



# A New Species of *Confluentia* Santos-Silva, Galileo & McClarin (Cerambycidae: Lamiinae: Colobotheini) from Panamá

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# A New Species of *Confluentia* Santos-Silva, Galileo & McClarin (Cerambycidae: Lamiinae: Colobotheini) from Panamá

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## Keywords:

Coleoptera; Description;  
Cerambycidae; New species ;  
Longhorned beetles; Darien province ;  
*Confluentia*; Panama.  
Taxonomy;

**Abstract.** – A new species of *Confluentia* Santos-Silva, Galileo & McClarin, 2018 is described from Panama. It is the first known species of the genus from Central America.

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## Introduction

The cerambycid genus *Confluentia* Santos-Silva, Galileo & McClarin, 2018 was proposed to include five species previously included in *Sparna* Thomson, 1864 and *Carterica* Pascoe, 1858, and two new species: *Confluentia rubra* (Martins & Galileo, 2005), *C. colombiana* (Gilmour, 1950), *C. soror* (Belon, 1896), *C. nigrolineata* (Fuchs, 1956), *C. pallida* (Gilmour, 1950), *C. nigra* Santos-Silva, Galileo & McClarin 2018, and *C. flavomaculata* Santos-Silva, Galileo & McClarin 2018. Recently, Nascimento *et al.* (2020) described the species *Confluentia quijos* from Ecuador. *Confluentia barriosi* sp. nov. is the first species of the genus recorded from Central America (Panama).

## Material and Methods

Photographs were taken with a Sony a6000 camera, equipped with AMSCOP 4x close-up lens and Nikkor Z MC 105mm f/2.8 VR S aperture for angular frames. All photographs taken were edited by Tracking technique using Photoshop editing software.

Measurements were taken in “mm” using Leica M165 C stereomicroscope with measuring ocular, also used in the study of the specimens.

The collection acronym used in this study follows:

– MIUP: Museo de Invertebrados G. B. Fairchild, Universidad de Panamá, Panamá.

## Results

### Tribe Colobotheini Thomson, 1860

#### *Confluentia barriosi* n. sp.

(Fig. 1-5)

ZooBank: <http://zoobank.org/BFF6BAD5-E398-4E89-A1DA-5BEA4D173B2D>

**Holotype**, ♂, Panama, Darien Province, Darien National Park, Rancho Frio Station, 21.iii-4.iv.2000. R. Cambra, A. Santos, and S. Bermudez leg. (MIUP).

#### Description of the holotype (Fig. 1-5).

**Diagnosis.** – Body slightly flattened. – *Frons* with irregular dark yellowish-brown areas. – *Vertex* dark brown; ventral mouthparts pale brown; apex of anteclypeus and labrum reddish brown. – *Scape*, pedicel, and antennomere III dark brown. – *Antennomere IV* pale yellow, apex dark brown; antennomere V dark brown. – *Antennomeres VI–XI* pale brown. – *Genae* dark brown. – *Pronotum* black centrally, yellowish-brown laterally. – *Elytra* mostly yellowish-brown, with large black macula along suture on basal third, black on posterior third, and narrow, longitudinal black macula close to epipleura on basal quarter. – *Prosternal process* with basal area pale yellow laterally. – *Ventral surface* dark reddish-brown. – *Coxae* brown. – *Base of pro- and mesofemora* pale yellow. – *Base of metafemora* reddish-brown. – Remaining surface of *femora* dark brown. – *Tarsi* reddish-brown, except pale yellow protarsomere III and tarsal claws. – *Abdominal ventrites* mostly brown.

#### Dimensions (mm)

- Total length, 8.75;
- Prothoracic length, 0.90;
- Anterior prothoracic width, 1.10;
- Posterior prothoracic width, 1.25;
- Widest prothoracic width (between apices of lateral tubercles), 1.50;
- Humeral width, 1.65;
- Elytral length, 7.00.

## Reviewers:

Antonio Santos-Silva (*Universidade de São Paulo, Brazil*) - Orcid: <https://orcid.org/0000-0001-7128-1418>

Jim McClarin (*Universidad Católica del Ecuador, Quito, Ecuador*) - Orcid: <https://orcid.org/0000-0003-1409-5322>



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**Head.** — *Frons* with yellowish pubescence partially obscuring integument. — *Area* between antennal tubercles with wide yellowish pubescent band on each side of median groove; remaining surface of vertex with dark brown pubescence not obscuring integument. Area behind eyes with dense yellowish pubescence superiorly and inferiorly, distinctly less dense centrally. — *Genae* 1.2 times length of lower eye lobe; with yellowish pubescence not obscuring integument. — *Antennal tubercles* with yellowish pubescence partially obscuring integument. Distance between upper eye lobes 0.12 times length of scape (0.30 times distance between outer margins of eyes). — *Antennae* 1.64 times elytral length, reaching elytral apex at posterior quarter of antennomere VI. — *Scape* slightly sinuous, gradually widened toward apex; with dark pubescence nearly obscuring integument, with moderately long, erect, thick, dark setae ventrally. — *Pedicel* and *antennomere III* with dark pubescence nearly obscuring integument; with long, erect dark setae ventrally, distinctly sparser than on scape. — *Remaining antennomeres* with grayish-white pubescence not obscuring integument, appearing to be lighter, especially ventrally. — *Antennomere IV* distinctly narrowed from base to apex.

Antennal formula (ratio) based on length of antennomere III:

— *Scape* = 2.27. — *Pedicel* = 0.17. — *IV* = 1.17. — *V* = 0.88. — *VI* = 0.88. — *VII* = 0.88. — *VIII* = 0.88. — *IX* = 0.82. — *X* = 0.82. — *XI* = 0.64.

**Thorax.** — *Prothorax* 1.65 times wider than longer, widest area near posterolateral angles; lateral tubercles small, spiniform, directed backward, located near posterolateral angles. — *Pronotum* somewhat coarsely, sparsely punctate on basal quarter, with dense yellow pubescence on yellowish-brown area. — *Sides of prothorax* with yellowish pubescence not obscuring integument. — *Ventral surface* of thorax with yellowish-white pubescence not obscuring integument. — *Prosternal process* almost parallel-sided, apex slightly concave, narrowest area slightly wider than one-third of procoxa. — *Mesoventral process* not gradually narrowed toward apex; distal area 2.05 times width of mesocoxal cavity. — *Scutellum* with dark pubescence not obscuring integument.

**Elytra.** — *Humeral and dorsal carinae* well-marked; apex strongly notched close to outer spine, sutural angle rounded; coarsely, abundantly punctate except area near apex with finer, shallower punctures; black area with dark pubescence not obscuring integument, and light area with dense yellow pubescence.

**Legs.** — *Femora* with grayish-white pubescence dorsally, not obscuring integument, ventrally  $\frac{1}{4}$  of basal half glabrous. — *Protibiae* with dark pubescence partially obscuring integument, bristly, brownish on apex of ventral surface; mesotibiae with dark pubescence partially obscuring integument, bristly and dark dorsally close to sulcus; metatibiae with dark pubescence partially obscuring integument, bristly, brownish on apex of ventral surface, with short, erect, sparse dark setae, more abundant dorsally on posterior third. — *Metatarsomere I* distinctly longer than II–III together.

**Abdomen.** — *Ventrates* with grayish-white pubescence not obscuring integument, darker on apex of ventrite 5; apex of ventrite 5 concave.

**Etymology.** — This species is named for my colleague, friend, and advisor for several years, Prof. Hector Barrios, University of Panama.

**Collection site.** — The Rancho Frio Biological Station is located within the Darién National Park, Panama (UTM: 18P0198757; 0887272). This area has a lowland semi-deciduous forest, with an annual rainfall of 1,310 mm and an average temperature of 19.9°C. The specimen was collected during a field trip in 2000.

**Remarks.** — *Confluentia barriosi* sp. nov. does not match any of the described species. It is somewhat similar to *Confluentia colombiana*, but differs as follows: pronotum black centrally, yellowish-brown laterally; elytra mostly yellowish-brown, with large black macula along the suture on the basal third, black on the posterior third, and with a narrow longitudinal black macula close to the epipleura on the basal quarter; and the elytral apex strongly notched close to the outer spine. In *C. colombiana* (Fig. 6), the pronotum is completely black, the elytra are bicolorous as in *C. barriosi*, but the color pattern is inverted and the elytral apex is not strongly notched close to the outer spine. This species is similar to specimens of the genus *Calopteron* (Lycidae), mainly *Calopteron notatum* Gorham 1884, recorded from Guatemala and Panama (Fig. 7).

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I would like to thank Roberto Cambra and Alonso Santos Murgas (MIUP) for approving the loan of the specimen used in this study; to Celso Hernandez who provided photographs of *Confluentia barriosi* and *Calopteron notatum*. Thanks to Antonio Santos-Silva (Museu de Zoologia, Universidade de São Paulo, São Paulo, SP, Brazil), and Larry G. Bezark, Sacramento, California, USA, for provided photograph of *Confluentia colombiana*, reviewing a previous version of the manuscript and providing suggestions for improvement. Also I would like to thank Jean Paul Lachaud for his support to translate the resume and keywords to French.

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## Résumé

Landuza-Garay A., 2022. — Une nouvelle espèce du genre *Confluentia* Santos-Silva, Galileo & McClarin (Cerambycidae: Lamiinae: Colobotheini) décrite de Panamá. *Faunitaxys*, 10(36): 1 – 3.

Une nouvelle espèce de *Confluentia* Santos-Silva, Galileo & McClarin, 2018 est décrite du Panama. Il s'agit de la première espèce connue du genre en Amérique Centrale.

Mots-clés. — Coleoptera, Cerambycidae, longicornes, *Confluentia*, taxinomie, description, nouvelle espèce, Province de Darién, Panamá.



**Fig. 1-5.** *Confluentia barriosi* sp. nov., holotype ♂.

1. Dorsal habitus. 2. Ventral habitus. 3. Lateral habitus. 4. Head, pronotum, scape and forelegs, lateral view. 5. Head, frontal view.



**Fig. 6.** *Confluentia colombiana* (Gilmour, 1950), Dorsal habitus.



**Fig. 7.** *Calopteron notatum* Gorham 1884, Dorsal habitus.

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**Illustration de la couverture :** Le **mola** est une sculpture sur tissus produite traditionnellement par les femmes d'un peuple autochtone appelé Cuna, vivant pour l'essentiel sur le territoire autonome de Guna Laya au Panama. Les molas constituent les plastrons et les dossards des tuniques dont se vêtent quotidiennement les femmes tulés. Ils sont faits de plusieurs couches de tissus de couleurs différentes assemblés par couture. Ces tissus sont ensuite découpés aux ciseaux ce qui fait apparaître des dessins par différentiels de couleurs. - [https://fr.wikipedia.org/wiki/Mola\\_\(textile\)](https://fr.wikipedia.org/wiki/Mola_(textile))

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