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Five new species and a new country record in American Cerambycidae (Coleoptera)

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Abstract

Five new species are described from American fauna: *Stizocera boliviensis* and *Sphaerion lingafelteri* from Bolivia (Elaphidiini); *Ectenessa wappesi* from Panama (Ectenessini); *Mecometopus martinsi* from Peru and Ecuador (Clytini); *Recchia volcanensis* from Bolivia (Aerenicini). The new species are included in previous keys. *Sphaerion rusticum* Burmeister, 1865 is recorded from Bolivia for the first time.

Key words: Central America, Neotropical Region, South America, taxonomy

Introduction

Currently, *Stizocera* Audinet-Serville, 1834 (Elaphidiini) encompasses 52 species distributed from Southern United States of America to Southern South America (including Caribbean) (Monné 2016a). The genus includes species with different prothorax (from as long as wide to notably longer than wide; with or without lateral tubercle; with or without distinct tubercles), and different femora (from distinctly clavate to almost cylindrical), which suggests that it is not monophyletic. The new species described here is from Bolivia.

Sphaerion Audinet-Serville, 1834 is a genus of Elaphidiini with a very confused history, as pointed out by Martins (2005: 101). According to Monné (2016a) *Sphaerion* includes seven species distributed from southern United States of America to southern South America. The eighth species is now described from Bolivia.

Ectenessa Bates, 1885 (Ectenessini) is a genus with 19 species distributed mainly in South America. Only one species, *E. nitida* Bates, 1885 (type species of the genus) occurs in Mexico and Central America. The new species described here is from Panama and is the second record from Central America.

Mecometopus Thomson, 1861 (Clytini) includes 16 species known from Mexico to southern South America. Another South American species is described here from Peru and Ecuador.

Currently, *Recchia* Lane, 1966 (Aerenicini) includes 24 species distributed in Central and South America (Monné 2016b). The new species from Bolivia belongs to the group of species with elytral apex not spiny.

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 collection acronyms used in this study are as follows:

ACMT	American Coleoptera Museum (James E. Wappes), San Antonio, Texas, USA;
FSCA	Florida State Collection of Arthropods, Gainesville, Florida, USA;
FWSC	Frederick W. Skillman Jr. Collection, Pearce, Arizona, USA;
LGBC	Larry G. Bezark, collection, Sacramento, California, USA;
MNKM	Museo de Historia Natural, Noel Kempff Mercado, Santa Cruz de la Sierra, Bolivia;
MZSP	Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil.

Results

Cerambycinae

Elaphidiini

Stizocera boliviensis sp. nov.

(Figs. 1–6)

Description. Male. Integument light reddish-brown, darker on some areas of ventral side, mainly on sides of mesothorax, metepisterna and most of metasternum; pedicel dark-brown; most of basal antennomeres dark-brown, gradually mostly reddish-brown toward distal antennomeres; each elytron with a large, sub-elliptical, pale yellow macula, not reaching suture, laterally not well-delimited, from about apex of basal sixth to after middle; elytral suture reddish-brown; elytral apex black on narrow region, extending laterally on distal sixth; prosternum with narrow brown band surrounding procoxal cavities, extending toward sides of prosternal process; mesosternum with narrow brown band surrounding mesocoxal cavities, extending toward margins of mesosternal process; central projection of metasternum toward mesosternal process with black, narrow band on margin; central projection of abdominal ventrite with black, narrow band on margin; base of femoral peduncles dark reddish-brown; apex of femoral club slight darker; basal 3/4 of tibiae blackish, gradually reddish-brown on distal third; tarsi dark-brown.

Head. Frons smooth, glabrous except for some small setae laterally; with deep depression laterally between clypeus and antennal tubercle. Area between antennal tubercles finely, sparsely punctate toward frons, coarsely, confluent punctate toward upper eye lobes (coarser punctures elongated); with short, decumbent, sparse setae. Remaining surface of vertex with fine, sparse setae between upper eye lobes, gradually smooth toward prothorax; with short, decumbent, sparse setae, laterally interspersed with some long, erect setae. Antennal tubercles finely, sparsely punctate, interspersed with some coarser punctures; with short, decumbent, sparse setae. Area behind upper eye lobes finely, sparsely punctate toward eye, striate-punctate close to prothorax; with short, sparse setae interspersed with some long, erect setae close to eye. Area behind lower eye lobes smooth close to eye, striate-punctate toward prothorax; glabrous except for long, erect, sparse setae near ventral side of head. Sides of gula near submentum striate interspersed with some punctures. Submentum transversely striate; with short, sparse, sub-decumbent setae interspersed with long, erect setae. Genae with short, decumbent, sparse setae toward eye, glabrous toward apex. Postclypeus glabrous centrally, laterally with short, decumbent setae and one long, erect seta. Mandibles striate punctate on basal two-thirds; with short, sparse, decumbent setae interspersed with some long, erect setae. Distance between upper eye lobes 0.60 times length of scape; distance between lower eye lobes in frontal view 0.95 times length of scape. Antennae 2.3 times elytral length, reaching elytral apex at basal fourth of antennomere VIII. Scape finely, moderately abundantly punctate; with short, decumbent setae interspersed with long, erect setae. Antennomeres with long, erect setae, mainly on inner side of ventral side, gradually sparser toward distal antennomeres. Antennomeres III–VI with long spine at apex of inner side; length of spine compared with distal width of antennomere: III, 0.77; IV, 0.77; V, 0.63; VI, 0.54. Antennal formula (ratio) based on antennomere III (spines not included): scape = 0.68; pedicel = 0.20; IV = 0.80; V = 0.96; VI = 1.01; VII = 1.01; VIII = 0.98; IX = 0.94; X = 0.87; XI = 1.14.

Thorax. Prothorax as long as wide (including lateral tubercles); lateral tubercles large, conical, placed at middle; sides coarsely, abundantly punctate below tubercle, except for smooth, wide, transverse band close to prosternum, connected to the smooth areas on anterior and posterior sides of tubercle; with long, erect, sparse setae, mainly on punctate region. Pronotum with gibbositities well-marked; coarsely, sparsely punctate, except for sides of

anterior third with abundant punctures; pubescent on sides of posterior constriction, with short, sparse setae on center of basal constriction; remaining surface with long, erect, sparse setae. Prosternum coarsely, abundantly punctate on basal half, finely, transversely striate on distal half; sides of basal half pubescent, center with short, sparse, decumbent setae, both interspersed with long, erect, sparse setae; distal half with short, sparse setae interspersed with long, erect, sparse setae. Prosternal process glabrous on base, pubescent on remaining surface. Mesosternum with short, decumbent, sparse setae centrally, pubescent laterally. Mesosternal process almost smooth, glabrous basally, coarsely, abundantly punctate, sparsely pubescent on remaining surface. Mesepisternum and mesepimeron pubescent. Metepisternum pubescent. Metasternum almost smooth laterally, coarsely, sparsely punctate centrally; sides and transverse area close to metacoxal cavities pubescent; remaining surface with short, sparse, decumbent setae interspersed with long, erect, sparse setae. Scutellum pubescent. **Elytra.** Finely, sparsely punctate on basal third, gradually more sparse toward apex; with coarse, slightly tuberculate, sparse punctures from which emerges long, erect seta (these punctures more abundant, irregularly distributed on basal quarter, sparser, aligned along suture and dorsal side); with long, sparse, erect setae along epipleura (shorter, toward apex); apex with long spine at outer angle, with short projection on sutural angle. **Legs.** Apices of profemora with rounded lobes; apices of meso- and metafemora with spine; femora with short, decumbent, sparse setae interspersed with long, erect, sparse setae. Metatarsomere I as long as II–III together.

Abdomen. Ventrites finely, sparsely punctate; with short, sparse setae interspersed with long, erect, sparse setae; ventrite V about as long as IV, truncate at apex.

Female. Differs from male mainly by the antennae shorter (1.7 times elytral length, reaching elytral apex at base of antennomere X), and by the ventrite V distinctly longer than IV, with apex slightly rounded.

Variation. Most of metathorax and abdomen dark-brown; tibiae reddish-brown only near apex; presence of erect setae on center of dorsal surface of elytra.

Dimensions (mm). Holotype male/paratype females. Total length (including mandibles), 19.45/12.95–14.50; prothoracic length, 3.95/2.40–2.85; anterior prothoracic width, 3.15/2.00–2.40; posterior prothoracic width, 3.15/2.00–2.40; largest prothoracic width (between apices of lateral tubercles), 4.00/2.45–2.90; humeral width, 4.50/2.85–3.30; elytral length, 13.20/8.30–9.70.

Type material. Holotype male from BOLIVIA, *Santa Cruz*: 4 km N Bermejo (Refugio Los Volcanes; 18°06'S / 63°36'W; 1045–1350 m), 11–17.XII.2012, Wappes & Skillman col. (MNKM). Paratypes (All from BOLIVIA, *Santa Cruz*)—2 females, same data as holotype except for: 5–7.XII.2015, Wappes, Kuckartz & Skillman col. (MZSP); 10–12.XII.2015, Wappes, Kuckartz & Skillman col. (ACMT); 1 female, same data as holotype except for: 4–9.XII.2013, Wappes & Skillman (ACMT); 1 female, same data as holotype except for: 13.XII.2012, Skillman & Wappes (FWSC); 1 male, same data as holotype except for: (1000–1200 m), 15.XII.2012, Skillman & Wappes col. (FWSC); 1 male, same data as holotype except for: (1000–1200 m), 16.XII.2012, Skillman & Wappes col. (FWSC); Huaico (Across Guenda fm Potrerillo, 270'; 17°40'35"S 63°26'59"W), 1 male, 1 female, 1.XII.2012, J. E. Wappes col. (ACMT); Huaico (near Potrerillo), 1 male, 1.XII.2012, Skillman & Bonaso col. (FWSC); Potrerillo del Guenda (Snake Farm, 350–400 m; 17°40'S / 63°27'W), 1 male, 10–18.XII.2011, Bettella, Bonaso & Romero col. (FSCA).

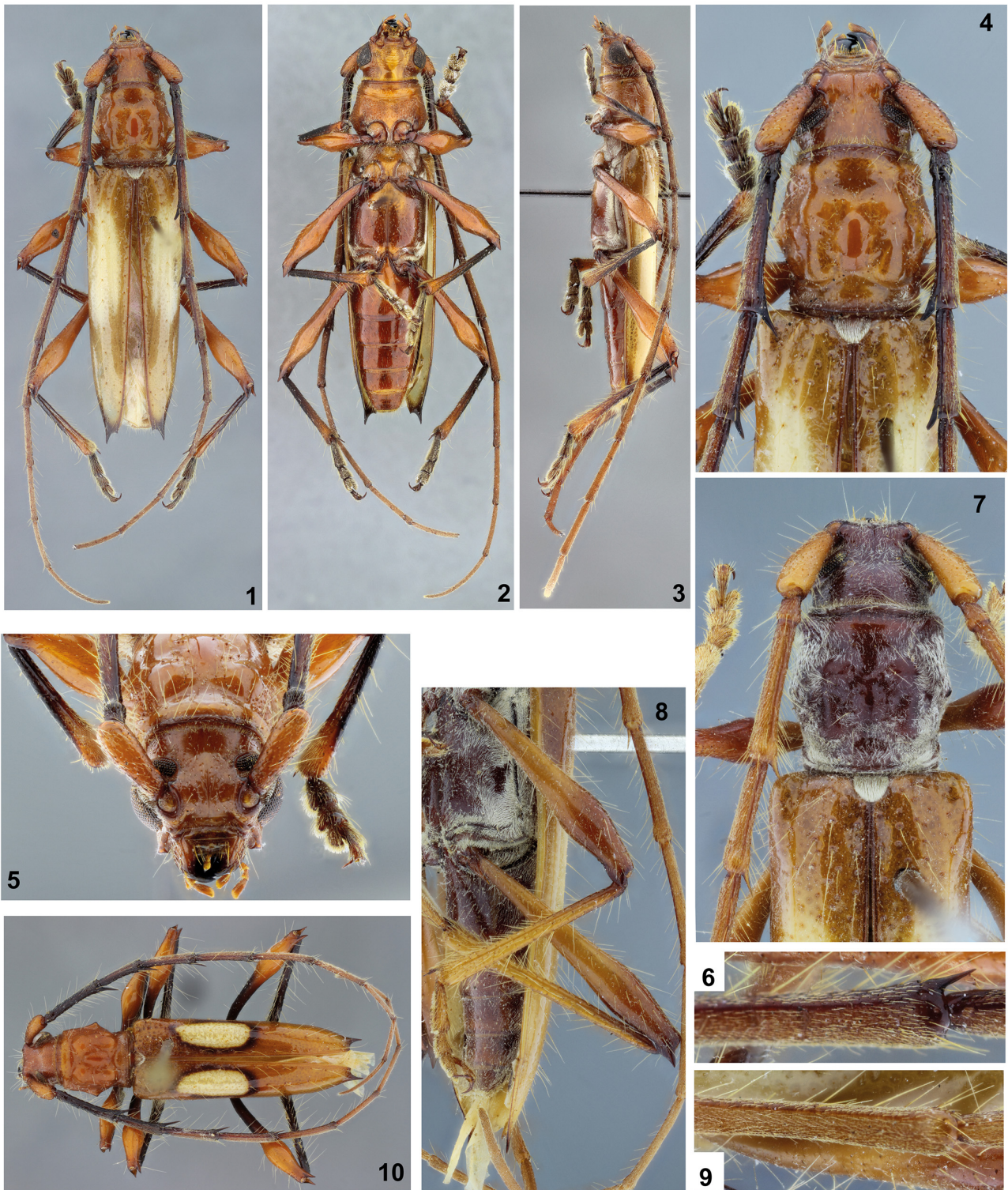
Etymology. The epithet is a Latin adjective referring to the native country (Bolivia).

Remarks. *Stizocera boliviensis* **sp. nov.** differs from *S. phtisica* Gounelle, 1909 as follows: antennomere VI with distinct spine at apex (Fig. 6); pedicel and basal antennomeres dark, distinctly contrasting with the color of the scape (Fig. 4); pronotum with pubescence only on sides of basal constriction (Fig. 4); basal 3/4 of tibiae blackish (Figs. 1–3); tarsi dark (Figs. 1–5). In *S. phtisica* the spine at apex of antennomere VI is tiny or absent (Fig. 9), the color of the pedicel and basal antennomeres is not contrasting with that of the scape (Fig. 7), the pronotum has distinct pubescence throughout (absent on some irregular areas) (Fig. 7), and the tibiae and tarsi are entirely light (Fig. 8). It differs from *S. poeyi* (Guérin-Méneville, 1838) (Fig. 10) mainly by the elytral pale yellow macula less distinctly delimited and not surrounded by dark area (well delimited and surrounded by dark area in *S. poeyi*), by the femora less clavate (more distinctly clavate in *S. poeyi*), by the femoral peduncle light (darker, mainly on meso- and metafemora in *S. poeyi*), and by the tibiae bicolorous (entirely dark in *S. poeyi*).

Stizocera boliviensis **sp. nov.** can be included in the alternative of couplet “3” from Martins (2005) (translated; modified):

- 3(2). Antennae and tibiae orangish-yellow 4
 - Pedicel and basal antennomeres contrasting with color of the scape 3'

- 3'(3). Elytral macula distinctly surrounded by dark band. Cuba, Costa Rica, Panama, Colombia, Venezuela, French Guiana, Brazil (Acre, Amazonas, Rondônia), Bolivia (Santa Cruz) *S. poeyi* (Guérin-Méneville, 1838)
 - Elytral macula not surrounded by dark band. Bolivia. *S. boliviensis* sp. nov.



FIGURES 1–10. 1–6, *Stizocera boliviensis* sp. nov., holotype male: 1, dorsal habitus; 2, ventral habitus; 3, lateral habitus; 4, head, pronotum and basal antennomeres; 5, head, frontal view; 6, apex of antennomere VI. 7–9, *Stizocera phtisica*, male: 7, head, pronotum and basal antennomeres; 8, legs, lateral view; 9, apex of antennomere VI. 10, *Stizocera poeyi*, male, dorsal habitus.

Sphaerion lingafelteri sp. nov.

(Figs. 11–14)

Description. Male. Integument dark-brown; mouthparts light reddish-brown; antennae light reddish-brown, slightly lighter toward distal segments; elytra light reddish-brown except narrow black band along margins of distal sixth (gradually brown toward anterior region); femora light reddish-brown, gradually darker after middle of club toward black distal region; tibiae light reddish-brown, slightly lighter toward apex; tarsi light reddish-brown. Setae yellowish.

Head. Frons deeply, transversely sulcate close to clypeus, mainly laterally; finely, abundantly punctate laterally, smooth on narrow central region; with short, sub-decumbent, sparse setae. Area between upper eye lobes finely, densely, confluent punctate, mainly centrally; with short, decumbent, moderately abundant setae and some long, erect setae close to eyes. Area between upper eye lobes and prothoracic margin tumid, finely, abundantly punctate (punctures coarser than area between upper eye lobes, confluent toward prothoracic margin); with short, decumbent, sparse setae (sparser than area between upper eye lobes). Antennal tubercles finely, abundantly punctate close to longitudinal sulcus, sparse on central region, finer, abundant close to apex; with short, decumbent, sparse setae. Area behind eyes finely, abundantly punctate, mainly close to upper eye lobe, gradually sparser toward inferior side of lower eye lobe; with short, sparse setae except on narrow area close to distal half of lower eye lobe with abundant setae. Submentum finely, abundantly punctate interspersed with coarser punctures (centrally punctures confluent, striate); with short, erect, moderately abundantly setae interspersed with long, erect setae. Genae, finely, abundantly punctate close to eye, smooth close to apex; with short, abundant setae close to eye, glabrous toward apex. Postclypeus transversely sulcate centrally near anteclypeus; finely, abundantly punctate except on smooth, transverse central region; with short, moderately abundantly setae (glabrous on smooth area), with one very long seta on each side. Mandibles coarsely, confluent, punctate laterally, mainly on base, with triangular, elongate depression close to inferior margin; with short, moderately abundantly setae interspersed with long, erect setae. Distance between upper eye lobes 0.65 times length of scape; distance between lower eye lobes in frontal view 0.95 times length of scape. Antennae 1.9 times elytral length, reaching elytral apex at apex of antennomere VIII. Scape finely, abundantly punctate, mainly laterally, sparser toward apex; with short, sparse, decumbent setae interspersed with long, erect setae. Antennomeres with long, erect setae, mainly ventrally, distinctly more abundant on basal segments; antennomeres III–VI dorsally sulcate; inner apex of antennomere III with minute spine; inner apex of antennomere IV with short spine; inner apex of antennomeres V–X unarmed. Antennal formula (ratio) based on antennomere III (spines not included): scape = 0.59; pedicel = 0.14; IV = 0.76; V = 0.85; VI = 0.84; VII = 0.88; VIII = 0.77; IX = 0.72; X = 0.68; XI = 0.89.

Thorax. Prothorax 1.25 times wider than long; sides distinctly rounded, unarmed; sides coarsely, deeply, moderately abundantly punctate, except sub-smooth triangular area close to anterior margin (this area narrowed toward pronotum); with minute, abundant setae (not obscuring integument), interspersed with long, erect, sparse setae. Pronotum with 5 distinctly gibbositities: two irregular, placed on each side of central region and one elongate centrally (distinctly wider on its basal 2/3, narrow on its distal third); central area between and on gibbositities shiny, opaque on remaining surface; finely, abundantly punctate on shiny area, smooth on gibbositities; opaque surface with punctures coarser, deeper, mainly toward anterior region and sides of prothorax; shiny region with minute, sparse setae (distinctly more abundant on basal region) interspersed with long, erect setae; opaque region with minute, abundant setae, not obscuring integument, interspersed with long, erect setae (minute setae forming moderately narrow, elongate band on each side of distal half, obscuring integument). Prosternum coarsely, abundantly punctate on basal half, gradually finer toward distal third; distal third finely, transversely striate; with minute, abundant setae, not obscuring integument, interspersed with long, erect setae. Prosternal process with minute, abundant setae (more abundant centrally) interspersed with long, erect setae. Mesosternum minutely, abundantly punctate, interspersed with fine punctures; with minute, abundant setae (slightly distinct centrally) interspersed with long, erect setae (more abundantly centrally). Mesepimeron, mesepisternum and metepisternum with minute, abundant setae, almost obscuring integument, interspersed with long, erect setae, mainly on metepisternum. Metasternum minutely, densely punctate, interspersed with fine, sparse punctures; with minute, abundant setae, distinctly sparser toward central area, interspersed with long, erect setae. Scutellum, with short, decumbent, abundant setae almost entirely obscuring integument. **Elytra.** Coarsely, abundantly punctate on basal third, gradually finer, sparser toward apex; with minute, sparse setae interspersed with long erect setae; uniformly



FIGURES 11–17. 11–14, *Sphaerion lingafelteri* sp. nov., holotype male: 11, dorsal habitus; 12, ventral habitus; 13, lateral habitus; 14, femora. 15–17, *Sphaerion inerme*, male: 15, dorsal habitus; 16, lateral habitus; 17, femora.

rounded on apex of outer margin toward apex of short spine, obliquely truncate from spine toward rounded sutural angle. **Legs.** Femora with minute, sparse setae interspersed with long, erect setae (distinctly more abundant on ventral side of peduncle). Outer side of tibiae slightly sulcate on basal half (inferior margin of sulcus carina-shaped). Metatarsomere I slightly longer than II–III together.

Abdomen. Ventrites finely, abundantly punctate; with minute, abundant setae (not obscuring integument, more abundantly laterally and basal central region), interspersed with long, erect, moderately abundant setae. Distal margin of ventrite V slightly concave.

Dimensions (mm). Holotype male. Total length (including mandibles), 17.20; prothoracic length, 2.85; anterior prothoracic width, 2.50; posterior prothoracic width, 2.70; largest prothoracic width, 3.80; humeral width, 4.05; elytral length, 11.80.

Type material. Holotype male from BOLIVIA, *Santa Cruz*: Huaico (near Potrerillo del Guendá; Andrés Ibáñez Province; 17°40.5'S / 63°26.6'W; 425 m), 22–23.XI.2013, S. Lingafelter col. (MNKM).

Etymology. The new species is named after Steven W. Lingafelter, collector of the holotype.

Remarks. *Sphaerion lingafelteri* **sp. nov.** shares some features with species of *Nephalius* Newman, 1841, as for example, the maxillary palpus almost as long as twice the labial palpus, similar distance between lower eye lobes in frontal view, and the elytra somewhat flattened distally. This makes the differences between *Nephalius* and *Sphaerion* very questionable. However, we are including the new species in *Sphaerion* mainly by its notable similarity with *S. inerme* White, 1853, a species notably variable in dorsal pubescence and general color of the integument. Notwithstanding, the new species differs from *S. inerme* as follows: antennae in male distinctly shorter, exceeding elytral apices at antennomere VIII (Fig. 11); femora distinctly less clavate (Fig. 14). In *S. inerme*, the antennae in male are longer (exceed elytral apex at antennomere VI) (Figs. 15–16) and the femora are more clavate (Fig. 17).

Sphaerion lingafelteri **sp. nov.** can be included in the alternative of couplet “5” from Martins (2005) (translated; modified):

- 5(4). Larger dimensions (length, 31–52 mm); antennae, in both sexes, with relatively long spine at antennomeres III–VI. United States of America (Texas), Mexico (Chiapas), Brazil (Pará, Piauí, Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Santa Catarina), Argentina and Uruguay *S. exutum* (Newman, 1841)
- Smaller dimensions (length, 21–40 mm); antennae unarmed or with minute spine (male) or with very short spine at antennomeres III–VI (female). 5'
- 5'(5). Antennae (male) longer, exceed elytral apex at antennomere VI; femora distinctly clavate (Fig. 17). Brazil (Mato Grosso, Goiás, Mato Grosso do Sul, Paraíba, Pernambuco, Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo, Paraná, Santa Catarina, Rio Grande do Sul), Bolivia (Beni, Santa Cruz, Tarija), Paraguay, Argentina (Jujuy, Salta), Uruguay. *S. inerme* White, 1853
- Antennae (male) shorter, exceeding elytral apices at antennomere VIII; femora less distinctly clavate (Fig. 14). Bolivia. *S. lingafelteri* **sp. nov.**

Ectenessini

Ectenessa wappesi **sp. nov.**

(Figs. 18–22)

Description. Male. Integument orange; head, scape, pedicel, antennomeres III–IV, distal 1/5 of elytra, distal 1/6 of femora, and tibiae black; antennomere V brownish with apex dark-brown; antennomeres VI–X light reddish-brown with apex brown; antennomere XI light reddish-brown; abdominal ventrite IV reddish-brown on base, gradually brown toward apex; abdominal ventrite V dark-brown.

Head. Frons smooth close to clypeus, finely, abundantly punctate laterally toward antennal tubercles; punctate region with short, decumbent, sparse setae. Vertex finely, abundantly punctate throughout, except sparsely punctate part of area between upper eye lobes; with short, sparse, decumbent setae between upper eye lobes, glabrous on remaining surface. Antennal tubercles smooth, except finely, abundantly punctate area close to apex; with short, decumbent, sparse setae. Area behind eyes finely, abundantly punctate, mainly close to upper eye lobe, gradually sparser toward inferior side of lower eye lobe; with short, sparse setae except on narrow area close to distal half of lower eye lobe with abundant setae. Gula transversely striate, mainly toward submentum, glabrous centrally, with

short, decumbent, sparse setae laterally and on area close to submentum. Submentum, transversely striate-punctate laterally and on area close to gula, microsculptured, finely, sparsely punctate on remaining surface; with short, erect, sparse setae interspersed with some long, erect setae. Genae minutely punctate; with minute, decumbent, sparse setae. Postclypeus finely, abundantly punctate laterally, finely rugose centrally; laterally with short, sparse, decumbent setae, interspersed with some short, erect setae and one very long, erect seta; glabrous centrally. Distance between upper eye lobes 0.35 times length of scape; distance between lower eye lobes in frontal view 0.50 times length of scape. Antennae 3.1 times elytral length, reaching elytral apex at apex of antennomere VI; scape dorsally rugose-punctate, mainly on basal half; antennomeres III–VI dorsally carinate; antennomeres III–X with long, erect setae on inner side of ventral side, sparser toward X; antennal formula (ratio) based on antennomere III: scape = 0.62; pedicel = 0.14; IV = 1.03; V = 1.18; VI = 1.20; VII = 1.16; VIII = 1.05; IX = 1.05; X = 1.00; XI = 1.33.

Thorax. Prothorax 1.2 times longer than wide; barrel-shaped in dorsal view; sides coarsely, abundantly punctate, except striate anterior region (wider toward ventral side); with some long, erect setae. Pronotum with five, slightly elevated gibbosities: one at each side of basal half, one at each side of distal half, one centrally on basal half; coarsely, abundantly punctate, mainly on distal half and laterally, smooth on gibbosities; with some short, erect setae. Prosternum centrally transversely, finely striate except striate-punctate distal region; coarsely, abundantly punctate laterally on basal half; with longitudinal band with short, sub-erect, moderately abundant setae on each side of basal half; center of basal half with short, sparse setae, sparser toward distal half; distal half with short, sparse setae. Prosternal process narrowed centrally. Ventral side of mesothorax moderately finely, sparsely punctate, except smooth central area of mesosternum closer to prothorax. Apex of mesosternal process deeply emarginate, about as wide as 3/4 of mesocoxal cavities. Metepisternum finely, sparsely punctate; with minute, sparse setae except densely pubescent distal region. Sides of metasternum finely, sparsely punctate, pubescent; remaining surface coarsely, sparsely punctate, with long, erect, sparse setae. Scutellum glabrous on base, finely pubescent on remaining surface. **Elytra.** Moderately finely, abundantly punctate, sparse on distal quarter; with long, erect, sparse setae; distal margin obliquely concave, with long triangular projection at outer angle and short triangular projection at sutural angle. **Legs.** Femora with long, erect, sparse setae; profemoral club with triangular projection dorsally; metatarsomere I as long as 1.3 times II–III together.

Abdomen. Ventrites with long, erect, sparse setae, denser on ventrite V; apex of ventrite V truncate.

Dimensions (mm). Holotype male. Total length (including mandibles), 13.60; prothoracic length, 2.80; anterior prothoracic width, 1.85; posterior prothoracic width, 1.85; largest prothoracic width, 2.35; humeral width, 2.85; elytral length, 8.50.

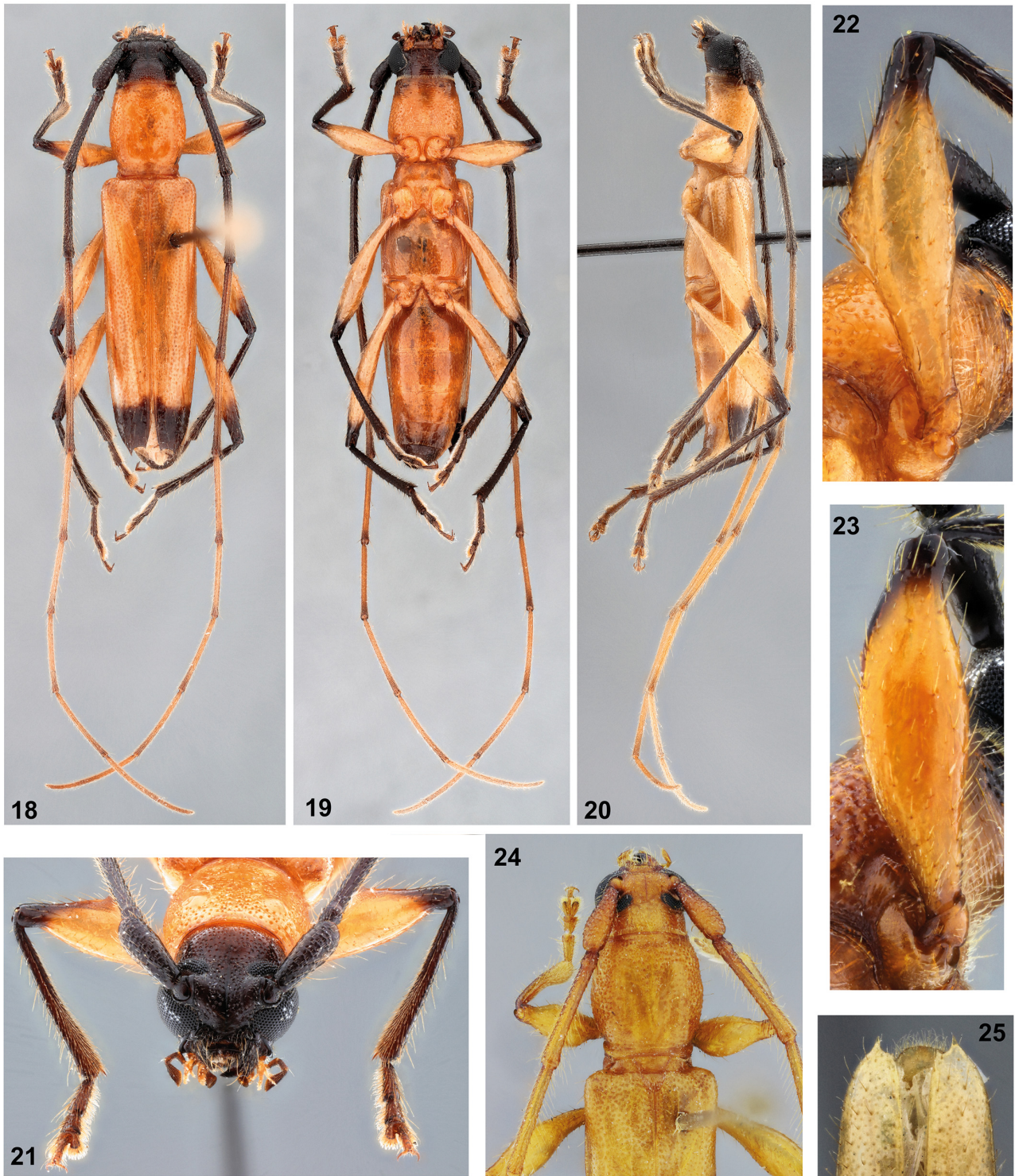
Type material. Holotype male from PANAMA, *Panama*: Bayano (2.5 km W Ipiti), 11–22.V.1996, Wappes, Huether & Morris col. (FSCA).

Etymology. The new species is named after our friend James E. Wappes.

Remarks. *Ectenessa wappesi* sp. nov. is similar to *E. villardi* Belon, 1902, mainly by the general color, but differs by the profemora dorsally without keel and with a distinct triangular projection (Fig. 22). In *E. villardi*, the dorsal side of profemora has keel without triangular projection (Fig. 23). It shares with *E. lurida* Martins, 1973 by the shape of profemora, but differs by the elytra black at apex (Fig. 18), and by the head, basal segments of antennae, tibiae and tarsi dark (Fig. 18). In *E. lurida*, the head, entire antennae, entire elytra, femora, tibiae and tarsi are light (Figs. 24–25).

Ectenessa wappesi sp. nov. can be included in the alternative of couplet “14” from Martins (1998) (translated; modified):

- | | | |
|----------|--|--------------------------------|
| 14(13). | Basal antennomeres and tibiae black | 14' |
| - | Flagellomere and tibiae reddish or orangish. Brazil (Goiás, Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro) | |
| | <i>E. scansor</i> (Gounelle, 1909) | |
| 14'(14). | Profemora with keel, without triangular projection dorsally. Brazil (Maranhão, Goiás, Mato Grosso, Mato Grosso do Sul, Piauí, Bahia, Minas Gerais, São Paulo), Bolivia (Santa Cruz, Tarija). | <i>E. villardi</i> Belon, 1902 |
| - | Profemora without keel, with triangular projection dorsally. Panama | <i>E. wappesi</i> sp. nov. |



FIGURES 18–25. 18–22, *Ectenessa wappesi* sp. nov., holotype male: 18, dorsal habitus; 19, ventral habitus; 20, lateral habitus; 21, head, frontal view; 22, profemur, lateral view. 23, *Ectenessa villardi*, male, profemur, lateral view. 24–25, *Ectenessa lurida*, male: 24, head, pronotum and basal antennomeres; 25, elytral apex.

Clytini

Mecometopus martinsi sp. nov.

(Figs. 26–29)

Description. Female. Integument black; antennae dark-brown toward distal segments; each elytron with two

grayish, wide, oblique band on anterior half (the most anterior not reaching lateral margin or suture; the other not reaching lateral margin, reaching suture).

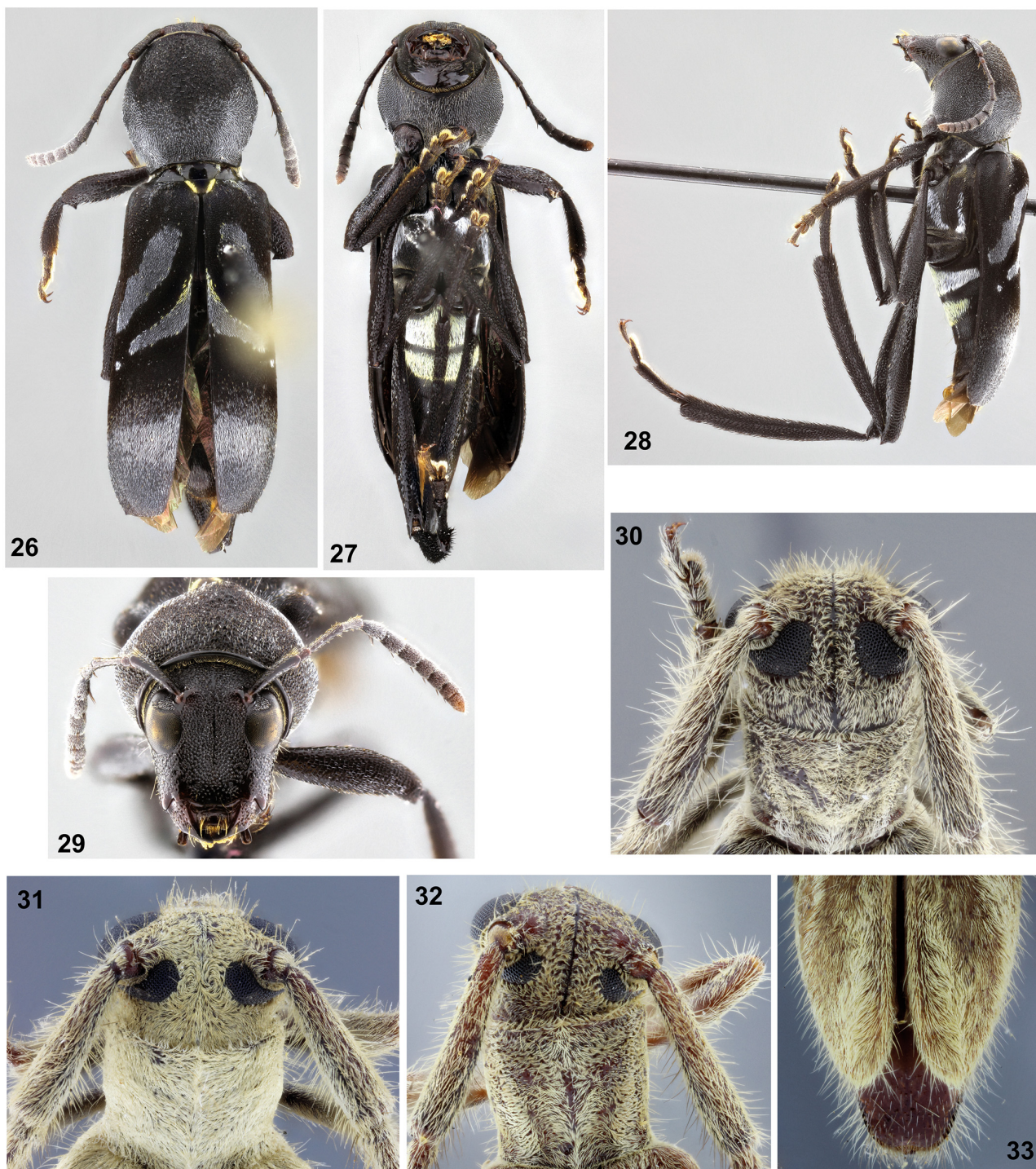
Head. Frons and vertex finely, densely punctate; with minute, moderately abundant, decumbent, white setae distinctly not obscuring integument. Antennal tubercles with sculpture as on frons basally, gradually smooth toward apex. Tempora with sculpture and setae as on frons. Area below lower eye lobes slightly coarsely punctate than on frons, with punctures gradually sparser toward ventral side; with minute, decumbent, white setae (gradually sparser toward ventral side), interspersed with long, erect, yellowish setae. Genae 1.35 times longer than frontal length of lower eye lobes; finely, abundantly punctate close to eye, gradually sparser toward ventral side and smooth apex; with minute, decumbent, sparse, white setae, sparser toward ventral side, interspersed with long, erect, yellowish setae, glabrous at apex. Longitudinal sulcus distinct middle of frons to prothoracic margin. Submentum distinctly depressed on close to gula, mainly laterally, obliquely elevated toward mentum at anterior half; with short, sparse, decumbent, white setae interspersed with long, erect, yellowish setae. Distance between upper eye lobes 1.3 times length of scape; distance between lower eye lobes in frontal view 0.9 times length of scape. Antennae 0.7 times elytral length, reaching apex of basal quarter of elytra; scape slender, gradually enlarged toward apex; antennomere III slender, cylindrical; antennomere IV slender, slightly enlarged toward apex; antennomere V notably enlarged toward apex; antennomeres VI–X thick, cylindrical; antennomere XI thicker, narrowed toward apex; antennal formula based on antennomere III: scape = 1.21; pedicel = 0.36; IV = 0.65; V = 0.64; VI = 0.49; VII = 0.46; VIII = 0.34; IX = 0.33; X = 0.26; XI = 0.39.

Thorax. Prothorax slightly wider than long. Pronotum finely, densely punctate, with small asperities on anterior half; with slightly distinct longitudinal band with small, transverse keels (slightly wider centrally); anterior half with minute, decumbent, sparse, white setae (slightly more abundant on anterior quarter); posterior half with short, abundant, decumbent, white setae, slightly denser laterally, not obscuring integument. Sides of prothorax finely, densely punctate (punctures slightly coarser than on pronotum); with short, decumbent, abundant, white setae not obscuring integument, except almost glabrous anterior area (this area reaches about middle of anterior surface, widened toward pronotum). Prosternum with sculpture as on sides of prothorax, except smooth, narrow area close to anterior margin; with short, decumbent, abundant, white setae not obscuring integument. Mesosternum finely, densely punctate; centrally with wide band with decumbent, white setae (distinctly not obscuring integument), interspersed with long, erect, yellowish setae. Mesepisternum finely, abundantly punctate (punctures finer, denser close to mesepimeron); area close to mesepimeron with narrow band with white, thick setae, not reaching apex of segment, distinctly obscuring integument. Metepisternum finely, densely punctate; with short, decumbent, yellowish setae on anterior quarter, interspersed with white, decumbent setae, partially obscuring integument; with central, longitudinal band with white, thick setae from posterior margin to after middle, obscuring integument (narrowed, sparser toward anterior region). Metasternum finely, densely punctate; with wide, semicircular band with white, thick setae from posterior angles to central area close to mesosternal process; remaining surface with short, decumbent, white setae not obscuring integument (denser laterally, mainly close to mesocoxal cavities). Scutellum with minute, brownish, decumbent setae, except for narrow, dense band with yellow setae laterally. **Elytra.** Minutely, densely punctate; with short, oblique band with sparse, white setae between humerus and scutellum; grayish areas with short, decumbent, white setae, distinctly not obscuring integument (anterior region of posterior band with yellow setae); with small spot with white setae laterally after middle; distal third with decumbent, abundant white setae (distinctly not obscuring integument), slightly denser on transverse band at center of region; remaining surface with minute, inconspicuous brownish setae; apex wide, slightly sinuous, with short, acute projection on outer and sutural angles (slightly longer on outer angle). **Legs.** Profemora fusiform; inner apex with triangular lobe slightly projected; outer apex with sub-spiniform projection turned down. Meso- and metafemora sub-claviform, with acute triangular lobe on outer and inner apex (slightly longer at metafemora). Femora with brownish, short setae (slightly conspicuous) interspersed with white setae on some regions. Metatarsomere I 2.3 times longer than II–III together.

Abdomen. Ventrite I covered with dense pubescence, yellowish centrally, white laterally, distinctly obscuring integument, except for narrow anterior region, widened toward sides; remaining surface with short, yellowish-brown, decumbent setae distinctly not obscuring integument. Ventrite II with wide, dense band with yellowish pubescence, distinctly obscuring integument, not reaching sides, narrow anterior margin (widened toward sides) and narrow area below sides of band of pubescence; remaining surface with short, yellowish-brown, decumbent setae distinctly not obscuring integument. Ventrites III–V with short, decumbent, moderately sparse yellowish-brown setae.

All ventrites with long, erect, sparse setae. Ventrite V flattened centrally (distal region depressed with sides slightly elevated); apex rounded.

Dimensions (mm). Holotype female/paratype female (?). Total length (including mandibles), 9.70/9.45; prothoracic length, 2.55/2.80; anterior prothoracic width, 2.00/2.05; posterior prothoracic width, 1.85/2.00; largest prothoracic width, 2.60/2.70; humeral width, 2.70/2.90; elytral length, 6.50/6.55.



FIGURES 26–33. 26–29, *Mecometopus martinsi* sp. nov., holotype female: 26, dorsal habitus; 27, ventral habitus; 28, lateral habitus; 29, head, frontal view. 30, *Recchia volcanensis* sp. nov., holotype female, upper eye lobes. 31, *Recchia lanei*, holotype female, upper eye lobes. 32–33, *Recchia procera*, paratype female: 32, upper eye lobes; 33, elytral apices.

Type material. Holotype female from PERU, *San Martín*: Picota (9 km NE S6.9877 / W76.3345; 290 m), 6–16.III.2005, J. Vasquez & M. E. Irwin col. (MZSP). Paratype female (?) from ECUADOR, *Napo*: Misahualli (near Tena), 26.VII–2.IX.2000, S. and P. Keller col. (LGBC).

Etymology. The new species is named after the late Ubirajara Ribeiro Martins de Souza.

Remarks. *Mecometopus martinsi* **sp. nov.** resembles the species of *Itaclytus* Martins & Galileo, 2011, but differs mainly by the distal area of the elytra not reddish. It is also similar to some species of *Pirangoclytus* Martins & Galileo, 2011, notably *P. triangularis* (Laporte & Gory, 1838), but differs by the pronotum not reddish (a questionable generic feature, since the pronotum can be dark or reddish in *P. triangularis*). It differs from *P. triangularis* mainly by the antennomeres VI–XI not yellowish, and by the central bands of the elytra not forming a distinct triangle. In *P. triangularis* the antennomeres VI–XI are yellowish, distinctly contrasting with III–V, and the central bands of the elytra form a distinct triangle.

It differs from *Mecometopus polygenus* Thomson, 1861 by the distal antennomeres not notably enlarged, by the central granules on pronotum slightly distinct, and by the elytral bands on basal half not densely pubescent. In *M. polygenus* the distal antennomeres are notably enlarged, the central granules on pronotum are distinct, and the elytral bands on basal half are densely pubescent. It can be separated from *M. wallacei* (White, 1855) by the antennae dark, by the granules on center of pronotum slightly distinct and by the bands on basal half of elytra without dense pubescence. In *M. wallacei* the antennae is yellowish, the granules on center of pronotum are distinct, and the elytral bands on basal half are densely pubescent.

Mecometopus martinsi **sp. nov.** can be included in the alternative of couplet “7” from Martins & Galileo (2011) (translated; modified):

7(6).	Elytra with small lateral spot with whitish pubescence slightly after middle	7'
-	Elytra without spot with whitish pubescence after middle	8
7'(7).	Antennae reddish; elytra with dense pubescent bands on basal half; tarsi light. Brazil (Amazonas)	
	<i>M. cauaburi</i> Martins & Galileo, 2011
-	Antennae distinctly dark; elytra without dense pubescent bands on basal half; tarsi dark. Ecuador, Peru.	
	<i>M. martinsi</i> sp. nov.

Lamiinae

Aerenicini

Recchia volcanensis **sp. nov.**

(Figs. 30, 34–36)

Description. Female. Integument dark-brown, almost black.

Head. Frons finely, abundantly punctate (punctures slightly coarser, denser laterally); with short, abundant, erect, yellowish-brown setae (not obscuring integument, but denser close to antennal tubercles) interspersed with long, erect, yellowish-brown and brown setae. Antennal tubercles with sculpture as on frons, slightly finer toward apex; with yellowish-brown, decumbent setae (partially obscuring integument, slightly lighter than on frons), interspersed with long, erect, yellowish-brown setae. Area between antennal tubercles and upper eye lobes finely, abundantly punctate (punctures slightly coarser than on frons); with setae as on antennal tubercles. Area between posterior margin of upper eye lobes and prothoracic margin moderately finely, abundantly punctate; with short, decumbent, yellowish-brown setae, almost obscuring integument, interspersed with long, erect, yellowish-brown setae. Tempora with sculpture and setae as on area of vertex close to prothorax, but with long, erect setae distinctly sparser. Genae with short, sparse, yellowish-brown setae interspersed with long, erect setae on area close to submentum; remaining surface smooth, glabrous. Postclypeus opaque, finely, moderately abundantly punctate, except for smooth lateral regions; with short, abundant, yellowish-brown setae (not obscuring integument) interspersed with long, erect, yellowish-brown setae. Labrum finely, sparsely punctate on basal quarter, densely, partially confluent punctate on distal 3/4; with short and long, abundant, erect, yellowish-brown setae. Longitudinal sulcus distinct from clypeus to prothoracic margin. Upper eye lobes distinctly widened after antennal socket; distance between upper eye lobes 0.2 times length of scape; distance between lower eye lobes in frontal

view 0.4 times length of scape. Antennae 1.7 times elytral length, reaching elytral apex at basal quarter of antennomere IX. Antennal formula based on antennomere III: scape = 1.38; pedicel = 0.19; IV = 0.86; V = 0.78; VI = 0.81; VII = 0.78; VIII = 0.73; IX = 0.65; X = 0.59; XI = 0.62.



FIGURES 34–39. 34–36, *Recchia volcanensis* sp. nov., holotype female: 34, dorsal habitus; 35, ventral habitus; 36, lateral habitus. 37, *Recchia abauna*, paratype female. 38, *Recchia procera*, paratype female. 39, *Recchia lanei*, holotype female.

Thorax. Prothorax slightly widened from base to apex. Pronotum finely, abundantly punctate; disc with yellowish-brown setae, partially obscuring integument, more whitish on base and part of narrow lateral band; setae forming somewhat bristly longitudinal central band, and longitudinal, slightly distinct, lateral band at each side (less distinct toward anterior margin); lateral area with setae distinctly shorter and less conspicuous; with long, erect, sparse setae throughout. Sides of prothorax finely, abundantly punctate; with short, decumbent, abundant, yellowish-brown setae, partially obscuring integument, interspersed with long, erect setae, except narrow band close to anterior margin with setae distinctly shorter and less conspicuous (this area narrowed toward pronotum). Prosternum, moderately finely, abundantly punctate, except area close to anterior margin with punctures finer and sparser; with short, abundant, yellowish-brown setae interspersed with long, erect setae on area more distinctly punctate, less conspicuous close to anterior margin. Prosternal process with long, erect, abundant yellowish-brown setae, except distal area with setae more whitish, directed backward. Sides of ventral side of mesothorax, metepisternum and sides of metasternum with moderately dense, decumbent, whitish setae (more yellowish toward apex of metasternum); remaining surface with yellowish-brown, decumbent setae; with long, erect, sparse, yellowish-brown setae (more abundant on mesosternum); metepisternum and sides of metasternum coarsely, moderately abundantly punctate; remaining surface of metasternum minutely, abundantly punctate. Scutellum with decumbent, abundant, yellowish-brown setae. **Elytra.** Coarsely, abundant punctate on basal 2/3, distinctly finer, sparser on distal third; dorsal surface with central sub-triangular large macula with whitish, decumbent setae, almost reaching apex of basal third, except for narrow sutural band with yellowish-brown setae; sides of basal 2/3 with band of whitish setae, sub-right, more lateral on basal third, curved toward dorsal side, forming semi-circle on middle third; distal 2/5 with longitudinal band with white pubescence, not reaching apex and suture, sub-right, more lateral on its distal third, oblique toward suture on anterior 2/3; distal fifth with longitudinal band with white pubescence near and subparallel to suture; remaining surface with yellowish-brown, decumbent setae (partially obscuring integument); with long, erect, sparse, yellowish-brown setae throughout; apex moderately widely, individually rounded. **Legs.** With yellowish-brown setae, not obscuring integument, interspersed with long, erect, yellowish-brown setae (more abundant on tibiae); metatarsomere I 1.25 times longer than II–III together.

Abdomen. Ventrite I moderately finely and abundantly punctate (less so centrally); ventrites II–V finely, sparsely punctate; with yellowish-brown, decumbent, abundant setae, partially obscuring integument (somewhat bristly on longitudinal, narrow, central band on ventrite I), interspersed with long, erect, sparse, yellowish-brown setae; distal margin of ventrite V slightly concave.

Dimensions (mm). Holotype female. Total length, 11.50; prothoracic length, 1.80; anterior prothoracic width, 2.00; posterior prothoracic width, 1.75; humeral width, 2.65; elytral length, 8.40.

Type material. Holotype female from BOLIVIA, *Santa Cruz*: 4 km N Bermejo (Refugio Los Volcanes; 18°06' S / 63°36' W; 1045–1350 m), 17–24.X.2014, Wappes & Morris col. (MNKM).

Etymology. The epithet “*volcanensis*” refers to the type locality of the holotype (Refugio Los Volcanes).

Remarks. *Recchia volcanensis* **sp. nov.** differs from *R. abauna* Martins & Galileo, 1998 by the upper eye lobes distinctly wider, with more than 10 rows of ommatidia (Fig. 30), by the pubescence on basal third of elytral disc not forming band, by the distal sixth of the elytra not entirely with whitish pubescence. In *R. abauna* the upper eye lobes are narrower, with 5–6 rows of ommatidia (Fig. 37), the pubescence on basal discal third of the elytra forms band, the distal sixth of the elytra is entirely covered with whitish pubescence. It differs from *R. distincta* (Lane, 1939) mainly by the upper eye lobes wider and with finer ommatidia (narrower and with coarser ommatidia). It can be separated from *R. lanei* Martins & Galileo, 1985 (Fig. 39) by the upper eye lobes wider (narrower in *R. lanei* - Fig. 31) and by the pubescence forming different drawings on the elytra (Fig. 34). It differs from *R. ludibriosa* Lane, 1966 and *R. moema* Martins & Galileo, 1998 mainly by the pubescence forming different drawings on the elytra (see photographs of the holotypes of *R. ludibriosa* and *R. moema* at Bezark 2016). Finally, it differs from *R. procera* Martins & Galileo, 1985 (Fig. 38) by the body wider, by the upper eye lobes wider (narrower in *R. procera* (Fig. 32)), and by the elytral apex distinctly wider and rounded (Fig. 34) (more acuminate in *R. procera* (Fig. 33)).

Recchia volcanensis **sp. nov.** can be included in the alternative of couplet “14” from Martins & Galileo (1998) (translated; alternative of couplets “13” and “14” modified):

- 13(12). Upper eye lobes wide, with at least 9 ommatidia. 14
 - Upper eye lobes narrow, with 5–6 ommatidia. Brazil (Goiás, Ceará, Rio Grande do Norte, Pernambuco, Alagoas, Sergipe, Bahia, Minas Gerais). *R. abauna* Martins & Galileo, 1998

- 14(13). Sides of pronotum without longitudinal bands with white pubescence; circum-scutellar region without whitish pubescence contrasting with its sides. Brazil (Goiás, Bahia, Minas Gerais, Rio de Janeiro, São Paulo, Paraná) *R. ludibriosa* Lane, 1966
- sides of pronotum with longitudinal bands with whitish pubescence; circum-scutellar region with whitish pubescence contrasting with its sides 14'
- 14'(14). Elytral apex acuminate; whitish circum-scutellar pubescence forming band. Brazil (Rio de Janeiro, Santa Catarina) *R. ravida* Martins & Galileo, 1985
- Elytral apex rounded; whitish circum-scutellar pubescence not forming band. Bolivia *R. volcanensis* **sp. nov.**

New record

Sphaerion rusticum Burmeister, 1865 (Cerambycinae, Elaphidiini) is recorded from Bolivia, **new country record**. Material examined: BOLIVIA, Tarija: Chaco (ca. 2 km SW Villa Montes, 21°16'S / 63°29'W), male, 12–16.XII.2011, Wappes, Bonaso & Morris (ACMT).

This species was described from Uruguay. Currently it is known from Paraguay, Argentina (Salta, Tucuman, Chaco) and Uruguay (Monné 2016a).

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