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A new genus *Cicatrixphaerion*, new species, new records,  
and redescrptions of Neotropical Cerambycidae (Coleoptera)

Steven W. Lingafelter

8920 S. Bryerly Ct.  
Hereford, Arizona 85615, USA.

Roy F. Morris II

2635 Ewell Road  
Lakeland, Florida 33811, USA  
beetlesandbirds@gmail.com

Frederick W. Skillman Jr.

7033 S. 19th St.  
Phoenix, Arizona 85042, USA

Antonio Santos-Silva

Museu de Zoologia, Universidade de São Paulo  
São Paulo, SP, Brazil

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## A new genus *Cicatrixphaerion*, new species, new records, and redescriptions of Neotropical Cerambycidae (Coleoptera)

Steven W. Lingafelter

8920 S. Bryerly Ct.  
Hereford, Arizona 85615, USA.  
elaphidion@gmail.com

Roy F. Morris II

2635 Ewell Road  
Lakeland, Florida 33811, USA  
beetlesandbirds@gmail.com

Frederick W. Skillman Jr.

7033 S. 19th St.  
Phoenix, Arizona 85042, USA  
azbycid@gmail.com

Antonio Santos-Silva

Museu de Zoologia, Universidade de São Paulo  
São Paulo, SP, Brazil  
toncriss@uol.com.br  
ORCID: 0000-0001-7128-1418

**Abstract.** A new genus, *Cicatrixphaerion* Lingafelter, Morris, Skillman, and Santos-Silva (Coleoptera: Cerambycidae), and three new species of the same authorship, *C. wappesi* from Quintana Roo, Mexico, *C. rileyi* from Chiapas, Mexico, and *Eupogonius wappesi* from Quintana Roo, Mexico, are described. New records and clarification on the distribution of *Psyrassaforma janzeni* Chemsak, 1991 and *P. nitida* Chemsak, 1991 are provided. *Ameriphoderes amoena* (Chemsak and Linsley, 1979) is redescribed based on four male specimens and a new country record from Guatemala is documented. New distributional records are provided for *Estola flavobasalis* Breuning, 1940 (including a new country record for Bolivia) and *Estola vittulata* Bates, 1874. A redescription and new distributional record are provided for *Eupogonius flavovittatus* Breuning, 1940 based on a female specimen.

**Key words.** Taxonomy, distribution, morphology, longhorned woodboring beetles, Neotropical region.

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### Introduction

Examination of material mostly from the American Coleoptera Museum of the late James E. Wappes (ACMT) has revealed a new genus, three new species, new distributional records, and morphological variation leading to redescriptions of several Neotropical species. We dedicate two new species to Jim Wappes in recognition of his generosity in sharing his collection with other researchers.

### 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 measuring ocular Hensoldt/Wetzlar - Mess 10 in a Leica MZ6 stereomicroscope, also used in the study of the specimens.

The acronyms used in the text are as follows:

- CASC** California Academy of Science, San Francisco, California, USA  
**CNIN** Colección Nacional de Insectos, National Autonomous University of Mexico  
**DHCO** Daniel Heffern Collection, Houston, Texas, USA  
**FSCA** Florida State Collection of Arthropods, Gainesville, Florida, USA  
**FWSC** Fred W. Skillman collection, Phoenix, Arizona, USA  
**JCPC** James Cope Collection, San Jose, California, USA  
**MZSP** Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil  
**RFMC** Roy F. Morris Collection, Lakeland, Florida, USA  
**SWLC** Steven W. Lingafelter Collection, Hereford, Arizona, USA

## Results

### CERAMBYCINAE Latreille, 1802

#### ELAPHIDIINI Thomson, 1864

#### *Cicatrixphaerion* Lingafelter, Morris, Skillman, and Santos-Silva, new genus

**Etymology.** The generic name is formed by joining the latinized *cicatrix*, meaning scar, with the suffix *sphaerion*, relating it to the former tribal name of many Elaphidiini. Masculine in gender.

**Type species.** *Cicatrixphaerion wappesi* Lingafelter, Morris, Skillman and Santos-Silva, **new species**, by present designation.

**Diagnosis.** This genus is recognized by the scape with a distinct cicatrix at its dorsal apex (Fig. 7, 16), which is absent in all other genera of Elaphidiini.

**Description. Head.** Median groove well-marked from clypeus to about area between upper eye lobes. Antennae 11-segmented, at most slightly surpassing elytral apex in both sexes; scape with distinct cicatrix at dorsal apex; inner spine of antennomere III at least as long as  $\frac{2}{3}$  of length of antennomere, slightly arched, bulbous apically; inner spine of antennomere IV variable, slightly shorter than that in III, but with same shape, or distinctly shorter and with acute apex; antennomeres V–VII with spine at inner apex, length successively decreasing distally; outer apex of all antennomeres without spine. Maxillary palpomere IV and labial palpomere III securiform, slightly more distinctly in male. Eyes coarsely granulated; lower eye lobes large, occupying most of anterolateral region of head; upper eye lobes narrow, with three or four rows of ommatidia, distance between them about five times width of one upper lobe. Genae shorter than  $\frac{1}{3}$  of width of lower eye lobe, with rounded apex.

**Thorax.** Prothorax varying from distinctly longer than wide to about as long as wide; sides varying from slightly to distinctly rounded between anterior and posterior constrictions, without tubercle. Pronotum with sculpturing variable, punctures shallow, somewhat alveolate, with distinctly smooth central area, or with a network of longitudinal, anastomosing carinulae, without central smooth area. Sexually dimorphic prosternal punctation present, with males having distinct punctures and females having punctures absent or indistinct. Lateral margin of procoxal cavity closed; posterior margin open. Prosternal process strongly narrowed centrally, triangularly expanded apically. Mesocoxal cavities closed laterally. Apex of mesoventral process notched centrally, tab-shaped laterally. Metanepisternum not partially concealed by elytron. **Elytra.** Parallel-sided in anterior  $\frac{2}{3}$ , gradually narrowed in posterior third; apex bispinose, with outer spine approximately twice length of sutural spine, region between them evenly concave; humerus without tooth; distinctly, separately punctate at basal half, becoming evanescent toward apex; with minute seta on some punctures, and long, erect, sparse seta on others; without velvet pubescence. **Legs.** Profemora subfusiform; meso- and metafemora gradually widened from base to apex, slightly clavate, club not abruptly widened; apices rounded; all femora not carinate laterally. Tibiae carinate laterally, carina reaching apex on meso- and metatibiae. Metatibia with pronounced apicomeral spur over  $\frac{1}{2}$  length of first metatarsomere. Metatarsomere I at most as long as II–III together.

**Abdomen.** Ventrites decreasing in length from I to IV; apex of ventrite V rounded.

**Remarks.** *Cicatrishphaerion* is superficially similar to some species in the genus *Micropsyrassa* Linsley, 1961, *Psyrassa* Pascoe, 1866 and *Minipsyrassa* Martins, 1974, however the presence of the cicatrix at the apex of the scape (unique in Elaphidiini), the very long, blunt spine on antennomere 3 that is at least  $\frac{2}{3}$  the length of antennomere 4 (present in only a few species of *Psyrassa* and *Micropsyrassa*), and the pronounced mesal metatibial spur that is over  $\frac{1}{2}$  the length of metatarsomere 1 easily distinguish *Cicatrishphaerion* from all other genera in Elaphidiini.

Sexual dimorphism is less pronounced in this genus compared to many other Elaphidiini. Antennal length and modification of antennomere XI cannot be easily used for determining gender in *Cicatrishphaerion*. The easiest way to distinguish males from females is that males have distinct, but separate punctures on the prosternum in the region in front of the procoxae that is distinct from a smooth, often more darkly colored anterior prosternal collar. In females, the region in front of the procoxae is rugulose, impunctate, and the anterior prosternal collar is not clearly demarcated by color or sculpturing.

### ***Cicatrishphaerion wappesi* Lingafelter, Morris, Skillman, and Santos-Silva, new species**

(Fig. 1–10)

**Description. Holotype female** (Fig. 1–8). Integument mostly light reddish brown; pronotum dark reddish brown (part of carinulae dark brown); palpi yellowish brown; margins of prosternum and mesoventrite close to coxae, prosternum, meso- and metaventral processes dark brown; abdominal ventrite I dark reddish brown basally, dark brown on remaining surface; abdominal ventrites II–III mostly dark brown; abdominal ventrite IV dark brown in basal half, dark reddish brown in posterior half; abdominal ventrite V mostly dark reddish brown in basal half, lighter in posterior half.

**Head.** Frons finely, densely rugose; with short, decumbent, sparse yellowish white setae on each side of median groove, and one long, erect, yellowish brown seta on each side under antennal tubercles. Vertex and area behind upper eye lobes coarsely, densely rugose-punctate, slightly less so on posteromedial area of vertex; with short, sparse yellowish white pubescence, slightly more abundant between antennal tubercles and upper eye lobes; with a few long, erect yellowish brown setae close to eyes. Area behind lower eye lobes almost smooth close to eye, rugose close to prothorax; glabrous except a few long, erect yellowish brown setae close to inferior region of eye. Genae finely punctate close to eye, smooth apically; with sparse yellowish white pubescence in punctate area, glabrous in smooth area. Postclypeus smooth in central area close to frons and laterally, rugose on remaining surface; rugose area with minute, sparse, decumbent yellowish white setae, and one long, erect yellowish brown seta on each side. Labrum coplanar with anteclypeus at posterior third, inclined, concave at anterior  $\frac{2}{3}$ ; with sparse yellowish white pubescence in posterior third, and abundant, bristly yellowish brown pubescence in anterior  $\frac{2}{3}$ ; with long, yellowish brown setae on sides of anterior  $\frac{2}{3}$ . Mandibles coarsely rugose-punctate and with a few long, erect golden setae in basal  $\frac{2}{3}$  of outer side. Antennal tubercles shallowly rugose, with very sparse yellowish white decumbent setae, except smooth and glabrous at apex. Gulae smooth, glabrous in posterior half; coarsely rugose-punctate, with long, erect, sparse yellowish brown setae in anterior half. Distance between upper eye lobes 0.39 times distance between outer margins of eyes; in frontal view, distance between lower eye lobes 0.51 times distance between outer margins of eyes; upper eye lobes with four rows of ommatidia. Antennae 1.5 times elytral length, reaching elytral apex at middle of antennomere XI. Scape with sparse yellowish pubescence and long, erect setae of same color interspersed. Pedicel and antennomeres with yellowish pubescence not obscuring integument, slightly denser than on scape; ventral surface of antennomeres III–X with long, erect yellowish setae (setae gradually shorter and sparser toward VII); dorsal apex of antennomeres III–X with a few long, erect yellowish setae; spine of antennomere III 0.7 times length of antennomere; spine of antennomere IV with acute apex, 0.4 times length of antennomere; spine of antennomere V 0.28 times length of antennomere; spine of antennomere VI 0.16 times length of antennomere; antennomere VII with spicule at apex. Antennal formula based on antennomere III (excluding apical spine): scape = 1.00; pedicel = 0.23; IV = 0.90; V = 0.93; VI = 0.93; VII = 0.93; VIII = 0.93; IX = 0.93; X = 0.83; XI = 1.03.

**Thorax.** Prothorax slightly longer than wide; sides distinctly rounded between anterior and posterior constrictions. Pronotum with a network of longitudinal, anastomosing carinulae, without central smooth area between constrictions; area between anterior constriction and anterior margin smooth; area between posterior constriction and posterior margin finely, sparsely punctate; sides of area between constrictions with sparse,



**Figures 1–10.** *Cicatrisphaerion wappesi* new species. 1–8) Holotype female. 1) Dorsal habitus. 2) Ventral habitus. 3) Lateral habitus. 4) Femora. 5) Side of prothorax and prosternum. 6) Head, frontal view. 7) Scape. 8) Antennomeres III–IV. 9–10) Paratype male. 9) Side of prothorax and prosternum. 10) Dorsal habitus.

minute grayish white pubescence; area close to anterior margin with sparse grayish white pubescence; area close to posterior margin with grayish white pubescence, distinctly denser laterally; with long, erect, sparse yellowish white setae between constrictions. Sides of prothorax with sculpturing as on pronotum superiorly, coarsely, abundantly, shallowly punctate on remaining surface, except close to anterior margin with sculpturing slightly distinct, and close to posterior margin and postcoxal process smooth; with grayish white pubescence not obscuring integument, pubescence distinctly sparser anteriorly and posteriorly, and almost absent on postcoxal process; with long, erect yellowish brown setae interspersed in wide central area. Prosternum impunctate or nearly so; finely, densely rugose in posterior  $\frac{2}{3}$ , striate in anterior third except for mostly smooth anterior collar; with abundant grayish white pubescence not obscuring integument in posterior  $\frac{2}{3}$ , with sparse grayish white pubescence in anterior third except glabrous area close to anterior margin; with long, erect, sparse yellowish brown setae interspersed in posterior  $\frac{2}{3}$ . Prosternal process 0.2 times procoxal width; sides elevated; with sparse grayish white pubescence in center of basal half, glabrous on remaining surface. Ventral surface of mesothorax with abundant grayish white pubescence not obscuring integument, except almost glabrous posterior half of mesoventrite; mesoventrite with a few short, erect yellowish white setae laterally, and narrowest area 0.5 times mesocoxal width. Metanepisternum and sides of metaventrite with abundant grayish white pubescence not obscuring integument; wide central area of metaventrite with very sparse, decumbent yellowish white setae, except glabrous area close to metathoracic discrimen; metaventrite with long, erect, sparse yellowish brown setae throughout. Scutellum with grayish white pubescence not obscuring integument. **Elytra.** Coarsely, somewhat abundantly punctate in basal third, punctures gradually finer, sparser and evanescent toward apex; erect setae yellowish brown. **Legs.** Femora with coarse, shallow, somewhat scabrous punctation on club; with very sparse yellowish pubescence and long, erect yellowish setae throughout, erect setae more abundant in basal third of ventral surface. Tibiae with abundant, bristly yellowish pubescence in posterior area of ventral surface; remaining surface with long, erect, somewhat abundant yellowish setae.

**Abdomen.** Ventrites finely, sparsely punctate; with moderately abundant yellowish white pubescence laterally, pubescence sparser centrally, except glabrous apex of ventrites I–IV; with long, erect, sparse yellowish brown setae interspersed. Apex of ventrite V slightly rounded.

**Male** (Fig. 9–10). Similar to female, but differs as follows: antennae slightly longer, reaching elytral apex at apex of antennomere X; prothorax as long as wide; sides of prothorax and sides of prosternum abundantly coarsely punctate.

**Dimensions (mm)** (holotype female / paratype male range / paratype female range). Total length 12.75 / 7.50–10.30 / 6.69–11.20; prothoracic length 2.55 / 1.45–2.05 / 1.42–2.15; anterior prothoracic width 1.80 / 1.09–1.35 / 1.20–1.50; posterior prothoracic width 1.80 / 1.15–1.41 / 1.13–1.53; maximum prothoracic width 2.40 / 1.41–1.93 / 1.25–2.05; humeral width 2.70 / 1.97–2.28 / 1.60–2.31; elytral length 8.45 / 5.00–7.47 / 4.90–7.50.

**Type material.** Holotype female from MEXICO, QUINTANA ROO: Highway 186, 17 km W of 307 [Highway 307], 30–31.V.1984, J.E. Wappes (FSCA, formerly ACMT). Paratypes, all MEXICO, QUINTANA ROO: Same data as holotype (1 male, FSCA; 1 female, MZSP; formerly ACMT). Puerto Morelos, 30.V.2002, beaten from red mangrove, J. Cope, coll. (23 males, 20 females, JCPC). Same data (1 male, 1 female, CNIN). Same data but 28.V.2000 (6 males, 9 females, JCPC). Same data but 28.V.2002 (4 males, 3 females, JCPC). Same data but 26.V.2002 (4 females, JCPC). Same data but 3.VI.2002 (3 males, 2 females, JCPC). 3 km N. Playa del Carmen, vic. of mangrove area, 14–20.VI.2011 (2 males, 2 females, JCPC). 3 km S. Tulum, 21.VI.1994 (1 female, JCPC). 1 km N. Xel-Ha, beating, J. Cope, 20.VI.2011 (1 female, JCPC). Puerto Morelos, 23.V.2004, J. Cope (1 male, RFMC). Puerto Morelos, beaten from red mangrove, 30.V.2002, J. Cope (1 female, RFMC). Puerto Morelos, beaten from red mangrove, 30.V.2002, J. Cope (1 male, 1 female, FWSC). Puerto Morelos, beaten from red mangrove, 30.V.2002, J. Cope (1 male, 1 female, MZSP). Puerto Morelos, beaten from red mangrove, 30.V.2002, J. Cope (1 male, FSCA). 1 km N. Xel-Ha, beating, J. Cope, 20.VI.2011 (1 female, SWLC). Puerto Morelos, 23.V.2004, J. Cope (1 male, SWLC). Puerto Morelos, beaten from red mangrove, 30.V.2002, J. Cope (1 female, SWLC). Puerto Morelos, beaten from red mangrove, 28.V.2002, J. Cope (1 male, 1 female, DHCO). Puerto Morelos, 23–30.V.2001, J. Cope (1 male, 2 females, CASC). Cancun, Moon Palace, emerged from Buttonwood girdles [*Conocarpus erectus*], 25 May 2002, Roy Morris (1 female, RFMC).

**Etymology.** The new species is dedicated to the late James E. Wappes, for his friendship and contributions to the knowledge of American Cerambycidae.

**Remarks.** Jim Cope reared one specimen of this species from a girdled branch of red mangrove, *Rhizophora mangle* L. (Rhizophoraceae). Another specimen was reared from a girdled branch of button mangrove, *Conocarpus erectus* L. (Combretaceae), by Roy Morris. Most of the additional specimens were collected beating red mangrove branches. See additional remarks under *Cicatrissphaerion rileyi*, **new species**.

***Cicatrissphaerion rileyi* Lingafelter, Morris, Skillman, and Santos-Silva, new species**

(Fig. 11–16)

**Description. Holotype female.** Head capsule reddish brown, lighter on frons, clypeus, labrum and ventral mouthparts except yellowish brown palpi; antennae orangish brown (more light reddish brown depending on light intensity); mandibles mostly reddish brown, dark brown on dorsal and ventral margins of outer side and anterior third. Prothorax mostly dark reddish brown, darker in narrow area close to procoxae and anterior half of prosternal process. Mesanepisternum, mesepimeron and anterior area of mesoventrite dark reddish brown; posterior area of mesoventrite and mesoventral process orangish brown, except narrow area close to mesocoxae and margins of mesoventral process darker. Ventral surface of metathorax dark reddish brown, except anterocentral area of metaventricle orangish brown and narrow margin close to mesocoxae and sides of metaventral process darker. Scutellum orangish brown, with margins reddish brown. Elytra orangish brown with punctures reddish brown. Legs orangish brown (more reddish brown depending on light intensity). Abdominal ventrites reddish brown, with irregular areas slightly more orangish brown.

**Head.** Frons coarsely, somewhat rugose-punctate, except smooth central area close to postclypeus; glabrous. Vertex and area behind upper eye lobes coarsely, shallowly, confluent punctate (punctures slightly finer and deeper behind upper eye lobes); with short, decumbent, sparse yellowish white setae, almost absent in posteromedial area of vertex, and a few long, erect, yellowish setae near eyes. Area behind lower eye lobes confluent coarsely punctate; almost glabrous, with long, erect yellowish brown setae ventrally. Genae minutely, sparsely punctate; with a few short, decumbent yellowish setae. Wide central area of postclypeus almost smooth close to frons, finely, confluent punctate close to anteclypeus, with one long, erect yellowish brown seta on each side; sides smooth, glabrous. Labrum coplanar with anteclypeus, finely, sparsely punctate, glabrous in posterior third, inclined, with long, somewhat abundant yellowish brown setae in inclined area (setae longer laterally). Mandibles coarsely rugose-punctate and with long, erect, sparse yellowish brown setae on basal  $\frac{2}{3}$  of outer side. Gula smooth, glabrous posteriorly; area between eyes coarsely, transversely rugose, with sparse, decumbent yellowish setae, and long, erect yellowish setae interspersed (erect setae sparser centrally). Distance between upper eye lobes 0.47 times distance between outer margins of eyes; in frontal view, distance between lower eye lobes 0.56 times distance between outer margins of eyes; upper eye lobes with three rows of ommatidia. Antennae 1.4 times elytral length, almost reaching elytral apex. Scape with sparse yellowish pubescence, and long, erect setae of same color interspersed (ventrally, erect setae present in posterior third). Pedicel and antennomeres with yellowish white pubescence not obscuring integument, denser from VI; ventral surface of pedicel and antennomeres III–X with long, erect yellowish setae (setae gradually shorter, sparser toward X); dorsal apex of antennomeres III–X with long, erect yellowish setae; spine of antennomere III about as long as length of antennomere; spine of antennomere IV with same shape of that in III, 0.75 times length of antennomere; spine of antennomere V 0.2 times length of antennomere; spine of antennomere VI 0.14 times length of antennomere; antennomere VII with spicule at apex. Antennal formula based on antennomere III (excluding apical spine): scape = 1.03; pedicel = 0.24; IV = 0.97; V = 1.21; VI = 1.09; VII = 1.03; VIII = 1.03; IX = 1.03; X = 0.91; XI = 1.09.

**Thorax.** Prothorax longer than wide; sides slightly rounded between anterior and posterior constrictions. Pronotum with shallow, somewhat alveolate punctation, with distinctly smooth central area; with minute, sparse yellowish white setae, absent in smooth central area, distinctly denser on sides of posterior region; with a few long, erect yellowish brown setae, absent in smooth central area. Sides of prothorax with sculpturing as on sides of pronotum superiorly, with alveoli less distinct (absent in some areas), minutely, densely rugose-punctate toward prosternum; with long, erect, sparse yellowish brown setae. Prosternum slightly rugose, minutely, densely punctate in posterior third; somewhat transversely striate in anterior third; with abundant yellowish white pubescence





**Figures 11–16.** *Cicatrisphaerion rileyi* new species, holotype female. 11) Dorsal habitus. 12) Ventral habitus. 13) Lateral habitus. 14) Femora. 15) Head, frontal view. 16) Scape.

not obscuring integument in posterior  $\frac{2}{3}$ , with pubescence distinctly sparser in anterior third. Prosternal process 0.09 times procoxal width; sides elevated; with sparse yellowish white pubescence in anterior half, glabrous on remaining surface. Ventral surface of mesothorax with abundant yellowish white pubescence not obscuring integument, except sparse pubescence in postero-central area of metaventricle and glabrous central area of mesoventral process; narrowest area of mesoventral process 0.41 times mesocoxal width. Metanepisternum and sides of metaventricle with abundant yellowish white pubescence not obscuring integument (inner margin of this area distinctly concave on metaventricle); remaining surface of metaventricle with a few short, decumbent yellowish setae, and long, erect yellowish brown setae interspersed, except glabrous area close to metathoracic discrimen. Scutellum almost glabrous centrally, with grayish white pubescence not obscuring integument laterally (especially posteriorly). **Elytra.** Coarsely, densely punctate in anterior  $\frac{2}{3}$ , punctures finer in posterior third, evanescent close to apex; erect setae yellowish brown. **Legs.** Femora somewhat coarsely, sparsely punctate on club; with short, decumbent, very sparse yellowish setae, and long, erect yellowish setae interspersed. Tibiae with short, decumbent, very sparse yellowish setae, except posterior area of ventral surface with abundant, bristly yellowish pubescence; with long, erect, moderately abundant yellowish setae.

**Abdomen.** Ventrites very finely and sparsely punctate; with sparse short and long yellowish setae. Apex of ventrite V rounded.

**Dimensions (mm).** Total length 7.95; prothoracic length 1.60; anterior prothoracic width 1.05; posterior prothoracic width 1.05; maximum prothoracic width 1.40; humeral width 1.70; elytral length 5.25.

**Type material.** Holotype female from MEXICO, CHIAPAS: Highway 199, 10 km S Palenque - San Manuel road, 30.V.1987, D.A Rider and E.G. Riley leg. (FSCA, formerly ACMT).

**Etymology.** This species is dedicated to Edward G. Riley for his contributions to Coleoptera and for collecting the holotype.

**Remarks.** The differences between *Cicatrissphaerion rileyi* **new species** and *C. wappesi* **new species** may suggest they belong to different genera (shape and length of the spine on antennomere IV, prothoracic shape, pronotal sculpturing, width of prosternal process between procoxae). However, due to the presence of a cicatrix at the apex of the scape in both species and the pronounced apicomeral tibial spurs, we prefer to keep them in the same genus, at least provisionally.

### ***Psyrassaforma janzeni* Chemsak, 1991**

(Fig. 17–18)

*Psyrassaforma janzeni* Chemsak 1991: 475; Monné 1993a: 14 (cat.); Monné and Giesbert 1994: 61 (checklist); Monné 2005a: 243 (cat.); Swift et al. 2010: 18 (distr.); Monné 2021a: 383 (cat.).

The description of *Psyrassaforma janzeni* was based on a pair from Costa Rica (Guanacaste). Chemsak (1991) reported the color of the integument varied from dark reddish brown to piceous. The integument of the two females examined is mostly almost black.

**Material examined.** GUATEMALA (**new country record**), ZACAPA: Quarry Road to San Lorenzo, 15.043871–89.668775, Sierra Las Minas, 600 m, 1 female, 26.V.2019, Skillman, Wappes and Monzón (FWSC); El Arenal, Heloderma Conservation Reserve, 14°18'N 89°78'W, 530 m, 1 female, 23–25.V.2019, Skillman, Wappes and Monzón (MZSP, formerly FWSC).

### ***Psyrassaforma nitida* Chemsak, 1991**

*Psyrassaforma nitida* Chemsak 1991: 474; Monné 1993a: 14; Monné and Giesbert 1994: 61 (checklist); Noguera and Chemsak 1996: 399 (cat.); Terrón 1997: 222; Lingafelter 1998: 88; Turnbow et al. 2003: 11 (distr.); Monné 2005a: 243 (cat.); Hovore 2006: 372 (distr.); Zaragoza-Caballero and Pérez-Hernández 2017: 38 (paratypes); Monné 2021a: 383 (cat.).

*Psyrassaforma janzeni*; Maes et al. 2010: 275 (distr.; misidentification).

The description of *Psyrassaforma nitida* was based on males and females from Mexico (Quintana Roo, Veracruz, Guerrero), Honduras, and Belize. Hovore (2006) reported this species from Guatemala.

Maes et al. (2010) illustrated one specimen from near Bonanza in northeast Nicaragua, noting it as a new country record for *P. janzeni*. However, the specimen belongs to *P. nitida*. Accordingly, Nicaragua is a **new country record** for *P. nitida*, and *P. janzeni* is excluded from the Nicaraguan fauna. *Psyrassaforma nitida* differs from *P. janzeni* by the absence of decumbent setae on the elytra (present and moderately abundant in *P. janzeni*), and femora finely and sparsely punctate (coarsely, densely punctate in *P. janzeni*).

## **RHINOTRAGINI Thomson, 1861**

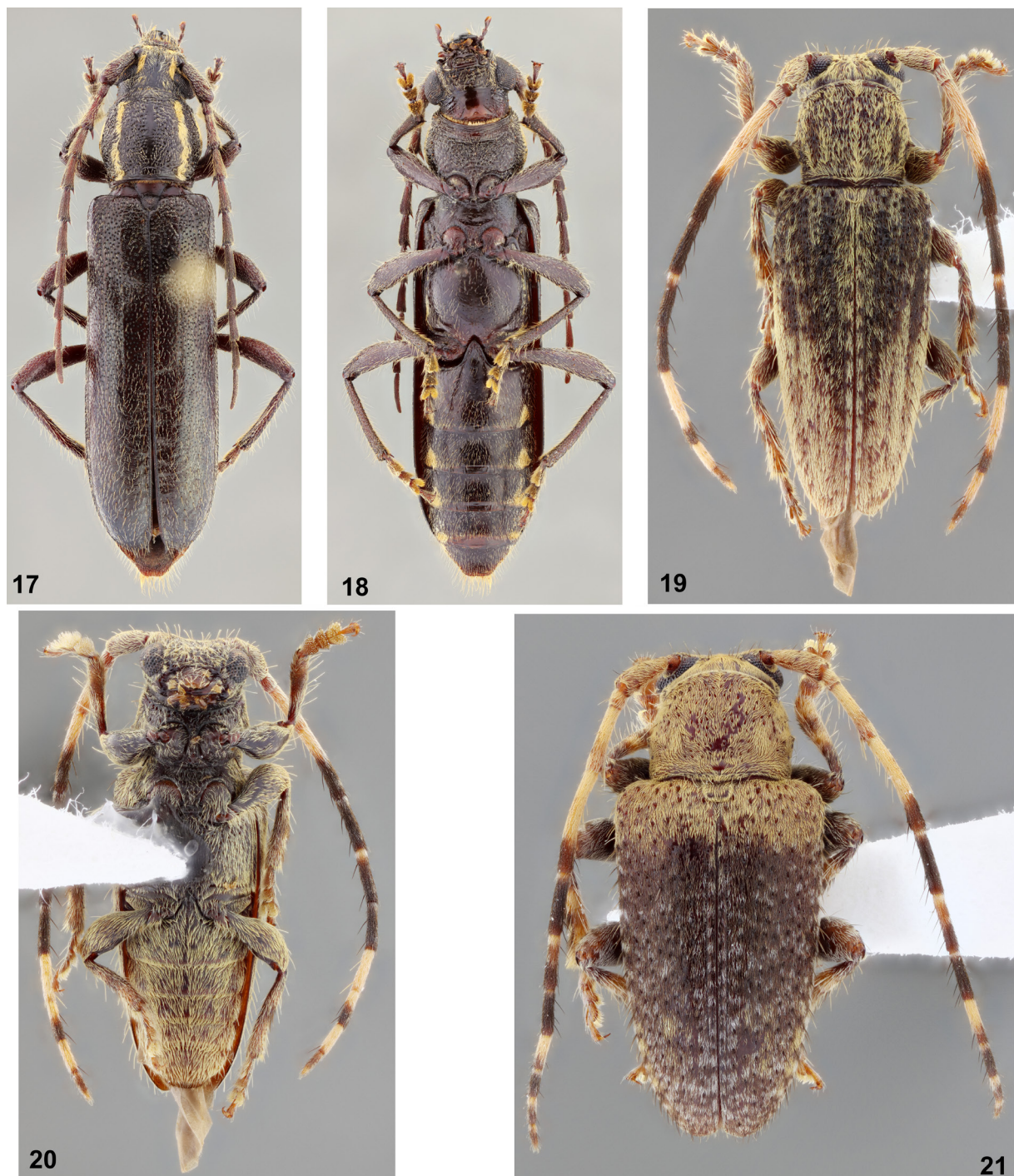
### ***Ameriphoderes amoena* (Chemsak and Linsley, 1979)**

(Fig. 30–34)

*Acyphoderes amoena* Chemsak and Linsley 1979: 74; Chemsak et al. 1988: 294 (distr.); Chemsak et al. 1992: 57 (checklist); Chemsak and Noguera 1995: 61 (biol., distr.); Monné 1993b: 40 (cat.); Monné and Giesbert 1994: 90 (checklist); Noguera and Chemsak 1996: 400 (checklist); Toledo et al. 2002: 527 (distr.); Monné 2005a: 454 (cat.); Monné and Hovore 2006: 115 (checklist).

*Ameriphoderes amoena*; Clarke 2015: 46; Monné 2021a: 677 (cat.).

**Redescription. Male.** Head capsule black; anterior area of postclypeus, most of anteclypeus, and anterior area of labrum dark reddish brown; posterior area of labrum brown; ventral mouthparts mostly reddish brown, with apex of some palpomeres pale yellow, and mentum dark brown. Scape, pedicel, and antennomeres III–IV shiny, black; antennomeres V–VIII opaque, dark brown; base of antennomeres IX–XI yellow, and remaining surface opaque, dark brown. Prothorax black; ventral surface of meso- and metathorax black (metathorax slightly darker



**Figures 17–21.** *Psyrrassaforma* and *Estola* spp. 17–18) *Psyrrassaforma janzeni* Chemsak, 1991, female. 17) Dorsal habitus. 18) Ventral habitus. 19–20) *Estola vittulata* Bates, 1874. 19) Dorsal habitus. 20) Ventral habitus. 21) *Estola flavobasalis* Breuning, 1940, dorsal habitus.

brown depending on light intensity), except for orangish brown metatrochantin. Scutellum dark brown. Elytra with oblique black band in basal sixth, starting close to the humerus, suture, apex, and sides black; remaining basal sixth light yellowish brown; translucent area slightly yellowish brown (appearing to be darker due to the color of membranous wings). Coxae black basally, orangish on remaining surface; trochanters orangish; femora

black dorsally, orangish on remaining surface, except for black elongated macula on ventral surface of peduncle; protibiae blackish dorsally, brownish in narrow apical area of sides and ventral surface, orangish on remaining surface; mesotibiae black dorsally (this area projected centrally on outer side), orangish on remaining surface; metatibiae black except for orangish ventral surface and part of sides of basal third. Abdominal ventrite I orangish, except for black macula on sides (this macula not reaching apex, widened toward its apex); abdominal ventrites II–IV black, except for reddish brown apex; abdominal ventrite V black, except orangish depressed area. No chromatic variation was observed in specimens from Guatemala. Golden pubescence appearing to be more pale yellow depending on light intensity.

**Head.** Frons coarsely, densely punctate; with golden pubescence obscuring integument, except yellowish white pubescence close to eyes. Vertex coarsely, abundantly punctate; central area with golden pubescence obscuring integument, except for glabrous area of median groove between superior area of lower eye lobes and antennal tubercles; remaining surface with brownish pubescence not obscuring integument. Area behind eyes coarsely, abundantly punctate; area behind upper eye lobes with brownish pubescence not obscuring integument; area close to lower eye lobes with dense golden pubescence (this area widened toward ventral surface), and long, erect setae of same color interspersed, glabrous in wide area close to prothorax. Genae glabrous close to eye frontally, almost glabrous in large area under eye laterally, glabrous on apex, and with dense golden pubescence on remaining surface. Wide central area of postclypeus with dense golden pubescence close to frons, pubescence sparser close to anteclypeus, and long, erect setae of same color interspersed; sides glabrous. Labrum finely, sparsely punctate posteriorly, smooth anteriorly; with a few short, brownish setae posteriorly, one long golden seta on each side of middle, and fringe of yellowish brown setae on anterior margin. Mandibles coarsely rugose-punctate and with a few long, erect golden setae on outer side. Antennal tubercles finely, moderately abundantly punctate in basal half, smooth apically; with dense golden pubescence at base of frontal half, very sparse pubescence of same color at base of remaining surface, glabrous apically. Gulamentum smooth, glabrous in posterior half; coarsely rugose-punctate, with long, erect, sparse golden setae in anterior half. Distance between upper eye lobes (only one male measured) 0.28 times distance between outer margins of eyes; in frontal view, distance between lower eye lobes 0.17 times distance between outer margins of eyes. Antennae (only one male measured) 1.1 times elytral length, almost reaching posterior quarter of elytra. Scape finely punctate dorsally and laterally, except for smooth apex, somewhat rugose-punctate ventrally; with sparse golden pubescence dorsally and laterally, and erect setae of same color interspersed dorsally, and long, erect yellowish brown setae ventrally. Pedicel finely punctate, with sparse golden pubescence and long, erect yellowish brown setae ventrally. Antennomere III cylindrical, finely, abundantly punctate, except smooth apex; with golden pubescence not obscuring integument, sparser ventrally, and long, erect yellowish brown setae on inner surface of ventral side. Antennomere IV widened toward apex, with sculpturing, pubescence and erect setae as on III. Antennomeres V–X serrate, with abundant grayish yellow pubescence; antennomeres V–VI with a few long, erect yellowish brown setae ventrally; antennomere XI fusiform, with pubescence as on X. Antennal formula based on antennomere III (only one male measured): scape = 0.67; pedicel = 0.21; IV = 0.46; V = 0.65; VI = 0.59; VII = 0.59; VIII = 0.57; IX = 0.54; X = 0.48; XI = 0.65.

**Thorax.** Prothorax longer than wide; sides rounded from anterior to posterior constriction. Pronotum with elongated tubercle centrally, from slightly before middle to posterior constriction; gibbous laterally from anterior to posterior constriction; longitudinally sulcate between gibbous area and central area; sulcate area coarsely, abundantly punctate, except for smooth central area between anterior margin and central tubercle; gibbous area coarsely, very sparsely punctate; sides coarsely, abundantly punctate; anterior margin glabrous; each side and anterior and posterior margins with alternating but connected patches of light and dark brown pubescence; sides of central tubercle with golden pubescent macula, widened and denser toward apex of central tubercle, surrounded by brownish pubescence internally; with long, erect, sparse golden setae. Sides of prothorax coarsely, densely punctate, except for smooth gibbous central area close to pronotum; with dense golden pubescence, except glabrous smooth area; golden pubescence projected anteriorly toward pronotum as oblique band (not reaching middle of pronotum), slightly rounded projected centrally toward sides of pronotum, and slightly projected toward pronotum close to apex; with long, erect golden setae interspersed on pubescent area. Prosternum smooth, glabrous laterally; remaining surface somewhat coarsely rugose-punctate; anterior quarter almost glabrous, with long, erect, sparse golden setae (more abundant laterally); remaining surface with dense golden

pubescence obscuring integument, and with long, erect golden setae interspersed. Postcoxal process almost glabrous; prosternal process gradually narrowed toward center, then strongly widened toward apex; basal half and center of posterior half with dense golden pubescence; sides of posterior half with brownish pubescence not obscuring integument. Mesoventrite with dense golden pubescence close to mesocoxal cavities and mesoventral process, almost reaching base centrally; anterior half with brownish pubescence not obscuring integument on sides of golden pubescence, and almost glabrous close to mesanepisternum. Mesanepisternum distinctly tumid in posterior  $\frac{2}{3}$ ; with brownish pubescence in basal third and golden dense pubescence in posterior  $\frac{2}{3}$ ; mesepimeron with dense golden pubescence. Mesoventral process abruptly elevated anteriorly, with yellowish brown pubescence basally, denser, golden on remaining surface. Metanepisternum finely, sparsely punctate in anterior  $\frac{2}{3}$ , except smooth wide area about middle; with dense golden pubescence basally, with golden pubescent macula close to elytra in anterior half, glabrous in smooth area, with erect golden setae in remaining anterior  $\frac{2}{3}$ , and with dense golden pubescence in posterior third. Metaventricle with dense golden pubescence, except glabrous area close to metathoracic discrimen, and wide area on each side of posterior half lacking pubescence, and metatrochantin with sparser golden pubescence; with long, erect golden setae except area close to metathoracic discrimen. Scutellum with golden pubescence not obscuring integument. **Elytra.** Coarsely, shallowly punctate on dorsal surface of basal quarter, finer, denser, confluent punctate laterally, moderately fine, sparsely punctate at apex, smooth in translucent area; with long, erect, sparse yellowish white setae in anterior quarter, shorter, slightly more abundant on remaining surface; apex rounded, reaching basal third of abdominal segment IV. **Legs.** Femora with long, erect golden setae, more abundant ventrally on profemora and ventral surface of mesofemora. Tibiae with yellowish brown pubescence, denser in posterior third, and long, erect setae of same color interspersed. Metatarsomere I slightly longer than II–III together.

**Abdomen.** Ventrites coarsely, abundantly punctate, especially on II–IV. Ventrite I with transverse golden pubescent band close to glabrous reddish brown apex, distinctly sparser centrally; sides of anterior area with long, erect, abundant yellowish brown setae; remaining central area glabrous. Ventrites II–III with golden pubescent band as on I, and arched golden pubescent band on sides of anterior region, fused with the transverse band; lateral area between golden pubescent bands with erect, abundant yellowish brown setae; reddish brown area glabrous; remaining central surface with sparse yellowish brown setae. Ventrite IV with two dense pubescent bands laterally, one in anterior third, another close to reddish brown apex; basal area almost glabrous (setae more conspicuous laterally); sides of central area with long, erect yellowish brown setae; remaining central area with abundant golden pubescence (sparser than on golden bands). Ventrite V strongly depressed centrally in posterior  $\frac{2}{3}$  (depression gradually deeper toward apex), making sides tab-shaped; basal area almost glabrous (this area widened toward center); with dense golden pubescent band on each side of anterior third; sides of posterior half with dense golden pubescence; lateral area between regions with golden pubescence with erect yellowish brown setae; depressed area with dense, bristly yellowish brown pubescence; apical margin strongly concave.

**Dimensions (mm) (four males).** Total length 15.50–17.70; prothoracic length 2.90–3.10; anterior prothoracic width 1.95–2.15; posterior prothoracic width 2.10–2.40; maximum prothoracic width 2.40–2.75; humeral width 2.80–3.15; elytral length 8.80–9.55.

**Material examined.** GUATEMALA (**new country record**), ZACAPA: Quarry Road to San Lorenzo, Sierra Las Minas, 500–600 m, blossoms of Bush Croton, 2 males, 29–31.V.2019, Wappes, Monzón and Skillman (FSCA, MZSP, formerly ACMT); 2 males, 29–31.V.2019, Skillman, Wappes and Monzón (FWSC).

**Remarks.** *Ameriphoderes amoena* is variable in the color of some antennal antennomeres, however, the distribution and shape of the pubescent bands and maculae appear to be constant. According to Chemsak and Linsley (1979): “antennae reddish brown; elytra shining, yellow-brown, margins black, base often with two short dark vittae extending back from inside of humeri; legs orange-brown, posterior femora often dark over clavate portion; abdomen usually pale and dark;” and “We are also assigning to this species five specimens from various localities in Mexico which differ in having the antennae black, with segments 8–11 all or partially yellow. In most of these, the two basal black vittae of the elytra are very distinct and the pubescence is more silvery than golden.” In fact, the specimens from Guatemala agree with the specimens mentioned by them regarding the mostly dark antennae, with part of the antennomeres IX–XI yellow. However, we have seen photographs of specimens as described by them (antennomeres VIII–XI entirely yellow), as well as with the antennomeres VIII–IX entirely yellow and

X–XI partially brown. The basal oblique band of the elytra may or may not be present as reported in the original description. The profemora may be entirely reddish or, like the specimens from Guatemala, the mesofemoral club may be entirely dark reddish brown, with or without blackish maculae internally and the metafemoral club may be almost entirely black, entirely dark reddish brown or brownish, with dorsal reddish brown band. The metatibiae may be reddish brown dorsally, with or without a dark macula about middle, or entirely black as in the specimens from Guatemala. The tarsi may be dark or reddish (sometimes dark on pro- and mesotarsi and reddish on metatarsi, or the basal tarsomeres reddish brown and the distal ones dark brown). Due to this great chromatic variation, we redescribe the species in more detail and provide photographs of the specimens from Guatemala that noticeably differ from the holotype and paratypes in Bezark (2021). Apparently, the chromatic variation is not related to geography and occurs throughout populations.

Previously, *A. amoena* was reported only from Mexico (Sinaloa, Nayarit, Jalisco, Oaxaca, Colima, Guerrero) (Monné 2021a; Tavakilian and Chevillotte 2020) and Guatemala represents a new country record.

Apparently, the only reliable difference between *A. amoena* and *A. cribricollis* (Bates, 1892) is the smooth gibbous area of the pronotum (this area is entirely punctate in *A. cribricollis*).

## LAMIINAE Blanchard, 1845 DESMIPHORINI Thomson, 1860

### *Estola flavobasalis* Breuning, 1940

(Fig. 21)

*Estola flavobasalis* Breuning 1940: 66; Blackwelder 1946: 600 (checklist); Breuning 1963: 508 (cat.); Villiers 1971: 346 (distr.); Breuning 1974: 83; Marinoni 1979: 212, 215 (hosts); Monné 1994: 45 (cat.); Monné and Giesbert 1994: 218 (checklist); Monné 2002: 14 (cat. hosts); Monné 2005b: 396 (cat.); Monné and Hovore 2006: 245 (checklist); Rodrigues et al. 2010: 317 (distr.); Morvan and Roguet 2013: 26 (distr.); Martins et al. 2015: 9 (key); Monné and Monné 2017: 240 (distr.); Monné 2021b: 591 (cat.).

*Estola flavobasalis* was described from a single female specimen from Brazil (Goiás). Currently, it is known from French Guiana, Brazil (Bahia, Goiás, Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo, Paraná, Santa Catarina, Rio Grande do Sul) (Monné 2021b; Tavakilian and Chevillotte 2020). A large series of specimens sent for study by James E. Wappes further extends the range into Bolivia.

**Material examined.** BOLIVIA (**new country record**), SANTA CRUZ: 4–5 km SE Terevinto, 3 males, 3 females, 21.XI.2013, Skillman and Wappes (FWSC); 2 males, 4 females, 21.XI.2013, Wappes and Skillman (2 MZSP; 3 FSCA; formerly ACMT); 3 km N Buena Vista, 1 male, 27.XI.2003, R. Clarke and E. Ortiz leg. (FSCA, formerly ACMT); 1 male, 1.XII.2003, R. Clarke and E. Ortiz leg. (FSCA, formerly ACMT).

### *Estola vittulata* Bates, 1874

(Fig. 19–20)

*Estola vittulata* Bates 1874: 226; 1880: 118; Lameere 1883: 58 (cat.); Bates 1885: 356; Lameere 1893: 277 (distr.); Aurivillius 1922: 320 (cat.); Blackwelder 1946: 601 (checklist); Breuning 1974: 107; Chemsak et al. 1992: 119 (checklist); Monné 1994: 50 (cat.); Monné and Giesbert 1994: 220 (checklist); Maes et al. 1994: 37 (distr.); Noguera and Chemsak 1996: 405 (cat.); Maes 1998: 915 (distr.); Martínez 2000: 98 (distr.); Turnbow et al. 2003: 26 (distr.); Monné 2005b: 402 (cat.); Hovore 2006: 376 (distr.); Swift et al. 2010: 55 (distr.); Maes et al. 2010: 156 (distr.); Audureau and Roguet 2018: 82 (distr.); Bezark and Tyson 2020: 29 (distr.); Monné 2021b: 598 (cat.).

*Estola vittulata* was described based on syntypes from Nicaragua. Currently, it is known from Mexico (Veracruz), Guatemala, Belize, Honduras, Nicaragua, Costa Rica, Panama, Venezuela and Colombia (Monné 2021b, Tavakilian and Chevillotte 2020). Bates (1880) provided some new country records for the species: “*Hab.* GUATEMALA, Toco, Vera Paz (*Champion*); BRISTH HONDURAS, Belize (*Blancaneaux*).” Curiously, Aurivillius incorrectly recorded the species from Honduras and was followed by subsequent authors. However, British Honduras is not Honduras, currently it is Belize. The first formal record of *E. vittulata* in Honduras is by Turnbow et al. (2003). Breuning (1974) also reported the species from Brazil (Pernambuco), a record not present in Monné (2021b); Bezark and Tyson (2020) recorded this species from Ecuador, but the record is also not present in Monné (2021b).

It is possible that *E. vittulata sensu* Bezark and Tyson (2020) (see photograph in Bezark 2021) belongs to a different species close to the true *E. vittulata*.

**Material examined.** PANAMA, BOCAS DEL TORO: 16 km W Chiriqui Grande, 3 males, 2 females, 21–22. II.1999, J.E. Wappes (1 male, 1 female, MZSP; 2 males, 1 female, FSCA, formerly ACMT).

### ***Eupogonius flavovittatus* Breuning, 1942**

(Fig. 22–25)

*Eupogonius flavovittatus* Breuning 1942: 161; 1963: 505 (cat.); 1974: 25 (rev.); Chemsak et al. 1992: 119 (cat.); Monné 1994: 30 (cat.); Monné and Giesbert 1994: 221 (checklist); Monné 2005b: 409 (cat.); Hovore 2006: 376 (distr.); Monné 2021: 609 (cat.).

**Description. Female.** Integument mostly dark brown; frons dark reddish brown; ventral mouthparts reddish brown except for apex of palpomeres yellowish brown; antennomere IV orangish basally, gradually reddish brown toward apex of anterior third, dark brown on remaining surface; antennomeres V–VII orangish basally; central area of gumentum reddish brown; pronotum with three longitudinal dark reddish brown bands, one on each side from base to apex, the third medial, from base to posterior fifth; central area of prosternum and prosternal process reddish brown; elytra with orangish longitudinal band from humerus to slightly after apex of basal third (this band gradually narrowed toward its apex); ventral surface of pro- and mesofemora orangish; central area of abdominal ventrites I–IV slightly dark reddish brown.

**Head.** Frons finely, rather densely punctate; with yellow pubescence partially obscuring integument, sparser toward clypeus, except yellowish white pubescence close to eyes; with long, erect, abundant yellow setae throughout (setae more brownish laterally toward antennal tubercles). Vertex and area behind upper eye lobes with sculpturing as on frons; area between antennal tubercles with yellow pubescence obscuring integument, and long, erect brownish setae interspersed laterally; remaining central area of vertex with wide, dense yellow pubescent band, slightly widened toward prothoracic margin; sides of vertex and area behind upper eye lobes with dark brown pubescence not obscuring integument, and long, erect yellowish brown setae interspersed (erect setae absent close to prothorax). Area behind lower eye lobes tumid close to eye, finely, somewhat densely punctate, except smooth area close to prothoracic margin in inferior region; tumid area with yellowish pubescence partially obscuring integument, and long, erect, abundant yellowish white setae interspersed; area close to prothorax with dark brown pubescence superiorly, glabrous toward ventral surface. Genae about 0.5 times length of lower eye lobes; finely, sparsely punctate except smooth apex; with abundant yellowish white pubescence frontally, pubescence distinctly sparser toward ventral surface, except glabrous smooth area, and long, erect yellowish white setae interspersed. Gumentum smooth, glabrous, except narrow anterior area with yellowish pubescence not obscuring integument, and a few long, erect yellowish white setae interspersed. Distance between upper eye lobes (only one male measured) 0.28 times distance between outer margins of eyes; in frontal view, distance between lower eye lobes 0.63 times distance between outer margins of eyes. Antennae 1.5 times elytral length, reaching elytral apex at posterior third of antennomere X. Scape, pedicel, and antennomere III with long, erect, abundant dark setae throughout (setae longer ventrally), except a few long, erect whitish setae ventrally at apex of scape, pedicel, and base of antennomere III; antennomere IV with long, erect setae throughout, setae yellowish white in basal quarter, brown on remaining surface (setae longer ventrally); antennomeres V–IX with long, erect, sparse dark setae ventrally, and moderately short, erect brown setae at dorsal apex; antennomeres III–IV gradually widened from base to apex. Antennal formula based on antennomere III (only one male measured): scape = 0.58; pedicel = 0.17; IV = 1.05; V = 0.53; VI = 0.45; VII = 0.41; VIII = 0.39; IX = 0.36; X = 0.30; XI = 0.39.

**Thorax.** Prothorax wider than long; sides with blunt tubercle about middle. Pronotum coarsely, abundantly punctate; longitudinal dark reddish brown bands with dense yellow pubescence; remaining surface with dark brown pubescence partially obscuring integument; with long, erect, sparse yellowish white setae interspersed. Sides of prothorax coarsely, somewhat densely punctate; with abundant dark yellowish brown pubescence not obscuring integument, except area close to pronotum with yellow pubescence (continuation of pubescence on sides of pronotum), and long, erect yellowish setae interspersed. Prosternum coarsely, sparsely punctate; with abundant whitish pubescence not obscuring integument, distinctly sparser in anterior quarter, and long, erect setae of same color interspersed. Prosternal process with abundant whitish pubescence, slightly denser than in



22



23



24



25

Figures 22–25. *Eupogonius flavovittatus* Breuning, 1942. 22) Dorsal habitus. 23) Ventral habitus. 24) Lateral habitus. 25) Head, frontal view.

posterior area, and long, erect setae of same color interspersed; narrowest area 0.4 times procoxal cavity. Wide central area of meso- and metathorax with abundant whitish pubescence not obscuring integument, and long, erect setae of same color interspersed on metaventrite; sides with abundant yellowish brown pubescence not obscuring integument. Scutellum with dark yellowish brown pubescence not obscuring integument, and long, erect setae of same color interspersed. **Elytra.** Coarsely, somewhat densely punctate, punctures slightly finer and sparser toward apex; orangish area with dense yellow pubescence; remaining surface with dark brown pubescence partially obscuring integument; with long, erect, somewhat abundant brown setae in dark area, and long, erect yellow setae in orangish area. **Legs.** Femora with whitish pubescence not obscuring integument, longer, bristly, more abundant ventrally, and long, erect setae of same color interspersed (erect setae more abundant ventrally at base). Protibiae with yellowish pubescence dorsally and laterally not obscuring integument, and long, erect, brownish and yellowish setae interspersed; ventral surface with abundant bristly whitish pubescence; apex of fringe of thick yellowish brown setae. Mesotibiae with sparse yellowish pubescence in basal third, dense, bristly yellowish white in posterior  $\frac{2}{3}$ ; with long, erect yellowish brown setae interspersed (longer, more abundant



dorsally); apex of fringe of thick yellowish brown setae. Metatibiae with yellowish brown pubescence not obscuring integument, and long, erect, both brownish and yellowish white setae interspersed (erect setae longer, more abundant dorsally); apex of fringe of thick yellowish brown setae. Metatarsomere I about as long as II–III together.

**Abdomen.** Ventrites with abundant whitish pubescence not obscuring integument, and long, erect setae of same color interspersed. Posterior area of ventrite V slightly depressed centrally, with apical margin slightly concave centrally.

**Dimensions (mm) (one female).** Total length 6.15; prothoracic length 1.05; anterior prothoracic width 1.10; posterior prothoracic width 1.25; maximum prothoracic width 1.35; humeral width 1.75; elytral length 4.60.

**Material examined.** GUATEMALA, QUETZALTENANGO (new department record): 3 km S Santa Maria, 5000', 1 female, 18.V.1966, J.M. Campbell leg. (FSCA).

**Remarks.** The only previously known specimen was the holotype collected in “Capetillo.” Tavakilian and Chevillotte (2020) and Monné (2021) reported this place in the Guatemalan department of Sacatepéquez. Although Breuning (1942) only reported the country and this place, we believe that “Capetillo” is “Capetillo farm” in Sacatepéquez. Breuning (1942) did not specify the sex of the holotype (see photographs in Bezark 2021). However, based on the length of the antennae, it appears to be a male. Breuning (1942) compared *E. flavovittatus* with *E. vestitus* (Say, 1827) (currently equal to *E. pauper* LeConte, 1852), a species noticeably different, and reported (translated): “but the antennae a little longer than the body, the lower eye lobes twice as long as the genae, pronotum without lateral spine.” These differences are, at most, partially true. The antennae in males of *E. pauper* are about as long as in *E. flavovittatus* and are longer in females; the lateral tubercles of the prothorax in *E. pauper* are variable, and may be acute or somewhat blunt at the apex; and the genal length is very similar in both species.

Comparing the female examined with photographs of the holotype, the only difference we could see is the yellow pubescent band in the center of the pronotum, which is distinctly widened anteriorly in the holotype. However, we think this is only a specific variation.

### *Eupogonius wappesi* Lingafelter, Morris, Skillman, and Santos-Silva, new species

(Fig. 26–29)

**Description. Holotype male.** Head capsule dark brown except reddish brown gulamentum; apex of palpomeres dark reddish brown; scape, pedicel, and antennomeres III–IV reddish brown basally, gradually reddish brown toward dark brown apex; antennomeres V–XI brown, slightly darkened apically. Pronotum dark brown except dark reddish brown areas with yellow pubescence (base, apex, and wide band on each side). Sides of prothorax dark brown. Prosternum dark reddish brown, except dark brown margins; prosternal process dark reddish brown in basal half, orangish in apical half. Mesoventral process mostly brown, with reddish brown central base and part of sides, dark brown close to procoxal cavities. Mesanepisternum, mesepimeron, and metanepisternum dark brown. Metaventrite dark brown, except dark reddish brown area near metacoxae. Elytra dark brown in dorsal third, except dark orangish brown area close to epipleural margin, gradually orangish brown toward apex. Procoxae dark brown; meso- and metacoxae partially orangish brown. Femora dark brown except reddish brown base. Tibiae orangish brown about basal third, dark brown toward apex. Tarsomeres dark orangish brown, with apex dark brown (especially tarsomere V). Abdominal ventrites dark reddish brown, with dark brown apex.

**Head.** Frons coarsely, densely punctate; with pale yellow pubescence close to eyes and clypeus, partially obscuring integument close to eyes, white, not obscuring integument on remaining surface; with long, erect yellowish setae interspersed centrally, and long, erect brownish setae close to eyes. Vertex and area behind upper eye lobes coarsely, moderately densely punctate; area between antennal tubercles and upper eye lobes, and area close to posterior margin of upper eye lobes with dense yellow pubescence; remaining surface of vertex and area behind upper eye lobes with very sparse, short yellowish white setae; with brownish setae interspersed (erect setae more abundant on yellow pubescent area of vertex). Area behind lower eye lobes coarsely, densely punctate; area close to eye with dense pale yellow pubescence (this area gradually widened toward ventral surface; remaining surface with short, sparse yellowish white setae; with a few long, erect brownish setae close to eye. Genae 0.4 times length of lower eye lobes; finely, sparsely punctate, except smooth apex; with yellowish white pubescence not obscuring integument, and a few long, erect brownish setae interspersed, except glabrous smooth area. Postclypeus with pale yellow pubescence partially obscuring integument, and long, erect brownish setae interspersed. Labrum coplanar



Figures 26–29. *Eupogonius wappesi* new species, holotype male. 26) Dorsal habitus. 27) Ventral habitus. 28) Lateral habitus. 29) Head, frontal view.

with anteclypeus posteriorly, inclined anteriorly; with both, short and long dark setae directed forward posteriorly, and dense golden pubescence anteriorly. Gulamentum smooth, glabrous, depressed anteriorly. Distance between upper eye lobes 0.24 times distance between outer margins of eyes; in frontal view, distance between lower eye lobes 0.55 times distance between outer margins of eyes. Antennae 1.4 times elytral length, nearly reaching elytral apex. Scape coarsely, densely punctate; with whitish pubescence not obscuring integument, and long, erect, brown and yellowish white setae interspersed throughout (erect setae longer ventrally). Pedicel with whitish pubescence not obscuring integument, absent in dark area except at narrow apex; with long, erect brown setae interspersed throughout (erect setae longer ventrally). Antennomeres III–IV with whitish pubescence not obscuring integument in basal third, distinctly sparser, brownish on remaining surface; with long, erect, brown and yellowish white setae interspersed throughout (erect setae longer ventrally, and whitish setae more abundant dorsally). Antennomeres V–X with brownish pubescence distinctly not obscuring integument, short, erect white setae dorsally, and long, erect, both whitish and dark setae ventrally (dark setae more abundant). Antennomere XI with brownish pubescence not obscuring integument, and short, erect whitish setae interspersed (erect setae more abundant apically). Antennal formula based on antennomere III (only one male measured): scape = 0.85; pedicel = 0.25; IV = 1.08; V = 0.48; VI = 0.42; VII = 0.38; VIII = 0.38; IX = 0.32; X = 0.30; XI = 0.38.

**Thorax.** Prothorax wider than long; sides with conical tubercle about middle. Pronotum coarsely, abundantly punctate; with wide, longitudinal, dense yellow pubescent band on each side, from base to apex, transverse



**Figures 30–34.** *Ameriphoderes amoena* (Chemsak and Linsley, 1979), male. **30)** Dorsal habitus. **31)** Ventral habitus. **32)** Lateral habitus. **33)** Head, frontal view. **34)** Abdominal ventrite V.

yellow pubescent band close to posterior margin, connecting lateral bands (narrowed centrally), and transverse yellow pubescent band near anterior margin, connecting lateral bands; remaining surface with white, sparse white pubescence; with long, erect brownish setae throughout. Sides of prothorax, coarsely, densely punctate; with dense yellow pubescence, except wide central area with sparse whitish pubescence; with long, erect brownish setae throughout. Prosternum coarsely, somewhat abundant punctate; with pale yellow pubescence partially obscuring integument, and long, erect setae of same color interspersed. Prosternal process with punctures slightly denser than on prosternum; basal half with pale yellow pubescence partially obscuring integument; posterior half with sparse yellowish pubescence, and long, erect yellowish setae apically; narrowest area 0.2 times procoxal cavity. Mesoventrite and mesoventral process with white pubescence not obscuring integument; mesanepisternum mostly with dense yellow pubescence; mesepimeron with yellowish pubescence, sparser than on mesanepisternum. Metanepisternum and sides of metaventrite with abundant yellowish pubescence not obscuring integument; remaining surface of metaventrite with abundant whitish pubescence not obscuring integument, except glabrous metathoracic discrimen; metaventrite coarsely, somewhat abundant punctate laterally (punctures finer, sparser toward metathoracic discrimen), and long, erect whitish setae interspersed. Scutellum with sparse yellowish white pubescence. **Elytra.** Coarsely, abundantly punctate in basal third, punctures gradually finer, sparser toward

apex; with longitudinal yellow pubescent band dorsally, from base to apex, curved apically, another longitudinal yellow pubescent band close to epipleural margin, from base to apex, apically fused with dorsal yellow pubescent band; remaining surface with whitish pubescence not obscuring integument, slightly denser between two yellow pubescent bands; with long, erect, abundant brownish setae throughout. **Legs.** Femora with yellowish white pubescence not obscuring integument, except glabrous posterior  $\frac{2}{3}$  of ventral surface; with long, erect, yellowish white and brownish setae interspersed. Tibiae with abundant, bristly yellowish white pubescence partially obscuring integument, and long, erect both yellowish white and brownish setae interspersed. Metatarsomere I slightly shorter than II–III together.

**Abdomen.** Ventrite I with abundant yellowish white pubescence not obscuring integument, forming dense fringe apically; ventrites II–V with abundant yellowish white pubescence not obscuring integument, forming dense fringe apically on II–IV, except nearly glabrous area close to apical margin on II–IV, and long, decumbent, abundant yellow setae centrally on II–V; with long, erect brownish setae on sides of III–V, and posterior third of V; apex of ventrite V slightly rounded.

**Dimensions (mm).** Total length 5.45; prothoracic length 1.05; anterior prothoracic width 1.05; posterior prothoracic width 1.10; maximum prothoracic width 1.45; humeral width 1.70; elytral length 3.90.

**Type material.** Holotype male from MEXICO, QUINTANA ROO: Highway 307, 9 km S. Cancun, 08.VI.2005, F.W. Skillman Jr. (FSCA, formerly FWSC).

**Etymology.** The new species is dedicated to the late James E. Wappes, for his friendship and contributions to the knowledge of American Cerambycidae.

**Remarks.** Four species of *Eupogonius* LeConte, 1852 have a longitudinal elytral pubescent band dorsally from base to apex: *E. cryptus* Hovore, 1989, *E. flavocinctus* Bates, 1872, *E. monzoni* Wappes and Santos-Silva, 2020, and *E. vittipennis* Bates, 1885 (see photographs of these species in Bezark 2021). *Eupogonius wappesi* differs from *E. cryptus* and *E. flavocinctus* by the wider elytra, lateral tubercles of the prothorax distinctly more conspicuous, absence of longitudinal yellow pubescent band in center of vertex, and absence of yellow pubescent band in center of the pronotum (entirely covering vertex in *E. flavocinctus*); from *E. monzoni* by the wider elytra, absence of a longitudinal yellow pubescent band in the center of the pronotum, and absence of dense white pubescence on the elytra; and from *E. vittipennis* by the wider elytra, lateral tubercles of the prothorax distinctly more conspicuous, longitudinal yellow pubescent bands on the pronotum fused anteriorly and posteriorly (not fused in *E. vittipennis*), and absence of a longitudinal pubescent band on the elytral suture.

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