

New species of Desmiphorini (Coleoptera: Cerambycidae: Lamiinae) from the Reserva Biológica Alberto Manuel Brenes, Alajuela, San Ramón, Costa Rica

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Abstract

A new species of the genus *Esaguasu* Galileo and Martins, 2007, *Esaguasu brenensis* sp. nov. is described from the unique specimen collected during 2007 in the Reserva Biológica Alberto Manuel Brenes, San Ramón, Alajuela, Costa Rica.

Additional key words: description; neotropical; taxonomy.

Resumen

Nueva especie de Desmiphorini (Coleoptera: Cerambycidae: Lamiinae) de la Reserva Biológica Alberto Manuel Brenes de San Ramón, Alajuela, Costa Rica

Se presenta y describe una nueva especie del género *Esaguasu* Galileo & Martins, 2007, *Esaguasu brenensis* sp. nov., con el único espécimen colectado en marzo de 2007 en la Reserva Biológica Alberto Manuel Brenes, San Ramón, Alajuela, Costa Rica.

Palabras clave adicionales: descripción; neotropical; taxonomía.

Introduction

From 2003 at the *Reserva Biológica Alberto Manuel Brenes*, Costa Rica, an Entomological Biodiversity Project between the *Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria* (INIA, Spain) and the University of Costa Rica (UCR, Grecia, Costa Rica) has involved entomological explorations. Material of an unknown species belonging to the genus *Esaguasu* Galileo & Martins, 2007, has been collected.

The *Reserva Biológica Alberto Manuel Brenes* is a wild protected area created on 1 June 1975, in San Ramón and it is administrated by the University of Costa Rica. The reserve covers 7,800 ha, and 90% of it corresponds to the San Lorencito River Basin. The area is limited to the North by Arenal-Monteverde and the Cloud Forest Reserve; to the East and South by a

primary and secondary forest, and to the West by a forest of Cidral in the locality of Miramar (Salazar-Rodríguez, 2006). Few groups of insects have been studied in the Reserve. Salazar-Rodríguez (2007) mentioned the papers published on Hemiptera: Homoptera, Hymenoptera (Apidae), Lepidoptera, Odonata, Trichoptera, and Coleoptera (Scarabaeidae). Barranco (2010) approached the Orthoptera (Anostomatidae and Tettigoniidae). The fauna from Costa Rica is still poorly known and this work is an important contribution to the knowledge of the biodiversity of Central America.

The only one species of the genus *Esaguasu*, *E. ocellaris* Galileo & Martins, 2007, come from Colombia (*Parque Natural Nacional Amacayacu*, Mata Mata, 3° 23' S, 70° 6' W, 150 m). It is characterized by antennomeres III-VIII with dense hairs fringe on the inferior edge; V and VI with sparse hairs fringe on the inferior edge; prothorax wider than long, with a post-medial lateral spine at each side; a mesosternal process with tubercle; an elytra with erect and long hairs and

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Received: 07-06-10; Accepted: 04-11-10.

uneven areas of dense pubescence; and some elytral apices with an external long spine (Galileo and Martins, 2007).

The objective of this work was to describe and illustrate a new species of *Esaguasu* and to compare it with type-species, *E. ocellaris*, also illustrated.

Material and methods

The specimen was obtained from the Reserva Biológica Alberto Manuel Brenes, and was collected in a crack in the bottom of the terrace roof of the building of the Station, where it was probably attracted to incandescent lights of the room. The insect collected has been deposited at *Museo de Insectos* of the University of Costa Rica (UCR), San José, Costa Rica.

Results

Systematics

Esaguasu brenensis Galileo & Esteban, new species

Diagnosis

The following combination of morphological features can distinguish this species from *Esaguasu ocellaris* Galileo & Martins, 2007 which is very similar: body integument dark brown almost black with reddish areas; antennae almost black, antennomeres VI up to XI grayish annulate at basal one-sixth; prothorax with yellowish dense pubescence on each side, except in the spines; pronotum with transverse subparallel ridges, and with a narrow but conspicuous central longitudinal

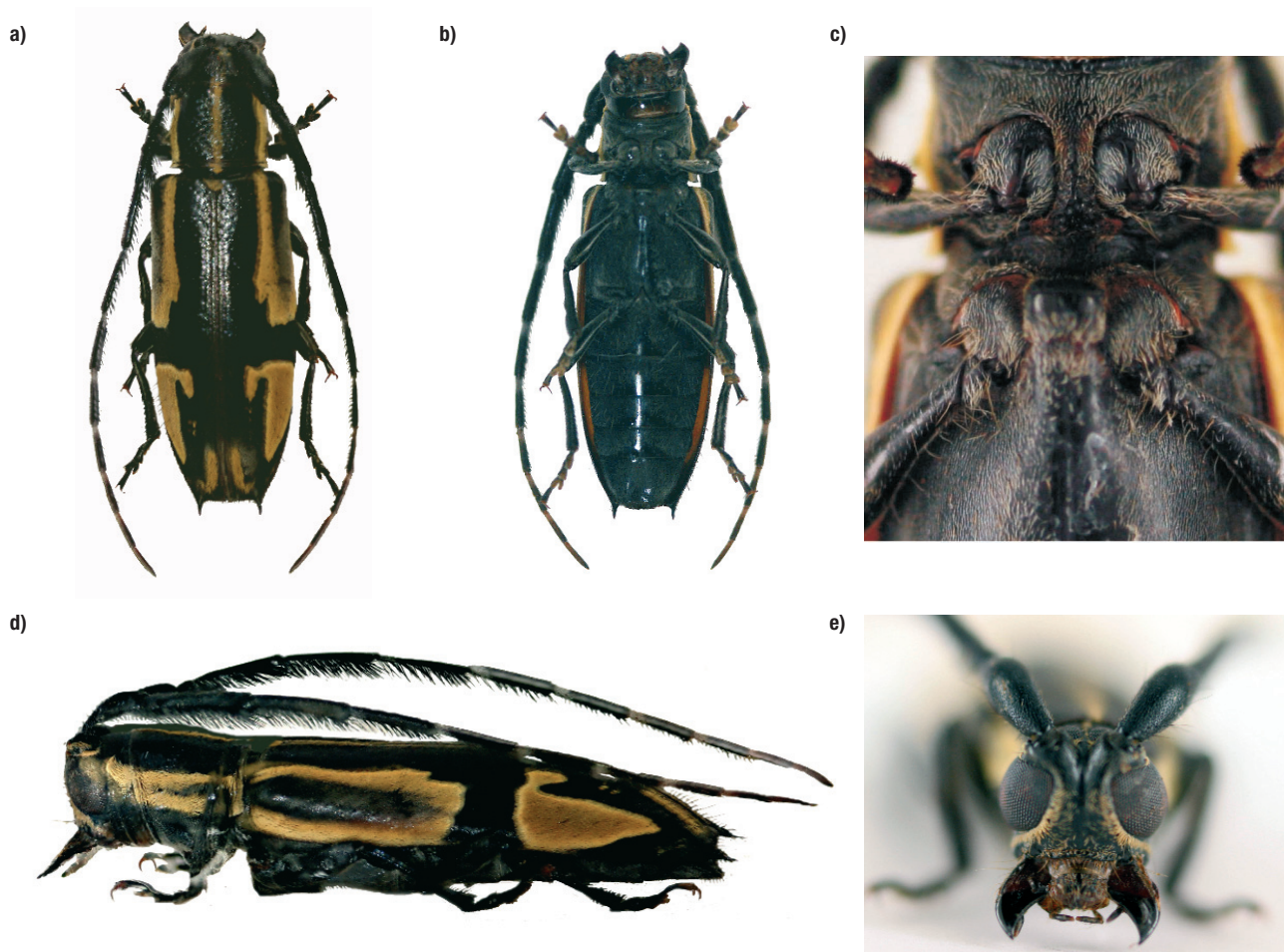


Figure 1. *Esaguasu brenensis* sp. nov., holotype male, length 15.5 mm. a) Dorsal view. b) Ventral view. c) Mesosternal process. d) Lateral view. e) Frontal view.

band of yellowish dense pubescence which also reaches the scutellum; each elytron has three yellowish pubescence uneven areas: the first one on the lateral basal half, underlines the humeral region (the confined region with grayish yellow hairs), other at the lateral distal third near the margin, with transversal anterior edge, and the last one almost sutural, before the elytral apices, inverted L-shape.

Description

Esaguasu brenensis Galileo & Esteban, new species

Male (Fig. 1a, b, c, d, e). Total length, measured between the apex of antennal tubercles and elytral apex: 15.5 mm; humeral width, between the apex of the lateral spines: 4.3 mm; prothoracic length: 3.0 mm; elytral length: 11.0 mm.

Stretched appearance, relatively oval, slightly concave. Integument dark brown, almost black, with long sparse setae throughout the body, especially on the elytra.

Head slightly narrower than pronotum with divergent sides of the forehead. Large eyes; lower eye lobes occupying almost the entire side of the head. A narrow strip of yellowish-brown hairs around almost the entire eye area. Powerful mandibles, sickle-sharp.

Antennae ultrapassing the apex of the elytra at end of antennomere IX; with dense fringe of the setae on lower side of scape, pedicel and antennomeres III to IX. Besides, the fringe is not long after antennomere VI; sparse in the X and almost negligible at the end of XI. Antennae integument almost black, grayish annulate at basal one-sixth from VI up to XI. Scape very robust.

Prothorax 1.2 times wider than long, each side with dense yellowish pubescence vittae except on the spine.

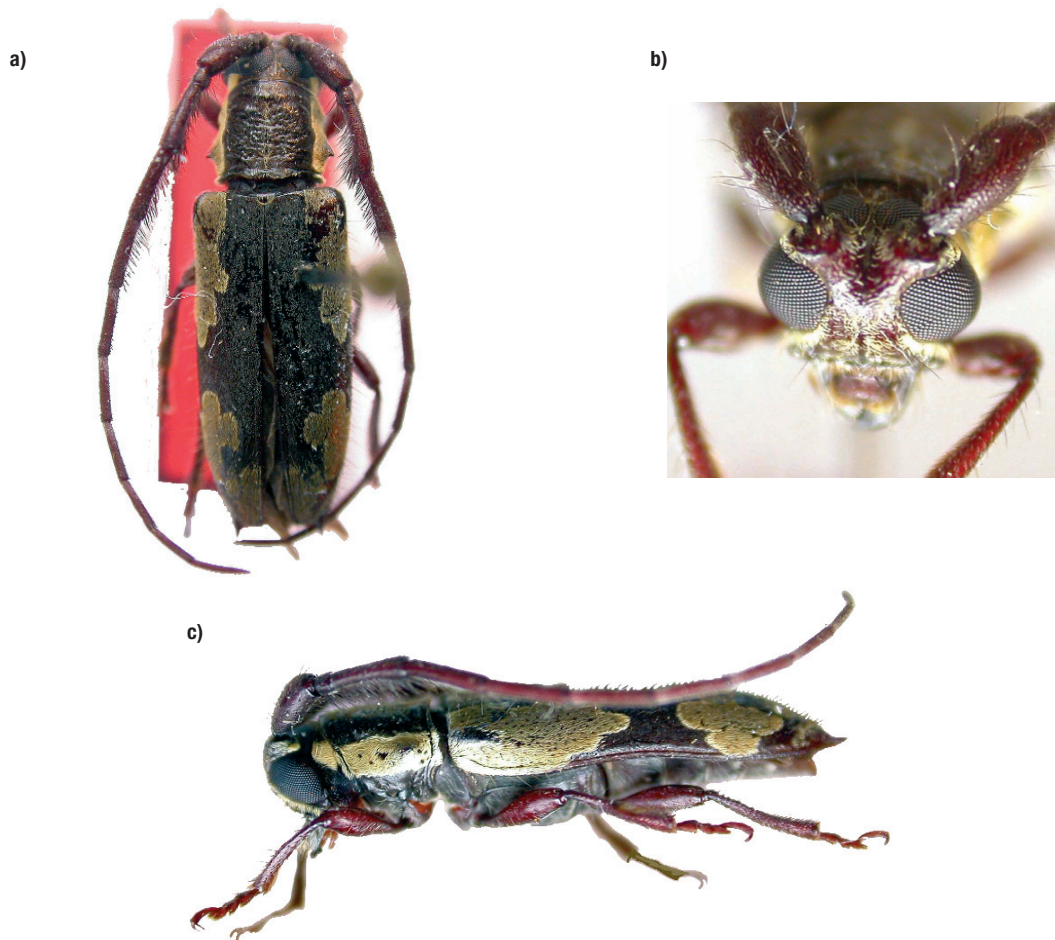


Figure 2. *Esaguasu ocularis* Martins and Galileo, 2007, holotype male, length 13.5 mm. a) Dorsal view. b) Frontal head. c) Lateral view.

Pronotum with dorsal transverse subparallel ridges and with narrow but conspicuous central longitudinal vittae of yellowish pubescence. Scutellum semicircular covered with yellowish pubescence.

Elytra with blackish pubescence, each one with three irregular areas of yellowish pubescence: sides of the basal half underlining the humeri; other one in the lateral distal third, with transversal anterior margin; one before the elytral apices, almost sutural, inverted L-shape. Humeral area confined by yellow pubescence with grayish pubescence in the basal half.

Relatively robust legs, dark-brownish, almost black, with femora subfusiform.

Type material

Holotype male labelled: **Costa Rica**, Alajuela, Estación Reserva Biológica Alberto Manuel Brenes, Alt. 840 m, 10 de marzo de 2007, colector Geovanny Mora, in collection of the Museo de Insectos (UCR), San José Costa Rica.

Discussion

Esaguasu brenensis, *sp. nov.*, is very close to *E. ocellaris*, type-species of the genus (Fig. 2). The features of whitish-yellow pubescence of the elytra is very different in the two species. Galileo and Martins (2007) described the area of whitish-yellow pubescence of the elytra: one lateral from humeral region until the half, the other lateral on the third apical without transversal anterior edge and one sutural until apical margin, except the spine.

Etymology

The specific name is an adjective referred to the type locality.

Acknowledgments

To Geovanny Mora, assistant at the University of Costa Rica (Sede de Occidente: San Ramón). We acknowledge the comments on the manuscript made by Antonio Santos-Silva, Museu de Zoologia, Universidade de São Paulo, Brazil. This work was financed by Project INIA, AT-07-001.

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