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Two new species of *Corimbion* Martins from Bolivia
(Coleoptera: Cerambycidae: Cerambycinae: Neoibidionini)

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Two new species of *Corimbion* Martins from Bolivia
(Coleoptera: Cerambycidae: Cerambycinae: Neoibidionini)

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Abstract. Two new species of *Corimbion* Martins, 1970 are described from Bolivia: *Corimbion kuckartzi* and *Corimbion ledezmae*. A previous key to the South American species of *Corimbion* (Martins 2009) is herein modified to include the new species. Dorsal, ventral and lateral habitus illustrations, as well as variation in color and dorsal pattern for *C. kuckartzi*, are also presented.

Resumen. Dos nuevas especies de *Corimbion* Martins, 1970 son descritas de Bolivia: *Corimbion kuckartzi* y *Corimbion ledezmae*. Una clave anterior para las especies sudamericanas de *Corimbion* (Martins 2009) es modificada para la inclusión de las dos nuevas especies. Son presentadas ilustraciones del habitus dorsal, ventral y lateral, así como la variación en el color y patrón dorsal para *C. kuckartzi*.

Key Words. Neotropical region, South America, species key, taxonomy.

Introduction

Currently, *Corimbion* Martins, 1970 encompasses eight species, seven distributed in South America and *C. martinsi* Giesbert, 1998 occurring in Central America (Monné 2015). *Corimbion nigroapicatum* Martins, 1970 until now has been the only species recorded in the genus from Bolivia.

Material and Methods

Photographs were taken with a Canon EOS Rebel T3i DSLR camera, Canon MP-E 65mm f/2.8 1-5X macrolens, 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 specimens.

The collection acronyms used in this study are as follows:

ACMT — American Coleoptera Museum (James E. Wappes), San Antonio, Texas, USA;

FWSC — Fred W. Skillman collection, Pearce, Arizona, 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.

Key to South American species of *Corimbion* (modified from Martins, 2009)

1. Elytral apices emarginate, with outer angle unarmed 2
 — Elytral apices with outer angle distinctly projected or spined 5
- 2(1). Elytra with basal and dorsal regions pale, similarly colored, pronotum much darker than elytra.
 Bolivia ***C. kuckartzi* new species**
 — Elytra dark reddish orange to dark brown, pronotum at most slightly darker than base of elytra
 3
- 3(2). Elytra dark reddish with small apical region black (see photograph of holotype at Bezark 2015);
 pronotum without pubescence. Venezuela ***C. caliginosum* Martins**
 — Elytra with anterior and posterior halves separated by light-colored transverse band with additional
 elongate light-colored spot, placed centrally, in anterior half of each elytron 4
- 4(3). Scape piriform, with dorsal depression on basal half (Fig. 11); distal half of elytra dark brown.
 Bolivia ***C. ledezmae* new species**
 — Scape elongate, without dorsal depression on basal half; distal half of elytra dark reddish. Brazil
 (Bahia) ***C. balteum* Martins**
- 5(1). Head (at least on frons) and scape dark, pronotum and basal 4/5 of elytra from orange to reddish
 orange, with distal 1/5, including apices, black 6
 — Head and pronotum similarly colored, reddish brown; elytral color and pattern of fascia extremely
 variable, typically with elongate and/or transverse somewhat darker fascia 7
- 6(5). Pedicel, antennomeres III-IV, apices of femora and tibia black; each elytron with three rows of
 piliferous punctures. Bolivia ***C. nigroapicatum* Martins**
 — Pedicel, antennomeres III-IV, apices of femora and tibia light orange to reddish orange (similarly
 colored as pronotum and elytra); each elytron with two rows of piliferous punctures. Colombia,
 Venezuela, Brazil (Roraima) ***C. terminatum* Martins**
- 7(5). Scape darker than other antennomeres, basal half of elytra with dark band along suture; distal
 half of elytra without transverse, dark central band. Brazil (Bahia to Paraná)
 ***C. vulgare* Martins**
 — Scape and remaining antennomeres similarly colored; basal half of elytra without dark band
 along suture; distal half of elytra with wide, transverse, dark central band. Venezuela
 ***C. supremum* Martins**

***Corimbion kuckartzi* Santos-Silva, Galileo and Wappes, new species**

(Fig. 1–7)

Diagnosis. *Corimbion kuckartzi* is similar to *C. vulgare* Martins, 1970, but differs as follows: typically, each elytron with a clearly evident heavy single brown fascia on basal half, less commonly the fascia is reduced to a thin line or small dark spots, and outer angle of each elytron acute but not spined. In *C. vulgare* the elytral color pattern is also variable, but at least has a wide, dark band on distal half, and the outer angle of each elytron distinctly spined. From *C. supremum* Martins, 1970 it also differs by the outer angle of each elytron lacking a spine (spined in *C. supremum*), and by the brown fascia on elytra not extending along suture to base or prolonged along suture to apex (in *C. supremum* the fascia extends to the base and is prolonged to apex (see photographs of paratypes at Bezark 2015).

Description. Holotype male (Fig. 1-4). The following brown (with some areas more reddish or darker): head; scape; prothorax (except base of prosternum centrally); mesosternum (except for central region close to mesosternal process); metasternum (except for central area close to metacoxae); inverted V-

shaped fascia (includes both elytrons) on basal 1/2 of elytra, includes suture but not lateral margins; distal 1/3 of mesofemoral club; metafemoral club and abdominal ventrites. The following reddish brown: base of prosternum centrally; area of mesosternum close to mesosternal process; mesosternal process. The following yellowish to reddish brown: pedicel; antennomeres III–XI (distinctly yellowish toward distal segments); profemora; most of mesofemora; peduncle of metafemora; tibiae; tarsi; central area of metasternum close to metacoxae. Remaining surface area of elytra yellowish brown.

Head. Frons densely, confluent, finely punctate; with sparse, very short, yellowish setae centrally, distinctly denser close to base of antennal tubercles and eyes. Area between antennal tubercles with sculpture and setae as on central area of frons. Area between apex of antennal tubercles and prothorax smooth centrally, abundantly finely punctate laterally; with sparse short yellowish setae interspersed by scattered long setae on punctate area. Area behind upper eye lobes abundantly finely punctate on wide, oblique band from apex of lobe to margin of prothorax; remaining surface smooth; with moderately abundant short yellowish setae on punctate area, remaining region glabrous. Area behind lower eye lobes tumid, smooth close to eye, sparsely finely punctate on remaining surface; with very sparse short yellowish setae. Genae abundantly finely punctate close to eye, smooth close to apex; with sparse short setae on punctate region. Submentum abundantly transversely striate, with fine punctures interspersed; with sparse short yellowish setae interspersed by longer setae. Antennal tubercles toward apex acute, in frontal view horn-shaped; abundantly finely punctate at base, gradually sparser toward apex; with sparse short yellowish setae. Longitudinal sulcus distinct from clypeus to posterior level of antennal tubercles. Distance between upper eye lobes 0.55 times length of scape; in frontal view, distance between lower eye lobes 0.85 times length of scape. Antennae 2.9 times elytral length; reaching elytral apex at basal 1/4 of antennomere VII. Scape abundantly finely punctate on basal 1/2, gradually sparser toward apex; with narrow but distinct longitudinal sulcus on basal 1/3 of dorsal surface; with sparse short yellowish setae interspersed with long setae. Antennomere III–IV wide; remaining antennomeres gradually narrower distally; antennomeres III–IV with sparse long yellowish setae on inner side ventrally; antennal formula based on antennomere III: scape = 0.52; pedicel = 0.18; IV = 0.77; V = 0.96; VI = 1.02; VII = 1.12; VIII = 0.91; IX = 0.83; X = 0.67; XI = 0.94.

Thorax. Prothorax 1.65 times longer than wide; with distinct constrictions after basal 1/6 and before anterior 1/5. Pronotum with moderately distinct longitudinal gibbosity on each side of anterior 1/2, and distinct, carina-shaped tubercle centrally; with white pubescence not obscuring surface, more distinct (depending on angle of light source) on some areas, distinctly sparse on three longitudinal regions: one centrally and one on each side; with sparse, very coarse shallow punctures, each puncture bearing a long seta. Sides of prothorax with white pubescence. Prosternum with wide band of white pubescence on each side of basal 1/2; anterior 1/2 transversely striate laterally in basal region, remaining surface nearly smooth; areas outside of pubescent bands with very sparse short white setae. Prosternal process with horizontal surface distinctly narrowed toward apex; narrowest area about 1/4 as wide as basal width of profemoral peduncle. Mesosternum finely pubescent. Metepisterna with moderately dense white pubescence. Sides of metasternum with moderately dense white pubescence gradually becoming sparser toward center. Scutellum with dense white pubescence. Elytra abundantly coarsely, very shallowly punctate throughout, sparsely interspersed with moderately fine punctures, each puncture bearing a long seta; apex shallowly emarginate.

Abdomen. Ventrites I–IV with whitish pubescence, slightly denser laterally, sparsely interspersed with long setae. Ventrite V with whitish pubescence throughout; apex slightly rounded and broadly truncate.

Legs. Femora with whitish pubescence dorsally and laterally, sparsely interspersed with long setae, glabrous ventrally.

Female (Fig. 5-7). Primarily differs from male by shorter antennae: 2.1 times elytral length, reaching apex at distal third of antennomere VIII.

Variation. Primarily in integument color or reduced elytral pattern with inverted V-shaped fascia on elytra absent or greatly reduced (sometimes only a small oblique macula or spots remain); scape from yellowish brown to brown; antennomeres entirely yellowish; frons distinctly reddish brown; metasternum mostly yellowish brown; mesofemoral club mostly brown, almost entirely yellowish brown, or en-

tirely yellowish; part of metafemoral peduncle and entire club brown; head and prothorax almost entirely reddish brown; abdominal ventrites reddish brown (sometimes with base of ventrite I yellowish brown).

Dimensions (mm). Holotype male/ paratype males (2) / paratype females (4). Total length (including mandibles) 10.20/7.60–11.30/9.53–13.50; prothoracic length 2.30/1.65–2.45/1.95–2.55; anterior prothoracic width 1.30/0.90–1.35/1.20–1.58; basal prothoracic width 1.35/0.95–1.40/1.13–1.58; humeral width 2.00/1.45–2.20/1.73–2.32; elytral length 6.10/5.00–7.10/6.30–9.00.

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 (6) – male, same data as holotype (ACMT); male, same data as holotype except for 4–9.XII.2013 (MZSP); 2 females, same data as holotype except for 31.X–3.XI.2013, and Wappes & Kuckartz col. (ACMT, MZSP); *Santa Cruz*, 20 km N Camiri (Rd. to Eyti, 1,250 m, 6–8 km E Hwy 9, 19°52'S / 63°29'W), 2 females, 5,6,10.X.2012, Wappes, Bonaso, Skillman col. (ACMT, FWSC).

Etymology. We are pleased to name this new species for Kenneth Paul Kuckartz, one of the collectors of specimens in the type series as well as a long-time friend and collecting partner of the third author.

***Corimbion ledezmae* Santos-Silva, Galileo and Wappes, new species**

(Fig. 8–11)

Diagnosis. *Corimbion ledezmae* is similar to *C. balteum* Martins, 1970, but differs as follows: Scape pyriform with distinct depression dorsally on basal half; antennae dark; elytra with distal area dark-brown; femora slender. In *C. balteum* the scape is slender and lacks a dorsal depression on basal half, the antennae are distinctly light, the distal area of the elytra are reddish brown, and the femora are thicker.

Description. Holotype female. Integument primarily reddish to dark brown with the following dark brown: head; scape; nearly anterior 1/2 of prothorax; narrow margin bordering oblique light band, border surrounding elongate light-colored fascia on basal half; distal 1/3 of elytra after oblique light band; abdominal ventrites; tibiae. The following reddish brown: antennomeres III–XI (distal three segments somewhat lighter); nearly basal 1/2 of prothorax; mesosternum; mesepisterna; mesepimera; metasternum; metepisterna; elytra from oblique light band to base and humerus (outside of dark brown edge bordering lighter colored fascia); femora. The following whitish yellow: oblique band on distal 1/2 of each elytron extending from lateral margin to suture and an elongate fascia located centrally on basal 1/2.

Head. Frons with large depression on each side; abundantly finely striate-punctate from clypeus to near base of antennal tubercles, except for moderately finely punctate, somewhat depressed lateral area under antennal tubercles; with sparse short yellowish white setae close to eyes and under antennal sockets. Area between antennal tubercles abundantly, moderately finely punctate, except for smooth longitudinal sulcus. Area between antennal tubercles to about middle of vertex microsculptured, glabrous on subtriangular region (narrowed toward center of vertex); sides of latter abundantly, moderately finely punctate, with sparse short setae interspersed with scattered long setae; remaining surface of vertex finely vermiculate, with sparse short setae. Area behind upper eye lobes moderately finely punctate close to eyes, somewhat vermiculate toward margin of prothorax from apex to about middle; remaining surface shining, smooth; punctate area with sparse short setae and close to eye a few long setae; smooth area shining and glabrous. Area behind lower eye lobes smooth, shining and glabrous, except for tumid, moderately finely punctate region close to eye, also with sparse short setae and some longer setae close to eye. Genae abundantly moderately finely punctate, with sparse short setae on 1/2 closest to eye, remaining surface smooth and shining glabrous. Submentum with numerous transverse carinae; with sparse short setae and a few long setae laterally. Antennal tubercles toward apex acute, in frontal view horn-shaped; sparsely moderately finely punctate; with sparse, very short setae. Longitudinal sulcus distinct from clypeus to level of upper eye lobes (distinctly deeper between antennal tubercles). Distance between upper eye lobes 0.50 times length of scape; in frontal view, distance between lower eye lobes 0.75 times length of scape. Antennae 2.1 times elytral length; reaching elytral apex at distal 1/3 of antennomere

VIII. Scape abundantly moderately finely punctate at base, punctures gradually sparser toward apex; dorsal surface with large, distinct depression on basal 1/2; with sparse short setae and a few long setae interspersed. Antennomeres gradually slimmer from III to XI; antennomeres III–VI with sparse long yellowish setae on inner side ventrally (sparser from III to VI); antennal formula based on antennomere III: scape = 0.59; pedicel = 0.21; IV = 0.64; V = 0.90; VI = 0.93; VII = 0.88; VIII = 0.81; IX = 0.78; X = 0.71; XI = 0.83.

Thorax. Prothorax 1.6 times longer than wide; with distinct constriction after basal 1/6; tumid near anterior margin laterally. Pronotum with distinct conical tubercle centrally; sparsely, very finely punctate; basal 1/6 pubescent; remaining surface with sparse, very short and long setae intermixed. Sides of prothorax almost glabrous anteriorly, pubescent on remaining surface (this area widely expanded centrally, reaching sides of prosternum). Prosternum shining, with very sparse short setae, except laterally on basal 3/4 and close to procoxal cavities. Prosternal process longitudinally carinate. Mesosternum finely pubescent. Metepisterna with moderately dense white pubescence. Sides of metasternum with moderately dense white pubescence that may be shorter and less distinct centrally (obscured by glue). Scutellum with dense white pubescence. Elytra with sparse, moderately fine setose punctures subaligned in rows on distal 2/3; apex obliquely truncate, with outer angle moderately spiniform.

Abdomen. Ventrites I–IV with fine whitish pubescence, slightly denser laterally, with sparse long setae intermixed, except for glabrous region on distal center of ventrites I–II. Ventricle V with fine whitish pubescence except center of base subglabrous; with sparse long fine setae in distal region and bearing one long, thick seta near apex; apex slightly rounded.

Legs. Profemora with whitish pubescence on dorsal and distal sides of club (with a few long setae dorsally); remaining surface subglabrous. Meso- and metafemora with whitish pubescence interspersed with sparse long setae, except distal 1/2 of ventral surface of club subglabrous.

Dimensions (mm). Holotype female. Total length (including mandibles) 11.60; prothoracic length 2.50; anterior prothoracic width 1.50; basal prothoracic width 1.45; humeral width 2.25; elytral length 7.10.

Type material. Holotype female 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).

Etymology. This species is named to honor Julieta Ledezma Arias, Chief of Entomology, MNKM. For the last 15 years, Julieta has been instrumental in helping make it possible to conduct a Cerambycidae survey in Bolivia. A survey which has discovered hundreds of species new to science, in turn described by participating or cooperating taxonomists, with holotypes of the new species deposited in the MNKM as tribute to the fascinating biological diversity of Bolivia.

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Figures 1–7. Adult *Corimbion kuckartzi*, 1–4) Holotype male: 1) Dorsal habitus. 2) Ventral habitus. 3) Lateral habitus. 4) Head, frontal view. 5–7) Paratype females: dorsal habitus showing variation in color and elytral pattern.



Figures 8–11. Adult *Corimbion ledezmae*, holotype female: **8)** Dorsal habitus. **9)** Ventral habitus. **10)** Lateral habitus. **11)** Head, frontal view.

