pubescence basally, yellowish-brown on remaining surface, both partially obscuring integument. Tibiae with both yellowish-white and yellowish-brown pubescence interspersed, partially obscuring integument; metatibiae (Fig. 6) slightly arched, not distinctly widened.

**Abdomen.** Ventrites I–IV with dense yellowish-brown pubescence, with yellowish-white pubescence centrally, especially on posterior half; ventrite V with dense yellowish-white pubescence, and yellowish-brown pubescence interspersed on anterior half.

**Male (Fig. 9–14).** Differs from female by the metatibiae strongly widened (Fig. 12).

**Dimensions in mm (1 female, 2 males).** Total length, 8.50/9.10–9.60; prothoracic length, 1.45/1.60–1.75; anterior prothoracic width, 1.55/1.65–1.85; posterior prothoracic width, 1.60/1.70–1.95; widest prothoracic width, 1.95/2.20–2.30; humeral width, 2.30/2.50–2.75; elytral length, 6.25/6.55–7.00.

**Material examined.** UNITED STATES OF AMERICA, TEXAS: Cameron Co., Sabal Palm Grove, 1 male, 26.V.1979, J.E. Wappes col. (ACMT); 1 male, 5.VI.1982, J.E. Wappes col. (MZSP); Starr Co., Salineño, Rio Grande River trail, 26°31'N / 99°07'W, 100', beating Spiny Hackberry, 1 female, 08.IV.2018, J.E. Wappes col. (ACMT).

**Remarks.** Schaeffer (1908) pointed out in the description of *Ataxia tibialis*: “This interesting species is placed provisionally in *Ataxia*. It belongs evidently to Lacordaire’s *Ataxiides* and seems to be more related to *Ataxia* than to the other genera placed by him in this tribe or admitted there later by Bates.” Linsley and Martin (1933) reported that it “is not a typical *Ataxia*.” Breuning (1961) reported that he knew the species only by the original description. Linsley and Chemsak (1985) indicated they knew the holotype and two additional specimens, both from Brownsville. However, they did not report the sex of the two additional specimens. According to Hovore et al. (1987), “We know of only seven specimens, all from the palm grove; some specimens were collected from dead *Zanthoxylum*, some by miscellaneous beating and some at lights.” Again, the sex of the specimens was not reported, but the specimen figured by them was a male. Heffern et al. (2018) reported that they saw a female but did not describe it.

Based on this study it is clear that *Ataxia tibialis* belongs to *Bisaltes* Thomson, 1868, currently in Apomecynini, and not to *Ataxia*, which is currently placed in Pteropliini. Linsley and Chemsak (1985) separated these two tribes in their key as follows: “3(2). Antennal scape with a distinct cicatrix at apex (feeble in some *Ataxia*),” leading to Ataxiini (currently, equal to Pteropliini); and “Antennal scape without a cicatrix at apex,” leading to Apomecynini. The separation between Pteropliini and Apomecynini is questionable. Nonetheless, as *A. tibialis* belongs to *Bisaltes*, it is an Apomecynini.

Thomson (1868) described *Bisaltes* and included three species: *B. buquetii* Thomson, 1868; *B. posticalis* Thomson, 1868 (= *B. pulvereus* (Bates, 1866)); and *B. acutipennis* Thomson, 1868 (now placed in *Ataxia*, Apomecynini). The inclusion of a species of *Ataxia* made the original description of *Bisaltes* inaccurate. Aurivillius (1900) described *Craspedocerus*, and Breuning (1942) considered it as a subgenus of *Bisaltes*. According to Breuning (1971) (translated): “Antennomeres III–V not enlarged... *Bisaltes* (*Bisaltes*) / these articles enlarged... *Bisaltes* (*Craspedocerus*).” Using this definition, again *Ataxia tibialis* belongs to *Bisaltes* (*Bisaltes*). According to Breuning (1971) on *Bisaltes* (translated): “Very elongated, cylindrical. Antennae moderately slender; scape moderately long, slightly wide, with open apical cicatrix. Antennal tubercles distant from each other. Eyes coarsely faceted, strongly emarginate. Pronotum transverse, convex, with lateral spine. Elytra very elongated, convex, slightly wider than pronotum. Head retractile. Prosternal process arched. Mesoventral process more or less truncate posteriorly. Metaventrite with normal length. Mesocoxal cavities closed laterally. Legs short, femora claviform, mesotibiae sulcate, metatibiae often enlarged and flattened in males. Entirely with erect setae.” This description agrees very well with the species currently placed in *Bisaltes* as well as with *Ataxia tibialis*.

Although it has never been reported, the antennae in some species of *Bisaltes* (*Bisaltes*) are 12-segmented (antennomere XII very small, but very distinct). *Bisaltes* (*Bisaltes*) *tibialis* also has the antennae 12-segmented (Fig. 7).



*Bisaltes (Bisaltes) tibialis* is similar to *B. (B.) uniformis*, but differs by the upper eye lobes more widely separated in both sexes (Fig. 1, 9) (narrower in *B. (B.) uniformis* (Fig. 8, 15)), white pubescent area on elytra more distinct in both sexes (less well-defined in *B. (B.) uniformis* (Fig. 8, 15)), and abdominal ventrite V in male about as long as IV (Fig. 10) (distinctly longer than IV in *B. (B.) uniformis* (Fig. 16)). It is also similar to *B. (B.) bimaculatus* Aurivillius, 1904 (Fig. 23–26), but differs by the absence of a dark macula on each side of abdominal ventrite I, and metanepisternum not dark.

### ***Bisaltes (Bisaltes) uniformis* Breuning, 1939**

(Fig. 8, 15–20)

*Bisaltes uniformis* Breuning 1939: 236; Blackwelder 1946: 598 (checklist).

*Bisaltes (Bisaltes) uniformis*; Breuning 1960: 178 (cat.); 1971: 281; Monné and Giesbert 1994: 187 (checklist); Monné 1994a: 23 (cat.); 2005: 297 (cat.); Martins et al. 2015: 295 (distr.); Nascimento et al. 2016: 558, 566 (distr.); Nascimento et al. 2017: 90 (distr.); Monné 2020: 440 (cat.).

*Bisaltes obliquatus* Breuning 1940: 155; Blackwelder 1946: 598 (checklist). **New synonym.**

*Bisaltes (Bisaltes) obliquatus*; Breuning 1960: 177 (cat.); 1971: 280; Monné and Giesbert 1994: 187 (checklist); Monné 1994a: 22 (cat.); 2005: 295 (cat.); Monné et al. 2010: 247 (distr.); Monné 2020: 438 (cat.).

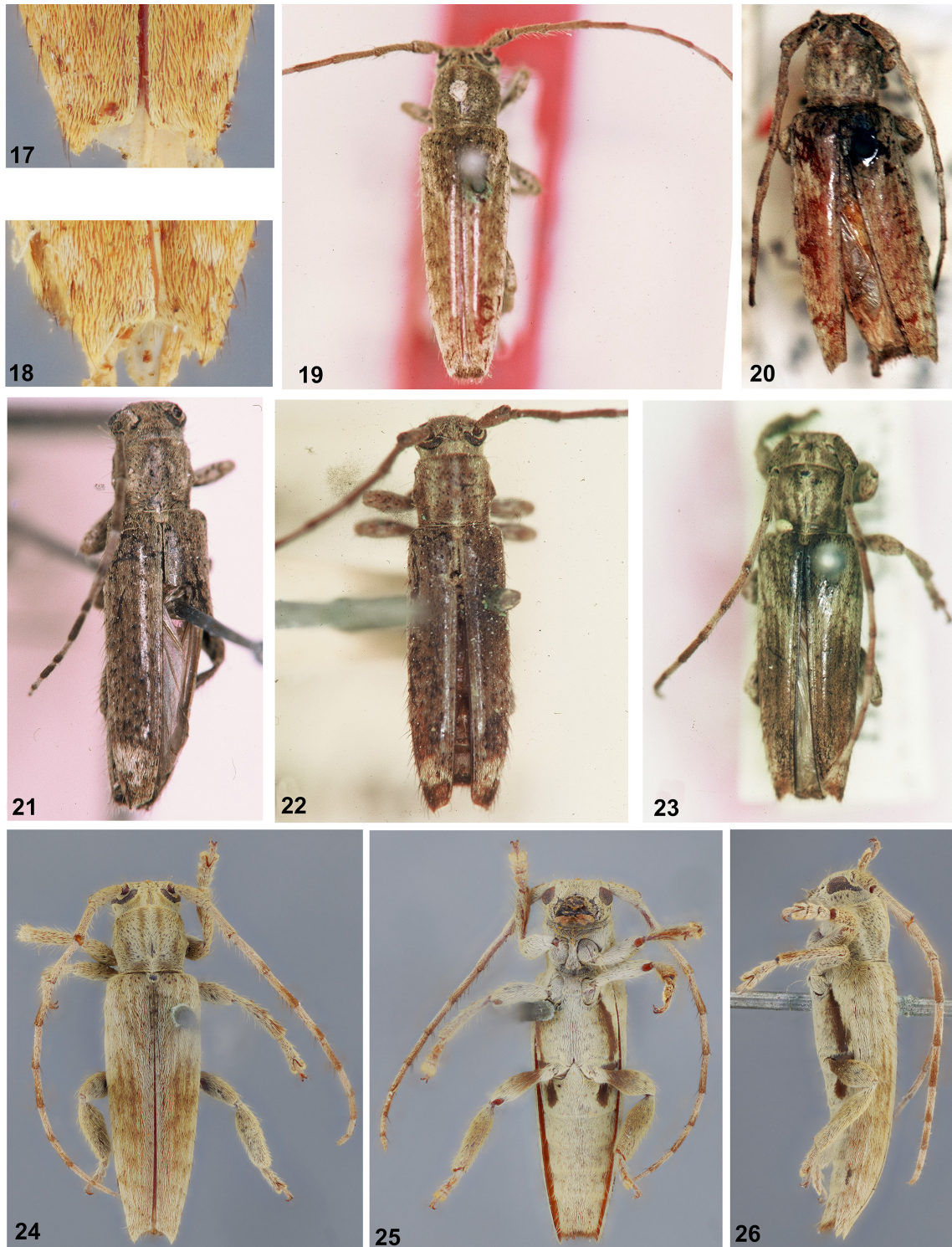
**Remarks.** Breuning (1939) described *Bisaltes uniformis* (Fig. 20) based on a single female from Brazil (no further details). Breuning (1971) indicated a second specimen (no sex reported), from Brazil (Pernambuco), but probably another female because he did not comment about the metatibiae. Breuning (1940) described *Bisaltes obliquatus* (Fig. 19) based on a single specimen from Brazil (Rio de Janeiro); the sex of the holotype was not indicated, but it is possible to see in the photograph of the holotype that it is a male. Breuning (1940) compared *B. obliquatus* with *B. bimaculatus* Aurivillius, 1904, and according to Breuning (1971), it could be only a variety of this species.

Breuning (1971) separated *B. uniformis*, *B. obliquatus*, and *B. bimaculatus* in his key as follows (translated): “8. On each side a dark brown longitudinal band running the lateral parts of the metaventrite and the first abdominal segment, *B. bimaculatus* / Without similar bands,” leading to *B. uniformis* and *B. obliquatus*; “12. Elytra very obliquely truncate at apex (the marginal apical angle stretched into a long lobe), *B. obliquatus* / Elytra slightly obliquely truncate at apex (the marginal angle stretched into a short lobe),” leading to *B. uniformis*. Comparing the elytral apex of the holotype of *B. uniformis* and *B. obliquatus* it is possible to see that the information from Breuning (1971) is inaccurate as the outer apical angle is very similar in both holotypes. The apex of the right elytron seems to be damaged in the holotype of *B. uniformis*, but using the left elytron, it is possible to see that the outer angle is also very similar to that in *B. obliquatus*. In fact, the only difference is that the apex is more strongly oblique toward the sutural angle in *B. obliquatus*. However, comparing the elytral apex of two females of *B. uniformis* (MZSP, Fig. 17–18), it is possible to see that this difference in the elytral apex is just specific variation. As the elytral pubescence pattern is very similar in the holotypes of *B. uniformis* and *B. obliquatus*, we conclude that the latter is a junior synonym of the former.

In fact, as pointed out by Breuning (1940, 1971), *B. obliquatus* (= *B. uniformis*) is similar to *B. bimaculatus*, but the absence of two dark maculae on abdominal ventrite I, as well as a different elytral pubescent pattern, allow separating these two species.

**Material examined.** BRAZIL, PERNAMBUCO: 1 female, 27.III.1935, no collector indicated (MZSP). BAHIA: no more data, 2 females (MZSP). MINAS GERAIS: Minas Gerais, Araçuaí, 1 female, 1958, Thieman col. (MZSP); Mar de Espanha, 1 female, 9.XII.1910, J.F. Zikán col. (MZSP); 1 female, 1–2.III.1962, J. Bechyné col. (MZSP); 1 male, 8.XII.1909, J.F. Zikán col. (MZSP). RIO DE JANEIRO: 1 female, 30.IX.1913, name of collector illegible (MZSP). SÃO PAULO (**new state record**): Ilha de São Sebastião, 1 male, 29.IX.1963, H. Urban col. (MZSP); Campos do Jordão, 1 male, 1–5.I.1948, F. Lane col. (MZSP); São Paulo, Morumbi, 1 male, XII.1950, Diringshofen col. (MZSP). ARGENTINA (**new country record**), BUENOS AIRES: no more data, 2 males (MZSP). SANTA FÉ: 1 male, no date indicated, C. Bruch col. (MZSP).





**Figures 17–26.** *Bisaltes* spp. 17–18) *Bisaltes* (*Bisaltes*) *uniformis*, female, elytral apex. 17) Specimen 1. 18) Specimen 2. 19) *Bisaltes obliquatus* Breuning, holotype, dorsal habitus (by Jesus Santiago Moure). 20) *Bisaltes uniformis*, holotype, dorsal habitus (by Jesus Santiago Moure). 21) *Bisaltes posticalis* Thomson, 1868, holotype, dorsal habitus (by Jesus Santiago Moure). 22) *Esthlogena pulverea* Bates, 1866, holotype, dorsal habitus (by Jesus Santiago Moure). 23) *Bisaltes bimaculatus* Aurivillius, holotype, dorsal habitus (by Jesus Santiago Moure). 24–26) *Bisaltes* (*Bisaltes*) *bimaculatus*, male from Brazil (Rio de Janeiro). 24) Dorsal habitus. 25) Ventral habitus. 26) Lateral habitus.

***Bisaltes (Bisaltes) pulvereus* (Bates, 1866)**

(Fig. 21–22)

*Esthlogena pulvereus* Bates 1866: 289; Lacordaire 1872: 600; Gemminger 1873: 3101 (cat.); Aurivillius 1922: 293 (cat.); Blackwelder 1946: 598 (checklist).

*Bisaltes pulvereus*; Breuning, 1949: 19 (syn.); Barbosa et al. 2009: 294 (distr.).

*Bisaltes (Bisaltes) pulvereus*; Breuning 1960: 178 (cat.); 1971: 281; Monné and Giesbert 1994: 187 (checklist); Monné 1994a: 22 (cat.); 2005: 295 (cat.); Morvan and Morati 2006: 41 (distr.); Touroult et al. 2010: 31; Giuglaris 2012: 64 (distr.); Morvan and Roguet 2013: 21 (distr.); Monné 2020: 438 (cat.).

*Bisaltes posticalis* Thomson 1868: 11; Lacordaire 1872: 606; Gemminger 1873: 3102 (cat.); Thomson 1878: 11 (type); Aurivillius 1922: 295 (cat.); Blackwelder 1946: 598 (checklist).

Breuning (1949) transferred *Esthlogena pulvereus* (Fig. 22) to *Bisaltes*, and synonymized *B. posticalis* (Fig. 21) with it. Comparing photographs of the holotypes of both species, we agree with Breuning (1949).

Currently, the species is known from French Guiana and Brazil (Amazonas, Pará, Rondônia) (Monné 2020). As the holotypes have never been figured, we take the opportunity to illustrate them here.

**Material examined.** FRENCH GUIANA: Roura, 1 male, 24.VII.1981, G. Tavakilian col. (MZSP).

***Bisaltes (Bisaltes) bimaculatus* Aurivillius, 1904**

(Fig. 23–26)

*Bisaltes bimaculatus* Aurivillius 1904: 207; Bruch 1912: 209 (cat.); Aurivillius 1922: 295 (cat.); Bosq 1943: 24 (distr., hosts); Duffy 1960: 271 (biol.); Di Iorio 1995: 858 (distr., hosts); 1996: 163 (hosts); Di Iorio et al. 1998: 90 (host); Monné, 2001: 64 (cat. hosts); Wappes et al., 2006: 24 (distr.).

*Bisaltes bimaculata*; Blackwelder 1946: 598 (checklist).

*Bisaltes (Bisaltes) bimaculatus*; Breuning 1960: 177 (cat.); 1971: 280; Monné and Giesbert 1994: 187 (checklist); Monné 1994a: 20 (cat.); Di Iorio et al. 2003: 25, 27 (distr.; host); Monné 2005: 293 (cat.); Monné et al. 2012: 54 (distr.); Nascimento and Bravo, 2015: 240 (distr.); Monné et al. 2016: 23 (distr.); Nascimento et al. 2017: 90 (distr.); Monné 2020: 435 (cat.).

**Remarks.** *Bisaltes (Bisaltes) bimaculatus* is dorsally very similar to *B. (B.) uniformis*, and *B. (B.) tibialis*, but differs from both by having the metanepisternum dark, and by the presence of one dark elliptical or subrounded dark macula on each side of abdominal ventrite I, which are absent in the latter two species.

This species was already illustrated by Monné et al. (2012), and Nascimento and Bravo (2015). However, the holotype and the ventral and lateral habitus showing the dark ventral maculae were never illustrated. Breuning (1971) suggested that *B. (B.) obliquatus* (now a synonym of *B. (B.) uniformis*) could be only a variety of *B. (B.) bimaculatus*. However, the dark maculae on ventral surface of *B. (B.) bimaculatus* are always present and never present in *B. (B.) uniformis*.

**Material examined.** BRAZIL, no more data: 1 female (MZSP). BAHIA: 1 female, no date indicated, Bondar col. (MZSP). MINAS GERAIS: Jampruca, 1 male, no more data (MZSP). ESPÍRITO SANTO: Córrego do Itá, 1 male, X.1954, J. Zikán col. (MZSP); Linhares, Parque Sooretama, 1 male, 17–27.X.1962, F.S. Pereira col. (MZSP). RIO DE JANEIRO: Itatiaia, 1 female, XI.1968, former Diringshofen collection (MZSP); 1 female, I.1954, J. Hercio col. (MZSP); 1 male, 9.XI.1926, J.F. Zikán col. (MZSP). SÃO PAULO: Barueri, 2 males, XII.1965, K. Lenko col. (MZSP); São Paulo (Cantareira), 1 female, IX.1935, Werontzow col. (MZSP); 1 female, 30.III.1941, Nick col. (MZSP); 2 females, 24.XII.1939, Nick col. (MZSP); (Saúde), 1 male, 22.XI.1926, Ohaus col. (MZSP); (Morumbi), 1 male, 4.II.1945, Nick col. (MZSP); Presidente Epitácio, 1 female, X.1926, Ohaus col. (MZSP). SANTA CATARINA (**new state record**): Rio Vermelho (now Corupá), 1 male, II.1960, former Diringshofen collection (MZSP).

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