INSECTA TUNDI A Journal of World Insect Systematics

0391

A new species of Elytrimitatrix (Grossifemora) Santos-Silva and Hovore from Peru (Coleoptera, Cerambycidae, Disteniinae)

> Stéphane Le Tirant Insectarium de Montréal 4581 rue Sherbrooke est Montréal, Québec, Canada

> > Antonio Santos-Silva Museu de Zoologia Universidade de São Paulo São Paulo, São Paulo, Brazil

Date of Issue: October 10, 2014

Stéphane Le Tirant and Antonio Santos-Silva

A new species of *Elytrimitatrix* (*Grossifemora*) Santos-Silva and Hovore from Peru (Coleoptera, Cerambycidae, Disteniinae)

Insecta Mundi 0391: 1–5

ZooBank Registered: urn:lsid:zoobank.org;pub:B3DF2B14-8F9B-40ED-B050-D68FD82874CB

Published in 2014 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, CAB Abstracts, etc. 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.

Chief Editor: Paul E. Skelley, e-mail: insectamundi@gmail.com

Head Layout Editor: Eugenio H. Nearns

Editorial Board: J. H. Frank, M. J. Paulsen, Michael C. Thomas

Review Editors: Listed on the Insecta Mundi webpage

Manuscript Preparation Guidelines and Submission Requirements available on the Insecta Mundi webpage at: http://centerforsystematicentomology.org/insectamundi/

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

CSIRO, Canberra, ACT, Australia Museu de Zoologia, São Paulo, Brazil Agriculture and Agrifood Canada, Ottawa, ON, Canada The Natural History Museum, London, UK Muzeum i Instytut Zoologii PAN, Warsaw, Poland National Taiwan University, Taipei, Taiwan California Academy of Sciences, San Francisco, CA, USA Florida Department of Agriculture and Consumer Services, Gainesville, FL, USA

Field Museum of Natural History, Chicago, IL, USA

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, CDROM ISSN 1942-1362) in PDF format:

Printed CD or DVD mailed to all members at end of year. 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/bv-nc/3.0/

Layout Editor for this article: Eugenio H. Nearns



A new species of *Elytrimitatrix* (*Grossifemora*) Santos-Silva and Hovore from Peru (Coleoptera, Cerambycidae, Disteniinae)

Stéphane Le Tirant

Insectarium de Montréal 4581 rue Sherbrooke est Montréal, Québec, Canada sletirant@ville.montreal.qc.ca

Antonio Santos-Silva Museu de Zoologia Universidade de São Paulo São Paulo, São Paulo, Brazil toncriss@uol.com

Abstract. The first species of *Elytrimitatrix* Santos-Silva and Hovore is described from Peru: *E.* (*Grossifemora*) *charpentierae*. The **new species** is included in a known key to the species of the subgenera. A list of the species currently known in Peru is provided.

Key words. Disteniini, South America, Taxonomy.

Introduction

The Peruvian Cerambycidae fauna still surprises with the discovery of new species and new records for the country. Herein we describe a new species of *Elytrimitatrix* (*Grossifemora*), the first species of the genus in South America (Monné et al. 2012).

Santos-Silva and Hovore (2007) divided *Distenia* Lepeletier and Audinet-Serville, 1828 into five genera: *Hovorestenia* Santos-Silva, *Oculipetilus* Santos-Silva and Hovore, *Novantinoe* Santos-Silva and Hovore, *Elytrimitatrix* Santos-Silva and Hovore (with two subgenera), and *Distenia* (with two subgenera). *Elytrimitatrix* (*Grossifemora*) differs from *Elytrimitatrix* (*E.*) by having the metafemora enlarged, clavate or fusiform (cylindrical in the latter), and by the hind wings lacking a second anal cell (present in the latter). *Elytrimitatrix* (*Grossifemora*) differs from *Distenia* by having the femora (at least metafemora) clavate and without spines at apex, by the second segment of maxillary palpus distinctly longer than third, by the apex of fourth segment of maxillary palpus in males strongly enlarged towards apex, by the head not very elongate behind eyes, and by antennomere III which varies in length from shorter to slightly longer than the prothorax. In *Distenia* the femora are cylindrical or fusiform, usually with the meso- and metafemora having a long spine at the apex, the second segment of maxillary palpus usually shorter or as long as the third, the last segment of maxillary palpus in males not very enlarged towards the apex, the head usually distinctly elongated behind eyes, and antennomere III distinctly longer than the prothorax (when slightly longer, the meso- and metafemora are spiny at apex).

Elytrimitatrix (Grossifemora) includes 36 species known only from North (Mexico) and Central America (without records in West Indies). Currently, thirteen species of Disteniinae are recorded for Peru (69.2% known only from this country) (Monné et al. 2012; Audureau 2014; Le Tirant and Santos-Silva 2014):

Disteniini

- 1. Abauba flavipes (Villiers, 1958) Peru;
- 2. America amethystina (Villiers, 1958) Peru;
- 3. America hovorei (Santos-Silva, 2007) Peru;
- 4. America peruviana (Villiers, 1958) Peru;
- 5. America thomasi (Hovore and Santos-Silva, 2007) Peru;
- 6. Cupecuara argodi (Belon, 1896) Peru, Bolivia;

- 7. Cupecuara santossilvai Audureau, 2014 Peru;
- 8. Distenia (Basisvallis) carinata Villiers, 1959 Peru, Ecuador, Brazil (Mato Grosso);
- 9. Distenia (Distenia) suturalis Bates, 1870 Ecuador, Peru, French Guiana, Bolivia, Brazil (Amazonas, Pará, Rondônia);
- 10. Novantinoe iani Santos-Silva and Hovore, 2007 Peru;
- 11. Novantinoe peruviensis (Villiers, 1959) Ecuador, Colombia, Peru, Brazil (Amazonas, Rondônia);
- 12. Novantinoe tumidicollis (Villiers, 1959) Peru.

Heteropalpini

1. Pseudocometes harrisoni Le Tirant and Santos-Silva, 2014 – Peru.

Material and Methods

Photographs were taken with Canon EOS Rebel T3i DSLR camera, Canon MP-E 65mm f/2.8 1–5X macro lens, controlled by Zerene Stacker AutoMontage software.

The collection acronyms used in this study are as follows:

IMCQ — Insectarium de Montréal, Québec, Canada.

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

PDPC — Patrick Demez Private Collection, Spa, Belgium.

USNM — National Museum of Natural History, Washington, DC, USA.

Taxonomy

Elytrimitatrix (Grossifemora) charpentierae sp. nov.

(Figures 1-5)

Description (holotype male). Integument dark-brown, except for: basal half of antennomeres III—IX brown; labrum reddish-brown; parts of mandibles reddish-brown; gulamentum and maxilla brown (darker on some areas); epipleura reddish-brown; peduncle of femora yellowish-white; tibiae reddish-brown; tarsi brown.

Head. Frons and antennal tubercles fine, abundantly punctate; pubescence short, grayish-white, not obliterating integument. Coronal suture well-marked from clypeus to anterior edge of prothorax. Vertex fine, densely, confluently punctate; pubescence yellowish, short, distinctly not obliterating integument, with long, decumbent setae near base of antennal tubercles. Area behind upper eye lobes with sculpture as on vertex; pubescence less conspicuous than on vertex. Area behind lower eye lobes fine, moderately sparsely punctate close to eye, impunctate, very fine, transversely striate towards anterior edge of prothorax; area close to eye sparsely pubescent, with sparse, short setae (pubescence distinctly sparser towards gulamentum). Gulamentum shiny, with short and long, sparse setae on anterior half. Genae with sculpture and pubescence as on vertex. Distance between upper eye lobes equal to 0.3 times length of scape; distance between lower eye lobes equal to 0.5 times length of scape. Antennae as long as 2.3 times elytral length; reaching elytral apex at basal half of antennomere VII; scape fine, densely punctate; antennal formula based on antennomere III: scape = 0.87; pedicel = 0.13; IV = 0.97; V = 1.01; VI = 1.00; VII = 0.92; VIII = 0.83; IX = 0.73; X = 0.56; XI = 0.55.

Thorax. Prothorax distinctly constricted anteriorly and posteriorly; lateral tubercles large, acute at apex. Pronotum with two large gibbosities on each side of area between anterior and posterior constrictions (lateroanterior ones larger, more conspicuous); general surface of the area between anterior and posterior constrictions flat, mainly centrally; fine, densely punctate; pubescence yellowish, distinctly not obliterating integument; laterally, on anterior and posterior constrictions, some long yellowish setae. Prosternum microsculptured, very shortly pubescent around procoxal cavities, shiny, almost glabrous, fine, shallow, moderately sparsely punctate centrally and anteriorly. Prosternal process narrow, not reaching posterior edge of procoxae. Mesosternum, mesepisterna and mesepimera fine, densely punc-

tate (microsculpture-like); pubescence not obliterating integument, centrally with sparse, yellowish, long setae. Mesosternal process about as wide as one-third of mesocoxal cavity; pubescent, with long, sparse yellowish setae. Metasternum laterally microsculptured, pubescent (pubescence not obliterating integument), with long, sparse setae; centrally shiny, fine, moderately sparsely punctate, pubescence less distinct than laterally, setae longer, more abundant than laterally. Metepisterna with sculpture and pubescence as on lateral of metasternum. Scutellum sub-quadrate, pubescence not obliterating integument. Elytra. Microsculptured; each elytron with four rows of coarse punctures (punctures distinctly sparser towards apex); with silky, grayish-white (more yellowish depending on angle of incision of light) pubescence; with long, moderately abundant brown-yellowish setae; apex obliquely sub-truncate; lateral sides distinctly convergent from base to about middle, then sub-parallel to near apex.

Abdomen. Ventrites fine, densely punctate; pubescence grayish-white (more yellowish depending on angle of incision of light); apex of ventrite V truncate-emarginate. **Legs**. Pubescence on femora very short, distinctly not obliterating integument; profemora fusiform; meso- and metafemora clavate.

Female. Antennae as long as 2.1 times elytral length; reaching elytral apex at distal half of antennomere VII. Lateral sides of elytra slightly convergent from base to about middle. Apex of ventrite V rounded.

Variation. General integument brown; antennomeres entirely dark-brown; antennomeres brown only on basal third; mandibles entirely dark-brown; gulamentum dark-brown; epipleura yellowish-brown; parts of club of femora brown; elytra light-brown.

Type material. Holotype male from PERU, *Pasco*: Pozuzo, IV.2014, local collector (MZSP). Paratypes – 15 males, 9 females, same data as holotype (1 male, 1 female – MZSP; 1 male – USNM; 3 males, 3 females – IMCQ; 10 males, 5 females - PDPC).

Dimensions in mm (holotype/male/female). Total length, 7.70/7.90-9.10/8.40-9.50; length of prothorax at center, 1.20/1.40-1.45/1.30-1.45; anterior width of prothorax, 1.05/1.10-1.20/1.15-1.30; posterior width of prothorax, 1.00/1.05-1.15/1.15-1.25; largest width of prothorax, 1.45/1.50-1.65/1.60-1.75; humeral width, 1.60/1.65-1.80/1.75-2.00; elytral length, 5.50/5.60-6.30/6.00-6.60.

Etymology. This species is dedicated to Anne Charpentier, Director of the Montréal Insectarium, in appreciation for her unflagging support for the development of the scientific collection and the institution's research associates program.

Remarks. Elytrimitatrix (Grossifemora) charpentierae differs from E. (G.) guatemalana Santos-Silva and Hovore, 2008 as follows: central gibbosity on disc of pronotum absent; elytra unicolored; elytral apex obliquely sub-truncate. In E. (G.) guatemalana the central gibbosity on pronotum is well-marked, the elytra are distinctly bicolored, and the elytral apex is acute. It differs from E. (G.) irregularis (Linsley, 1935) by the absence of a pronotal central gibbosity (distinct in E. (G.) irregularis), and by the elytra and tibiae being unicolored (bicolored in E. (G.) irregularis). It can be separated from E. (G.) fuscula (Bates, 1885) mainly by having the elytral apex obliquely sub-truncate (acute in E. (G.) fuscula). It differs from E. (G.) clavata Santos-Silva and Hovore, 2008 by having the antennomeres mostly dark (reddish-brown in E. (G.) clavata), and by the elytra abundantly pubescent (not abundantly pubescent E. (G.) clavata). Elytrimitatrix (G.) charpentierae differs from E. (G.) lineatopora (Bates, 1880) mainly by the elytra single colored (bicolor in E. (G.) lineatopora).

Elytrimitatrix (*Grossifemora*) *charpentierae* can be included in the alternative of couplet "28", from Santos-Silva and Hovore (2008) (translated; modified):

28(27).	Elytra brown or dark-brown2	29'
	Elytra tawny or reddish	
29'(28)	. Elytra pubescent, with four rows of punctures. Peru	v.

Acknowledgments

The authors wish to thank our collaborator Patrick Demez for supplying us this new species. We express our sincere thanks to Steven W. Lingafelter (Systematic Entomology Laboratory, Plant Sciences Institute, Agriculture Research Service, U. S. Department of Agriculture, National Museum of Natural History, Washington, D.C.), and Maxim Larrivée (IMCQ) for corrections to the manuscript.

Literature Cited

- **Audureau, A. 2014.** Un nouveau Disteniini du Pérou (Coleoptera, Cerambycinae, Disteniinae). Les Cahiers Magellanes, NS 15: 48–50.
- Le Tirant, S., and A. Santos-Silva. 2014. A new species of Heteropalpini from Peru (Coleoptera: Cerambycidae: Disteniinae). Insecta Mundi 0351: 1–5.
- Monné, M. A., E. H. Nearns, S. C. Carbonel Carril, I. P. Swift, and M. L. Monné. 2012. Preliminary checklist of the Cerambycidae, Disteniidae, and Vesperidae (Coleoptera) of Peru. Insecta Mundi 0213: 1–48.
- Santos-Silva, A., and F. T. Hovore. 2007. Divisão do gênero *Distenia* Lepeletier & Audinet-Serville, notas sobre a venação alar em Disteniini, homonímias, sinonímia e redescrições (Coleoptera, Cerambycidae, Disteniinae). Papéis Avulsos de Zoologia 47(1): 1–29.
- Santos-Silva, A., and F. T. Hovore. 2008. Espécies de *Elytrimitatrix* (*Grossifemora*) Santos-Silva & Hovore. 2. Novas espécies e chave para o subgênero (Coleoptera, Cerambycidae, Disteniinae). Les Cahiers Magellanes 75: 1–25.

Received October 5, 2014; Accepted October 5, 2014. Review Editor Eugenio H. Nearns.



Figures 1–5. *Elytrimitatrix* (*Grossifemora*) *charpentierae*. **1**) Dorsal habitus, holotype male. **2**) Ventral habitus, holotype male. **3**) Lateral habitus, holotype male. **4**) Head, frontal view, holotype male. **5**) Head, frontal view, paratype female.