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Two new species of Cerambycidae (Coleoptera) from Colombia

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Two new species of Cerambycidae (Coleoptera) from Colombia

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Abstract. *Taeniotes antonkozlovi* Santos-Silva and Botero, **new species** (Cerambycidae, Lamiinae, Monochamini) and *Amphelictus antonkozlovi* Santos-Silva and Botero, **new species** (Cerambycidae, Cerambycinae, Cerambycini, Sphalotrichina) are described from Colombia.

Key Words. Monochamini, Neotropical region, taxonomy

Introduction

Currently, *Taeniotes* Audinet-Serville, 1835 includes 25 species distributed from Central to South America (Monné 2016b), including the Caribbean, with one species introduced in the Azores (an archipelago in the North Atlantic Ocean) at the beginning of 20th century. *Taeniotes* still encompasses several problems (currently under study by the first author), regarding the identity of some species. Thus, at this time, it is not possible to provide an authoritative key to its species or to include the new species in previous keys (Dillon and Dillon 1941; Breuning 1943).

Amphelictus Bates, 1884, was revised by Eya and Chemsak (2003a, b), and the South American species were further reviewed by Martins and Monné (2005) who described seven additional species. According to Monné (2016a) *Amphelictus* includes 22 species distributed from Mexico to South America.

Materials and Methods

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

The acronym used in the text is as follows:

MZSP – Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil

Results

***Taeniotes antonkozlovi* Santos-Silva and Botero, new species**
(Fig. 1–5)

Description. Holotype female. Integument mostly black, shining; elytra with bronze reflections; mentum partially reddish-brown; maxillary and labial palpomere I reddish-brown.

Head. Frons coarsely rugose; with pale yellow pubescence partially obscuring integument, except narrow yellowish-brown band with yellow pubescence, obscuring integument, close to lower eye lobes (this band continuing toward genal area close to eye and area between eye and antennal socket); with some short, dark, erect setae near base of antennal tubercles. Frontoclypeal sulcus well marked (less so centrally). Area between antennal tubercles with yellowish-brown pubescence obscuring integument, except glabrous, narrow central area. Vertex with large yellowish-white band from area between upper eye lobes to prothoracic margin, laterally margined with yellowish-brown pubescence between upper eye lobes; with short, dark, erect setae close to upper eye lobes. Median groove distinct from clypeus to prothoracic margin, carina-shaped between antennal tubercles and upper eye lobes. Area behind upper eye lobes moderately coarsely, shallowly, partially confluent punctate; with short yellowish-brown pubescence partially obscuring integument; area behind lower eye lobes tumid close to eye; with yellowish-brown pubescence obscuring integument, except elongate central area with shorter pubescence partially exposing integument. Genae with yellowish-brown pubescence obscuring integument toward ventral side, less so toward dorsal side, except the narrow band with dense pubescence close to eye, and glabrous, subtriangular area close to curvature of eye. Postclypeus with yellowish-brown pubescence partially obscuring integument except glabrous sides and narrow, transverse central band with integument distinctly exposed; with long, erect, sparse dark setae laterally. Labrum convex, coplanar with anteclypeus on basal third, inclined on distal 2/3; densely, minutely punctate on basal 2/3; centrally nearly glabrous, with yellowish-brown pubescence laterally; with 2 long, erect, thick setae on each side of apex of basal third. Gulamentum glabrous toward prothorax, with yellowish-brown pubescence obscuring integument toward mentum; with some long, erect, dark setae on pubescent area. Distance between upper eye lobes 0.2 times length of scape; in frontal view, distance between lower eye lobes 0.55 times length of scape. Antennae 2.1 times elytral length, reaching elytral apex at about midlength of antennomere VIII; scape, pedicel and antennomere III with short, erect, moderately abundantly dark setae ventrally; antennal formula (ratio) based on length antennomere III: scape = 0.57; pedicel = 0.08; IV = 0.63; V = 0.60; VI = 0.57; VII = 0.60; VIII = 0.58; IX = 0.57; X = 0.55; XI = 0.77.

Thorax. Lateral spiniform tubercles of prothorax moderately long, with blunt apex, glabrous. Pronotum with 4 transverse sulci: one deep close to base, slightly widened centrally, laterally continuing toward sides of prothorax (smooth on this area); one deep at level of basal constriction, laterally continuing toward sides of prothorax; one small, placed centrally between the two basal sulci; one moderately deep, placed at level of distal constriction, laterally continuing toward sides of prothorax (gradually shallower, wider on this area). Central area of pronotum with wide, longitudinal band of yellowish-white pubescence (except for very small glabrous central area), widened from base to second basal transverse sulcus, gradually narrowed from distal sulcus toward margin; sides of central band of pubescence, between transverse sulci, moderately coarsely rugose-punctate, with pale yellow pubescence not obscuring integument, denser on oblique band from central band to another longitudinal band with yellowish-brown pubescence (this later placed laterally, from first basal transverse sulci to distal sulci); inside of distal transverse sulcus with yellowish-brown pubescence partially obscuring integument; sides of central band, between distal transverse sulcus and distal margin finely rugose-punctate, with yellowish-brown pubescence partially obscuring integument (less so closer to sulcus); with long, erect, dark setae on sides of central band between sulci and close to distal margin. Sides of prothorax with small granules behind and beneath lateral tubercle; with yellowish-brown pubescence partially obscuring integument except oblique band with denser pubescence at about center; with long, erect, dark setae emerging from each small granule. Prosternum and mesosternal process with yellowish-brown pubescence obscuring integument; prosternal process laterally expanded toward procoxae near distal curvature. Mesosternum with yellowish-brown pubescence obscuring integument (paler yellow laterally) except central area close to prosternal process; with long, erect, moderately abundant setae centrally; mesosternal process with distinct tubercle. Mesepisternum and mesepimeron with yellowish-brown pubescence obscuring integument. Metepisternum and metasternum with yellowish-brown pubescence nearly obscuring integument; metasternum with moderately long, suberect, dark, sparse setae throughout. Scutellum with white pubescence obscuring integument, sparse on narrow lateral band. **Elytra.** With moderately small, abundant tubercles on basal fifth, except central area below scutellum; remaining surface minutely, moderately sparsely punctate (slightly coarser laterally between tubercles and midlength); area along suture with wide, yellowish-white pubescent band, irregularly

dentate at side opposite to suture; base with irregular, yellowish-white pubescent macula, gradually yellowish-brown toward sides; with irregular, yellowish-white pubescent macula placed at about apex of basal third (partially fragmented); with irregular, yellowish-white pubescent macula placed near beginning of distal third (fragmented on left elytron); remaining surface with irregular, small spots of yellowish-brown pubescence, interspersed with sparse yellowish-brown pubescence (slightly denser laterally, denser on distal quarter); apex with small, blunt spine at sutural angle. **Legs.** Femora and tibiae with abundant yellowish-brown pubescence, partially obscuring integument. Protibiae sinuous. Tarsi with grayish pubescence.

Abdomen. Ventrites with yellowish-brown pubescence partially obscuring integument.

Dimensions (in mm). Total length, 34.00; prothorax: central length, 5.15; anterior width, 5.60; posterior width, 6.30; widest width (between the apices of the lateral tubercles), 7.90; humeral width, 9.95; elytral length, 24.75.

Type material. Holotype female from COLOMBIA, *Magdalena*: road Minca – Cerro Kennedy (Palo Alto; 11°05'49"N / 74°04'34"W; 1700 m), 08-13.VI.2016, V. Sinyaev & C. Pinilla col. (MZSP).

Etymology. The new species is named after Anton Olegovich Kozlov (Russia), who sent and donated the specimen to MZSP collection.

Remarks. *Taeniotes antonkozlovi* n. sp. is similar to *T. marmoratus* Thomson, 1865, but differs as follows: vertex with wide, longitudinal, yellowish-white pubescent band; area behind upper eye lobes without narrow, dense band with yellowish-brown pubescence close to eye; area behind upper eye lobes with punctures not distinct and pubescent; pronotum centrally with wide, longitudinal band of yellowish-white pubescence, not widened centrally; scutellum with whitish pubescence; elytral band of pubescence along suture yellowish-white; body beneath uniformly yellowish-brown pubescent. In *T. marmoratus* (Fig. 6–7), the vertex has narrow, longitudinal yellowish-brown pubescent band (sometimes more whitish, but always narrow), area behind upper eye lobes with narrow, dense, yellowish-brown pubescent band close to eye, and with punctures distinct and not distinctly pubescent, pronotum with longitudinal band of yellowish-brown pubescence centrally, distinctly widened centrally (sometimes whitish, but distinctly different shaped), scutellum with yellowish-brown pubescence, elytral band of pubescence along suture yellowish-brown, body beneath with yellowish-brown maculae on metasternum and sides of abdominal ventrites.

***Amphelictus antonkozlovi* Santos-Silva and Botero, new species**

(Fig. 8–13)

Description. Holotype female. Head black except dark reddish-brown gular area and light-reddish brown mouthparts; scape black; pedicel mostly black, dark brown distally; antennomere III black on basal third, gradually reddish-brown toward apex; antennomere IV brown on basal third, gradually reddish-brown toward apex (primarily on outer side); remaining antennomeres reddish-brown, gradually lighter toward distal segments; prothorax dark brown, slightly lighter on center of pronotum and with narrow black band around procoxal cavities; ventral side of mesothorax dark reddish-brown, mesepimeron mostly darker, with black narrow band around mesocoxal cavities and along sutures between segments; ventral side of metathorax light reddish-brown, except dark brown narrow band along suture between metathorax and metepisternum, narrow band around metacoxal cavities and central discrimin; elytra dark reddish-brown, gradually lighter toward apex; femora mostly light reddish-brown, with black apex; tibiae black on base, gradually reddish-brown toward apex; tarsi reddish-brown, with mostly dark-brown claws; abdominal ventrites reddish-brown with brownish areas, primarily toward V. Pubescence and setae yellow.

Head. Frons finely, sparsely punctate on frontal plate, distinctly denser, finer between plate and base of antennal tubercles; with sparse pubescence interspersed with long, erect setae (pubescence more abundant between plate and base of antennal tubercles). Area between antennal tubercles finely,

abundantly punctate (punctures coarser than on frontal plate); with decumbent, short setae interspersed with long, erect setae; this area forming plate with triangular apex toward area between upper eye lobes. Area between upper eye lobes and prothoracic margin nearly smooth on wide, longitudinal, central area, finely, densely punctate laterally (this area not reaching prothoracic margin), finely, moderately sparsely, finely punctate beneath area with dense punctures; nearly glabrous on central area, with sparse pubescence on punctate area (sparser close to prothoracic margin), interspersed with long, erect setae. Antennal tubercles moderately finely, sparsely punctate on base, minutely, abundantly punctate close to smooth apex (frontal area nearly smooth); with sparse pubescence interspersed with long, erect setae (glabrous on apex and nearly glabrous on frontal area). Coronal suture distinct only on area between antennal tubercles. Area behind upper eye lobes smooth close to eye (this area widened toward lower eye lobe), moderately finely, abundantly punctate on remaining surface (punctures gradually distinctly coarser toward lower eye lobe); with sparse pubescence close to vertex, gradually nearly glabrous toward lower eye lobe. Area behind lower eye lobes tumid, smooth close to eye, obliquely striate-punctate on remaining surface; with long, erect, sparse setae between smooth and punctate area. Genae finely, smoothly punctate; with minute, sparse pubescence interspersed with long, erect setae. Postclypeus finely, moderately abundantly punctate except on subsmooth central area; with short, suberect, sparse setae interspersed with long, erect setae (primarily laterally). Labrum with long setae directed forward, forming fringe at distal margin. Gula subsmooth and nearly glabrous. Submentum with wide, transverse depression close elevated anterior margin; finely, abundantly punctate between gula and depression (subsmooth centrally), sparsely punctate inside depression, smooth on elevated anterior area; with long, erect, moderately abundant setae between gula and depression except glabrous central area. Distance between upper eye lobes 0.65 times length of scape; in frontal view, distance between lower eye lobes 0.80 times length of scape. Antennae 1.1 times elytral length, reaching base of distal sixth of elytra. Scape moderately coarsely, abundantly punctate, gradually sparser toward smooth apex; with short, decumbent, sparse setae interspersed with long, erect setae (primarily dorsally). Antennomere III gradually widened toward apex, subcylindrical on basal 2/3, slightly flattened on distal third; dorsally finely, sparsely punctate on basal 2/3 (finer and moderately abundant toward outer side), minutely, densely punctate on distal third, except smooth narrow area close to apex; with long, erect setae, slightly more abundant near apex of inner side; with short, sparse, decumbent setae on basal 2/3, more abundant on punctate distal third, notably toward outer side. Remaining antennomeres flattened dorso-ventrally; IV–X slightly widened toward apex, with long, erect, sparse setae. Antennal formula (ratio) based on length antennomere III: scape = 0.64; pedicel = 0.12; IV = 0.85; V = 0.79; VI = 0.76; VII = 0.69; VIII = 0.64; IX = 0.62; X = 0.52; XI = 0.58.

Thorax. Prothorax with conical lateral tubercle ending in spiniform projection, placed at about middle. Pronotum with five gibbosities: two subcircular, barely elevated from surrounding surface, placed on sides of basal half, two subcircular, distinctly more elevated, placed on sides after middle, and a longitudinal elevated one, conspicuous, placed on center of basal half; with transverse, wide, moderately well-marked sulcus on distal third; with transverse sulcus on each side of basal quarter; smooth on central longitudinal area except scabrous area close to distal margin, and slightly rugose area close to base; remaining surface moderately coarsely and abundantly punctate, denser toward base and interspersed with minute, abundant punctures on basal half; smooth central area glabrous, except narrow area close to basal and distal margins with sparse pubescence, denser on sides of basal half; remaining surface with sparse pubescence interspersed with long, erect setae. Sides of prothorax finely, moderately abundantly punctate; with sparse pubescence interspersed with long, erect setae. Prosternum finely, abundantly punctate on basal 2/3 (primarily centrally), transversely striate on distal third; with sparse pubescence on basal 2/3 and long, erect, abundant setae throughout. Mesosternum finely, moderately abundantly punctate; with moderately sparse pubescence interspersed with long, erect setae. Mesepisternum minutely, abundantly punctate; pubescence abundant, but not obscuring integument, interspersed with long, erect setae. Mesepimeron finely rugose-punctate; pubescence not obscuring integument, interspersed with long, erect setae. Metepisternum and metasternum with abundant, long and erect setae, not obscuring integument. Scutellum with pubescence partially obscuring integument, except on glabrous basal center. **Elytra.** Surface slightly rugulose, finely, sparsely punctate (punctures at base separated by more than four puncture diameters) (Fig. 13); with short, sparse setae throughout, interspersed with long, erect setae, more abundant on center of basal third and outer mar-

gins; apex with short projection at sutural angle. **Legs.** Femora finely, moderately abundantly punctate except on smooth apex; with short and long, moderately sparse setae except on glabrous smooth apex. Metatarsomere I 0.8 times length of II–III together.

Abdomen. Ventrites with short and long, suberect, moderately abundant setae throughout; apex of ventrite V slightly rounded.

Dimensions (in mm). Total length, 36.35; prothorax: central length, 4.35; anterior width, 4.20; posterior width, 5.85; widest width (between the apices of the lateral tubercles), 6.75; humeral width, 9.20; elytral length, 27.30.

Type material. Holotype female from COLOMBIA, *Bogotá*: 4.0237143 / -74.3295182 [04°01'25.37"N / 74°19'42.26"W], III.2016, Gortovannyi col. (MZSP).

Etymology. The new species is named after Anton Olegovich Kozlov (Russia), who sent and donated the specimen to MZSP collection.

Remarks. *Amphelictus antonkozlovi* is similar to *A. fuscipennis* Eya and Chemsak, 2003, also known from Colombia, and *A. bicolor* Eya and Chemsak, 2003, known from Mexico, Costa Rica and Panamá, but differs from both species as follows: antennae reaching base of distal sixth of the elytra; antennomere III shorter than basal width of the elytron, distinctly widened toward apex; prothorax proportionally more transverse. In *A. fuscipennis* and *A. bicolor* (see photographs at Bezark 2017), the antennae surpass elytral apex, antennomere III longer than basal width of the elytron, subcylindrical and slightly widened from base to apex, and prothorax more elongated.

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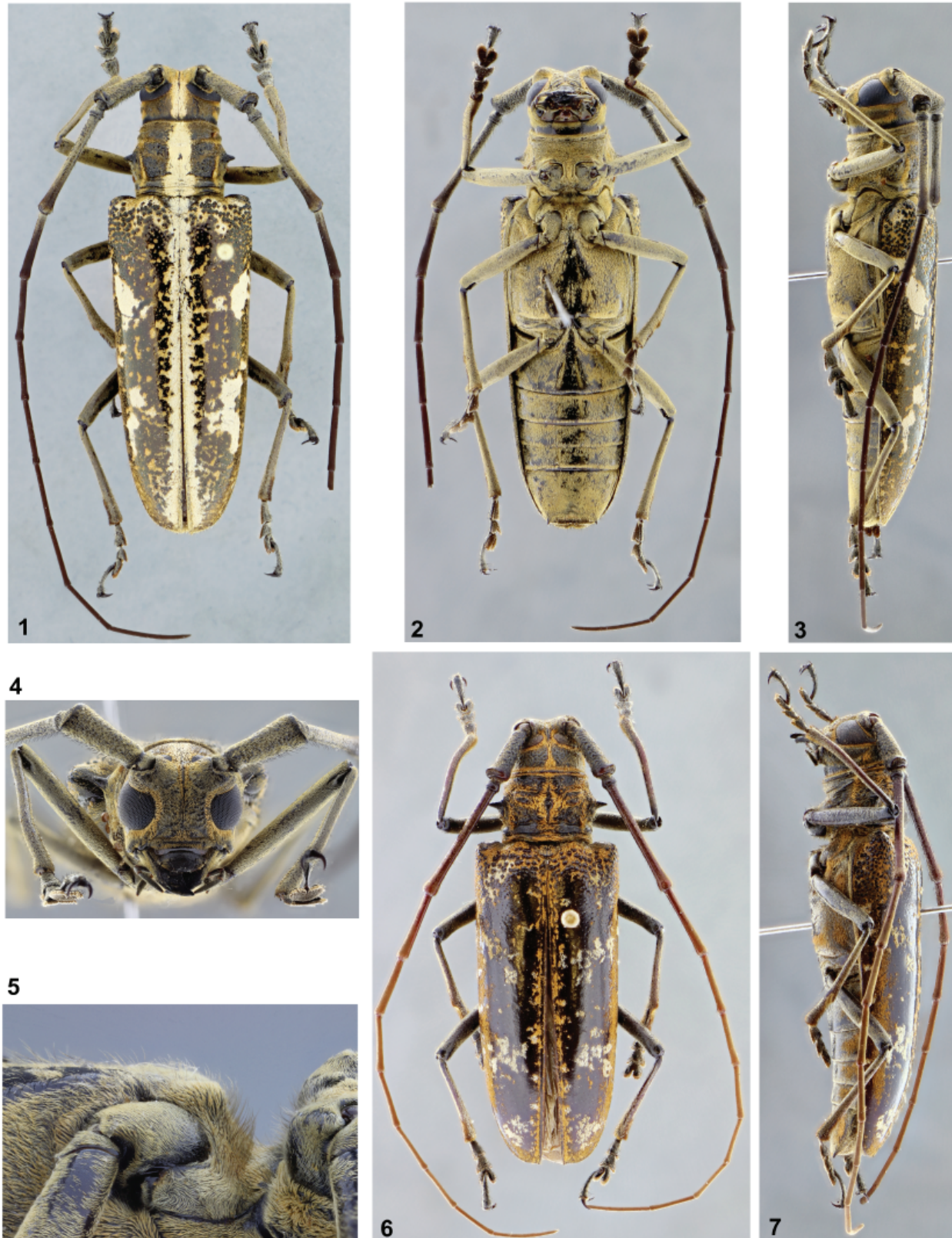
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Figures 1–7. *Taeniotes* spp. 1–5, Habitus and structures of *Taeniotes antonkozlovi* n. sp., holotype female. 1) Dorsal habitus. 2) Ventral habitus. 3) Lateral habitus. 4) Head, frontal view. 5) Mesosternal process. 6–7, Habitus of *Taeniotes marmoratus*, female. 6) Dorsal habitus. 7) Lateral habitus.



Figures 8–13. Habitus and structures of *Amphelictus antonkozlovi* n. sp., holotype female. **8)** Dorsal habitus. **9)** Ventral habitus. **10)** Lateral habitus. **11)** Head and pronotum. **12)** Scape and antennomere III, dorsal view. **13)** Elytral sculpture on basal third.

