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## A new genus and seven new species of Onciderini Thomson, 1860 (Coleoptera: Cerambycidae: Lamiinae) from Central and South America

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# INSECTA **IUNDI**A Journal of World Insect Systematics

### 0688

A new genus and seven new species of Onciderini Thomson, 1860 (Coleoptera: Cerambycidae: Lamiinae) from Central and South America

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Date of issue: February 22, 2019

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Insecta Mundi 0688: 1–16

ZooBank Registered: urn:lsid:zoobank.org:pub:694AC742-CBC8-46DC-A615-F246F52FE2E9

#### Published in 2019 by

Center for Systematic Entomology, Inc.

P.O. Box 141874

Gainesville, FL 32614-1874 USA

http://centerforsystematicentomology.org/

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Insecta Mundi is referenced or abstracted by several sources, including the Zoological Record and CAB Abstracts. Insecta Mundi is published irregularly throughout the year, with completed manuscripts assigned an individual number. Manuscripts must be peer reviewed prior to submission, after which they are reviewed by the editorial board to ensure quality. One author of each submitted manuscript must be a current member of the Center for Systematic Entomology.

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Layout Editor for this article: Robert G. Forsyth

### A new genus and seven new species of Onciderini Thomson, 1860 (Coleoptera: Cerambycidae: Lamiinae) from Central and South America

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Abstract. Thomsonista Nearns and Nascimento, a **new genus** of Onciderini Thomson, 1860 (Coleoptera: Cerambycidae: Lamiinae), is described and illustrated. Seven **new species** of Onciderini are described and illustrated: Hesychotypa antonkozlovi from Ecuador; Hesychotypa danilevskyi from Panama; Lingafelteria pandolfii from Brazil; Oncideres antonkozlovi and Oncideres erwini from Peru; Oncideres johnmarvini from Costa Rica and Panama; and Thomsonista antonkozlovi from Colombia.

**Key words.** Longhorned beetles; Neotropical region; taxonomy.

Resumen. Thomsonista Nearns y Nascimento, un nuevo género de Onciderini Thomson, 1860 (Coleoptera, Cerambycidae, Lamiinae), es descrito e ilustrado. Siete nuevas especies de Onciderini son descritas e ilustradas: Hesychotypa antonkozlovi de Ecuador; Hesychotypa danilevskyi de Panamá; Lingafelteria pandolfii de Brasil; Oncideres antonkozlovi y Oncideres erwini de Perú; Oncideres johnmarvini de Costa Rica y Panamá; y Thomsonista antonkozlovi de Colombia.

Palabras claves. Escarabajos longicorneos; región neotropical; taxonomía.

### Introduction

Onciderini Thomson, 1860 were revised by Dillon and Dillon (1945, 1946), who provided identification keys and described several new taxa. More recently, several works have been published on the tribe, especially by the first author and collaborators (e.g., Nearns et al. 2011, 2014; Nearns and Swift 2011; Nearns and Tavakilian 2012a, b, 2015a, b; Nearns and Androw 2013; Nearns and Maier 2016; Nearns and Santos-Silva 2016; Nearns and Powell 2017).

Currently, the tribe contains 80 genera and about 500 species widely distributed in the New World from North America to southern South America, making it one of the largest tribes of the subfamily Lamiinae Latreille, 1825 (Monné 2018; Tavakilian and Chevillotte 2018).

Herein we describe a new genus, *Thomsonista* Nearns and Nascimento, and seven new species of Onciderini: *Hesychotypa danilevskyi* Nearns and Nascimento from Panama; *Hesychotypa antonkozlovi* Nearns and Nascimento from Ecuador; *Lingafelteria pandolfii* Nearns and Nascimento from Brazil; *Oncideres antonkozlovi* Nearns and Nascimento and *Oncideres erwini* Nearns and Nascimento from Peru; *Oncideres johnmarvini* Nearns and Nascimento from Costa Rica and Panama; and *Thomsonista antonkozlovi* Nearns and Nascimento from Colombia. All but one of the new species described herein are based on single specimens.

### **Materials and Methods**

Specimens from the following collections were examined and the following codens are used throughout the paper:

ACMS American Coleoptera Museum, San Antonio, Texas, USA

EFGC Edmund F. Giesbert Collection (at FSCA), Gainesville, Florida, USA

FSCA Florida State Collection of Arthropods, Gainesville, Florida, USA

MNCR Museo Nacional de Costa Rica, San José, Costa Rica

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

NMNH National Museum of Natural History, Smithsonian Institution, Washington, DC, USA

**ZMHB** Museum für Naturkunde - Leibniz-Institut für Evolutions- und Biodiversitätsforschung, Berlin, Germany

Observations of specimens were made using a Carl Zeiss Stemi SR stereomicroscope with 10× eyepieces. Photographs were taken with Visionary Digital's Passport Storm imaging system fitted with a Canon EOS 50D. Figure plates were edited with the Adobe Photoshop, free software GIMP 2.10.6 (GNU Image Manipulation Program), and Inkscape 0.48.4. Classification and distributional data are based on Tavakilian and Chevillotte (2018) and Monné (2018).

### **Taxonomy**

### Hesychotypa Thomson, 1868

Type species. Hesychotypa miniata Thomson, 1868.

**Diagnosis and remarks.** Hesychotypa has 24 described species widely distributed in the Neotropical region (Monné 2018; Tavakilian and Chevillotte 2018). According to Dillon and Dillon (1945): "The chief distinguishing characteristics of the genus are as follows: the elytra simply punctate, not granulate at base; antennae with third segment much longer than scape, moderately sinuate, scape short, robust, clavate; mesosternal process angulate each side, apex emarginated; humeri only slightly prominent, anterior margin strongly arcuate; head and pronotum always with alternate dark and pale vittae."

### *Hesychotypa danilevskyi* Nearns and Nascimento, sp. nov. (Figures 1a–d)

**Description.** Male. Length 13.65 mm (measured from vertex to elytral apices), width 4.95 mm (measured across humeri). Habitus as in Fig. 1a. Integument mostly black; distal area of postclypeus yellowish-brown; distal area of labrum reddish-brown; apex of last labial and maxillary palpomeres reddish-brown; antennomeres gradually dark brown toward antennomere XI.

Head. Frons slightly elongate, finely, sparsely punctate (punctures more abundant near clypeus); with abundant yellowish-brown pubescence not obscuring integument. Vertex impunctate; with longitudinal brownish-green pubescent band on each side of median groove, surrounded by light yellowish-brown pubescence; area close to upper eye lobes narrowly glabrous. Area behind eye lobes with yellowish-green pubescence interspersed with light yellowish-brown pubescence, not obscuring integument, more uniformly yellowish-brown toward apex of lower eye lobes (narrowly denser close to lower eye lobe). Antennal tubercles elevate, not horn-shaped; pubescence as on frons. Median groove distinct from clypeus to prothoracic margin. Genae slightly longer than half of length of lower eye lobe; with yellowish-brown pubescence, very sparse toward dorsal side, denser, not obscuring integument, toward ventral side. Distance between upper eye lobes 0.37 times length of scape; in frontal view, distance between lower eye lobes 0.75 times length of scape. Antennae 2.3 times elytral length, reaching elytral apex at middle of antennomere VI; scape with yellowish-brown pubescence partially obscuring integument; pedicel with grayish-white pubescence interspersed with yellowish-brown pubescence; antennomeres III–IV with grayish-white pubescence basally (this area shorter on III), and yellowish-brown pubescence on

remaining surface; remaining antennomeres with grayish-white pubescence covering from basal third to basal half, and yellowish-brown pubescence toward apex; antennomeres III–V with erect, dark setae ventrally (shorter, sparser toward V); antennomere III straight; antennal formula based on antennomere III: scape = 0.56; II = 0.10; IV = 0.83; V = 0.59; VI = 0.49; VII = 0.42; VIII = 0.41; IX = 0.40; X = 0.39; XI = 0.37.

Thorax. Prothorax wider at base, transverse, 1.65 times as wide as long, sides with tubercle from about basal third to near midlength, with apex of tubercle conical and blunt. Pronotum with basal and distal sulci distinct; coarsely punctate on base of lateral gibbosities, smooth on remaining surface; with three wide brownish-green pubescent bands, one longitudinal, irregular on each side, another Y-shaped centrally; remaining surface with light yellowish-brown pubescence, more yellowish-white on sides of basal half. Sides of prothorax coarsely, sparsely punctate in basal half; with pubescence mostly brownish-green centrally, mostly light yellowish-brown on remaining surface. Prosternum and mesoventrite with light yellowish-brown pubescence, denser laterally. Prosternal process triangularly widened from near base to apex; with sparse light yellowish-brown pubescence. Mesosternal process with distal margin slightly concave, slightly narrower than mesocoxal cavity. Metepisternum and metasternum with light yellowish-brown pubescence partially obscuring integument. Scutellum with brownish-green pubescence in wide central area, and yellowish-white pubescence laterally.

Elytra. Slightly shorter than twice humeral width, 4.1 times as long as prothoracic length; parallel-sided at basal 2/3, uniformly rounded toward suture at distal third; finely, moderately abundantly punctate in basal third, punctures gradually sparser toward apex; humerus forming obtuse tubercle; pubescence mostly brownish-green except following light yellowish-brown pubescent maculae interspersed with yellowish-white pubescence: three small close to basal curvature; small, sparse, nearly circular in basal third, and another elongate close to suture; four longitudinal, partially fused, about central third, outermost placed close to epipleura, innermost placed about center of dorsal surface, gradually shorter from outermost to innermost, together forming wide, oblique band; irregular, mostly longitudinal, partially fused in distal third (covering most of surface of distal third). Legs. Femora with brownish-green pubescence interspersed with yellowish-brown pubescence (the latter forming irregular distal ring). Tibiae with pubescence mostly as on femora, but with golden pubescence in some areas, especially distally. Metatarsomere I 0.65 times II—III together.

**Abdomen.** Ventrites with yellowish-brown pubescence partially obscuring integument; apex of ventrite V truncate.

Female. Unknown.

**Type material.** Holotype (Fig. 1a–d) male from PANAMA, *Panama*: Soberanía National Park (Pipeline road at 2.3 km; beating plants / at Hg/UV lights), 18.V.2013, N. Franz col. (NMNH).

**Etymology.** The new species is named in honor of Mikhail Leontievich Danilevsky (Russian Academy of Sciences, Moscow, Russia) for his many contributions to the study of Cerambycidae. The epithet is a noun in the genitive case.

Diagnosis and remarks. This species differs from males of species with similar general appearance as follows (only the most notable characters are used): from *H. ableptema* Martins and Galileo, 1990, *H. jaspidea* (Bates, 1865) and *H. subfasciata* Dillon and Dillon, 1945 by the antennal tubercles not horn-shaped and antennomere III straight (respectively, horn-shaped, and sinuous in these species); from *H. aeropa* Dillon and Dillon, 1945, *H. fernandezi* Martins and Galileo, 1999 and *H. lirissa* Dillon and Dillon, 1945 by the antennal tubercles not horn-shaped and lower eye lobes distinctly longer than gena (respectively, horn-shaped, and about as long as gena in these species); from *H. liturata* (Bates, 1865) by the antennomere III straight and elytral apex rounded (respectively, sinuous, and obliquely truncate in *H. liturata*); and from *H. heraldica* (Bates, 1872) by the antennomere III straight, shorter antennae reaching elytral apex at middle of antennomere VI, and antennomere XI distinctly shorter than IV (respectively, sinuous, reaching elytral apex at about apex of antennomere V, and slightly shorter than IV in *H. heraldica*).

*Hesychotypa antonkozlovi* Nearns and Nascimento, sp. nov. (Figures 1e-h)

**Description.** Male. Length 14.7 mm (measured from vertex to elytral apices), width 5.3 mm (measured across humeri). Habitus as in Fig. 1f. Integument mostly reddish brown, lighter or darker (almost black) in some areas; postclypeus and distal area of labrum yellowish; apex of labial and maxillary palpomeres yellowish-brown; scape slightly lighter apically, flagellomeres gradually darker from about posterior half.

**Head.** Frons slightly longer than wide, subquadrate; surface finely, sparsely punctate, more densely toward clypeus; with abundant yellowish pubescence, obscuring integument near eyes. Vertex impunctate; with yellowish pubescence as on frons. Area behind eye lobes with sparse yellowish pubescence, not obscuring integument. Antennal tubercles divergently elevate. Median groove distinct from clypeus to prothoracic margin. Genae about one-third of lower eye lobe length; with sparse yellowish pubescence. Distance between upper eye lobes about twice greatest width of upper eye lobe. Antennae (missing antennomeres VIII—XI in left antenna, VI—XI in right antenna) reaching elytral apex at apex of antennomere VI; scape moderately clavate, with sparse yellowish pubescence; pedicel with sparse whitish yellow pubescence, slightly denser than on scape; antennomere III sinuous; antennomeres III—IV with erect yellowish setae on inner side, remaining surface with yellowish pubescence (denser toward distal half), not obscuring integument; remaining antennomeres with dense yellowish-white pubescence in basal half, gradually yellowish toward apex; antennal formula based on antennomere III: scape = 0.53; II = 0.10; IV = 0.82; V = 0.62; VII = 0.62; VII = 0.54.

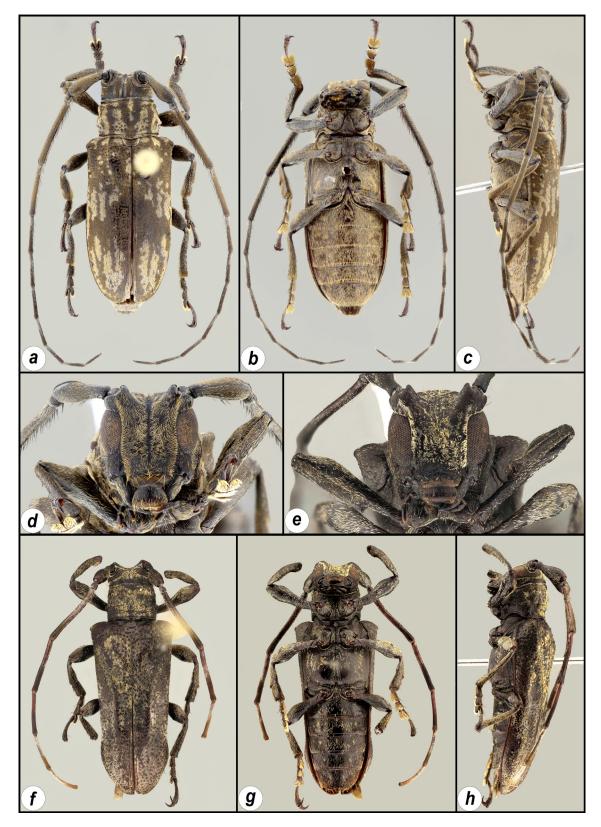
Thorax. Prothorax parallel-sided, about 1.5 times as wide as long (including tubercles); sides with tubercle about basal third, conical and blunt at apex. Pronotum with basal and distal sulci distinct; anterior and posterior quarters transversely demarcated by depression; pronotal disk (between transverse depressions) slightly elevated; with two tubercles anteriorly and one median posteriorly; with some smaller irregular tubercles alongside dorsal tubercles; surface with sparse yellowish pubescence. Prosternum and mesoventrite with light yellowish pubescence. Prosternal process triangle-shaped; with sparse light yellowish-brown pubescence. Mesepisternum sulcate along its length; with moderately dense pubescence, not obscuring integument. Mesosternal process longitudinally depressed; with angular margin, apically about as wide as two-thirds of mesocoxal cavity. Metepisternum and metasternum with sparse light yellowish pubescence. Scutellum about 1.5 times wider than long, with sparse yellowishwhite pubescence. Elytra. About twice humeral width, 4.5 times as long as prothoracic length; slightly convergent at basal 2/3; apical third slightly widened; with shallow, oblique, wide depression from near humerus to near suture at basal quarter; area near scutellum with some granulate punctures; longitudinally elevated centrally at anterior third of each elytron; coarsely, moderately abundantly punctate in basal third, punctures gradually sparser toward apex; humerus forming obtuse tubercle; with moderately dense yellowish pubescence, not obscuring integument. Legs. Coxae with sparse yellowish pubescence; procoxae with prominent anterior tubercle at inner side; mesocoxae with small tubercle posteriorly at inner side. Femora with sparse light yellowish pubescence; profemora with irregular wrinkles in basal third. Tibiae with pubescence mostly yellowish, with some brownish areas, especially distally. Metatarsomere I about 0.7 times II–III together (missing protarsomeres and tarsomeres of left leg). Abdomen. Ventrites with yellowish pubescence, not obscuring integument (except small spots sideways of ventrites I–IV); apex of ventrite V notched.

Female. Unknown.

**Type material.** Holotype (Fig. 1e–h) male from ECUADOR, *Pichincha* (Camping Tombo, 0°01′22″ S 78°38′48″ W, 1,969 m), 25.X.2011, Viktor Sinyaev col. (MZSP).

**Etymology.** The new species is named in honor of Anton Olegovich Kozlov (Moscow, Russia), who sent and donated the holotype. The epithet is a noun in the genitive case.

**Diagnosis and remarks.** Hesychotypa antonkozlovi sp. nov. is similar to H. punctata Martins, 1979 by the general body shape, punctures of the elytra (denser at basal third) and pubescence pattern. Through the study of the photograph of the H. punctata holotype (ZMHB) it is possible to differentiate the new species as follows (H. punctata in parentheses): antennomeres III–V longer, together reaching



**Figure 1.** Two new species of *Hesychotypa*. **a–d)** *Hesychotypa danilevskyi* sp. nov., holotype male: **a)** Dorsal habitus. **b)** Ventral habitus. **c)** Lateral habitus. **d)** Close-up of head. **e–h)** *Hesychotypa antonkozlovi* sp. nov., holotype male: **e)** Close-up of head. **f)** Dorsal habitus. **g)** Ventral habitus. **h)** Lateral habitus.

the apical fifth of the elytra (reaching the apical third); sutural carina of the elytra present only at apical third (present in almost the entire suture). Additionally, the antennal tubercles are gradually divergent (abruptly elevated and modified in tubercle apically). Although both species were collected in Ecuador, *H. antonkozlovi* was collected in Pichincha at 1,969 m, while *H. punctata* was collected in Balzapamba at about 2,877 m.

### Lingafelteria Nearns and Tavakilian, 2012

Type species. Lingafelteria giuglarisi Nearns and Tavakilian, 2012.

**Diagnosis and remarks.** *Lingafelteria* is a monotypic genus, proposed to allocate *L. giuglarisi* Nearns and Tavakilian, 2012 from French Guiana. According to Nearns and Tavakilian (2012a), this genus is similar to *Proplerodia* Martins and Galileo, 1990, but differs by the eyes with lower lobes taller than genae, elytra without longitudinal lines, and tarsomere V distinctly shorter than I–III combined.

### *Lingafelteria pandolfii* Nearns and Nascimento, sp. nov. (Figures 2a–e)

Description. Male. Length 6.85 mm (measured from vertex to elytral apices), width 2.40 mm (measured across humeri). Habitus as in Fig. 2a. Head, prothorax, ventral side of meso- and metathorax brown (more dark reddish brown depending on angle of light source); mouthparts yellowish-brown (except brown mandibles); elytra mostly yellowish-brown, except wide, oblique brown band (more dark reddish brown depending on angle of light source) from near humerus to near suture in basal third, brownish band laterally in basal quarter, and wide, subcircular brown band in about central third, not prolonged toward vertical lateral area, gradually lighter, less distinct toward its apex; scape, pedicel and antennomere XI yellowish-brown; antennomere III pale yellow in basal half, gradually light brown toward apex; antennomeres V, VII and IX entirely light brown; antennomeres VI and VIII light brown except brownish apex; antennomere X pale yellow in basal 2/3, yellowish-brown in distal third; femora and tarsi light reddish brown; tibiae yellowish-brown; abdominal ventrites light reddish brown except dark reddish brown apex of ventrites I–IV. General pubescence pale yellow.

**Head.** Frons finely, sparsely punctate; pubescence abundant, not obscuring integument centrally, nearly obscuring laterally (partially lost in the holotype), except narrow, nearly glabrous band close to eyes. Vertex impunctate; pubescence yellow between antennal tubercles and upper eye lobes, as on frons toward prothoracic margin. Area behind eye lobes with narrow yellow pubescent band close to upper eye lobe, with pale yellow pubescence partially obscuring integument on remaining surface. Antennal tubercles with pubescence as on sides of frons. Median groove distinct from clypeus to prothoracic margin. Genae with sparse pale yellow pubescence except nearly glabrous area close to eye; about as long as half length of lower eye lobe. Distance between upper eye lobes 0.26 times length of scape; in frontal view, distance between lower eye lobes 0.63 times length of scape. Antennae 1.9 times elytral length, reaching elytral apex at basal quarter of antennomere VIII; scape, pedicel and antennomeres III–IV with a few long, erect, thick dark setae ventrally; antennomeres V–X with a few long, erect, dark, thick setae ventrally near apex; antennomere III straight; antennal formula based on antennomere III: scape = 0.95; II = 0.17; IV = 0.81; V = 0.69; VI = 0.63; VII = 0.59; VIII = 0.57; IX = 0.51; X = 0.46; XI = 0.42.

Thorax. Prothorax slightly wider at base, transverse, about 1.25 times as wide as long, sides with rounded lateral protuberance. Pronotum coarsely, sparsely punctate, with two large, slightly distinct gibbosities laterally in central area; pubescence abundant, partially obscuring integument. Sides of prothorax with punctures and pubescence as on pronotum. Ventral side of thorax impunctate; with abundant pubescence not obscuring integument. Narrowest area of prosternal process about 1/7 as wide as procoxal cavity; apex triangular. Mesosternal process slightly, gradually widened toward apex; narrowest area about half as wide as mesocoxal cavity; apex distinctly emarginate centrally. Elytra. Nearly twice as long as width at humeri, about 1.7 times as wide as maximum prothoracic width, about 4.1 times as long as prothoracic length; sides slightly, gradually convergent from humeri to about distal quarter, then

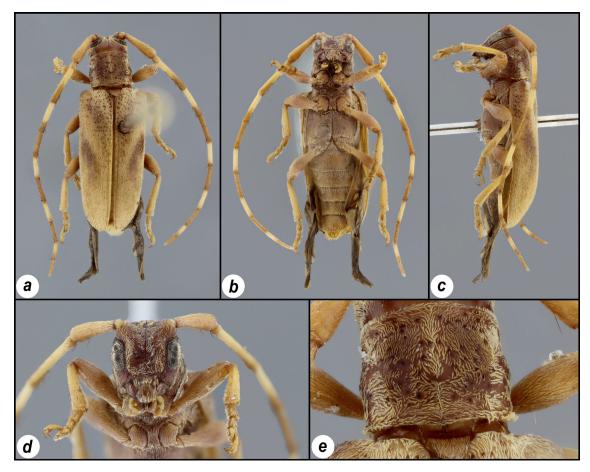


Figure 2. Lingafelteria pandolfii sp. nov., holotype male: a) Dorsal habitus. b) Ventral habitus. c) Lateral habitus. d) Close-up of head. e) Close-up of pronotum and elytral humeri.

rounded toward sutural angle; coarsely, moderately abundantly punctate in large triangular area from base to about middle, sparsely punctate on remaining surface (punctures gradually finer toward apex); humeri prominent, obtuse; pubescence abundant, partially obscuring integument. **Legs.** Pubescence abundant, not obscuring integument. Meso- and metatarsomeres II—III with a few long, erect, dark, thick setae; metatarsomere I slightly shorter than II—III together.

**Abdomen.** Pubescence abundant, not obscuring integument; distal area of ventrite V with transverse row of sparse, erect, dark, thick setae; apex of ventrite V truncate, very slightly emarginate centrally.

#### Female. Unknown.

**Type material.** Holotype (Fig. 2a–e) male from BRAZIL, *Amazonas*: Reserva Ducke (AM 010, Km 26; Malaise trap), 29.VIII.1978, no collector indicated (MZSP).

**Etymology.** This species is named in honor of the first author's beloved cousin, Roberto Martín "Lole" Pandolfi (Patagonia, Argentina), for his friendship and generosity. The epithet is a noun in the genitive case.

**Diagnosis and remarks.** *Lingafelteria pandolfii* sp. nov. differs from *L. giuglarisi* Nearns and Tavakilian, 2012 as follows: antennae thicker, for example diameter of antennomere III equal to about 1/7 of length of antennomere; antennomere III straight; pronotal pubescence not obscuring integument; elytra less distinctly narrowed toward apex (width about base of distal quarter equal to 0.9 times humeral width); elytra with dark bands. In *L. giuglarisi* antennae slender, for example diameter of antennomere III equal to about 1/9 of length of antennomere; antennomere III slightly sinuous; pronotal pubescence

obscuring integument; elytra more distinctly narrowed toward apex (width about base of distal quarter equal to 0.7 times humeral width); and elytra without dark bands.

### Oncideres Lacordaire, 1830

Type species. Lamia vomicosa Germar, 1824 (Thomson designation 1864: 104) [= Lamia saga Dalman, 1823].

**Diagnosis and remarks.** The genus *Oncideres* currently contains 131 described species (Tavakilian and Chevillotte 2018). The first author and collaborators provided color photographs of nearly all the primary type specimens described in the genus. We believe *Oncideres* is in need of a taxonomic revision. Richly illustrated dichotomous and interactive identification keys are currently in preparation by Nearns.

### *Oncideres antonkozlovi* Nearns and Nascimento, sp. nov. (Figures 3a–d)

**Description.** Male. Length 9.0 mm (measured from vertex to elytral apices), width 2.8 mm (measured across humeri). Habitus as in Fig. 3a. General form moderately elongate. Integument mostly reddish brown; head (except brownish labial and maxillary palpomeres), scape, pedicel, prothorax dark brown; antennomeres III–XI slightly darkened at apex; abdominal ventrites reddish-orange; meso- and metafemora reddish brown basally, darker toward apex; base and apex of tibiae darker.

**Head.** Frons slightly longer than wide, subquadrate; coarsely, sparsely punctate, especially in central area near clypeus; with abundant yellowish pubescence, slightly lighter, partially obscuring integument near eyes. Vertex with yellowish pubescence. Antennal tubercles divergently elevate, modified at inner side (horn-shaped). Median groove distinct from clypeus to prothoracic margin. Genae about 0.8 times of lower eye lobe length; moderately densely punctate; yellowish pubescence as on frons. Distance between upper eye lobes about twice greatest width of one upper lobe eye. Left antenna damaged (missing antennomeres IX–XI), right antenna reaching elytral apex at midlength of VII. Scape gradually widened toward apex; with a few rough spots and a few brownish erect setae at base of inner side; with moderately abundant yellowish pubescence on base, whitish-yellow in remaining areas, not obscuring integument. Pedicel and remaining antennomeres with whitish-yellow pubescence, not obscuring integument, and a few brownish erect setae on inner side. Antennal formula based on antennomere III: scape = 1.00; II = 0.13; IV = 0.85; V = 0.86; VI = 0.84; VII = 0.80; VIII = 0.72; IX = 0.65; X = 0.64; XI = 0.84 (slightly curved).

**Thorax.** Prothorax transverse, about 1.4 times as wide as long (including tubercles); sides with tubercle about middle, conical and blunt at apex; posterior half remarkably narrowed, with a few erect brownish setae. Pronotum with basal and distal sulci distinct; pronotal disk with three slightly elevate tubercles, two anteriorly, another centrally; surface with moderately dense yellowish-white pubescence forming median line, not obscuring integument (tubercles glabrous). Prosternum and mesoventrite with yellowishwhite pubescence nearly obscuring integument, more yellowish toward sides and anteriorly. Prosternal process strongly triangle-shaped. Mesepisternum with yellowish pubescence not obscuring integument. Mesosternal process slightly longitudinally depressed; about as wide as half mesocoxal cavity; truncate apically. Metepisternum with yellowish-white pubescence, yellower on anterior margin; metasternum with dense yellowish-white pubescence, nearly obscuring integument (except glabrous, central, inverted triangle-shaped area), and yellower pubescence on posterior sides. Scutellum about 1.3 times wider than long, with sparse yellowish-white pubescence; rounded posteriorly. Elytra. About 2.3 times humeral width, 4 times as long as prothoracic length; apical quarter slightly convergent; apices rounded together; surface coarsely, moderately abundantly punctate in anterior half, punctures gradually sparser in posterior half; with a few granulate punctures near scutellum; with dense yellowish-white pubescence between humeri, nearly obscuring integument, sparser in remaining areas (except glabrous areas around punctures); with yellowish spots throughout. Legs. Coxae with dense yellowish-white pubescence, sparser on mesocoxae; femora with moderately yellowish-white pubescence; profemora with irregular wrinkles in basal third. Tibiae with mostly yellowish pubescence, lighter on base. Metatarsomere I about 0.7 times II-III together. Abdomen. Ventrites with dense yellowish-white pubescence, partially obscuring integument; apex of ventrite V slightly notched with brownish elongate setae.

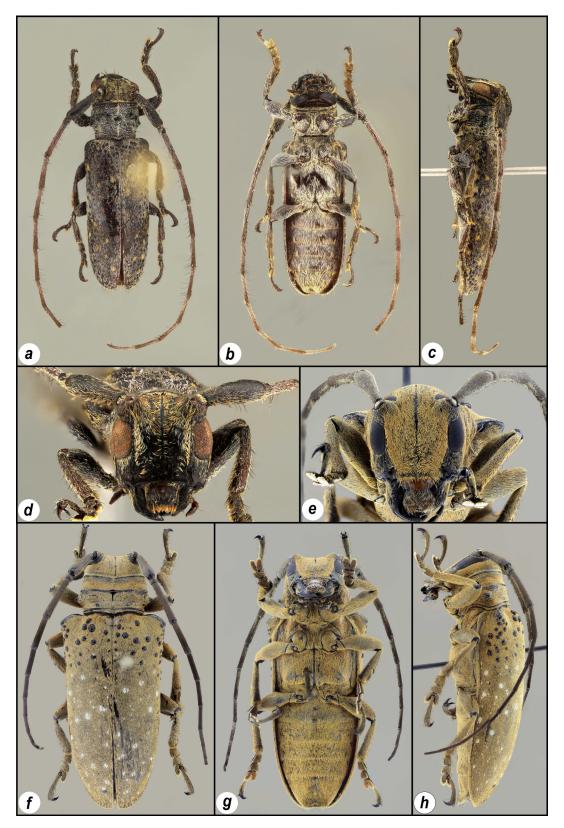


Figure 3. Two new species of *Oncideres*. a-d) *Oncideres antonkozlovi* sp. nov., holotype male: a) Dorsal habitus. b) Ventral habitus. c) Lateral habitus. d) Close-up of head. e-h) *Oncideres erwini* sp. nov., holotype female: e) Close-up of head. f) Dorsal habitus. g) Ventral habitus. h) Lateral habitus.

Female. Unknown.

**Type material.** Holotype (Fig. 3a–d) male from PERU, *La libertad* (Sánchez Carrión prov., Road PE10C, near Laguna Pias, 07°54′43″ S 77°35′38″ W, 2,180 m), 19.X.2011, V. Sinyaev col. (MZSP).

**Etymology.** The new species is named in honor of the great beetle collector Anton Olegovich Kozlov (Moscow, Russia), who donated the holotype. The epithet is a noun in the genitive case.

**Diagnosis and remarks.** Oncideres antonkozlovi sp. nov. is similar to O. pectoralis Thomson, 1868 by the pronotum and pattern of elytral pubescence. The new species can be separated especially by the antennal tubercles modified at inner side (horn-shaped), and sparse whitish pubescence between the yellowish spots of the elytra. In O. pectoralis the antennal tubercles are not modified, and the pubescence between the elytral spots is yellowish, forming dense areas nearly obscuring integument.

### Oncideres erwini Nearns and Nascimento, sp. nov. (Figures 3e-h)

**Description. Female.** Length 24.5 mm (measured from vertex to elytral apices), width 7.3 mm (measured across humeri). Habitus as in Fig. 3f. General form elongate-oblong, moderately sized. Integument mostly black; anteclypeus brownish, with darker irregular areas; labrum dark brown basally, almost black, gradually lighter toward apex. Pubescence ochraceous (slightly lighter in some areas), mostly nearly obscuring integument, except small white pubescent spots in distal two-thirds of elytra.

Head. In dorsal view, anterior area of head slightly concave. Frons transverse, slightly wider than 3.5 times lower eye lobes. Eyes with lower lobes moderately sized, oblong; narrowest area connecting upper and lower eye lobes about three ommatidia wide. Gena about 0.75 times as tall as lower eye lobes. Distance between upper eye lobes 0.70 times length of scape (4.15 times maximum width of one upper eye lobe); in frontal view, distance between lower eye lobes 1.10 times length of scape. Antennal tubercles widely separated, unarmed at apex. Antennae 1.4 times elytral length, reaching elytral apex at distal quarter of antennomere X; scape gradually widened toward apex, not clavate, with short, erect, sparse dark-brown setae ventrally; antennomeres not curved; antennomeres III–V with short fringe of dark-brown setae (slightly sparser toward V); remaining antennomeres with short, erect, sparse dark setae ventrally (gradually sparser toward XI). Antennal formula based on antennomere III: scape = 0.78; II = 0.13; IV = 0.75; V = 0.64; VI = 0.60; VII = 0.58; VIII = 0.52; IX = 0.52; XI = 0.51.

Thorax. Prothorax roughly conical, transverse, 2.0 times as wide as long (including lateral tubercles), slightly wider at apex; lateral tubercles large, conical, with blunt apex, placed at basal half, pubescent basally, glabrous distally. Pronotum with basal margin slightly sinuous and distal margin concave; disk with transverse, slightly sinuous carina near middle, more protuberant laterally, glabrous except moderately sparse pubescence close to protuberant area; distal transverse sulcus wide, moderately deep. Scutellum transverse, apex rounded, longitudinally glabrous centrally. Elytra about 1.9 times as long as width at humeri, about 5.0 times as long as pronotal length, about 1.4 times broader basally than prothorax at its widest (at tubercles); humeri prominent, keel-shaped, nearly glabrous, not tuberculate; lateral margins slightly, gradually narrowed from humerus to about distal third, gradually rounded to apex at apical third; apex jointly rounded; basal third with scattered, small to medium-sized glabrous tubercles. Basal area of prosternal process distinctly narrower than procoxal cavity. Mesosternal process slightly narrower than mesocoxal cavity; apex bilobed. Legs. Short; femora robust, not rugose; pro- and mesofemora fusiform; metafemora clavate; tibiae slightly, gradually expanded toward apex; metatarso-mere V slightly longer than I–III combined.

Male. Unknown.

**Type material.** Holotype (Fig. 3e–h) male from PERU, *Junín*: Pampa Hermosa Lodge, 1-6.IV.2011, J. B. Heppner and C. Carrera col. (NMNH).

**Etymology.** This species is named in honor of Terry Lee Erwin, senior curator of Coleoptera at the NMNH, in recognition of his many contributions to the study of Neotropical beetles. The epithet is a noun in the genitive case.

Diagnosis and remarks. This species resembles *O. apiaba* Martins, 1981, but differs as follows: in dorsal view, anterior area of the head slightly concave; distance between upper eye lobes shorter than length of the antennomere IV; elytra with white pubescent spots; sutural angle of the elytra not projected; basal area of the prosternal process distinctly narrower than a procoxal cavity. In *O. apiaba*, in dorsal view, anterior area of the head is nearly straight, distance between upper eye lobes is larger than length of the antennomere IV, elytra lacks white pubescent spots, sutural angle of the elytra is slightly projected, and basal area of the prosternal process is about as wide as a procoxal cavity. It differs from *O. germarii* Thomson, 1868 especially by the white pubescent spots on the elytra larger and scattered (minute and very abundant in *O. germarii*). *Oncideres erwini* can be separated from *O. satyra* Bates, 1865 and *O. fulva* Bates, 1865 by the absence of white pubescence on ventral side of the thorax (present in those two species). The new species differs from *O. diringsi* Martins and Galileo, 1990 especially by the humeri keel-shaped (not so in *O. diringsi*), and from *O. albopicta* Martins and Galileo, 1990 by the white pubescent spots of the elytra scattered (distinctly abundant in *O. albopicta*).

### *Oncideres johnmarvini* Nearns and Nascimento, sp. nov. (Figures 4a–d)

**Description. Female.** Length 20.0–21.6 mm (measured from vertex to elytral apices), width 7.9–8.8 mm (measured across humeri). Habitus as in Fig. 4a. General form elongate-oblong, moderately sized. Integument brown to ferrugineous, with gray, ochraceous and testaceous pubescence; portions of pronotum, elytra and venter with white pubescence.

**Head.** Frons nearly subquadrate, slightly transverse, about 4.0 times width of lower eye lobes. Eyes with lower lobes moderate-sized, oblong; narrowest area connecting upper and lower eye lobes about 2 ommatidia wide. Genae elongate, nearly 1/2 as tall as lower eye lobes. Antennae about as long as body; antennal tubercles prominent, widely separated; tubercles not armed at apex; scape clavate; antennomere III slightly curved. Antennal formula based on antennomere III: scape = 0.82; II = 0.13; IV = 0.77; V = 0.67; VII = 0.57; VII = 0.56; VIII = 0.53; IX = 0.47; X = 0.39; XI = 0.32.

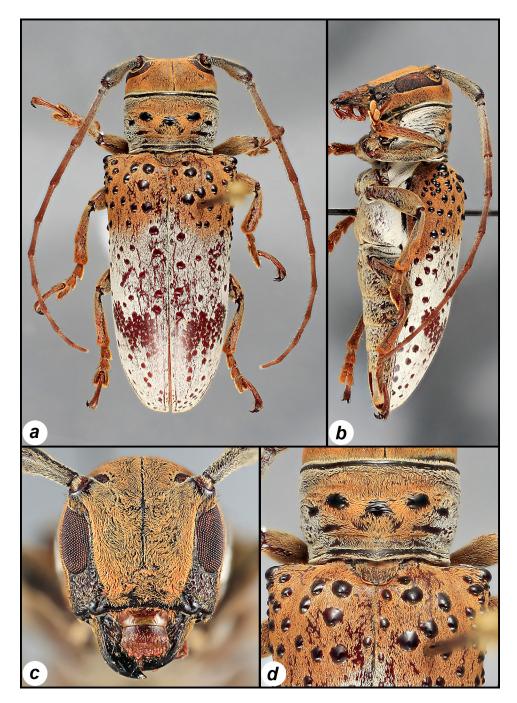
Thorax. Pronotum roughly conical, transverse, slightly more than 1.5 times as wide as long, wider at apex; disk densely pubescent, with 3 prominent, glabrous tubercles, median tubercle slightly rugose; each side with minute, blunt, glabrous protuberance behind middle; basal transverse sulcus shallow. Scutellum transverse, apex rounded. Elytra. About 2.6 times as long as width at humeri, little more than 4 times as long as pronotal length, nearly 1.5 times broader basally than pronotum at its widest (at apex); lateral margins slightly attenuate, gradually rounded to apices at apical 1/3, apices jointly rounded; basal 1/3 with scattered small and moderately sized glabrous tubercles; humeri moderately prominent, anterior margin arcuate.

**Abdomen.** Venter with procoxae large, globose, not uncate; apex of prosternal process subtriangular. Mesosternal process about 2/3 as wide as mesocoxal cavity, slightly emarginate. Fifth abdominal ventrite about 1.5 times longer than IV. **Legs.** Short; femora robust; metafemora clavate apically; tibiae slightly expanded apically; metafemora about 1/4 as long as elytra; tarsomere V about as long as I–IV combined.

**Male.** Length 17.6–19.0 mm (measured from vertex to elytral apices), width 6.8–7.5 mm (measured across humeri). Similar to female except profemora transversely rugose; antennae nearly 2 times longer than body.

Material examined. Holotype (Fig. 4a–d) female from PANAMA, Panama Pr., 10 km N El Llano, May 16–22, 1987, E. Giesbert, coll. (EFGC). Allotype, male from COSTA RICA, Heredia Prov., Est. Magsasay, P.N. Braulio Carrillo, 200 m, R. Aguilar, September 1990, L-N-264600, 531100//Costa Rica INBIO, CR1000, 484448 (MNCR). One male paratype from PANAMA, Panama Prov., 12 km N El Llano, 23/24 Jan 1993, F.T. Hovore, coll. (NMNH).

**Etymology.** This species is named in honor of the first author's dear friend, John Calvin "JC" Marvin (University of Florida, Gainesville, Florida, USA), for his friendship and support. The epithet is a noun in the genitive case.



**Figure 4.** *Oncideres johnmarvini* sp. nov., holotype female: **a)** Dorsal habitus. **b)** Lateral habitus. **c)** Close-up of head. **d)** Close-up of pronotum and elytral humeri.

**Diagnosis and remarks.** This species is most similar to *O. barclayi* Nearns and Tavakilian, 2015 by the pattern of integument color, brown to ferrugineous, by the pattern and color of the elytral pubescence (anteriorly ferrugineous and posteriorly whitish). The new species can be separated from *O. barclayi* by the more ochraceous and testaceous pubescence coloration; basal 1/3 of the elytra with smaller and less dense glabrous tubercles; males with antennomere III not swollen and profemora not transversely rugose; and relatively larger size (20.0–21.6 mm). In *O. barclayi* coloration is less brown; basal 1/3 of the elytra has scattered medium and large glabrous tubercles; males with antennomere III distinctly swollen and profemora transversely rugose; and relatively smaller size (10.4–12.9 mm).

Thomsonista Nearns and Nascimento, gen. nov. (Figures 5a–e)

Type species. Thomsonista antonkozlovi, sp. nov., here designated.

Description (male). General form elongate-oblong, moderately sized. Habitus as in Fig. 5a. Head with frons quadrate. Eyes with lower lobes large, oblong; area connecting lobes narrower than upper eye lobe. Genae subquadrate, distinctly shorter than lower eye lobes. Antennal tubercles prominent, widely separated, slightly modified at apex. Antennae distinctly longer than body; scape clavate, distinctly shorter than antennomere III, without cicatrix at apex; antennomere III longest, almost straight, filiform; antennomere IV longer than scape; antennomere XI about as long as X. Prothorax transverse, swollen laterally before and behind middle, slightly wider basally than apically, sides with blunt, distinct tubercle before middle. Pronotum with distinct gibbosities. Mesosternal process without tubercle. Apex of mesosternal process feebly emarginate. Elytra parallel-sided; humeri slightly prominent; disk without gibbosities or tubercles basally; apices individually rounded. Legs moderate in length; procoxae without projection; femora robust, clavate; metafemora about 1/3 as long as elytra; tibiae gradually expanded to apex.

**Etymology.** The genus is named in honor of the excellent longicornist James Thomson (1828–1897), who published extensively on Cerambycidae and designated the tribe Onciderini ("Thomson" with the Latin suffix "ista", meaning one who practices, believes, or follows). Masculine gender.

Diagnosis and remarks. This genus closely resembles *Ischiocentra* Thomson, 1861, but differs as follows (male), considering the type species, *I. clavata* Thomson, 1861: antennal tubercles not distinctly modified at apex; antennomere XI about as long as X; prothorax not cylindrical, with lateral tubercles more distinct; humerus with small tubercle; elytra distinctly parallel-sided. In *Ischiocentra* the antennal tubercles are distinctly modified at apex, the antennomere XI is longer than X, the prothorax is cylindrical, with lateral tubercles less distinct, the humerus has large tubercle, and the elytra is less parallel-sided. *Ischiocentra* appears to be not monophyletic, including species with different antennal tubercles (with or without distinct projection), prothorax with lateral tubercles notably distinct or not, humeri with large tubercle or not in male, and the elytra ranging from slightly parallel-sided to distinctly attenuate toward apex. The new genus also resembles *Hesychotypa*, but can be differentiated especially by the almost straight antennomere III (remarkably sinuous in *Hesychotypa*).

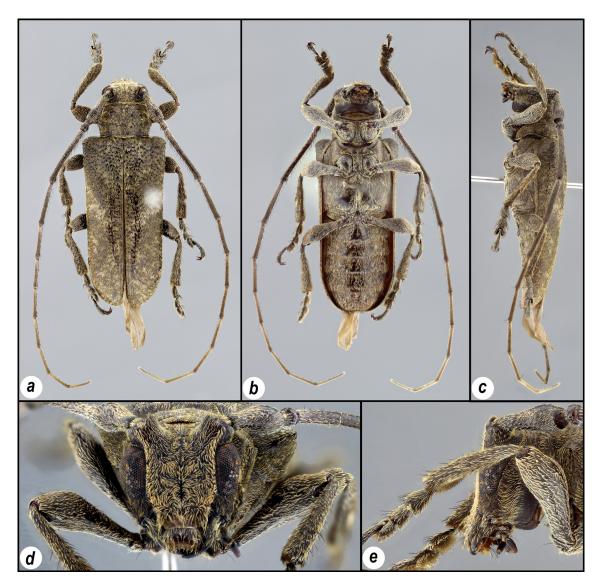
Thomsonista gen. nov. can be included in the alternative of couplet "41" from Dillon and Dillon (1945):

41.	Pronotum cylindrical, sides nearly straight
—	Pronotum strongly swollen laterally before and behind middle 41
41′.	Antennal tubercles in male notably modified at apex Lochmaeocles Bates, 188
	Antennal tubercles in male slightly modified at apex

Thomsonista antonkozlovi Nearns and Nascimento, sp. nov. (Figures 5a-e)

**Description.** Male. Length 14.50 mm (measured from vertex to elytral apices), width 5.15 mm (measured across humeri). Integument dark brown. Pubescence mostly ochraceous, feebly whitish on two oblique, slightly distinct bands about middle of elytra, and irregular patches on distal elytral half; golden inside mesotibial sulcus and apex of tibiae (depending on angle of light source).

**Head.** Frons finely, sparsely punctate; pubescence abundant, not obscuring integument. Vertex impunctate; pubescence as on frons. Tempora impunctate; pubescence slightly sparser than on frons, especially toward ventral side, interspersed with a few long, erect dark setae behind lower eye lobe. Median groove distinct from clypeus to prothoracic margin. Antennal tubercles with blunt projection at inner apex; pubescence slightly sparser than on frons. Distance between upper eye lobes 0.35 times length of scape; in frontal view, distance between lower eye lobes 0.80 times length of scape; narrowest area connecting upper and lower eye lobes 4 ommatidia wide. Genae finely, sparsely punctate (punctures finer than on frons); pubescence notably sparser than on frons. Submentum with pubescence not obscuring integument,



**Figure 5.** Thomsonista antonkozlovi sp. nov., holotype male: **a)** Dorsal habitus. **b)** Ventral habitus. **c)** Lateral habitus. **d)** Close-up of head. **e)** Close-up of head in lateral view.

interspersed with long, erect, sparse dark setae. Antennae 2.1 times elytral length; reaching elytral apex at basal quarter of antennomere VII; scape with distinct grooves ventrally at basal third; scape, pedicel, antennomeres III–XI with long, erect dark setae ventrally, gradually shorter, sparser toward distal segment; antennomeres ringed basally with light yellowish-brown pubescence, wider toward distal segments; antennal formula based on antennomere III: scape = 0.55; II = 0.15; IV = 0.76; V = 0.59; VI = 0.53; VII = 0.50; VIII = 0.48; IX = 0.47; XI = 0.49.

Thorax. Pronotum impunctate, with five gibbosities, one transverse, placed at each side of distal half, one transverse, distinctly narrower, almost fused with former, placed at each side of basal half, one subcircular, subfused with former, placed at center of basal half; basal plate separated from area of gibbosities by distinct, transverse sulcus; distal plate separated from area of gibbosities by distinct, transverse, moderately sinuous sulcus (less deep than basal sulcus, especially centrally); pubescence moderately abundant, not obscuring integument. Sides of prothorax smooth before lateral tubercle, somewhat vermiculate after lateral tubercle; pubescence as on pronotum. Ventral side of meso- and metathorax with moderately abundant pubescence, not obscuring integument, interspersed with long,

erect, sparse setae on metasternum. Scutellum rounded at apex, centrally depressed in basal half; pubescence abundant, not obscuring integument. **Elytra.** With shallow, oblique, wide sulcus from near humerus to near suture in basal quarter; coarsely, abundantly, moderately deeply punctate in basal third, gradually finer, smoother, sparser toward apex; pubescence not obscuring integument; humeri slightly projected forward, rounded from area close to prothorax to lateral tubercle. **Legs.** Inner side of basal half of pro- and mesofemora with erect, sparse setae. Tibiae with moderately long, erect setae, gradually more abundant toward apex. Metatarsomere I 0.65 times II—III together; metatarsomere V (excluding tarsal claws) 0.65 times I—III together.

**Abdomen.** Ventrites with pubescence abundant, not obscuring integument; ventrite V with long, erect, dark setae in distal third, with apex truncate.

Female. Unknown.

**Type material.** Holotype (Fig. 5a–e) male from COLOMBIA, *Risaralda*: Termales de San Vicente (2560 m; 04°51′18″ N / 75°31′46″ W), 21-23.III.2015, Sinyaev, M. Marquéz and J. Machado col. (MZSP).

**Etymology.** The new species is named in honor of Anton Olegovich Kozlov (Moscow, Russia), who donated the holotype. The epithet is a noun in the genitive case.

### Acknowledgments

The authors are grateful to Antonio Santos-Silva (MZSP) for photography (except *O. johnmarvini*) and other important contributions to this work; Anton Olegovich Kozlov (Moscow, Russia) for donating the holotypes of *T. antonkozlovi*, *H. antonkozlovi* and *O. antonkozlovi*; and Frederick W. Skillman, Jr. (Arizona, USA) and James E. Wappes (ACMS) for sending specimens for study. Antonio Santos-Silva (MZSP) and Gareth S. Powell (Brigham Young University, Provo, Utah, USA) provided critical reviews to an earlier version of this manuscript. The second author is grateful for the grant 2017/15283-9, São Paulo Research Foundation (FAPESP). Opinions expressed in this article do not necessarily represent the policies of the U.S. Department of Agriculture.

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Received January 7, 2019; accepted January 17, 2019. Review editor Jiri Zidek.