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Descriptions, transference and new records of Lamiinae from Central and South America (Coleoptera, Cerambycidae)

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Abstract

Two new species are described in Calliini: *Callisema jirouxi* sp. nov. from Ecuador and *Colombicallia setosa* sp. nov. from Costa Rica. Keys to species of *Callisema* and *Colombicallia* are provided. *Psapharochrus alboguttatus* (Melzer, 1935) is transferred to *Alphus* White, 1855. New country, department and state records are provided in Lamiinae.

Key words: Longhorned beetles, Neotropical region, taxonomy

Introduction

Many new species of Lamiinae have been described from the Neotropical Region during the last few decades. Even so, very frequently we receive specimens for identification that do not match any known species. The number of new species found in Northern South America and Central America are particularly surprising. Herein, we describe two species of Calliini.

Psapharochrus Thomson (1864) is a large genus currently including 92 species distributed from Mexico to South America. Some species placed in this genus do not agree with the features of *Acanthoderes cylindricus* Bates, 1861, type species by original designation. Here we are transferring one of these species to *Alphus* White, 1855.

Callisema Martins & Galileo, 1990 is a small genus with 5 species currently known only from South America (Monné 2016). The genus can be separated from the other genera of Calliini by the following character set: prothorax with lateral tubercle; mesosternum with single tubercle; antennomeres cylindrical; and scape with apical cicatrix. The new species described here is the first record of the genus for Ecuador.

Currently, *Colombicallia* Galileo & Martins, 1992 includes only two species occurring in Colombia and Bolivia (Monné 2016). The new species expands the distribution of the genus to Central America.

During the process of identification of material from CASC, LGBC and MZSP we examined specimens that establish new country and state records.

The work is divided in two parts: new species and new distributional records by Santos-Silva, Bezark, and Galileo, and discussion of the rearing protocol for *Colombicallia setosa* sp. nov. by Li.

Material and methods

Photographs were taken with a Canon EOS Rebel T3i DSLR camera, Canon MP-E 65mm f/2.8 1–5X macro lens, controlled by Zerene Stacker AutoMontage software. Measurements were taken in “mm” using a micrometer ocular Hensoldt/Wetzlar - Mess 10 in the Leica MZ6 stereomicroscope, also used in the study of the specimen.

The acronyms used in the text are as follows:

| | |
|------|-------------------------------------------------------------------------|
| AMNH | American Museum of Natural History, New York, USA; |
| CASC | California Academy of Sciences, San Francisco, California, USA; |
| CMNC | Canadian Museum of Nature, Ontario, Ottawa, Canada; |
| CSCA | California State Collection of Arthropods, Sacramento, California, USA; |
| LGBC | Larry G. Bezark, collection, Sacramento, California, USA; |
| MSZP | Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil. |
| WHTC | William H. Tyson Collection, Coarsegold, California, USA. |

Description

Calliini

Callisema jirouxi Santos-Silva, Bezark and Galileo, sp. nov.

(Figs. 1–4)

Male. Integument dark brown, almost black; ventral side of head mostly reddish-brown; mouthparts yellowish-brown; antennae reddish-brown, darker on base of scape; legs dark reddish-brown, more brownish on some areas. Pubescence on head, prothorax and elytra yellowish-brown; pubescence on ventral side of meso- and metathorax, legs and abdomen yellowish-white.

Head. Frons rectangular, finely, abundantly punctate (punctures partially obscured by pubescence); pubescence dense, mainly close to clypeus and laterally, interspersed with long, erect, yellow setae laterally. Area between antennal tubercles and eyes with narrow, elongate, glabrous depression centrally; remaining surface densely pubescent, interspersed with long, erect, yellow setae. Vertex moderately coarsely, sparsely punctate; densely pubescent, except for glabrous, irregular area on each side of center, below upper eye lobes, and elongate area centrally close to prothoracic margin; with long, erect, yellow setae on area near eyes. Area behind eyes densely pubescent, gradually glabrous on area close to prothorax toward ventral side; with some long, erect, thick, black setae near lower eye lobes. Submentum moderately sparsely pubescent. Genae pubescent, except for glabrous, narrow area close to apex. Distance between upper eye lobes 0.10 times length of scape; distance between lower eye lobes in frontal view 0.75 times length of scape. Antennae 1.6 times elytral length, reaching elytral apex at apex of antennomere IX; scape with long, erect, sparse, thick setae, interspersed with long yellow setae; pedicel with long, thick, black, sparse setae ventrally; antennomere III with long, thick, black, sparse setae ventrally, interspersed with some long, yellow setae on basal third; antennomeres IV–X with long, thick, black, sparse setae ventrally, sparser toward antennomere X, mainly on IX–X; antennal formula (ratio) based on antennomere III: scape = 0.79; pedicel = 0.19; IV = 0.95; V = 0.80; VI = 0.72; VII = 0.69; VIII = 0.63; IX = 0.61; X = 0.56; XI = 0.55.

Thorax. Prothorax subcylindrical, wider than long (1.3 times wider than long, including lateral tubercles); sides with small, distinct, acute tubercle at middle. Pronotum coarsely, abundantly punctate (punctures partially obscured by pubescence); pubescence denser on three longitudinal bands (one centrally and one laterally one each side) and anterior third between bands; with thick, sparse, dark setae on anterior half. Sides of prothorax with punctures as on pronotum; pubescence partially obscuring punctures, denser toward ventral side. Prosternum and mesosternal process pubescent. Mesosternum pubescent, distinctly less conspicuous centrally. Mesosternal process longitudinally elevated (carina-shaped), dorsally shiny, glabrous; anterior margin slightly sloping toward mesosternum. Metepisterna pubescent. Metasternum coarsely, shallowly, sparsely punctate laterally; densely pubescent laterally, except for glabrous, small, areas surrounding punctures; pubescence sparser toward middle.

Elytra. Coarsely, sparsely punctate throughout; densely pubescent, except for small glabrous areas surrounding punctures; with thick, sparse, dark setae directed backward; apex obliquely truncate, with outer angle slightly projected and sutural angle rounded. **Legs.** Femora pubescent, except for small, somewhat distinct subglabrous areas surrounding punctures. Metatibiae with some thick, erect, dark setae.



FIGURES 1–7. 1–4, *Callisema jirouxi* sp. nov., holotype male: 1, dorsal habitus; 2, ventral habitus; 3, lateral habitus; 4, head, frontal view. 5–7, *Colombicallia setosa* sp. nov., holotype male: 5, head, frontal view; 6, dorsal habitus; 7, ventral habitus.

Abdomen. Ventrates pubescent, denser laterally, except for small, abundant glabrous areas surrounding punctures; with long, sparse, erect, yellow setae; apex of ventrite V widely emarginate.

Dimensions (mm). Holotype male/paratype male. Total length, 9.20/9.50; prothoracic length, 1.50/1.60; anterior prothoracic width, 1.65/1.70; basal prothoracic width, 1.65/1.70; largest prothoracic width (between apices of lateral tubercles), 1.95/2.10; humeral width, 2.45/2.60; elytral length, 6.70/6.85.

Type material. Holotype male (CASC) and paratype male (LGBC) from ECUADOR, Orellana: 16 km N Coca, 20.II.2004, F. T. Hovore col.

Etymology. The new species is named after Eric Jiroux, for his friendship and contribution towards the knowledge of Cerambycidae.

Remarks. *Callisema jirouxi* sp. nov. is similar to *C. iucaua* Martins & Galileo, 1996 but differs as pointed out in the key below.

Key to species of *Callisema* (adapted from Martins & Galileo 1996)

1. Elytra with integument bicolored, entire lateral declivity lighter than dorsal surface 2
- Elytral integument unicolored 3
- 2(1). Sides of elytra reddish, including humeri, almost reaching apex; elytral apex obliquely truncate; abdomen, sides of metasternum and femora with coarse, glabrous distinct punctures. Brazil (Mato Grosso, Goiás).
..... *C. consortium* Martins & Galileo, 1990
- Sides of elytra yellowish, not including humeri and reaching distal third; elytral apex rounded; sides of metasternum and femora without contrasting punctures, slightly contrasting on abdomen. Brazil (Minas Gerais, Espírito Santo, São Paulo, Paraná, Santa Catarina), Argentina (Misiones)
..... *C. socium* Martins & Galileo, 1990
- 3(1). Femora mostly reddish-orange with dark apex. Bolivia, Brazil (Rondônia, Maranhão, Ceará, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Espírito Santo, São Paulo).
..... *C. rufipes* Martins & Galileo, 1990
- Femora unicolorus 4
- 4(3). Elytral apex rounded. Colombia, Venezuela.
..... *C. elongata* Galileo & Martins, 1992
- Elytral apex obliquely truncate 5
- 5(4). Longitudinal band of pubescence on center of the pronotum contrasting in color with that on its sides; pubescence of scutellum distinctly contrasting with that on elytra; pubescence mostly whitish. Peru
..... *C. iucaua* Martins & Galileo, 1992
- Longitudinal band of pubescence on center of the pronotum not contrasting in color with that on its sides; pubescence of scutellum not contrasting with that on elytra; pubescence mostly orangish-brown. Ecuador
..... *C. jirouxi* sp. nov.

Colombicallia setosa Santos-Silva, Bezark and Galileo, sp. nov.

(Figs. 5–8)

Male. Integument orangish-brown; head mostly brown dorsally; sides of pronotum reddish-brown; center-basal area of pronotum reddish-brown; sides of prothorax, sides of ventral surface of meso- and metathorax brown; mandibles black; scape mostly reddish-brown dorsally, more brownish ventrally; pedicel brown; antennomere III reddish-brown, slightly darker on apex; antennomere IV orangish-brown on basal 2/3, brown on distal third; antennomeres V–XI orangish-brown on basal third, brown on distal 2/3; punctures on pronotum and basal half of elytra dark brown; tarsi mostly brownish.

Head. Frons rectangular, coarsely, abundantly punctate (punctures partially obscured by pubescence); pubescence yellowish, moderately dense, less so along longitudinal sulcus, interspersed with long, erect and suberect, thick, dark setae, mainly laterally. Area between antennal tubercles and upper eye lobes coarsely, sparsely punctate; pubescence moderately dense, not obscuring punctures, interspersed with long, erect, yellowish setae. Area between upper eye lobes and prothoracic margin pubescent, impunctate. Area behind eyes densely pubescent (less so toward ventral side of lower eye lobes), interspersed with some long, erect, yellowish setae behind lower eye lobes. Submentum with pubescence not dense, interspersed with long, erect, yellowish setae. Genae glabrous close to eyes (glabrous area wider toward ventral side), with moderately sparse pubescence near apex. Distance between upper eye lobes 0.45 times length of scape; distance between lower eye lobes in frontal view 0.85 times length of scape. Antennae 1.75 times elytral length, reaching elytral apex at middle of antennomere VIII; scape coarsely, sparsely punctate, with decumbent, moderately sparse setae, interspersed with long, erect setae; ventral side of antennomeres with long, erect setae (darker toward distal antennomeres); light region of antennomeres ringed with yellowish-white pubescence; antennal formula (ratio) based on antennomere III: scape = 0.62; pedicel = 0.14; IV = 0.78; V = 0.47; VI = 0.44; VII = 0.41; VIII = 0.37; IX = 0.36; X = 0.29; XI = 0.31.

Thorax. Prothorax subcylindrical, with pronotum moderately flat centrally, wider than long (1.35 times wider than long, including lateral tubercles); sides with acute tubercle just before middle. Pronotum coarsely, abundantly punctate (punctures distinctly denser laterally); pubescence yellowish, not notably dense, not obscuring punctures, interspersed with long, suberect, yellowish setae throughout, and thick, dark setae on anterior third. Sides of prothorax coarsely, densely punctate, with pubescence not obscuring punctures. Prosternum pubescent laterally, gradually with decumbent, sparse setae toward middle, where there are long, abundant, erect, yellowish-white setae; moderately finely, sparsely punctate laterally, slightly denser toward middle. Prosternal process with long, erect, abundant, yellowish-white setae. Mesosternum finely, sparsely punctate centrally, impunctate laterally; pubescence denser laterally, distinctly sparser toward middle. Mesepisterna coarsely, abundantly punctate; pubescence yellowish-white, not obscuring integument. Mesepimera impunctate, with yellowish-white pubescence. Mesosternal process with long, erect, yellowish-white setae. Metepisterna with yellowish-white pubescence. Metasternum coarsely, abundantly punctate laterally, distinctly sparser toward middle; central area close to mesocoxal cavities slightly transversely striate; with yellowish-white pubescence, denser laterally, not obscuring integument, interspersed with long, abundant setae on central area close to mesocoxal cavities. Scutellum with dense, yellowish-white pubescence, contrasting with that on elytra.

Elytra. Coarsely, abundantly punctate on basal third, punctures gradually finer, sparser toward apex; pubescence yellowish-white, not obscuring integument, distinctly sparser on some irregular areas on distal half; with thick, suberect, dark setae throughout; apex rounded. **Legs.** Femora with yellowish-white pubescence, except for small, glabrous areas surrounding part of punctures.

Abdomen. Ventrates with yellowish-white pubescence, moderately dense, not entirely obscuring integument, except for small, glabrous areas surrounding punctures laterally; with suberect, thick, dark, sparse setae laterally on ventrates III–V; ventrite V about 1.5 times longer than IV, with apex rounded.

Female. Antennae slightly shorter, 1.55 times elytral length, reaching elytral apex at distal third of antennomere IX. Prosternum with long and erect setae sparser than in male. Ventrite V 2.5 times longer than IV, depressed centrally close to apex; apex truncate.

Variability. Antennomere III mostly brownish; sides of pronotum brown; tibiae mostly brownish; ventral side of metathorax entirely brown.

Dimensions (mm). Holotype male/paratype males/paratype females. Total length (including mandibles), 6.40/5.31–5.37/6.30–6.85; prothoracic length, 1.30/1.12–1.26/1.20–1.25; anterior prothoracic width, 1.30/1.14–1.23/1.40–1.50; basal prothoracic width, 1.40/1.25–1.30/1.40–1.55; largest prothoracic width (between apices of lateral tubercles), 1.80/1.46–1.51/1.80–1.85; humeral width, 2.05/1.87–1.93/2.15–2.20; elytral length, 4.40/3.82–3.85/4.50–4.55.

Type material. Holotype male from COSTA RICA, Puntarenas: Osa Peninsula (08°24.273'N / 83°20.265'W; host: *Castilla tunu* Hemsl.), 22–28.XII.2013, Li & Lopez col. (LGBC, to be deposited at CASC). Paratypes – 1 male, same data as holotype except for 29.XII.2013–1.IV., 1 female, same data as holotype, except for 12–18.I.2014 (LGBC); 1 female, same data as holotype, except for 27.I–8.II.2014 2014 (MZSP), 1 male, same data as holotype (AMNH).

Etymology. The species name “setosa” refers to the long and erect setae on the prosternum.

Remarks. *Colombicallia setosa* sp. nov. is similar to *C. curta* Galileo & Martins, 1992, but differs mainly by the lighter color. Additionally, females of *C. curta* have no long and erect setae on the prosternum, while these setae are very conspicuous in females of *C. setosa*.

Key to species of *Colombicallia*

1. Antennomere III less than 1.1 longer than IV; lateral tubercles of prothorax large, rounded; elytra with contrasting bands of pubescence. Bolivia. *C. albofasciata* Martins & Galileo, 2006
- Antennomere III at least 1.3 longer than IV; lateral tubercles of prothorax small, acute; elytra without contrasting bands of pubescence 2
- 2(1). Integument lighter; color of punctures on pronotum and basal half of the elytra contrasting with integument; upper eye lobes narrower (Fig. 6). Costa Rica *C. setosa* sp. nov.
- Integument darker; color of punctures on pronotum and elytra not contrasting with integument; upper eye lobes (Fig. 10) wider. Colombia *C. curta* Galileo & Martins, 1992



8



9



10



11

FIGURES 8–11. 8, *Colombicallia setosa* sp. nov., holotype male, lateral habitus. 9–10, *Colombicallia curta*, holotype male: 9, lateral habitus; 10, dorsal habitus. 11, *Alphus alboguttatus*, female from Panama, dorsal habitus.

Rearing protocol

Five specimens of *C. setosa* were reared from *Castilla tunu* Hemsl. (in the family Moraceae). As part of a study of cerambycid community structure (Li, 2014), eight specimens of *C. tunu* were sampled in the lowland tropical humid forest at Osa Conservation, on the Osa Peninsula of Costa Rica. Bait branches were prepared during the transition to the rainy season. The basal 75 cm section of each branch was suspended in the canopy, and the remainder left on the ground; baits were exposed for three months. Ground stratum branches were then cut into three thick sections and six thin segments (approximately 8 cm and 2–3 cm x 75 cm, respectively). Canopy, ground thick, and ground thin branch segments were placed into separate cages constructed from No-Seeum netting, and monitored daily through August 2014. As adult cerambycids emerged, they were sorted into morphospecies and preserved in 95 % EtOH.

C. setosa adults (3 males, 2 females) emerged from the thin branch sections of a single specimen of *C. tunu* located in secondary forest (N 08°24.405', W 083°20.229'; diameter 30.5 cm). The bait branch was cut on 28 March 2013, and the adults emerged during the subsequent dry season: 22 Dec 2013–8 Feb 2014. This is verification of the single reared specimen reported in Li 2014. *C. setosa* was considered a Moraceae specialist (Li, 2014) but this was based on a single host record from *C. tunu*, a locally abundant host tree sampled in both old growth and secondary forest.

Two additional species of Calliini (*Callia albicornis* Bates and *Drycothaea stictica* Bates) emerged from thin branches of the same tree; seven additional cerambycid species emerged from the thick branches. In Panama, *C. albicornis* emerged preferentially from thin branches of *Castilla elastica* (A. Berkov, unpubl. data), and in French Guiana, *Callia bicolor* and *Drycothaea* spp. emerged from *Cecropia* (family Urticaceae, sister to the Moraceae) (Tavakilian et al. 1997; Stevens, 2001 onwards; Monné 2002). Although both Moraceae and Urticaceae produce exudates, in Costa Rica *C. albicornis* and *D. stictica* also emerged from Malvaceae. Given the host data that are currently available, *C. setosa*—and the diminutive Calliini that emerged from the same branch—may be preferentially associated with fast-growing tree species, with moist or lactiferous wood, that characterize secondary forests.

Transference and new records

ACANTHOCININI

Carphina cerdai Audureau, 2013. Material examined: ECUADOR, Napo: 20 km W Loreto, 2 specimens, 8.IV.2000, R. L. Penrose col. (CSCA, LGBC) (**new country record**).

It was described from Peru.

ACANTHODERINI

Acanthoderes (Symperasmus) affinis (Thomson, 1865). Material examined. BRAZIL, Rondônia: Fazenda Rancho Grande (62 Km SE Ariquemes), 1 female, 12–22.XI.1991, L. Bezark & D. E. Russell (LGBC) (**new state record**).

It was described from French Guiana. Currently it is known from French Guiana and Brazil (Amazonas, Pará) (Monné 2016).

Alphus alboguttatus (Melzer, 1935), comb. nov.

(Fig. 11)

Acanthoderes alboguttata Melzer, 1935: 192.

Acanthoderes (Psapharochrus ?) alboguttata; Gilmour, 1965: 616 (cat.).

Psapharochrus alboguttatus; Monné, 2005: 200 (cat.); Monné, 2015: 305 (cat.).

Melzer (1935) described *Acanthoderes alboguttata* from Brazil (Santa Catarina), based on a single female. Gilmour (1965) placed this species in *Acanthoderes (Psapharochrus)*, but he was not sure about the placement: “**alboguttata** Melz. (1935, Arch. Inst. Biol. Veg. Biol. Veg., II. p. 192) [gen ?]”. However, it was Monné (1994)

who formally placed *A. alboguttata* in the subgenus *A. (Psapharochrus)*. Currently, *Psapharochrus* is considered a genus distinct from *Acanthoderes* Audinet-Serville, 1835.

Restello *et al.* (2001) divided *Alphus* White, 1855 into three genera. Characters of *Psapharochrus alboguttatus* are different from some of the features used by these authors to separate *Alphus* from *Exalphus* Restello *et al.* 2001, and from *Ateralphus* Restello *et al.* 2001. Melzer's species agrees very well with the following features pointed out for *Alphus* by Restello *et al.* (2001): Anterior region of the pronotum without transverse depression (it is slightly distinct in *A. alboguttatus*) (with depression in *Exalphus*; without depression in *Ateralphus*); pronotum, close to anterior and posterior margins, with contrasting bands of pubescence (with bands in *Exalphus*; absent in *Ateralphus*); pronotum, close to basal margin, with wide longitudinal carina, starting at posterolateral projection (with narrow carina in *Exalphus*; absent in *Ateralphus*); elytral color pattern as in *Exalphus*, not agreeing with remaining species currently placed in *Alphus sensu* Restello *et al.* (2001); elytra only with basal crests, not tuberculate, not carinate (with crests tuberculate and carinate in *Exalphus*; with crests and carinate in *Ateralphus*); punctures on basal half of elytra more or less irregularly distributed as in *Exalphus* and *Ateralphus* (coarse, aligned in rows in *Alphus sensu* Restello *et al.* 2001); mesosternal process subtuberculate, with anterior region at an angle of 90° (without tubercle and at an angle of about 45° in *Alphus*; tuberculate and at an angle of 90° in *Exalphus*; without tubercles and at an angle of about 45° in *Ateralphus*); pubescence of the tarsomere V bicolorous as in *Exalphus* and *Ateralphus* (unicolorous in *Alphus*). Additionally, Restello *et al.* (2001) affirmed that the last ventrite in the female has no longitudinal sulcus in *Alphus* and *Exalphus*, and Souza and Monné (2013) confirmed this information. In the same table (Table 1) with features separating the genera, Restello *et al.* (2001) affirmed that the ventral surface in males has sexual pubescence in *Alphus*, which is absent in *Exalphus* and *Ateralphus*. However, in the original description of *Exalphus*, it was recorded that the pubescence in males is present. These authors also affirmed in the redescription of *Alphus* that the sexual pubescence in males of *Alphus* is slightly distinct (almost absent). Also according to them (Table 1) *Exalphus* has elytral carinae. However, in the description of the genus they pointed out (translated): "Elytra with basal crests strongly distinct, often tuberculate, parallel to concave in relation to suture; with or without a second line of tubercles, oblique, from humerus to distal quarter." Souza and Monné (2013) discussed the differences between *Alphus*, *Exalphus* and *Ateralphus*, and concluded that the former is the genus more easily recognized, and pointed out: "In this genus [Alphus], the basal-crest is somewhat raised and sometimes even inconspicuous and the elytral punctuation is arranged in longitudinal and parallel rows on the basal half." Nevertheless, as noted above, Melzer's species is different from *Alphus* regarding the distribution of elytral punctures.

As seen above, *Psapharochrus alboguttatus* has some features intermediate between *Alphus* and *Exalphus*. However, as nearly all agree better with species currently placed in *Alphus* (notably the absence of elytral carinae, and sexual pubescence on ventral side of males, features of the type species of the genus, *Lamia tuberosa* Germar, 1824), we think that this is the correct genus for Melzer's species.

Alphus differs from *Acanthoderes* mainly by the eyes being coarsely faceted, while they are distinctly finely faceted in the latter. It is not easy to define *Psapharochrus*, mainly because many species currently placed in it differ when compared with the type species of the genus. Thus, we used features present in the type species to establish the differences between *Alphus* and *Psapharochrus*: elytra not carinate and not distinctly flattened dorsally; pronotum without central-longitudinal carina; pronotum with wide longitudinal carina, starting at posterolateral projection; protarsi in males without long setae laterally. In *Psapharochrus* the elytra is carinate and flattened dorsally, the pronotum has a central-longitudinal carina and has no carina starting at the posterolateral projection, and the protarsi in male have long setae laterally.

Currently, *Alphus alboguttatus* is recorded from Bolivia and Brazil (Espírito Santo, Rio de Janeiro, São Paulo, Paraná, Santa Catarina) (Monné 2016). It is now recorded from Panama (**new country record**).

Material examined. PANAMA, *Panama*: 31 km E Cafita, 1 female, 21.V.1995, F. T. Hovore col. (CASC). BRAZIL, *São Paulo*: Peruíbe, 04.XII.1942, 1 male, H. Zellibor col. (MZSP). *Santa Catarina*: Corupá (former Hansa Humboldt), male [no other data] (MZSP); holotype female, I.1933, A. Maller col. (MZSP).

***Exalphus cicatricornis* Schmid, 2014.** Material examined: ECUADOR: 1 specimen, 19.VI.1999, MV light, V.L.M. & A.T. col. (CSCA) (**new country record**).

It was described from Brazil (Monné 2016).

***Exalphus foveatus* (Marinoni & Martins, 1978).** Material examined. PANAMA, *Panama*: Canal zone, Howard Air Force Base, 1 female, 21.V.1991, F. T. Hovore col. (CASC) (**new country record**).

It was described based on two males from Brazil (Goiás, São Paulo). Currently it is known from French Guiana, Bolivia and Brazil (Maranhão, Piauí, Bahia, Goiás, Mato Grosso, Minas Gerais, São Paulo) (Monné 2016).

AERENICINI

***Recchia boliviensis* Martins & Galileo 1998.** Material examined: BOLIVIA, Cochabamba: Villa Tunari, 1 specimen, 11.IX.2001, malaise trap, H. Heider col. (LGBC); 1 specimen, 7–20.IX.2002, malaise trap, H. Heider col. (LGBC); (**new department record**).

It was described from Bolivia (Santa Cruz) (Monné 2016).

APOMECYNINI

***Adetus pacaruaia* Martins & Galileo, 2003.** Material examined. ECUADOR, Napo: Cabanas Alinahui, 1 female, 14.IX.2000, F. T. Hovore (CASC) (**new country record**).

It was described and is known from Peru (Monné 2016).

***Amphicnæia antennata* Galileo & Martins, 2001.** Material examined. PANAMA, Darien: Cerro Chucanti (875m, 08°47'21.4"N / 078°27'05.5"W), 1 male, 13–16.II.2012, L. G. Bezark col. (LGBC) (**new country record**).

Species described and known only from Brazil (Minas Gerais) (Monné 2016).

***Euteleuta laticauda* Bates 1885.** Material examined: GUATEMALA, Petén: 4 km S of Poptun (500 m; beating), 1 specimen, 17–18.VI. 2012, E. Fuller col. (WHTC) (**new country record**).

This species was described from Panama, and is known from Costa Rica and Panama (Monné 2016).

CALLIINI

***Callia boliviensis* Belon, 1903.** Material examined. BRAZIL, Rondônia: Fazenda Rancho Grande (62 Km SE Ariquemes, 165m), 1 female, 12–22.XI.1991, E. M. Fisher (LGBC) (**new country record**).

Species described from Bolivia and known also from Peru (Monné 2016).

***Eumathes amazonicus* Bates, 1866.** Material examined. ECUADOR, Orellana: 16 km W Coca, 5 males, 1 female, 20.II.2004, F. T. Hovore col. (CASC). Napo: 1 km W Ahuano, 1 male, 29.VIII.2004, F. T. Hovore col. (MZSP) (**new country record**).

It was described and it is known only from Brazil (Amazonas) (Monné, 2016).

***Euryestola cibrata* (Bates, 1881).** Material examined. BELIZE, Cayo: Chiquibul National Park (3 miles S Millionario, 16°44.365'N / 89°00.719'W, 1,976 ft.), 1 female, 14–20.V.2007, F. G. Andrews (LGBC) (**new country record**).

It was described from Guatemala and currently it is known also from Mexico (Veracruz), Honduras and Costa Rica (Monné 2016; Chemsak *et al.* 1992).

DESMIPHORINI

***Malthonea pirauba* Martins & Galileo, 2009.** Material examined: PANAMA, Chiriquí: Quetzales Lodge (Guadeloupe; 2189 m), 1 specimen, 30.V–4.VI.2014, E. Fuller col. (WHTC) (**new country record**).

It was described from Costa Rica (Monné 2016).

***Pseudestoloides rubiginosa* Martins & Galileo, 2009.** Material examined: PANAMA, Coclé: El Valle (640 m), 1 specimen, 26–28.VI.2011, E. Fuller col (WHTC) (**new country record**).

This species was described from Costa Rica (Monné 2016).

HEMIOPHININI

***Apagomerella versicolor* (Bohemian, 1859).** Material examined. BRAZIL, Minas Gerais: Parque Estadual Rio Doce, male, 27.X–14.XII.2013, L. Migliori (MZSP) (**new state record**).

This species was described from Argentina (Buenos Aires). It is currently known from Brazil (Espírito Santo, Rio de Janeiro, São Paulo, Paraná, Santa Catarina, Rio Grande do Sul), Paraguay, Argentina (Catamarca, Salta, Tucumán, Santiago del Estero, Córdoba, Mendoza, San Juan, San Luis, Formosa, Misiones, Chaco, Santa Fé,

Corrientes, Entre Ríos, Buenos Aires, La Pampa, Rio Negro, Neuquén), and Uruguay (Martins & Galileo 2014; Monné 2016).

ONCIDERINI

Bacuris sexvittatus (Bates, 1865). Material examined: GUATEMALA, *Baja Verapaz*: 3 km S Purulhá (15°12'96"N / 90°13'15"W; light trap; 1676 m), 1 specimen, 12–14.VI.2013, E. Fuller col. (WHTC) (**new country record**).

This species was described from Brazil, and is known from Honduras, Costa Rica, Panama, Brazil (Amazonas, Pará), French Guiana, and Peru (Monné 2016).

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References

- Chemsak, J.A., Linsley, E.G., & Noguera, F.A. (1992) *Listados faunísticos de México. II. Los Cerambycidae y Disteniidae de Norteamérica, Centroamérica y las Indias Occidentales (Coleoptera)*. Universidad Nacional Autónoma, México, D.F., 204 pp.
- Gilmour, E.F. (1965) Catalogue des Lamiaires du Monde (Col., Cerambycidae). Verlag des Museums G. Frey, Tutzing bei München, 8, 559–655.
- Li, L. (2014) *The impact of forest successional status on community structure of neotropical cerambycid beetles*. (Unpublished Master's Thesis). The City College of New York, New York, NY.
- Martins, U.R. & Galileo, M.H.M. (1996) Descrições e notas sobre Cerambycidae (Coleoptera) sul-americanos. *Revista Brasileira de Zoologia*, 13 (2), 291–311.
<http://dx.doi.org/10.1590/S0101-81751996000200001>
- Martins, U.R. & Monné, M.A. (2002) Subfamília Lamiinae. Tribo Hemilophini. Parte I. In: Martins, U.R. (org.), *Cerambycidae Sul-Americanos (Coleoptera). Taxonomia*. Sociedade Brasileira de Entomologia, Curitiba, v. 13, 231 pp.
- Melzer, J. (1935) Novos cerambycideos do Brasil, da Argentina e de Costa Rica. *Archivos do Instituto de Biología Vegetal*, 2 (2), 173–205.
- Martins, U.R. & Galileo, M.H.M. (2014) Subfamília Lamiinae, Hemilophini Thomson, 1868. Parte I. *Cerambycidae Sul-Americanos (Coleoptera) Taxonomia*. Sociedade Brasileira de Entomologia, Curitiba, 13, 2–232.
- Monné, M.A. (1994) Catalogue of the Cerambycidae (Coleoptera) of the Western Hemisphere. Part XVII. Subfamily Lamiinae: Tribes Anisocerini, Polyrhaphidini, Xenofreini, Acrocinini and Acanthoderini. Sociedade Brasileira de Entomologia, São Paulo, 110 pp.
- Monné, M.A. (2002) Catalogue of the Neotropical Cerambycidae with known host plant - Part IV: Subfamily Lamiinae, tribes Batocerini to Xenofreini. *Publicações Avulsas do Museu Nacional*, 94, 1–92.
- Monné, M.A. (2016) Catalogue of the Cerambycidae (Coleoptera) of the Neotropical Region. Part II. Subfamily Lamiinae. Available from: <http://www.cerambyxcat.com/> (Accessed March 2016)
- Restello, R.M., Iannuzzi, L. & Marinoni, R.C. (2001) Descrição de dois novos gêneros afins a *Alphus* White e duas novas espécies (Cerambycidae, Lamiinae, Acanthoderini). *Revista Brasileira de Entomologia*, 45 (4), 295–303.
- Souza, D.S. & Monné, M.L. (2013) Revision of the genus *Ateralphus* Restello, Iannuzzi, & Marinoni, 2001. (Coleoptera, Cerambycidae, Lamiinae). *Zootaxa*, 3736 (4), 301–337.
<http://dx.doi.org/10.11646/zootaxa.3736.4.1>
- Stevens, P.F. (2001 onwards) Angiosperm Phylogeny Website. Version 12, July 2012 [and more or less continuously updated since]. Available from: <http://www.mobot.org/MOBOT/research/APweb/> (accessed March 2016)
- Tavakilian, G.L., Berkov, A., Meurer-Grimes, B. & Mori, S. (1997) Neotropical tree species and their faunas of xylophagous longicorns in French Guiana. *The Botanical Review*, 63 (4), 303–355, 2 figs.
- Tavakilian, G.L. & Chevillotte, H. (2015) Base de données Titan sur les Cerambycidés ou Longicornes. Available from: <http://lis-02.snv.jussieu.fr/titan/index.html> (accessed March 2016)