

A journal of world insect systematics

# INSECTA MUNDI

---

---

0966

New species and taxonomical and geographical  
notes on Cerambycidae and Disteniidae  
(Coleoptera: Chrysomeloidea)

Daniel Heffern

10531 Goldfield Lane, Houston, TX 77064, USA

Juan Pablo Botero

Grupo de Sistemática Molecular, Laboratorio de Entomología, Pontificia Universidad Javeriana. Bogotá, Colombia

Antonio Santos-Silva

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

Date of issue: January 6, 2023

Center for Systematic Entomology, Inc., Gainesville, FL

**Heffern D, Botero JP, Santos-Silva A. 2023.** New species and taxonomical and geographical notes on Cerambycidae and Disteniidae (Coleoptera: Chrysomeloidea). *Insecta Mundi* 0966: 1–17.

Published on January 6, 2023 by  
**Center for Systematic Entomology, Inc.**  
P.O. Box 141874  
Gainesville, FL 32614-1874 USA  
<http://centerforsystematicentomology.org/>

**INSECTA MUNDI** is a journal primarily devoted to insect systematics, but articles can be published on any non-marine arthropod. Topics considered for publication include systematics, taxonomy, nomenclature, checklists, faunal works, and natural history. *Insecta Mundi* will not consider works in the applied sciences (i.e. medical entomology, pest control research, etc.), and no longer publishes book reviews or editorials. *Insecta Mundi* publishes original research or discoveries in an inexpensive and timely manner, distributing them free via open access on the internet on the date of publication.

*Insecta Mundi* is referenced or abstracted by several sources, including the Zoological Record and CAB Abstracts. *Insecta Mundi* is published irregularly throughout the year, with completed manuscripts assigned an individual number. Manuscripts must be peer reviewed prior to submission, after which they are reviewed by the editorial board to ensure quality. One author of each submitted manuscript must be a current member of the Center for Systematic Entomology.

Guidelines and requirements for the preparation of manuscripts are available on the *Insecta Mundi* website at <http://centerforsystematicentomology.org/insectamundi/>

**Chief Editor:** David Plotkin, [insectamundi@gmail.com](mailto:insectamundi@gmail.com)  
**Assistant Editor:** Paul E. Skelley, [insectamundi@gmail.com](mailto:insectamundi@gmail.com)  
**Layout Editor:** Robert G. Forsyth  
**Editorial Board:** Davide Dal Pos, Oliver Keller, M. J. Paulsen  
**Founding Editors:** Ross H. Arnett, Jr., J. H. Frank, Virendra Gupta, John B. Heppner, Lionel A. Stange, Michael C. Thomas, Robert E. Woodruff  
**Review Editors:** Listed on the *Insecta Mundi* webpage

**Printed copies (ISSN 0749-6737) annually deposited in libraries**

Florida Department of Agriculture and Consumer Services, Gainesville, FL, USA  
The Natural History Museum, London, UK  
National Museum of Natural History, Smithsonian Institution, Washington, DC, USA  
Zoological Institute of Russian Academy of Sciences, Saint-Petersburg, Russia

**Electronic copies (Online ISSN 1942-1354) in PDF format**

Archived digitally by Portico  
Florida Virtual Campus: <http://purl.fcla.edu/fcla/insectamundi>  
University of Nebraska-Lincoln, Digital Commons: <http://digitalcommons.unl.edu/insectamundi/>  
Goethe-Universität, Frankfurt am Main: <http://nbn-resolving.de/urn/resolver.pl?urn:nbn:de:hebis:30:3-135240>

**Copyright held by the author(s).** This is an open access article distributed under the terms of the Creative Commons, Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited. <http://creativecommons.org/licenses/by-nc/3.0/>

# New species and taxonomical and geographical notes on Cerambycidae and Disteniidae (Coleoptera: Chrysomeloidea)

Daniel Heffern

10531 Goldfield Lane, Houston, TX 77064, USA  
titanusgiganteus@hotmail.com  
https://orcid.org/0000-0003-2263-6643

Juan Pablo Botero

Grupo de Sistemática Molecular, Laboratorio de Entomología, Pontificia Universidad Javeriana. Bogotá, Colombia  
jp\_bot@yahoo.com  
https://orcid.org/0000-0002-5547-7987

Antonio Santos-Silva

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

**Abstract.** Four new species of Coleoptera are described: *Pentanodes clavatus* **new species**, from Ecuador; *Pentanodes baldwini* **new species**, from Panama (Cerambycidae: Cerambycinae: Tillomorphini); *Elytrimitatrix (Grossifemora) dilatata* **new species**, from Mexico (Disteniidae) and *Novantinoe falsa* **new species**, from Mexico (Disteniidae). Taxonomical notes on *Euderces cribellatus* (Bates, 1885) (Tillomorphini) and *Oreodera Audinet-Serville*, 1835 (Lamiinae: Acrocinini) are provided. Additionally, new records are provided for *Oreodera noguerai* McCarty, 2001 (new state record), *Adetus croton* Heffern, Santos-Silva and Botero, 2019 (new country record), *Icimauna sarauaia* Martins and Galileo, 1991 (new country record), and *Phoebe mexicana* Bates, 1881 (new state record).

**Key words.** Longhorned woodboring beetle, Neotropical region, taxonomy

**ZooBank registration.** urn:lsid:zoobank.org:pub:F5B8AFEF-30F7-43ED-86C0-D0DD03D3568A

## Introduction

The study of specimens from the collection of the first author allowed us to describe four new species, two in Cerambycidae and two in Disteniidae, and provide new geographical records for four other species of Cerambycidae. Furthermore, during the process of identification of the specimens we found some problems regarding the generic concept of *Oreodera* Audinet-Serville, 1835, as well as in *Euderces cribellatus* (Bates, 1885) sensu Giesbert and Chemsak (1997).

*Euderces* LeConte, 1850 is a large genus of Tillomorphini (Cerambycinae), which includes 60 species distributed from southern Canada to northern South America (Monné 2022a; Tavakilian and Chevillotte 2022). The key proposed by Giesbert and Chemsak (1997) is a fundamental tool for the identification of the species of this genus.

*Pentanodes* Schaeffer, 1904 is a small genus of Tillomorphini, which includes five species distributed from the southern United States of America (extreme southern Texas) to northern South America, including the Caribbean (Monné 2022a; Tavakilian and Chevillotte 2022).

*Oreodera* Audinet-Serville, 1835 is a large genus of Acrocinini (Lamiinae), which includes 118 species distributed from Mexico to southern South America (Monné 2022b; Tavakilian and Chevillotte 2022). Herein, the concept of *Acrocinini* and *Oreodera* proposed by Souza et al. (2020) is partially questioned. This information suggests that the study of a large number of species of Acanthoderini may or may not indicate that the proposal of transferring *Oreodera* from Acanthoderini to Acrocinini was not correct, primarily because two important features reported by them separating Acrocinini from Acanthoderini are variable in the species of *Oreodera*.



**Figures 1–7.** *Pentanodes* spp. 1–6) *Pentanodes clavatus*, holotype male: 1) Dorsal habitus; 2) Ventral habitus; 3) Lateral habitus; 4) Head, frontal view; 5) Head and pronotum, oblique view; 6) Pronotum and basal antennomeres. 7) *Pentanodes tropipennis* (Chemsak, 1997), male from Costa Rica, pronotum and basal antennomeres.

*Adetus* LeConte, 1852 is a large genus of Apomecynini (Lamiinae), which includes 83 species distributed from the United States of America to southern South America, including the Caribbean (Monné 2022b; Tavakilian and Chevillotte 2022).

*Icimauna* Martins and Galileo, 1991 is a small genus of Hemilophini (Lamiinae), which includes seven species distributed from Costa Rica to southern South America (Monné 2022b).

*Phoebe* Audinet-Serville, 1835 is a moderately large genus of Hemilophini, which includes 21 species distributed from Mexico to southern South America (Bezark 2022b).

*Elytrimitatrix* (*Grossifemora*) Santos-Silva and Hovore, 2007 is a moderately large subgenus of Disteniidae, which includes 43 species distributed from Mexico to northern South America (Tavakilian and Chevillotte 2022).

*Novantinoe* Santos-Silva and Hovore, 2007 is another moderately large genus of Disteniidae, which includes 41 species distributed from Mexico to northern South America, including the Caribbean (Tavakilian and Chevillotte 2022).

## Materials and Methods

Photographs were taken in the MZSP with a Canon EOS Rebel T3i DSLR camera, Canon MP-E 65mm 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 the Leica MZ6 stereomicroscope, also used in the study of the specimens.

The acronyms used in the text are as follows:

**CNIN** Colección Nacional de Insectos, Instituto de Biología (UNAM), Mexico City, Mexico.

**DHCO** Daniel Heffern Collection, Houston, Texas, USA.

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

**TAMU** Texas A&M University, College Station, Texas, USA.

## Results

**CERAMBYCIDAE Latreille, 1802**

**CERAMBYCINAE Latreille, 1802**

**TILLOMORPHINI Lacordaire, 1868**

***Euderces* LeConte, 1850**

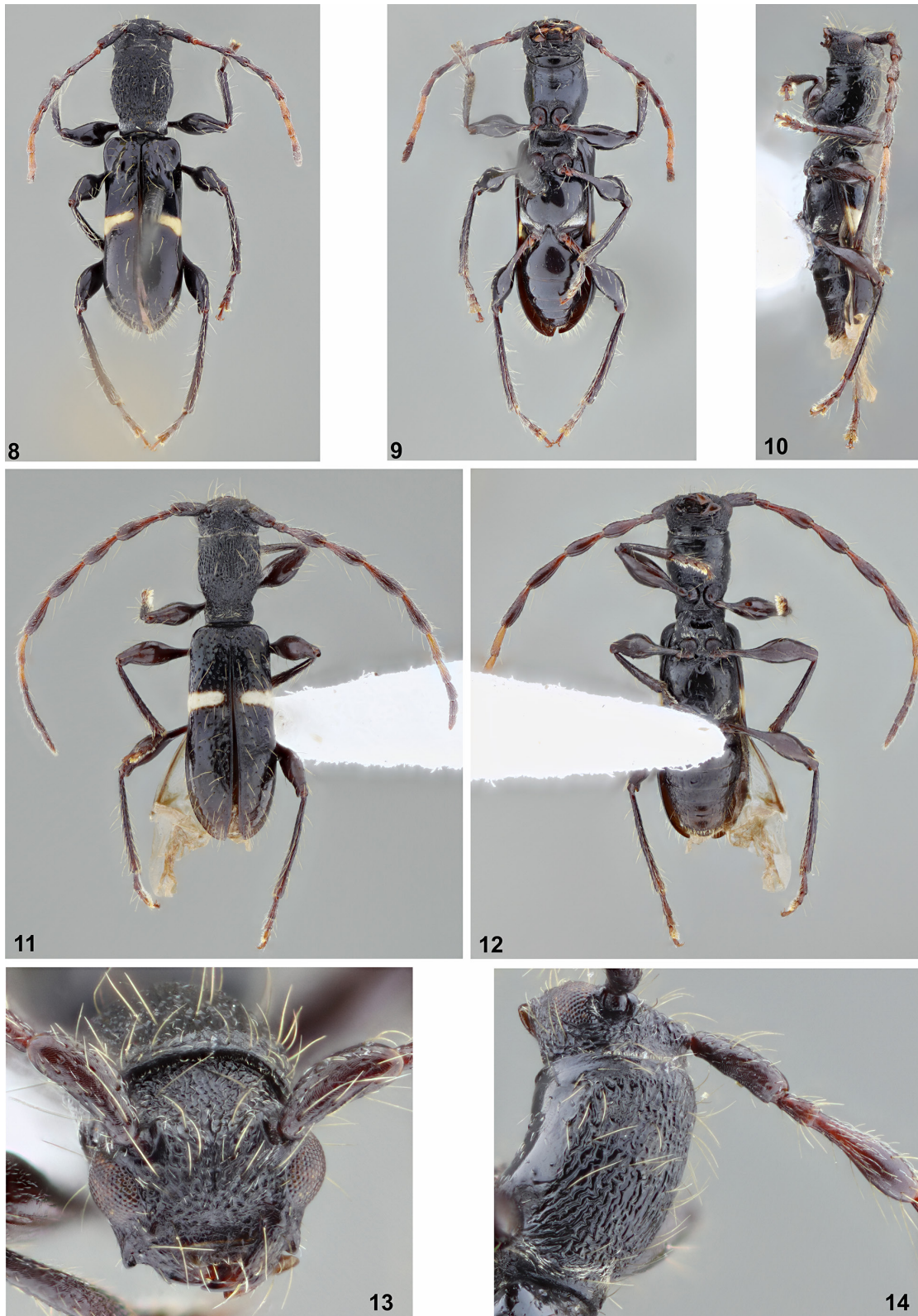
***Euderces cribellatus* (Bates, 1885)**

(Fig. 15)

*Apilocera cribellata* Bates 1885: 306.

**Remarks.** According to Bates (1885) (translated): “Black, shiny, almost glabrous; elytra with eburneous semi-band medially; frons short and wide, irregularly reticulate-punctate; prothorax ovate-elongate, strongly narrowed and depressed toward base, not depressed anteriorly, pronotum rugose-punctate (wrinkles short, interrupted by punctures); elytra alveolate-punctate on anterior half, smooth on posterior half with silvery-silky macula near suture, centrobasal crest obtuse, slightly elevated; antennomere III with long spine, with apex slightly thickened; antennomere IV without spine.” Giesbert and Chemsak (1997) redescribed and illustrated *E. cribellatus*. However, their redescription and illustration (Fig. 16) do not agree with the holotype (see photographs on Bezark 2022a) and specimens examined by us. Information by Giesbert and Chemsak (1997), not agreeing with the holotype and specimens examined, between parentheses: body proportionally stouter (slender); maximum width of the prothorax on middle (after middle); and elytra with somewhat narrow and distinctly oblique densely punctate area after eburneous band (very wide and not oblique).

Currently, the species is known from Costa Rica and Panama (Monné 2022a; Tavakilian and Chevillotte 2022).



**Figures 8–14.** *Pentanodes* spp. 8–9) *Pentanodes clavatus*, paratype female: 8) Dorsal habitus; 9) Ventral habitus. 10–14) *Pentanodes baldwini*, holotype male: 10) Lateral habitus; 11) Dorsal habitus; 12) Ventral habitus; 13) Head, frontal view; 14) Eye lobe and pronotum.

**Material examined.** PANAMA, CHIRIQUI: Boquete, Volcancito Rd., 1300 m, 8°46'31"N 82°26'52"W, 2 males, 3 females, 22.I.2021, B.B. Baldwin leg. (1 male, 2 females, DHCO; 1 male, 1 female, MZSP); 2 males, same data as others except 4-II-2021. All seven specimens were collected in a malaise trap.

### *Pentanodes* Schaeffer, 1904

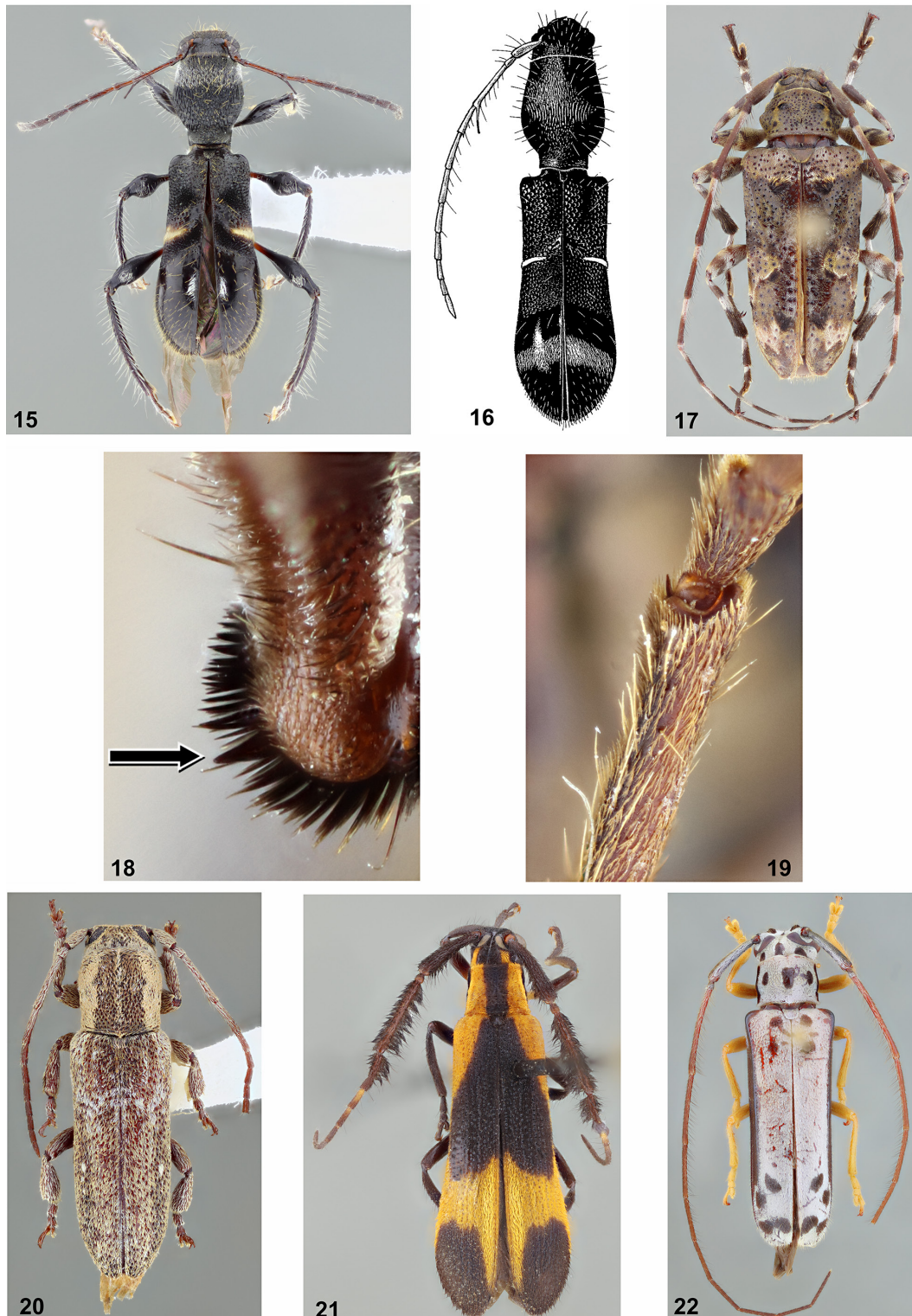
#### *Pentanodes clavatus* Heffern, Botero and Santos-Silva, new species

(Fig. 1–6, 8–9)

**Description. Holotype male** (Fig. 1–6). Integument mostly black dorsally, mostly dark brown ventrally; ventral surface of head gradually dark reddish brown toward prothorax; palpomeres reddish brown, lighter on apex; anteclypeus and labrum dark reddish brown; scape, pedicel, and antennomeres IX–XI dark brown; antennomeres III–IV dark reddish brown on narrow basal area, dark brown on remaining surface; antennomeres V–VI orangish brown on narrow basal area, dark brown on remaining surface; antennomere V orangish brown; antennomere VII orangish brown, except brown apical area. Elytra with arched eburneous band located about middle extending from near epipleural margin to near suture. Apex of mesoventral process, trochanters and base of metafemora dark reddish brown; pro- and mesofemora, remaining surface of metafemora dark brown; tibiae dark brown, slightly lighter toward apex on metatibiae; tarsomeres I–II dark brown; tarsomeres III–IV reddish brown; tarsomere V dark reddish brown, except reddish brown apex; tarsal claws reddish brown.

**Head.** Frons coarsely rugose-punctate on wide central area; sides elevated, carina-shaped, punctures close to eyes finer, slightly sparser than on wide central area; area close to antennal tubercles slightly depressed; with short, sparse yellowish-white setae on wide central area, slightly longer close to eyes; with one long, erect yellowish seta on each side close to postclypeus. Vertex and area behind antenna with sculpturing and setae as on wide central area of frons; with one long, erect yellowish seta on each side of vertex. Area behind eyes tumid, coarsely rugose-punctate close to eyes, subsmooth close to prothorax; with sparse, both short and long yellowish-white setae on tumid area, glabrous close to prothorax. Genae coarsely rugose-punctate, punctures and roughness finer than on wide central area of frons; with both short and decumbent, and long and somewhat short yellowish-white setae. Gulamentum smooth, glabrous posteriorly, coarsely, transversely striate anteriorly, except slightly depressed, striate-punctate area close to anterior margin; with sparse, both short and decumbent, and long and erect yellowish-white setae. Maxillary palpomere IV and labial palpomere III securiform. Wide central area of postclypeus coarsely rugose-punctate, punctures finer, shallower, and roughness finer than on central area of frons; with short, sparse, decumbent yellowish-white setae. Sides of postclypeus smooth, glabrous. Labrum glabrous close to anteclypeus, with long tuft of yellowish-brown setae on each side of central area, and short, bristly yellowish-white setae on remaining surface. Anterior 2/3 of outer surface of mandibles coarsely rugose-punctate, with sparse, short, decumbent yellowish-white setae, and thick, long, erect yellowish-white setae interspersed; posterior third smooth, glabrous. Superior area of eyes slightly rounded, projected upward; in frontal view, distance between eyes 0.62 times distance between outer margins of eyes. Antennae 1.55 times elytral length, almost reaching elytral apex. Scape subcylindrical; finely, sparsely punctate dorsally, except smooth apex, subsmooth on remaining surface; with sparse, short, decumbent brownish setae and long, erect yellowish-white setae interspersed dorsally, except glabrous smooth area, glabrous on remaining surface, except a few long, erect yellowish-white setae on posterior third of ventral surface. Pedicel with sparse, long, erect yellowish-white setae throughout, and a few short, decumbent setae of same color interspersed. Antennomeres III–VI pedunculate-clavate, peduncle of III longer; with short, decumbent white setae, not obscuring integument, and moderately long, erect setae of same color interspersed dorsally, a few short, decumbent white setae laterally, and long, erect yellowish-white setae on apex of dorsal and ventral surfaces. Antennomeres VII–XI with abundant whitish pubescence not obscuring integument, and short, erect setae of same color interspersed; dorsal and ventral apex of VII with long, erect yellowish-white setae, and dorsal apex of VII with moderately long, erect yellowish-white setae on dorsal apex. Antennal formula based on length of antennomere III: scape = 0.89; pedicel = 0.20; IV = 0.72; V = 0.76; VI = 0.72; VII = 0.58; VIII = 0.48; IX = 0.48; X = 0.41; XI = 0.52.

**Thorax.** Prothorax distinctly longer than wide; sides rounded between apex of anterior and base of posterior quarter, distinctly narrowed on posterior quarter. Pronotum coarsely, longitudinally striate-punctate on wide



**Figures 15–22.** Cerambycidae spp. **15)** *Euderces cribellatus* (Bates, 1885), female from Panama, dorsal habitus; **16)** *Euderces cribellatus sensu* Giesbert and Chemsak (1997). **17–18)** *Oreodera noguerai* McCarty, 2001, female from Mexico (Jalisco): **17)** Dorsal habitus; **18)** Apex of protibia. **19)** *Oreodera albilatera* Martins and Monné, 1993, apex of protibia. **20)** *Adetus croton* Heffern, Santos-Silva and Botero, 2019, male from Nicaragua. **21)** *Icimauna sarauaia* Martins and Galileo, 1991, female from Peru. **22)** *Phoebe mexicana* Bates, 1881, female from Mexico (Chiapas).



central area; striae denser centrally; coarsely, shallowly punctate close to anterior margin; coarsely rugose-punctate on posterior quarter, except subsmooth on wide central area close to posterior margin; anterior  $\frac{3}{4}$  with a few short, decumbent brownish setae, and sparse, long, erect yellowish-white setae laterally; posterior quarter with yellowish-white pubescence not obscuring integument. Sides of prothorax longitudinally striate-punctate close to pronotum, sculpturing finer than on pronotum, gradually smooth toward prosternum; with a few long, erect yellowish-white setae superiorly, glabrous inferiorly. Prosternum sparsely, coarsely, shallowly punctate, except central area close to procoxal cavities with abundant, somewhat fine punctures, and finer striae on central apex of anterior third; with a few long and short yellowish-white setae, absent on wide central area, except abundant yellowish-white pubescence not obscuring integument posteriorly close to procoxal cavities. Prosternal process distinctly narrowed centrally, strongly widened on posterior third; narrowest area 0.14 times procoxal width; with a few short brownish setae. Mesoventrite strongly, obliquely inclined from anterior quarter toward mesoventral process; with white pubescence not obscuring integument anteriorly and laterally, glabrous on remaining surface; with a few long, erect yellowish-white setae near mesocoxal cavities. Mesanepisternum with dense white pubescence; mesepimeron with dense white pubescence close to elytra, glabrous close to mesocoxae. Mesoventral process with white pubescence not obscuring integument; apex widened, bilobed, strongly emarginate centrally; narrowest area 0.42 times mesocoxal width. Metanepisternum almost glabrous, except apex with dense white pubescence. Metaventrite with a few short yellowish setae, and a few long, erect white setae, except dense white pubescence on sides of posterior area. Scutellum with short, decumbent, sparse yellowish-white setae. **Elytra.** Gradually inclined from base to near middle, then convex toward apex; centrobasal crest elevated, convex dorsally; anterior  $\frac{3}{4}$  coarsely, sparsely punctate; posterior quarter finely, sparsely punctate, punctures distinctly more abundant than on anterior  $\frac{3}{4}$ ; punctures on anterior  $\frac{3}{4}$  with long, erect yellowish-white seta, nearly all seta yellow basally, but some setae entirely yellowish-brown; posterior quarter with moderately abundant and short yellowish-white setae, and long, erect setae of same color interspersed. **Legs.** Femora with sparse, long, erect whitish setae dorsally and laterally, glabrous ventrally. Tibiae with sparse, short, fine yellowish-white setae, and moderately abundant, long, erect white setae, except sides of posterior half of protibiae with abundant white pubescence, bristly, yellowish pubescence on ventral surface of posterior half of protibiae, and somewhat abundant yellowish-white pubescence on ventral surface of posterior third of meso- and metatibiae. Metatarsomere I as long as II–III together.

**Abdomen.** Ventrites with sparse, decumbent yellowish-white setae, and a few long, erect white setae interspersed laterally.

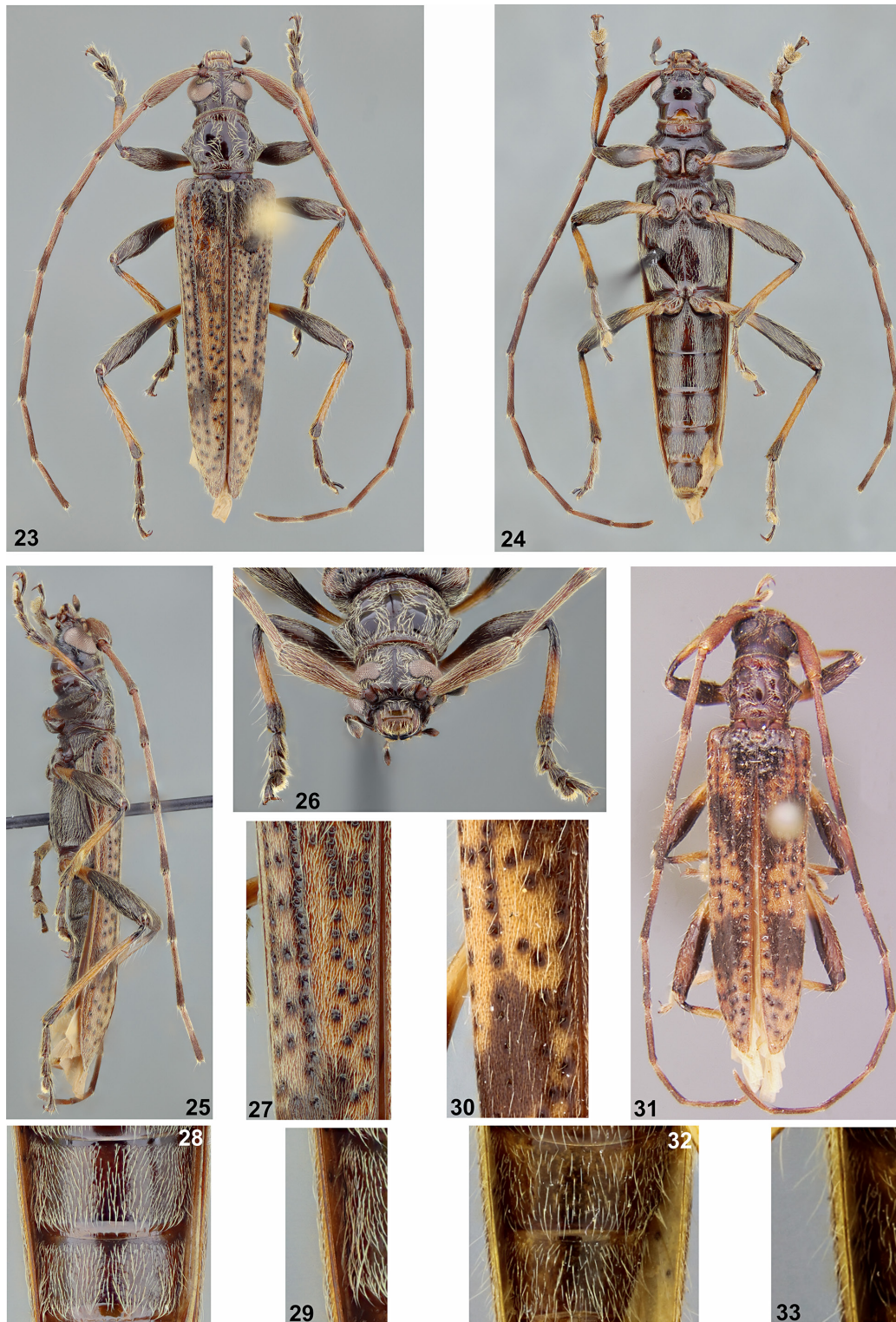
**Female** (Fig. 8–9). Similar to male, differing especially by the antennal shape (generic feature), antennae 1.2 times elytral length, reaching about posterior third of elytra.

**Dimensions in mm (holotype male/paratype female).** Total length, 5.05/5.80; prothoracic length, 1.30/1.55; anterior prothoracic width, 0.80/1.00; posterior prothoracic width, 0.75/0.85; maximum prothoracic width, 0.90/1.15; humeral width, 1.10/1.40; elytral length, 2.95/3.60.

**Type material.** Holotype male from ECUADOR, PICHINCHA: Santo Domingo, Tandapi, 15–17.XII.2004, Z. Mráček leg. (TAMU, formerly DHCO). Paratype female, ECUADOR, PICHINCHA: Santo Domingo de los Colorados, V.1981, no collector indicated (MZSP). The paratype female has an additional label with the following information: “On *Prunus* sp. “Kapuli.” This tree is typical of high altitude and is introduced in this city.”

**Etymology.** Latin, “clavatus” (club-shaped); allusive to the shape of the antennomere III.

**Remarks.** *Pentanodes clavatus* **new species** is similar to *P. tropipennis* (Chemsak, 1997), but differs as follows: Antennomere III distinctly pedunculate-clavate in males (Fig. 6); pronotum mostly striate-alveolate (Fig. 6). In *P. tropipennis*, antennomere III is gradually widened from base to apex in males (Fig. 7), and the pronotum is finely densely longitudinally striate (Fig. 7). This new species differs from *P. nicaraguensis* Heffern, Botero and Santos-Silva, 2020 (known only by the female holotype and two female paratypes), by the dorsal surface of the head without somewhat abundant whitish setae (present in *P. nicaraguensis*), pronotum mostly striate-alveolate (sculpturing distinctly finer and denser in *P. nicaraguensis*), scutellum distinctly smaller, 0.15 times as wide as the posterior width of the prothorax (wider, 0.25 times as wide as the posterior width of the prothorax in *P. nicaraguensis*), and elytral yellowish-white band arched (straight in *P. nicaraguensis*).



**Figures 23–33.** *Elytrimitatrix* spp. 23–29) *Elytrimitatrix* (*Grossifemora*) *dilatata*, holotype male: 23) Dorsal habitus; 24) Ventral habitus; 25) Lateral habitus; 26) Head frontal view; 27) Elytral sculpturing on middle; 28) Pubescence of ventrites; 29) Elytral margin. 30–33) *Elytrimitatrix* (*Grossifemora*) *irregularis* (Linsley, 1935): 30) Elytral sculpturing on middle, holotype male; 31) Holotype male, dorsal habitus; 32) Male, pubescence of ventrites; 33) Male, elytral margin.

***Pentanodes baldwini* Heffern, Botero and Santos-Silva, new species**

(Fig. 10–14)

**Description. Holotype male.** Integument mostly black; anteclypeus and labrum partially reddish brown; palpomeres, apex of scape, most of pedicel, about basal half of antennomere III, basal quarter of antennomeres IV–VI reddish brown; antennomeres VII–VIII orangish with brownish apex; antennomeres IX–XI dark brown. Elytra with transverse eburneous band before middle, starting close to epipleural margin, not reaching suture. Femora and tibiae dark brown; tarsomeres I–II dark reddish brown; tarsomeres III–V and claws dark orangish brown. Ventrites 4–5 dark brown.

**Head.** Frons coarsely alveolate-punctate; with minute, sparse whitish setae on wide central area, sparse, short, bristly yellowish-white setae close to eyes, and sparse, long, erect, thick yellowish setae interspersed toward antennal tubercles. Vertex, area behind antennae, and eyes coarsely rugose-punctate, roughness finer on posterocentral area of vertex; with sparse, short, decumbent whitish setae, absent on posterocentral area of vertex, one long, erect, thick yellowish seta on each side between antennal tubercles, and a few long, erect, thick, both yellowish-white and yellowish-brown setae interspersed on posterolateral region of vertex, behind antenna, and behind eye. Genae coarsely rugose-punctate toward ventral surface, finely rugose-punctate toward clypeus, except smooth apex; with sparse, short, erect, both yellowish and brownish setae, except glabrous smooth area. Gula almost smooth, glabrous close to prothorax, transversely striate, glabrous about central area, slightly depressed, striate-punctate, with sparse brownish pubescence and a few long, erect yellowish setae interspersed close to anterior margin. Maxillary palpomere IV and labial palpomere III securiform. Wide central area of postclypeus rugose-punctate, roughness and punctures finer than on frons; with sparse, short, decumbent yellowish-white setae, and one long, erect, thick yellowish seta on each side. Sides of postclypeus smooth, glabrous. Labrum glabrous close to anteclypeus, with sparse, erect, both short and long yellowish setae on wide central area, glabrous anteriorly. Anterior  $\frac{2}{3}$  of outer surface of mandibles coarsely rugose-punctate, with sparse, short, decumbent yellowish-white setae, and thick, long, erect yellowish-white setae interspersed (brownish basally on some setae); posterior third smooth, glabrous. Superior area of eyes projected upward, but not forming a distinct upper eye lobe; in frontal view, distance between eyes 0.6 times distance between outer margins of eyes. Antennae 1.7 times elytral length, surpassing elytral apex at base of antennomere XI. Scape subcylindrical; somewhat sparsely, finely punctate dorsally, except smooth apex, finely, transversely striate laterally and ventrally, with a few punctures interspersed laterally; with sparse, short, decumbent white setae dorsally, almost absent laterally and ventrally, and long, erect yellowish setae interspersed, erect setae more abundant dorsally. Pedicel with sparse, short, decumbent white setae, and long, erect yellowish setae interspersed. Antennomeres III–VI clavate, III more pedunculate-clavate; with somewhat abundant, short, decumbent white setae not obscuring integument, long, erect yellowish setae interspersed ventrally and apically, and short, erect yellowish-white setae interspersed dorsally. Antennomeres VII–XI with abundant white pubescence not obscuring integument, and short, erect setae of same color interspersed; antennomeres VII–VIII with long, erect yellowish setae on ventral apex. Antennal formula based on length of antennomere III: scape = 0.87; pedicel = 0.29; IV = 0.91; V = 1.04; VI = 0.96; VII = 0.62; VIII = 0.54; IX = 0.50; X = 0.41; XI = 0.56.

**Thorax.** Prothorax distinctly longer than wide; subparallel-sided on anterior half, distinctly constricted and narrowed on posterior half. Pronotum abundantly, coarsely, longitudinally rugose from near base to near apex, with sparse, coarse punctures interspersed; with a few short, decumbent yellowish-white setae on anterior  $\frac{5}{6}$ , sparse, long, erect yellowish-brown setae on anterior  $\frac{2}{3}$ , and somewhat abundant, decumbent whitish setae on posterior sixth. Sides of prothorax with sculpturing as on pronotum close to it, with a few coarse punctures on remaining surface; with sparse, short yellowish-white setae. Prosternum somewhat abundantly, coarsely punctate centrally close to procoxal cavities, sparsely, coarsely and shallowly punctate on remaining surface; with sparse, short, decumbent yellowish-white setae, more abundant on central area close to procoxal cavities, and sparse, long, erect yellowish setae. Prosternal process distinctly narrowed centrally, strongly widened on posterior third; narrowest area 0.11 times procoxal width; with sparse yellowish-white pubescence, more abundant on posterior third. Mesoventrite strongly, obliquely inclined from anterior third to mesoventral process; with a few short, decumbent, both whitish and yellowish setae centrally from base to posterior quarter, and abundant white pubescence not obscuring integument on remaining surface. Mesanepisternum and mesepimeron with abundant



**Figures 34–39.** *Novantinoe* spp. 34–38) *Novantinoe falsa*, holotype female: 34) Dorsal habitus; 35) Ventral habitus; 36) Lateral habitus; 37) Head, frontal view; 38) Prosternal and mesoventral processes. 39) *Novantinoe fabiolae* Botero, Heffern and Santos-Silva, 2018, holotype female, prosternal and mesoventral processes.

white pubescence partially obscuring integument. Mesoventral process with abundant white pubescence not obscuring integument, and a few long, erect yellowish-white setae interspersed; apex widened, bilobed, strongly emarginate centrally; narrowest area 0.4 times mesocoxal width. Metanepisternum almost glabrous, except apex with dense white pubescence. Metaventricle with a few short, decumbent yellowish setae and a few short, erect yellowish-brown setae, except dense white pubescence sides of posterior area. Scutellum with sparse, minute yellowish-brown setae. **Elytra.** Gradually, slightly inclined from base to eburneous macula, then convex toward apex; centrobasal crest absent; somewhat abundantly, coarsely punctate on anterior third, punctures gradually finer, sparser on posterior  $\frac{2}{3}$ , with minute punctures interspersed near eburneous macula; with sparse, long, erect yellowish-brown setae, more abundant close to apex. **Legs.** Femora with sparse, long, erect yellowish-brown setae. Tibiae with sparse, short, decumbent yellowish-white setae, except abundant, bristly, yellowish-brown setae on ventral surface of protibiae, yellowish-brown setae gradually denser toward apex, and sparse, decumbent yellowish-brown setae on posterior third of ventral surface of meso- and metatibiae; with sparse, long, erect,

yellowish-brown setae interspersed dorsally and laterally on pro- and mesotibiae, throughout on metatibiae. Metatarsomere I slightly longer than II–III together.

**Abdomen.** Ventrites with sparse, decumbent yellowish-white setae laterally, sparser centrally, and sparse, long, erect, yellowish-brown setae interspersed laterally.

**Dimensions in mm.** Total length, 4.05; prothoracic length, 1.10; anterior prothoracic width, 0.70; posterior prothoracic width, 0.60; maximum prothoracic width, 0.75; humeral width, 0.90; elytral length, 2.55.

**Type material.** Holotype male from PANAMA, CHIRIQUI: Boquete, Volcancito Rd., 1300 m, 8°46'31"N 82°26'52"W, 15.VI.2020, malaise, B. B. Baldwin leg. (TAMU, formerly DHCO).

**Etymology.** The new species is dedicated to Brian Baldwin, friend of the first author and collector of the holotype.

**Remarks.** *Pentanodes baldwini* new species is similar to *P. xanthocollis* (Chemsak, 1977) (see photographs on Bezark 2022a), but differs as follows: head and prothorax black; antennomere III almost pedunculate-clavate; pronotum coarsely longitudinally striate; elytral centrobasal crest absent; elytral eburneous macula not reaching suture. In *P. xanthocollis*, the head and prothorax are orangish, antennomere III gradually widened from base to apex, pronotum finely longitudinally striate, elytral centrobasal crest present, and the elytral eburneous macula reaching suture. *Pentanodes baldwini* new species differs from *P. clavatus* new species by the scape shorter and wider (longer and slender in *P. clavatus*), absence of the centrobasal crest on the elytra (present in *P. clavatus*), and elytral punctures more abundant, especially on basal half (sparser in *P. clavatus*).

### LAMIINAE Latreille, 1825 ACROCININI Swainson, 1840

#### *Oreodera* Audinet-Serville, 1835

**Remarks.** According to Souza et al. (2020): “According to the parsimony analysis, the monophyly of Acrocini, including *Acrocinus*, *Macropophora* and *Oreodera*, is supported by six synapomorphies: prothorax with a conspicuous suture surrounding the lateral tubercle ...; pronotum with linear coarse punctuation at the posterior margin ...; protibia cylindrical ...; protibia with a projection near sulcus at inner face ...; protibia without a pair of apical spurs at inner margin ...; and protarsomere II longer than wide ...,” and “Among the synapomorphies for Acrocini, containing *Acrocinus*, *Macropophora* and *Oreodera*, the protibia without spurs is the most remarkable diagnostic character of the tribe.” Although the prothoracic suture surrounding the lateral tubercle is conspicuous in many species of *Oreodera*, it is slightly distinct, as reported by Souza et al. (2020), or even entirely absent in some species. Furthermore, the apex of the protibiae has a short but distinct spur in some species of *Oreodera* (Fig. 18–19); however we did not find any species of *Oreodera* with two spurs on the apex of the protibiae, as occurs in all Acanthoderini examined by us. These differences, which do not fully agree with the concept of Acrocini by Souza et al. (2020), may indicate that they are variable in Acanthoderini. However, a more detailed study of Acanthoderini will be needed to establish whether *Oreodera* really belongs to Acrocini, in this case with corrections on the concept of this tribe, or if, in fact, that the features pointed out are just extreme variations on Acanthoderini, with intermediate conditions of the features in some genera, especially in *Oreodera*.

#### *Oreodera noguerai* McCarty, 2001

(Fig. 17–18)

*Oreodera noguerai* McCarty 2001: 24.

**Remarks.** This species was described based on a single female from Mexico (Mexico). Until now, it was known only by the holotype (Monné 2022b; Tavakilian and Chevillotte 2022).

The sulcus surrounding the lateral tubercles of the prothorax is absent in this species, and the protibiae have a short spur apically (Fig. 18).

**Material examined.** MEXICO, JALISCO (new state record): Sierra de Talpa, 1655 m, 1 female, 17–18.VII.2010, G. Nogueira leg. (DHCO).

**APOMECCYNINI Thomson, 1860*****Adetus* LeConte, 1852*****Adetus croton* Heffern, Santos-Silva and Botero, 2019**

(Fig. 20)

*Adetus croton* Heffern, Santos-Silva and Botero 2019: 565.

**Remarks.** *Adetus croton* was recently described based on specimens from the United States of America (extreme southern Texas), Mexico (Chiapas, Jalisco, Michoacán, Nuevo León, Quintana Roo, Sonora, Tamaulipas, Yucatán), and Honduras (Francisco Morazán) (Monné 2022b; Tavakilian and Chevillotte 2022).

**Material examined.** NICARAGUA (**new country record**), GRANADA: Domitila, 1 male, 1 female, 17.V.2012, D.J. Heffern leg. (DHCO); Res. Silv. Domitila [Reserva Privada Domitila], 11.708969°N 85.953733°W, 1 male, 2–5.VI.2013, B. Raber, D. Heffern and E. van den Berghe leg. (DHCO).

**HEMILOPHINI Thomson, 1868*****Icimauna* Martins and Galileo, 1991*****Icimauna sarauaia* Martins and Galileo, 1991**

(Fig. 21)

*Icimauna sarauaia* Martins and Galileo 1991: 820.

**Remarks.** This species was described based on a single male from Bolivia. Currently, it is known from Bolivia (Cochabamba, Santa Cruz) and Brazil (Rondônia) (Monné 2022b; Tavakilian and Chevillotte 2022).

**Material examined.** PERU (**new country record**), CUSCO: Santa Isabel, Valle de Cosñipata, 5525 ft., 1 female, 13.XII.1951, F. Woytkowski leg. (DHCO).

***Phoebe* Audinet-Serville, 1835*****Phoebe mexicana* Bates, 1881**

(Fig. 22)

*Phoebe mexicana* Bates 1881: 215.

**Remarks.** This species was described based on a single female from Mexico (Veracruz). Currently, it is known from Mexico (Veracruz, Jalisco), Guatemala, Honduras, Nicaragua, and Costa Rica (Monné 2022b; Tavakilian and Chevillotte 2022).

**Material examined.** MEXICO, CHIAPAS (**new state record**): El Aguacero, 680 m, 1 female, 17–18.VI.1990, W.B. Warner leg. (DHCO).

**DISTENIIDAE Thomson, 1861*****Elytrimitatrix* (*Grossifemora*) Santos-Silva and Hovore, 2007*****Elytrimitatrix* (*Grossifemora*) *dilatata* Heffern, Botero and Santos-Silva, new species**

(Fig. 23–29)

**Description. Holotype male.** Head capsule mostly black; apical region of antennal tubercles brown; postero-central region of gumentum yellowish-brown. Posterior area of anteclypeus dark brown, anterior area reddish brown. Labrum reddish brown. Basal  $\frac{2}{3}$  of mandibles mostly reddish brown and posterior third blackish. Mentum dark brown posteriorly, light reddish brown anteriorly; ligula pale yellowish-brown, except reddish brown basal area; maxillary and labial palpomeres I reddish brown; maxillary and labial palpomeres II, maxillary palpomere IV, and labial palpomere III dark brown, except reddish brown apex. Scape and pedicel reddish brown,

apical area of scape slightly darker; antennomeres III–X reddish brown, except dark brown apex, dark area gradually longer toward X; antennomere XI dark brown centrally, reddish brown on remaining surface. Pronotum and sides of prothorax blackish on wide central area, dark reddish brown anteriorly and posteriorly. Prosternum blackish about posterior half, reddish brown on remaining surface; anterior  $\frac{3}{4}$  of prosternal process dark brown laterally, dark reddish brown centrally, and posterior quarter orangish brown. Ventral surface of meso- and meta-thorax almost black, except mesoventral process dark reddish brown basally, gradually lighter toward apex. Elytra blackish on circum-scutellar region punctures on anterior  $\frac{3}{4}$ , dark brown on narrow longitudinal bands including part of rows of punctures on anterior  $\frac{3}{4}$ , dark brown close to epipleural margin on anterior quarter, reddish brown on remaining anterior quarter, with oblique dark brown band on beginning of posterior third, reaching epipleural margin, not reaching suture, orangish brown on remaining surface. Trochanters, base of femora, and wide central area of tibiae orangish brown; remaining surface of femora and tibiae dark brown; tarsi mostly dark brown. Ventrites mostly dark reddish brown.

**Head.** Frons smooth, glabrous centrally, finely, somewhat abundantly punctate, with decumbent yellowish-white pubescence not obscuring integument laterally. Antennal tubercles sparsely, finely punctate, except smooth apex; with pale-yellow pubescence not obscuring integument, slightly more abundant posteriorly, except glabrous apex. Vertex sparsely, finely punctate, except smooth area close to median groove; with abundant, decumbent yellowish-white pubescence not obscuring integument, except glabrous area close to median groove, and sparse, long, erect setae of same color interspersed. Area behind upper eye lobes abundantly, finely punctate close to eye, with sparse, fine punctures close to prothorax toward vertex, smooth on remaining surface close to vertex, abundantly, coarsely punctate on remaining surface toward lower eye lobe; with somewhat abundant, decumbent yellowish-white pubescence close to eye, and a few long, erect setae of same color interspersed, glabrous on remaining surface. Area behind lower eye lobes abundantly, coarsely punctate close to upper eye lobe, sparsely, finely punctate toward ventral surface; with short, bristly yellowish-white setae and a few long, erect setae of same color close to eye, glabrous on remaining surface. Genae sparsely, finely punctate close to eye, finely striate-punctate on remaining surface, except smooth apex; with yellowish-white pubescence not obscuring integument, except glabrous smooth area. Gulamentum with a few fine punctures, glabrous on posterior half; sparsely, finely punctate, with short, decumbent yellowish-white setae and a few long, erect setae of same color interspersed between eyes; intermaxillary process slightly depressed, somewhat coarsely, rugose-punctate, with yellowish-white pubescence not obscuring integument, and a few long, erect setae of same color interspersed. Wide central area of postclypeus sparsely, finely punctate, with abundant, short, bristly yellowish-white setae not obscuring integument, and long, erect setae of same color interspersed; sides of postclypeus smooth, glabrous. Labrum sparsely, finely punctate; with somewhat sparse, erect, both short and long yellowish-white setae on wide central area of posterior  $\frac{3}{4}$ , and dense yellowish-brown pubescence on remaining surface. Maxillary palpomere IV subcampaniform; labial palpomere III slightly widened from basal third, truncate apically. Distance between upper eye lobes 0.27 times distance between outer margins of eyes; in ventral view, distance between lower eye lobes 0.63 times distance between outer margins of eyes. Antennae 1.9 times elytral length, reaching elytral apex at posterior quarter of antennomere VIII. Scape arched basally; abundantly, finely punctate; with abundant yellowish pubescence not obscuring integument, and long, decumbent setae of same color apically interspersed dorsally and laterally, and somewhat abundant, long, decumbent yellowish setae ventrally, except glabrous basal area, and a few long, erect yellowish setae interspersed. Pedicel with abundant, long, yellowish setae directed backward, not obscuring integument. Antennomeres III–XI with abundant yellowish pubescence partially obscuring integument dorsally and laterally on light area, slightly sparser yellowish-brown on dark area, except apex of III–IX with both short and long, yellowish setae; ventral surface of III–XI with very long brownish setae. Antennal formula based on length of antennomere III: scape = 0.98; pedicel = 0.09; IV = 0.96; V = 0.94; VI = 0.92; VII = 0.90; VIII = 0.88; IX = 0.86; X = 0.77; XI = 0.75.

**Thorax.** Prothorax, including lateral tubercles, wider than long; lateral tubercles large, conical, located medially, with acute apex directed upward; anterior constriction well-marked. Pronotum with one large, somewhat elevated gibbosity on each side, between anterior constriction and posterior fifth, and longitudinal gibbosity centrally, between lateral gibbosities, more distinct from about middle to posterior fifth; posterior sixth transversely tumid before posterior sulcus; anterior fifth somewhat abundantly and coarsely punctate, posterior sixth sparsely, finely punctate, area between gibbosities sparsely, finely punctate anteriorly, punctures slightly

more abundant, coarser posteriorly, sides abundantly, coarsely, shallowly punctate, smooth on gibbosities; with somewhat abundant, both short and long, decumbent yellowish-white setae not obscuring integument, denser laterally, except glabrous gibbosities. Sides of prothorax sparsely, finely punctate on area close to prothorax, somewhat striate-punctate posteriorly, smooth close to prosternum; with somewhat abundant, both short and long, decumbent yellowish-white setae not obscuring integument close to pronotum, except glabrous ventral surface of lateral tubercle, glabrous close to prosternum. Posterior  $\frac{2}{3}$  of prosternum mostly smooth, with a few short, decumbent yellowish-white setae laterally, with narrow yellowish-white pubescent band close to procoxal cavities, glabrous on remaining surface; anterior third slightly rugose-punctate, with somewhat sparse, long, erect yellowish-white setae. Prosternal process with abundant, decumbent yellowish-white setae partially obscuring integument; narrowest area 0.12 times procoxal width. Mesoventrite with abundant, decumbent yellowish-white setae not obscuring integument, and a few long, erect setae of same color interspersed centrally, almost glabrous laterally; mesanepisternum, mesepimeron, and mesoventral process with pubescence as on central area of mesoventrite; apex of mesoventral process strongly emarginate centrally; apex of mesoventral process 0.64 times mesocoxal width. Metanepisternum with abundant, decumbent yellowish-white setae not obscuring integument. Metaventrite densely, somewhat coarsely punctate laterally, somewhat transversely striate anterocentrally, slightly sparsely, finely punctate on remaining central area; with abundant, decumbent yellowish-white setae not obscuring integument, setae denser laterally. Scutellum with abundant yellowish pubescence not obscuring integument, except glabrous longitudinal area centrally. **Elytra.** Somewhat abundant, coarsely punctate, punctures gradually sparser toward apex, and forming a row dorsolaterally, from base to posterior third; with abundant, decumbent yellowish-white setae not obscuring integument, and long, subdecumbent setae of same color interspersed; apex narrowly individually rounded. **Legs.** Femora with abundant, decumbent yellowish-white setae not obscuring integument, and long, erect setae of same color interspersed. Tibiae with moderately sparse, decumbent yellowish-white setae, and long, erect setae of same color interspersed, except ventral apical area with denser, bristly yellowish-brown setae. Metatarsomere I as long as II–III together.

**Abdomen.** Ventrites with abundant, decumbent yellowish setae not obscuring integument, setae denser laterally, except glabrous apex of ventrites 1–4, and long, erect setae of same color interspersed; apex of ventrite 5 concave.

**Dimensions (mm).** Total length, 15.3; prothoracic length, 2.1; anterior prothoracic width, 1.9; posterior prothoracic width, 2.0; maximum prothoracic width, 3.0; humeral width, 3.4; elytral length, 10.8.

**Type material.** Holotype male from MEXICO, OAXACA: El Vidrio, 1925 m, 16°13'02"N 97°08'52"W, 15.VI.2016, Cunningham and Nogueira leg. (CNIN).

**Etymology.** Latin, “dilatatus” (dilated); allusive to the width of the upper eye lobes.

**Remarks.** *Elytrimitatrix (Grossifemora) dilatata* new species is similar to *E. (G.) irregularis* (Linsley, 1935) (Fig. 30–33) but differs as follows: elytra with long and decumbent setae (Fig. 27); epipleural margin without long and erect setae (Fig. 29); elytral punctures finer and more abundant (Fig. 23, 27); and ventrites with abundant pubescence (Fig. 24, 28–29). In *E. (G.) irregularis*, the elytra have long and erect setae (Fig. 30), epipleural margin with long and erect setae (Fig. 33), elytral punctures are coarser and sparser (Fig. 30–31), and ventrites without abundant pubescence (Fig. 32). It is also similar to *E. (G.) lineatopora* (Bates, 1880) (see photographs on Bezark 2022a), but differs especially by the upper eye lobes wider and not narrowed on inner margin (slender and distinctly narrowed on inner margin in *E. (G.) lineatopora*). *Elytrimitatrix (Grossifemora) dilatata* new species differs from *E. (G.) curoei* Santos-Silva and Le Tirant, 2016 by the profemora without spiniform projections ventrally (present in *E. (G.) curoei*), apex of mesoventral process not rounded and not projecting to the sides (rounded and projected to the sides in *E. (G.) curoei*), and elytra with long and decumbent setae dorsally (absent in *E. (G.) curoei*).

### ***Novantinoe* Santos-Silva and Hovore, 2007**

#### ***Novantinoe falsa* Heffern, Botero and Santos-Silva, new species**

(Fig. 34–38)

**Description. Holotype female.** Head capsule mostly dark brown; antennal tubercles and area between them, and posterior area of gumentum reddish brown. Anteclypeus and labrum yellowish-brown. Ventral mouthparts



reddish brown. Antennae reddish brown. Pronotum dark brown, with some areas more dark reddish brown; sides of prothorax dark brown, except reddish-brown area close to anterior margin; prosternum dark brown on posterior half, reddish brown on anterior half; prosternal process dark brown, except reddish-brown apex. Ventral surface of mesothorax dark brown, except mesoventral process mostly dark reddish brown. Metanepisternum dark brown; metaventrite dark reddish brown (darker, depending on light intensity), except dark brown narrow area close to metanepisternum. Elytra brownish, except dark brown punctures. Femora reddish brown, except basal area more yellowish-brown. Tibiae and tarsi mostly yellowish-brown. Ventrites mostly dark reddish brown, with yellowish-brown and dark brown irregular areas interspersed.

**Head.** Frons sparsely, finely punctate centrally, punctures denser laterally; with yellowish pubescence not obscuring integument, absent centrally. Area between antennal tubercles almost smooth and glabrous; remaining surface of vertex abundantly, finely punctate, except smooth central area located from middle level of upper eye lobes and prothorax, and smooth area close to inner margin of eyes; with abundant pale-yellow, pubescence partially obscuring integument on some areas, except glabrous smooth areas, and a few long, erect pale-yellow setae interspersed. Antennal tubercles sparsely, finely punctate, except smooth apex; with pale-yellow pubescence not obscuring integument, except glabrous apex. Area behind upper eye lobes abundantly, finely punctate, punctures slightly coarser than on vertex; with abundant pale-yellow pubescence and a few long, erect setae of same color interspersed close to eye, glabrous toward prothorax. Area behind lower eye lobes tumid, somewhat transversely rugose close to eye, finely, somewhat abundantly punctate close to prothorax, punctures gradually finer and sparser toward ventral surface; with abundant pale-yellow pubescence close to eye, not obscuring integument, glabrous on remaining surface. Genae finely punctate, somewhat rugose on some areas, except smooth apex; with abundant pale-yellow pubescence not obscuring integument, except glabrous smooth apex. Gulamentum smooth, glabrous on posterior half; anterior half strongly, transversely concave close to intermaxillary process, sparsely, minutely punctate, with a few short, decumbent pale-yellow setae on wide center of area after concavity, transversely rugose-punctate, with moderately abundant pale-yellow setae on sides of this area, sparsely, minutely punctate, with somewhat abundant, decumbent pale-yellow setae and a few long, erect setae of same color interspersed on intermaxillary process and concavity. Wide central area of postclypeus abundantly, finely punctate, with abundant, bristly yellow setae partially obscuring integument. Sides of postclypeus smooth, glabrous. Anteclypeus abundantly, finely punctate close to postclypeus, smooth close to labrum; with abundant, short, decumbent yellow setae not obscuring integument, and long setae of same color directed forward interspersed close to postclypeus, glabrous close to labrum. Labrum abundantly, finely punctate close to anteclypeus, punctures sparser toward anterior margin; with somewhat abundant, short, decumbent yellowish-brown setae not obscuring integument, and long, erect setae of same color interspersed, erect setae absent close to anteclypeus; anterior margin with short fringe of yellowish-brown setae laterally, and golden fringe centrally. Maxillary palpomere IV gradually widened toward obliquely truncate apex; labial palpomere III distinctly widened from basal third, then subparallel-sided toward rounded apex. Distance between upper eye lobes 0.35 times distance between outer margins of eyes; in ventral view, distance between lower eye lobes 0.73 times distance between outer margins of eyes. Antennae 1.9 times elytral length, reaching elytral apex slightly after middle of antennomere VIII. Scape abundantly, finely punctate; with abundant, decumbent pale-yellow setae not obscuring integument, and a few long, erect setae of same color interspersed. Pedicel abundantly, finely punctate on anterior third, punctures sparser on posterior  $\frac{2}{3}$ ; glabrous on anterior third, with somewhat abundant, both short and long pale-yellow setae on posterior third. Antennomeres III–XI with abundant, short, decumbent pale-yellow setae not obscuring integument dorsally and laterally, setae gradually denser toward XI; ventral surface with very long yellowish-brown setae; apex of antennomeres III–VIII with long pale-yellow setae. Antennal formula based on length of antennomere III: scape = 0.86; pedicel = 0.09; IV = 0.98; V = 0.93; VI = 0.86; VII = 0.80; VIII = 0.75; IX = 0.71; X = 0.68; XI = 0.62.

**Thorax.** Prothorax, including lateral tubercles, wider than long; lateral tubercles large, conical, located medially, with blunt apex; anterior constriction well-marked. Pronotum with five tubercles, one more elevated, on each side of anterior half, one less elevated and located more internally than anterior ones, on each side of posterior half, another longitudinal, subelliptical, slightly elevated, located centrally between lateral tubercles; somewhat abundantly, finely, shallowly punctate, punctures absent on posterolateral and central tubercles and denser laterally; with abundant pale-yellow pubescence partially obscuring integument, except glabrous tubercles and narrow,

longitudinal center of anterior third and center of posterior fifth. Sides of prothorax almost smooth on wide central area, sparsely, finely punctate close to posterior margin, slightly striate close to anterior margin, this last area gradually widened toward prosternum; with abundant pale-yellow pubescence partially obscuring integument on wide central area, sparser close to anterior and posterior margins. Prosternum sparsely, minutely punctate, punctures almost absent on some areas, transversely striate about middle; with abundant yellowish-white pubescence laterally and close to procoxal cavities, pubescence slightly sparser laterally toward anterior margin, with sparse, bristly golden pubescence and a few long, erect setae of same color on center of anterior half, glabrous on remaining surface. Prosternal process with abundant yellowish-white pubescence not obscuring integument, except glabrous apex; narrowest area 0.26 times procoxal width. Ventral surface of meso- and metathorax with abundant yellowish pubescence, pubescence distinctly denser laterally, slightly sparser on center of mesoventrite and on mesoventral process, almost absent on most of central area of metaventrite. Scutellum with abundant yellowish-white pubescence partially obscuring integument, pubescence yellower on margins. **Elytra.** With six rows of coarse punctures, punctures close to epipleural margin finer, rows not reaching posterior third, the outermost is longest; with abundant yellowish pubescence not obscuring integument; apex strongly narrowed toward sutural angle. **Legs.** Femora with abundant yellowish-white pubescence not obscuring integument, except glabrous anterior  $\frac{2}{3}$  of inner surface. Tibiae with yellowish-white pubescence not obscuring integument, except dense, bristly yellowish-brown pubescence on ventral surface of protibiae, pubescence denser toward apex, yellowish-brown, bristly pubescence on dorsal and ventral surface of mesotibiae, and yellowish-brown, bristly pubescence on ventral surface of posterior half of metatibiae, pubescence denser toward apex. Metatarsomere I as long as II–III together.

**Abdomen.** Ventrites with dense yellowish-white pubescence, partially obscuring integument laterally, slightly sparser centrally, except glabrous base and apex of ventrites 1–4. Apex of ventrite 5 subrounded.

**Dimensions (mm).** Total length, 22.5; prothoracic length, 3.0; anterior prothoracic width, 2.9; posterior prothoracic width, 3.0; maximum prothoracic width, 4.1; humeral width, 4.7; elytral length, 15.0.

**Type material.** Holotype male from MEXICO, VERACRUZ: 2 km SW Calchualco, 19°07'00"N 97°04'46"W, 4.VI.2016, Cunningham and Nogueira leg. (CNIN).

**Etymology.** Latin, “falsus” (false); allusive to the general appearance as in the species of the genus *Elytrimitatrix*.

**Remarks.** *Novantinoe falsa* is similar to *N. noguerai* Santos-Silva and Le Tirant, 2016 (see photographs on Bezark 2022a), but differs as follows: anterolateral tubercles of the pronotum more elevated and slightly inclined toward outside; elytral punctures finer; elytral apex not spiniform; and profemora without spiniform projections ventrally. In *N. noguerai*, anterolateral tubercles of the pronotum less elevated and not inclined toward outside, the elytral punctures are coarser (about twice diameter of punctures in *N. falsa*), elytral apex spiniform, and profemora with spiniform projections ventrally. It differs from *N. fabiolae* Botero, Heffern and Santos-Silva, 2018 (see photographs on Bezark 2022a), especially by the wider prosternal process (Fig. 38), with its narrowest area about as wide as the diameter of antennomere III (narrowest area distinctly narrower (Fig. 39) than the diameter of antennomere III in *N. fabiolae*), pronotum slightly contrasting in color with elytra (strongly contrasting in *N. fabiolae*), elytra without dark longitudinal band along suture (present in *N. fabiolae*), and scutellum about as long as wide (longer than wide in *N. fabiolae*). It is also similar to *N. hefferni* Santos-Silva and Hovore, 2007 (see photographs on Bezark 2022a), but differs by the wider prosternal process (similar to *N. fabiolae* in *N. hefferni*), pronotum slightly contrasting in color with elytra (strongly contrasting in *N. hefferni*), and elytra without dark sutural band (present in *N. hefferni*). The new species differs from *N. rufa* (Villiers, 1959) (see photograph on Bezark 2022a), by the scape shorter and wider, maximum diameter about 2.5 times diameter of antennomere III (scape slender and longer, maximum diameter shorter than twice diameter of antennomere III in *N. rufa*), and by the elytra not spiniform at outer angle (spiniform in *N. rufa*).

## Acknowledgments

For providing specimens for study, the first author would like to thank Brian Baldwin (Boquete, Panama), Richard Cunningham (Show Low, Arizona, USA), and Guillermo Nogueira (Zapopan, Jalisco, Mexico). We express our most sincere thanks to Larry G. Bezark and Robert Androw for their prior review of the manuscript.

## Literature Cited

- Bates HW. 1881.** Longicornia, Fam. Cerambycidae [continuation]. p. 153–224. In: Godman FD, Salvin O (eds.). *Biologia Centrali-Americana, Insecta, Coleoptera*. Vol. 5. Taylor and Francis; London. xii + 525 p.
- Bates HW. 1885.** Supplement to Longicornia. p. 249–436. In: Godman FD, Salvin O (eds.). *Biologia Centrali-Americana, Insecta, Coleoptera*. Vol. 5. Taylor and Francis; London. xii + 525 p.
- Bezark LG. 2022a.** A photographic Catalog of the Cerambycidae of the World. *New World Cerambycidae Catalog*. Available at <http://bezbycids.com/byciddb/wdefault.asp?w=n/> (Last accessed 29 July 2022.)
- Bezark LG. 2022b.** Checklist of the Oxypeltidae, Vesperidae, Disteniidae and Cerambycidae, (Coleoptera) of the Western Hemisphere. 2021 Edition (updated through 31 December 2020). Available at <http://bezbycids.com/byciddb/wdefault.asp?w=n/> (Last accessed 29 July 2022.)
- Giesbert EF, Chemsak, JA. 1997.** A review of the genus *Eudercus* LeConte (Coleoptera, Cerambycidae, Tillomorhini). *Proceedings of the California Academy of Sciences* 49(8): 211–286.
- Heffern D, Santos-Silva A, Botero JP. 2019.** A new genus and two new species of Apomecynini, a new species of Desmiphorini, and new records in Lamiinae and Disteniidae (Coleoptera). *Zootaxa* 4691(5): 561–574.
- Martins UR, Galileo MHM. 1991.** O gênero *Tyrinthia* Bates, 1866 e gêneros afins (Coleoptera, Cerambycidae, Lamiinae, Hemilophini). *Revista Brasileira de Entomologia* 35(4): 813–824.
- McCarty JD. 2001.** A review of the Mexican species of *Oreodera* Audinet-Serville (Coleoptera, Cerambycidae). *Occasional Papers of the Consortium Coleopterorum* 4(1): 13–34.
- Monné MA. 2022a.** Catalogue of the Cerambycidae (Coleoptera) of the Neotropical region. Part I. Subfamily Cerambycinae. Available at <https://cerambycids.com/catalog/> (Last accessed 29 July 2022.)
- Monné MA. 2022b.** Catalogue of the Cerambycidae (Coleoptera) of the Neotropical region. Part II. Subfamily Lamiinae. Available at <https://cerambycids.com/catalog/> (Last accessed 29 July 2022.)
- Souza DS, Sepúlveda TA, Marinoni L, Monné ML. 2020.** Phylogenetic analyses provide new insights into systematics of the longhorned beetle tribe Acrocinini (Coleoptera: Cerambycidae: Lamiinae). *Arthropod Systematics et Phylogeny* 78(1): 17–27.
- Tavakilian GL, Chevillotte H. 2022.** Titan: base de données internationales sur les Cerambycidae ou Longicornes. Available at <http://titan.gbif.fr/> (Last accessed 29 July 2022.)

Received August 25, 2022; accepted December 7, 2022.

Review editor Patrick Gorrington.

