

INSECTA MUNDI

A Journal of World Insect Systematics

0376

Five new species of Cerambycidae (Coleoptera) from Peru and Bolivia,
and two new records for Peru

Maria Helena M. Galileo
Researcher of CNPq
Porto Alegre, Rio Grande do Sul, Brazil

Ubirajara R. Martins
Researcher of CNPq
Museu de Zoologia
Universidade de São Paulo
São Paulo, São Paulo, Brazil

Stéphane Le Tirant
Insectarium de Montréal
4581 rue Sherbrooke est Montréal
Québec, Canada

Antonio Santos-Silva
Museu de Zoologia
Universidade de São Paulo
São Paulo, São Paulo, Brazil

Date of Issue: September 5, 2014

Maria Helena M. Galileo, Ubirajara R. Martins, Stéphane Le Tirant, and Antonio Santos-Silva

Five new species of Cerambycidae (Coleoptera) from Peru and Bolivia, and two new records for Peru

Insecta Mundi 0376: 1–13

ZooBank Registered: urn:lsid:zoobank.org:pub:2C01739E-4F87-402D-AC77-F7A59C50A9F7

Published in 2014 by

Center for Systematic Entomology, Inc.

P. O. Box 141874

Gainesville, FL 32614-1874 USA

<http://centerforsystematicentomology.org/>

Insecta Mundi is a journal primarily devoted to insect systematics, but articles can be published on any non-marine arthropod. Topics considered for publication include systematics, taxonomy, nomenclature, checklists, faunal works, and natural history. **Insecta Mundi** will not consider works in the applied sciences (i.e. medical entomology, pest control research, etc.), and no longer publishes book reviews or editorials. *Insecta Mundi* publishes original research or discoveries in an inexpensive and timely manner, distributing them free via open access on the internet on the date of publication.

Insecta Mundi is referenced or abstracted by several sources including the Zoological Record, CAB Abstracts, etc. **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.

Chief Editor: Paul E. Skelley, e-mail: insectamundi@gmail.com

Head Layout Editor: Eugenio H. Nearn

Editorial Board: J. H. Frank, M. J. Paulsen, Michael C. Thomas

Review Editors: Listed on the *Insecta Mundi* webpage

Manuscript Preparation Guidelines and Submission Requirements available on the *Insecta Mundi* webpage at: <http://centerforsystematicentomology.org/insectamundi/>

Printed copies (ISSN 0749-6737) annually deposited in libraries:

CSIRO, Canberra, ACT, Australia

Museu de Zoologia, São Paulo, Brazil

Agriculture and Agrifood Canada, Ottawa, ON, Canada

The Natural History Museum, London, UK

Muzeum i Instytut Zoologii PAN, Warsaw, Poland

National Taiwan University, Taipei, Taiwan

California Academy of Sciences, San Francisco, CA, USA

Florida Department of Agriculture and Consumer Services, Gainesville, FL, USA

Field Museum of Natural History, Chicago, IL, USA

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

Zoological Institute of Russian Academy of Sciences, Saint-Petersburg, Russia

Electronic copies (Online ISSN 1942-1354, CDROM ISSN 1942-1362) in PDF format:

Printed CD or DVD mailed to all members at end of year. Archived digitally by Portico.

Florida Virtual Campus: <http://purl.fcla.edu/fcla/insectamundi>

University of Nebraska-Lincoln, Digital Commons: <http://digitalcommons.unl.edu/insectamundi/>

Goethe-Universität, Frankfurt am Main: <http://nbn-resolving.de/urn/resolver.pl?urn:nbn:de:hebis:30:3-135240>

Copyright held by the author(s). This is an open access article distributed under the terms of the Creative Commons, Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original author(s) and source are credited. <http://creativecommons.org/licenses/by-nc/3.0/>

Layout Editor for this article: Eugenio H. Nearn

Five new species of Cerambycidae (Coleoptera) from Peru and Bolivia,
and two new records for Peru

Maria Helena M. Galileo
Researcher of CNPq
Porto Alegre, Rio Grande do Sul, Brazil
galileomh@yahoo.com

Ubirajara R. Martins
Researcher of CNPq
Museu de Zoologia
Universidade de São Paulo
São Paulo, São Paulo, Brazil
urmsouza@usp.br

Stéphane Le Tirant
Insectarium de Montréal
4581 rue Sherbrooke est Montréal
Québec, Canada
sletirant@ville.montreal.qc.ca

Antonio Santos-Silva
Museu de Zoologia
Universidade de São Paulo
São Paulo, São Paulo, Brazil
toncriss@uol.com.br

Abstract. The following four **new species** of Cerambycidae are described from Bolivia: *Chrysoprasis imitatrix* (Heteropsini); *Carneades vigneaulti* (Colobotheini); *Colobothea larriveei* (Colobotheini); *Colobothea boliviana* (Colobotheini). *Esthlogena (Pseudotaxia) bella* (Pteropliini) is described from Peru. A key to species of *Carneades* Bates, 1869 is provided. The other new species are included in previously published keys. Additionally, two **new country records** are reported for the fauna of Peru.

Key words. *Carneades*, *Chrysoprasis*, *Colobothea*, *Esthlogena*, Taxonomy.

Introduction

Napp and Martins (1995, 1997, 1998, 1999) divided *Chrysoprasis* into four species groups: basalis group; chalybea group; hypocrita group; and auginena group. According to Napp and Martins (1998), species of the hypocrita group (then comprised of 31 species) are characterized by the urosternites reddish and the pronotal and elytral integument with a single metallic color. Subsequently, three species were added to this group of species: *C. grupiara* Napp and Martins, 2009; *C. morana* Napp and Martins, 2009; and *C. pilosa* Galileo and Martins, 2003. Thus, the hypocrita group currently includes 34 species. A new species from Bolivia, described herein, is added to this group.

Bates (1869) described *Carneades*, to include two new species: *C. superba* and *C. delicia*. It differs from *Colobothea* Lepeletier and Audinet-Serville, 1825 by the indistinct elytral lateral carina, and by the clavate scape at apex. Currently *Carneades* encompasses 13 species (Monné 2014). Among them, only two are recorded for Bolivia: *C. nigrosignata* Aurivillius, 1925; and *C. vittata* Gahan, 1889. Among the material recently incorporated in the collection of the MZSP (see Material and Methods), we found a new species of *Carneades* that is described below.

Monné and Monné (2010) listed 24 species of *Colobothea* for Bolivia. In the same year, Schmid (2010) described one more new species from that country, *C. dostalbergieri*, increasing the total of species known from Bolivia to 25. Herein, two new species are described from Bolivia.

Breuning (1940) erected *Esthlogena* (*Pseudotaxia*) to include four species: *E. (P.) brunnea* (Champlain and Knull, 1926); *E. (P.) hubbardi* (Fisher, 1924); *E. (P.) obliquata* Breuning, 1940 (type species of the subgenus); and *E. (P.) proletaria* (Thomson, 1868). Currently, the first two are placed in the genus *Ataxia* Haldeman, 1847. *Esthlogena* (*Pseudotaxia*) differs from *Esthlogena* (*E.*) by the elytral punctures aligned in rows (not so in the latter). We describe a new species of the subgenus from Peru.

Materials and Methods

Photographs were taken with Canon EOS Rebel T3i DSLR camera, Canon MP-E 65mm f/2.8 1–5X macro lens, controlled by Zerene Stacker AutoMontage software.

The collection acronyms used in this study are as follows:

IMCQ — Insectarium de Montréal, Québec, Canada

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

Taxonomy

Heteropsini Lacordaire, 1868

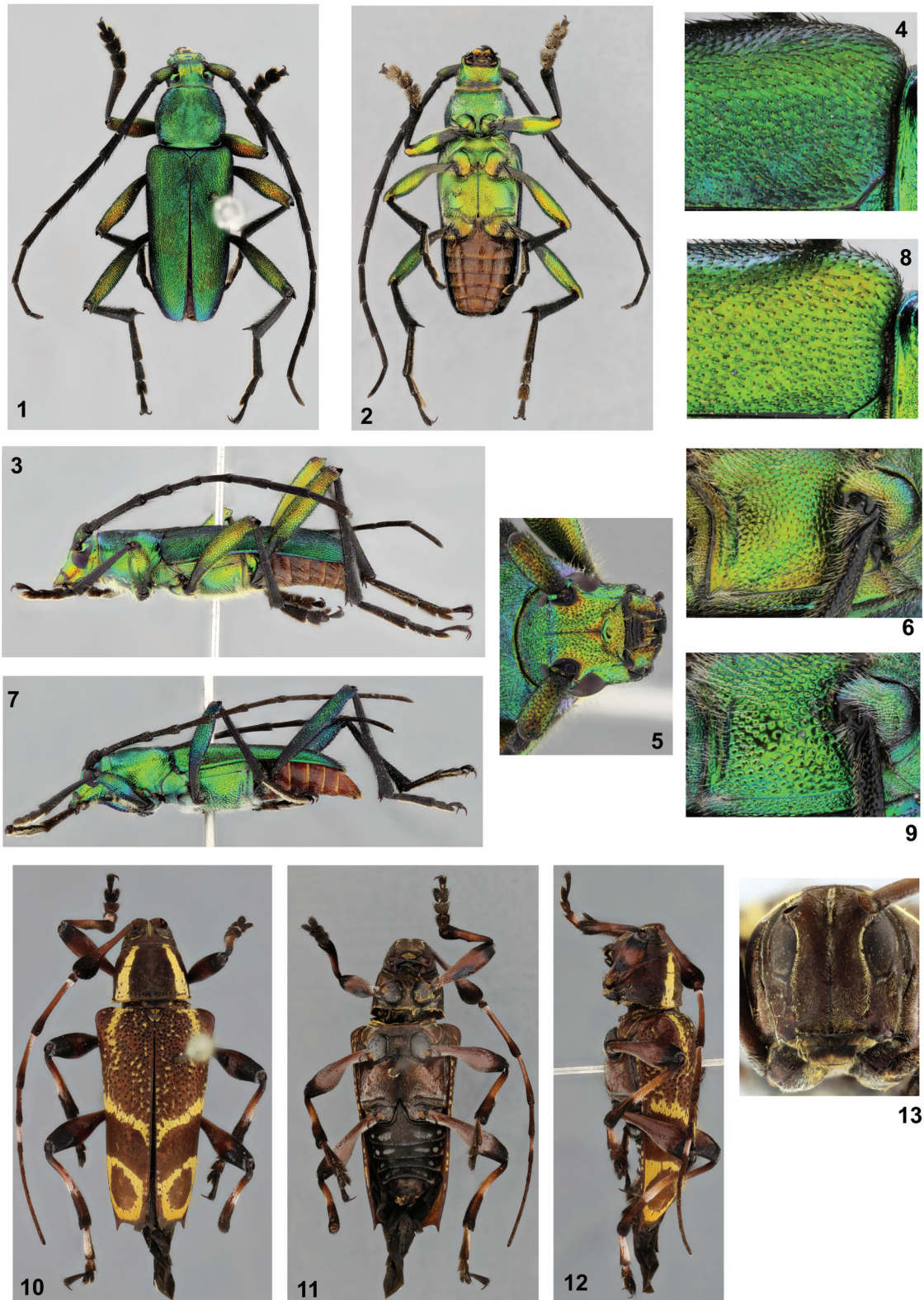
Chrysoprasis imitatrix sp. nov.

(Figures 1–6)

Description. Integument metallic green (color variable depending of angle of incision of light), darker on elytra; base and apex of scape, and apex and lateral sides of postclypeus violaceous; urosternites brown-reddish; peduncle of femora violaceous; metafemoral club golden-green, except apex dark-green with violaceous reflex; pedicel, antennomeres, tibiae, and tarsi dark-brown with violaceous reflex.

Head. Frons coarsely, abundantly, confluent punctate; almost all punctures with short setae; some laterally with long setae. Coronal suture well marked from clypeus to area between antennal tubercles. Postclypeus with transverse, impunctate, elliptical gibbosity at center, close to frons; surface coarsely, confluent punctate, distinctly finer, sparser on violaceous apex, laterally impunctate on violaceous areas; green surface with short, moderately abundant setae, laterally with long setae. Antennal tubercles coarsely, confluent punctate on frontal area, gradually sparser towards posterior area, impunctate on area close to the antennal fovea. Vertex with sculpture and pubescence as on frons. Area behind superior ocular lobes with sculpture and pubescence as on frons; area behind region of connection of ocular lobes, shiny, with sparse punctures; area behind inferior ocular lobes coarsely, confluent punctate close to the eyes, punctate-striate towards prothoracic margin. Genae, coarsely, abundantly punctate (punctures coarser than on frons), impunctate on area close to the apex. Gulamentum transversely striate on area closer to thorax (centrally smooth), coarsely striate-punctate on area closer to maxilla; this latter area with long, abundant setae. Distance between superior ocular lobes equal to 0.8 times length of scape; distance between inferior ocular lobes, in frontal view, equal to 1.1 times length of scape. Antennae as long as 2.2 times elytral length; reaching elytral apex at middle of antennomere VIII; scape coarsely, abundantly punctate; antennomeres III–VI with distinct spine at inner apex; distal antennomeres somewhat flattened, with outer distal angle projected; antennal formula based on antennomere III: scape = 0.53; pedicel = 0.19; IV = 0.60; V = 0.67; VI = 0.72; VII = 0.72; VIII = 0.69; IX = 0.65; X = 0.60; XI = 0.72.

Thorax. Prothorax wider than long; lateral sides rounded. Pronotum moderately finely, densely punctate; laterally with short, dark setae, mixed with sparse long setae. Lateral sides of prothorax coarser, shallower punctate than on pronotum (slightly striate-punctate); with long and short setae. Prosternum densely, finely striate-punctate; with long, abundant whitish setae. Prosternal process



Figures 1–13. 1–6) *Chrysoprasis imitatrix*, holotype male: 1) Dorsal habitus; 2) Ventral habitus; 3) Lateral habitus; 4) Elytral punctation; 5) Head, frontal view; 6) Metasternal punctation. 7–9) *Chrysoprasis hypocrita*, male: 7) Lateral habitus; 8) Elytral punctation; 9) Metasternal punctation. 10–13) *Carneades vigneaulti*, holotype male: 10) Dorsal habitus; 11) Ventral habitus; 12) Lateral habitus; 13) Head, frontal view.

shallow punctate; with moderately abundant setae. Mesosternum with sculpture as on prosternum (slightly coarser towards apex); pubescence moderately short, abundant (sparser than on prosternum). Mesosternal process with sculpture and pubescence as on apex of mesosternum; apex deeply emarginate. Metepisterna moderately finely, densely punctate, coarser towards apex. Metasternum coarsely, abundantly punctate; pubescence long, abundant. Scutellum finely, abundantly punctate, with narrow impunctate band close to the margin. **Elytra.** Surface microsculptured; coarsely, abundantly punctate; each puncture with short, thick, dark setae; apex wide, slightly sinuous, with outer angle projected and sutural angle rounded.

Abdomen. Finely, moderately sparsely punctate; with long, moderately abundant setae. **Legs.** Femora coarsely, densely punctate (striate-punctate on club); with thick, moderately abundant setae.

Dimensions in mm (male). Total length, 12.7; length of prothorax at center, 2.9; anterior width of prothorax, 2.2; posterior width of prothorax, 2.9; largest width of prothorax, 3.3; humeral width, 3.8; elytral length, 8.1.

Type material. Holotype male from BOLIVIA, *La Paz Department*: Caranavi (1300 m), 1–25.XII.2007, local collector (MZSP).

Etymology. From the Latin *imitatrix* (imitator), alluding to the general appearance somewhat similar to that of *C. hypocrita*.

Remarks. *Chrysoprasis imitatrix* is similar to *C. hypocrita* Erichson, 1847, but differs as follows (more than 200 specimens examined, including some from Peru, where the type was collected): punctures of metasternum finer (Fig. 6); elytra slightly finely, densely punctate (Fig. 4); femoral club golden-green (Fig. 3) (though possibly this condition is simply an extreme variation). In *C. hypocrita* the punctures of metasternum are coarser (Fig. 9), the elytra is slightly coarsely, sparsely punctate (Fig. 8), and the femoral club is dark-green (Fig. 7). *Chrysoprasis imitatrix* differs from *C. pilosa* Galileo and Martins, 2003 by the femoral club lighter, by the punctation on metasternum sub-uniform. In *C. pilosa* the femoral club is dark and the sides of metasternum are finely, densely punctate antero-laterally, with the remaining surface coarsely punctate (diameter of punctures larger than distance between them) (Galileo and Martins, 2003).

Chrysoprasis imitatrix can be included in the alternative of couplet “9”, from Napp and Martins (1998) (translated; modified):

- 9(8). Females. Scape slender, projected at outer apex, longer than half the length of antennomere III. Elytra finely, not corrugated punctate, without rough appearance. Pronotal alveoli large and regular. Prosternum sub-glabrous. Metasternum sub-glabrous with juxtaposed fovea. Brazil (Pará) ***C. icuara* Napp and Martins, 1998**
- Males and females. Scape robust, not projected at outer apex, shorter or about as long as half the length of antennomere III. Elytra with rough, corrugated punctation on base and sides of suture. Pronotum finely alveolate, with reticulate appearance on disc. Prosternum with denser pubescence. Metasternum with long pubescence, and rounded, not juxtaposed punctures **9'**
- 9'(9). Punctures on elytra and metasternum finer (Fig. 4, 6); femoral club golden-green. Bolivia ***C. imitatrix* sp. nov.**
- Punctures on elytra and metasternum coarser (Fig. 8, 9); femoral club dark-green. Mexico, Venezuela, Peru, Bolivia, Brazil (all territory), Paraguay, Argentina, Uruguay ***C. hypocrita* Erichson, 1847**

Colobotheini Thomson, 1860***Carneades vigneaulti* sp. nov.**

(Figures 10–13)

Description. Integument brown; abdomen dark-brown; the following black: margin of antennal tubercles around antennal sockets; apex of mandibles; most of palpi; part of club of scape; distal fourth of antennomere III; distal third of antennomeres IV–V; apex of femora; base and apex of tibiae; tarsomeres III–V.

Head. Frons densely microsculptured; pubescence most brownish, yellow-whitish close to clypeus and around coronal suture (more yellowish near antennal tubercles), laterally with narrow yellowish band from clypeus to antennal tubercles. Vertex densely microsculptured; pubescence brownish, with yellow band around coronal suture, from area between antennal tubercles to level of posterior edge of eyes, and narrow band behind and in front of part of superior ocular lobes. Area behind eyes and genae with brownish pubescence, mixed by white-yellowish pubescence, mainly behind narrow yellow band of superior ocular lobes and distal portion of genae. Distance between superior ocular lobes equal to 0.15 times length of scape; distance between inferior ocular lobes equal to 0.30 times length of scape. Antennae as long as 1.7 times elytral length; reaching elytral apex at apex of antennomere VIII; club of scape large, with pubescence most blackish; antennomeres III–IV with basal ring of whitish pubescence (wider on IV); antennomere VI with whitish pubescence on basal two-thirds; antennal formula based on antennomere III: scape = 1.36; pedicel = 0.14; IV = 0.86; V = 0.53; VI = 0.45; VII = 0.31; VIII = 0.29; IX = 0.29; X = 0.25; XI = 0.26.

Thorax. Pronotum with row of deep, coarse punctures on base, some smaller punctures on basal fourth, and one/two coarse punctures on each side (inside base of yellow band); laterally, from base to apex, large band of yellow pubescence, narrowed towards anterior edge; remaining surface with brownish pubescence. Lateral sides of prothorax coarsely, sparsely punctate (distinctly sparser on basal half); pubescence brownish. Prosternum and prosternal process with yellowish pubescence (former laterally mixed by whitish pubescence). Mesosternum and mesosternal processes with yellow-whitish pubescence (more whitish depending of angle of light). Mesepisternum with yellowish pubescence close to margins, centrally brownish mixed by whitish pubescence. Metasternum laterally with yellow-whitish pubescence (more whitish depending of angle of light), centrally brownish. Scutellum with yellow pubescence on central triangular area of base and distal margin on each side of longitudinal sulcus; remaining surface with brownish pubescence. **Elytra.** Coarsely, deeply, moderately abundantly punctate on basal half (mainly on circum-scutellar region), finely, sparsely punctate on distal half; apex largely obliquely truncate, with large spine at outer angle, and rounded sutural angle; pubescence most brownish, with the following yellow on each elytron: sub-circular wide band on basal fourth, starting on base close to humeri (pubescence sparser towards apex); wide oblique band starting about middle near lateral margin, reaching sutural margin, and following it for a short space; ocellar macula on distal third; several small spots from base to oblique band at middle.

Abdomen. Pubescence most brownish; urosternites I–IV laterally with wide transverse band of white-yellowish pubescence, sub-circular spot of pubescence of same color between band and lateral margin, and narrow band also white-yellowish along distal margin (pubescence more whitish depending of angle of light); center of urosternite V variegated by white-yellowish pubescence. **Legs.** Femora, from base to about distal third of club, with white-yellowish (more whitish depending of angle of light); tibiae with white-yellowish (more whitish depending of angle of light), distally with blackish pubescence; tarsomeres I variegated by white-yellowish pubescence (more whitish depending of angle of light); metatarsomere I 1.4 times as long as II–III combined.

Dimensions in mm (male). Total length, 13.3; length of prothorax at center, 2.4; anterior width of prothorax, 2.5; posterior width of prothorax, 3.4; humeral width, 5.0; elytral length, 9.2.

Type material. Holotype male from BOLIVIA, *La Paz Department*: Caranavi (1300 m), 1–25.XII.2007, local collector (MZSP).

Etymology. This species is dedicated to our colleague Robert Vigneault, a specialist in the longhorn beetles of Quebec and also a very important collaborator with both our institutions.

Remarks. *Carneades vigneaulti* differs from the other species of the genus by distinct yellow bands and spots contrasting with remaining surface of elytra.

Key to species of *Carneades* Bates, 1869

1. Elytral pubescence mostly whitish or yellow-whitish 2
- Elytral pubescence not mostly whitish or yellow-whitish 8

- 2(1). Light pubescence of elytra surrounded by dark reticulate areas. Colombia *C. reticulata* Bates, 1881
- Dark areas of elytra not reticulate (at least some of the species of this group seem to be only variations of the same species) 3

- 3(2). Pronotum laterally with transverse, distinct, wide dark band, or wide spots placed as transverse band 4
- Pronotum without transverse, or nearly so, dark band 5

- 4(3). Pronotum with one transverse band on each side. Costa Rica, Panama *C. championi* Bates, 1885
- Pronotum with single transverse band or four wide spots placed as transverse band. Colombia *C. quadrinodosa* Aurivillius, 1902

- 5(3). Pronotum laterally with longitudinal wide dark band. Bolivia *C. nigrosignata* Aurivillius, 1925
- Pronotum with small, sub-rounded dark spots, laterally without longitudinal dark band 6

- 6(5). Pronotum with six dark spots on disc. Mexico, Guatemala, Honduras, Belize *C. grandis* (Thomson, 1860)
- Pronotum with two dark spots on disc 7

- 7(6). Smaller (less than 15 mm); transverse band on basal half of elytron reaching suture. Nicaragua *C. delicia* Bates, 1869
- Larger (more than 20 mm); transverse band on basal half of elytron not reaching suture. Honduras, Nicaragua, Costa Rica, Panama *C. superba* Bates, 1869

- 8(1). Elytra with sutural band of whitish pubescence, from scutellum to apex (sometimes fragmented) 9
- Elytral pubescence without sutural band of whitish pubescence from scutellum to apex 10

- 9(8). Transverse elytral bands of whitish pubescence obliquely inclined upwards from suture to the lateral margins. Ecuador, Peru, Brazil (Amazonas) *C. glaucothea* Bates, 1872
- Anterior transverse elytral band of whitish pubescence obliquely inclined upward from suture to the lateral margins, and posterior band obliquely downward sloping. Ecuador, Peru, Bolivia, Brazil (Amazonas) *C. vittata* Gahan, 1889

- 10(9). Pronotal pubescence mostly whitish; elytra with two transverse bands and several small spots of whitish pubescence. Guadeloupe (Lesser Antilles) *C. bicincta* Gahan, 1889
- Pronotal pubescence most dark; elytra without two transverse bands of whitish pubescence (at least, pubescence forming more complex pattern) 11

- 11(10). Pronotum with two longitudinal bands of light pubescence. Bolivia *C. vigneaulti* sp. nov.
 — Pronotum with single longitudinal band of light pubescence 12
- 12(11). Anterior large spot of light pubescence centrally on elytra distinctly emarginate. Colombia ...
 *C. personata* Bates, 1881
 — Anterior large spot of light pubescence on elytra cross-like or nearly so (these two species
 probably conspecific) 13
- 13(12). Anterior spot of light pubescence on elytra more distinctly cross-like; posterior spot centrally
 wider, not fragmented. Costa Rica, Panama *C. hemileuca* Bates, 1881
 — Anterior spot on elytra more indistinctly cross-like; posterior spot centrally slender, fragmented.
 Nicaragua, Costa Rica, Panama *C. princeps* Bates, 1872

***Colobothea larriveei* sp. nov.**

(Figures 14–17)

Description. Holotype. Integument dark-brown; parts of elytra blackish; scape and antennomeres brown at base, gradually darkened towards apex; tibiae darkened on distal third.

Head. Pubescence on frons very short, brown-yellowish; laterally with narrow yellowish band of pubescence distinctly longer than on remaining surface, from antennal tubercles to clypeus (those bands are interconnected by a transverse band at anterior margin of clypeus). From area between antennal tubercles to anterior margin of prothorax, wide band of yellowish pubescence around coronal suture. Remaining areas of vertex and area behind eyes (only up to middle of inferior ocular lobes) with brown-yellowish, very short pubescence. Laterally, from margin of prothorax to gena, starting at level of middle of inferior ocular lobe, wide band of dense, yellow pubescence, sparser towards apex of gena. Gulae with narrow, not dense band of yellowish pubescence at anterior margin, interconnected with the pubescence on gena. Genae, clypeus, labrum, and base of mandibles with thick, long, dark, sparse setae. Distance between superior ocular lobes equal to 0.10 times length of scape; distance between inferior ocular lobes equal to 0.35 times length of scape. Antennae as long as 2.2 times elytral length; reaching elytral apex near apex of antennomere VI; pedicel and antennomeres III–VIII with short, tick, black setae at underside, denser on pedicel and apex of antennomere III; about basal half of antennomeres with whitish pubescence; antennal formula based on antennomere III: scape = 0.97; pedicel = 0.09; IV = 0.89; V = 0.72; VI = 0.67; VII = 0.58; VIII = 0.55; IX = 0.52; X = 0.49; XI = 0.46.

Thorax. Pronotum with semi-circular row of deep, coarse punctures on base; disc with three longitudinal bands of whitish pubescence (not very conspicuous); laterally with wide band of yellow pubescence (whitish on inner side of middle); remaining pubescence among five bands brownish. Lateral side of prothorax with large triangular area of brown-yellowish pubescence close to the yellow band of pronotum; close to the former, longitudinal band with brown, almost inconspicuous pubescence, followed by area with brown-yellowish pubescence. Ventral side of thorax with brown-yellowish pubescence (more grayish depending of the angle of light). Scutellum with almost inconspicuous brownish pubescence, except a narrow band of yellowish pubescence at apex. **Elytra.** Moderately coarse punctate, sparser, more distinctly aligned in rows towards apex; apex emarginate, with long spine at outer angle, rounded projection at sutural angle. Elytral pubescence grayish, except: narrow, sub-glabrous area around scutellum; short, triangular area of yellow pubescence at base, following that on pronotum; narrow, longitudinal band of dark-brown pubescence at basal sixth, between scutellum and basal yellow triangular area; about apex of basal third, semi-elliptical spot with dark, almost inconspicuous pubescence; near lateral margin, at same level of former discal spot, small, sub-triangular area with dark pubescence, preceded by small macula of yellow pubescence; just after middle, large spot of dark, slightly conspicuous pubescence (sub-truncate anteriorly, deeply dentate posteriorly), partially surrounded by narrow band with yellow pubescence; at distal fifth, two areas with dark, slightly conspicuous pubescence, separated by grayish pubescence; close to those former areas, oblique triangular area with yellow pubescence; outer spine of apex sub-glabrous.

Abdomen. From urosternite I to base of V, large central triangular area with grayish, not dense pubescence, followed laterally by wide, dense band of yellow pubescence (distinctly narrow on urosternites I and V); laterally, on basal half of urosternites I-V, semi-circle with dark-brown, slightly conspicuous pubescence; remaining surface of urosternite V with dark-brown, slightly conspicuous pubescence. **Legs.** Femora with grayish pubescence; tibiae with grayish pubescence at base and middle, separated by area with brownish pubescence; distal third of tibiae (mainly meso- and metatibiae) with dark-brown pubescence and dark-brown, tick, moderately abundant setae at meso- and metatibiae; metatarsomere I about as long as II–III together.

Dimensions in mm (female). Total length, 11.0–12.2; length of prothorax at center, 1.7–2.0; anterior width of prothorax, 2.2–2.5; posterior width of prothorax, 2.5–3.1; humeral width, 3.5–4.1; elytral length, 8.3–9.0. The largest dimensions are those of the holotype.

Variability. Paratype female: scutellum without yellow band at apex, but with narrow, longitudinal band at center of distal half.

Type material. Holotype (MZSP) and paratype (IMCQ) females from BOLIVIA, *La Paz*: Caranavi (1300 m), 1-25.XII.2007, local collector.

Etymology. This species is dedicated to Dr. Maxim Larrivé, head of the entomological section at IMCQ.

Remarks. *Colobothea larriveei* differs from *C. declivis* Aurivillius, 1902 as follows: pronotum without area of dark pubescence on center of the area close to the anterior margin (present in *C. declivis*); basal yellow band of pubescence not reaching the first dark spot (reaches in *C. declivis*); area at side of middle elytral dark spot without another spot (present in *C. declivis*); central spot not as two elliptical spots fused (more or less so in *C. declivis*); inner dark spot on elytral sixth slender, without wide band of yellow pubescence close to its anterior side (respectively wider and present in *C. declivis*); area after distal dark spots of elytra with distinct triangular macula of yellow pubescence (absent in *C. declivis*). It differs from *C. wappesi* Monné and Monné, 2010, mainly by the absence of large macula of yellow pubescence between the first and second dark discal spots on elytra (present in *C. wappesi*). *Colobothea larriveei* can be separated from *C. dostalbergeri* Schmid, 2010 by the absence of longitudinal bands of yellow pubescence at discal center of pronotum (present in *C. dostalbergeri*) and by the absence of a wide band of yellow pubescence from lateral to middle dark spot of elytra (present in *C. dostalbergeri*). It also differs from *C. boliviana* sp. nov. by the absence of longitudinal bands of yellow pubescence at discal center of pronotum (present in *C. boliviana*), by the yellow area of elytral apex smaller (occupying almost the whole area between and after the two dark spots in *C. boliviana*), and by the pubescence of the metasternum brown-yellowish (yellow in *C. boliviana*).

***Colobothea boliviana* sp. nov.**

(Figures 18–21)

Description. Holotype. Integument black; scape, pedicel, basal half of antennomeres, peduncle of femora, basal half and apex of femoral club, middle of protibiae, and basal two-thirds of meso- and metatibiae dark-brown; central region of femoral club, basal and distal areas of protibiae, and distal third of meso- and metatibiae blackish.

Head. Pubescence on frons short, brown-yellowish; laterally with narrow yellowish band of pubescence from antennal tubercles to clypeus; around coronal suture, band of yellowish pubescence, distinctly more yellow from middle of inferior ocular lobes towards vertex. Vertex with two bands of yellow pubescence, divergent from base of superior ocular lobes to margin of prothorax; remaining surface with brownish pubescence. Area behind eyes with not dense, brown-yellowish pubescence, gradually more yellowish towards apex of inferior ocular lobes. Genae with brownish pubescence, slightly yellowish towards gulamentum. Genae, clypeus, labrum, and base of mandibles with thick, long, dark, sparse setae. Gulamentum with narrow, not dense band of short, yellowish pubescence at anterior

margin. Distance between superior ocular lobes equal to 0.1 times length of scape; distance between inferior ocular lobes equal to 0.3 times length of scape. Antennae, from scape to apex of antennomere IX (antennomeres X–XI missing), as long as 2.3 times elytral length; reaching elytral apex at base of antennomere VI; pedicel and antennomeres III–IX with short, tick, black setae at underside, denser at pedicel and apex of antennomere III, gradually shorter, sparser towards last antennomeres; about basal half of antennomeres with whitish pubescence; antennal formula based on antennomere III: scape = 0.95; pedicel = 0.08; IV = 0.92; V = 0.78; VI = 0.67; VII = 0.63; VIII = 0.63; IX = 0.63.

Thorax. Pronotum with two semi-circular rows of deep, coarse punctures on base (punctures of most distant of base sparser); base with transverse sulcus, laterally deeper; disc with two wide bands of yellow pubescence, convergent from base to apex; on each side of those last bands, narrow, less conspicuous band of yellowish pubescence, parallel each other; laterally, wide band of yellow pubescence from base to apex; remaining surface with black pubescence. Sides of prothorax with wide band of black pubescence, close to yellow lateral band of pronotum; remaining surface with yellow-whitish pubescence. Prosternum with not dense, yellow-whitish pubescence. Metasternum with dense (mainly laterally), yellow pubescence. Scutellum with black pubescence. **Elytra.** Coarsely, moderately abundantly punctate, more distinctly aligned in rows towards apex; apex emarginate, with long spine at outer angle, rounded projection at sutural angle. Elytral pubescence yellow-grayish, except: triangular area with black pubescence under and close to the scutellum; short area with yellowish pubescence under and close to the scutellum, between black triangular areas; semi-circular, large spot with black pubescence, placed near end of basal third, surrounded at inner side by band of yellowish pubescence; semi-elliptical, large spot of black pubescence, placed near end of middle third; at distal fourth, two irregular areas with black pubescence separated by yellow pubescence; this latter yellow pubescence enlarged towards apex, covering part of outer spine and rounded sutural projection.

Abdomen. Central region of urosternites I–IV with yellow-whitish, not dense pubescence, followed laterally by wide, dense band of yellow pubescence (not reaching base of urosternite I); laterally, on basal half of urosternites II–IV, semi-circle with black pubescence; urosternite V with brownish, slightly conspicuous pubescence, except small spot of yellow pubescence on each side of basal center. **Legs.** Femora with brown-yellowish pubescence; tibiae with brown-yellowish pubescence on basal half, black pubescence on distal half; metatarsomere I about 1.4 times as long as II–III together.

Variability. Paratype male: between middle and distal spots of black pubescence on elytra, some fine lines of yellow pubescence.

Dimensions in mm (male). Total length, 10.1–12.4; length of prothorax at center, 1.9–2.3; anterior width of prothorax, 2.1–2.3; posterior width of prothorax, 2.5–3.0; humeral width, 3.2–3.8; elytral length, 7.3–8.9. The smallest dimensions are those of the holotype.

Type material. Holotype (MZSP) and paratype (IMCQ) males from BOLIVIA, *La Paz Department*: Caranavi (1300 m), 1-25.XII.2007, local collector.

Etymology. The name refers to the country of the type locality of the species.

Remarks. *Colobothea boliviana* differs from *C. declivis* by the following characters: elytra without longitudinal yellow band of pubescence from base to first dark spot (present in *C. declivis*); area at side of middle elytral dark spot without another spot (present in *C. declivis*); central spot not as two elliptical fused spots (more or less so in *C. declivis*); dark spots on elytral fourth slender, without wide band of yellow pubescence close to its anterior side (respectively wider and present in *C. declivis*); area after distal dark spots of elytra with distinct macula of yellow pubescence (absent in *C. declivis*). It differs from *C. wappesi* mainly by the presence of two longitudinal, wide bands of yellow pubescence on middle of pronotum (absent in *C. wappesi*) and by the absence of yellow macula between basal and middle spots of elytra (present in *C. wappesi*). It can be separated from *C. dostalbergeri* by the absence of wide band with yellow pubescence from lateral to middle dark spot of elytra (present in *C. dostalbergeri*). See remarks on *C. larriveei*.

Key to species of *Colobothea* from Bolivia

The two new species of *Colobothea* herein described can be included in the alternative of couplet “23”, from Monné and Monné (2010) (modified):

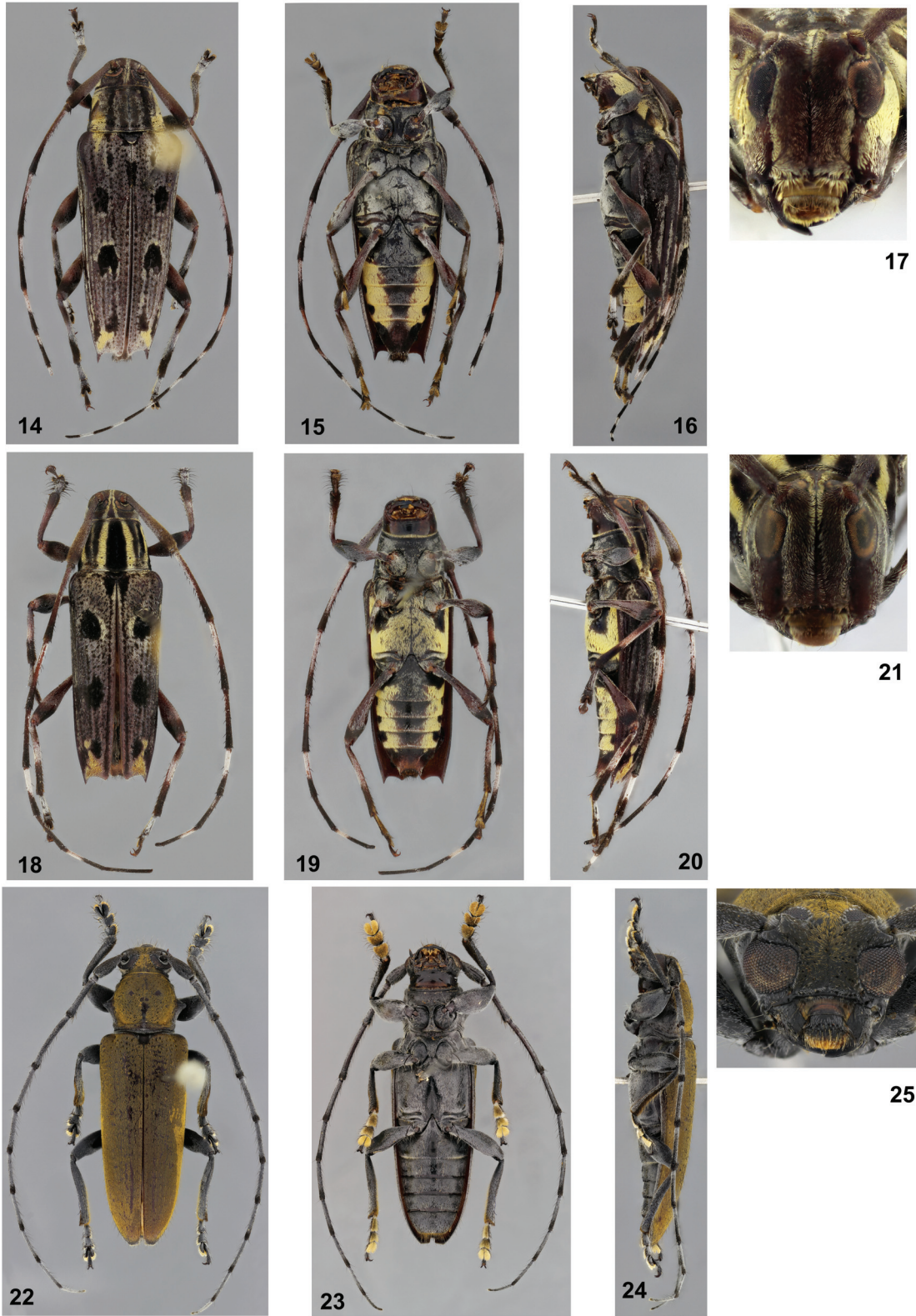
- 23(22). Yellow lateral stripe of the pronotum projected posteriorly on the basal 1/4 or 1/3 of the elytron ***C. declivis* Aurivillius, 1902**
 — Yellow lateral stripe of the pronotum not projected on the elytron, or projected by a minute patch **24**
- 24(23). Pronotal disc with two wide, distinct, longitudinal bands of yellow pubescence on center; metasternum with dense, distinct yellow pubescence ***C. boliviana* sp. nov.**
 — Pronotal disc without longitudinal bands of yellow pubescence on center; metasternum without distinct yellow pubescence **25**
- 25(24). Elytra with distinct, large macula of yellow pubescence between the first and second dark discal spots ***C. wappesi* Monné and Monné, 2010**
 — Elytra without such macula ***C. larriveei* sp. nov.**

Pteropliini Thomson, 1860***Esthlogena (Pseudotaxia) bella* sp. nov.**

(Figures 22–25)

Description. Holotype male. Integument dark-brown, almost black in some areas. **Head.** Frons moderately coarsely, deeply, sparsely punctate; pubescence brown-yellowish, very short laterally and near clypeus, slightly longer centrally towards vertex; around inferior ocular lobes very narrow band of grayish pubescence; with long sparse setae. Coronal suture distinct from clypeus to anterior edge of prothorax. Pubescence on antennal tubercles distinctly exposing integument; with long, sparse setae. Area between superior ocular lobes with punctures slightly coarse than on frons, laterally aligned, centrally sparser; pubescence yellowish, except small aligned patches of grayish pubescence close to eyes; with long sparse setae. Area between superior ocular lobes and anterior edge of prothorax with brown-yellowish pubescence; impunctate. Area behind region of connection of ocular lobes and inferior ocular lobes with grayish pubescence; with long, sparse setae; coarsely, sparsely punctate. Genae with finely, sparsely punctate; pubescence grayish; with long, sparse setae. Gula mentum most glabrous, impunctate, except on intermaxillary process that has short grayish pubescence, mixed by long, sparse setae, and very fine, moderately dense punctures. Distance between superior ocular lobes equal to 0.4 times length of scape; distance between inferior ocular lobes equal to 0.6 times length of scape. Antennae as long as 2.0 times elytral length; reaching elytral apex about middle of antennomere VIII; scape, pedicel and antennomeres with grayish pubescence; scape and pedicel with long, sparse setae, mainly ventrally; antennomeres III–X ventrally with long, sparse setae, dorsally with long setae at apex; antennomere XI ventrally with long, sparse setae; antennal formula based on antennomere III: scape = 0.81; pedicel = 0.17; IV = 1.47; V = 1.10; VI = 1.00; VII = 0.95; VIII = 0.90; IX = 0.85; X = 0.81; XI = 0.85.

Thorax. Prothorax, without lateral tubercles, slightly wider than long; lateral tubercles large, conical. Pronotal disc laterally with two slightly elevate tubercles about middle of anterior half; basal half with large, elliptical, slightly elevate callosity at basal center; surface moderately coarsely, sparsely punctate, except on discal tubercles and callosity; base with transverse, deep, narrow sulcus, followed by distinct, transverse elevation, centrally rounded projected; anteriorly, at each side, narrow, well marked transverse sulcus; pubescence dense, brown-yellowish (more grayish depending of the angle of incision of light), less dense, slightly darker on basal transverse elevation, and laterally, between base and lateral tubercles of prothorax (this latter area centrally with grayish pubescence). Lateral sides of prothorax with grayish, very short pubescence (somewhat more brownish depending of angle of incision of light); moderately, finely, shallowly, sparsely punctate (more distinctly on base). Ventral



Figures 14–25. 14–17) *Colobothea larriveei*, holotype female: 14) Dorsal habitus; 15) Ventral habitus; 16) Lateral habitus; 17) Head, frontal view. 18–21) *Colobothea boliviana*, holotype male: 18) Dorsal habitus; 19) Ventral habitus; 20) Lateral habitus; 21) Head, frontal view. 22–25) *Esthlogena (Pseudotaxia) bella*, holotype male: 22) Dorsal habitus; 23) Ventral habitus; 24) Lateral habitus; 25) Head, frontal view.

side of thorax with grayish pubescence (more brownish depending of angle of incision of light); central area of metasternum with pubescence distinctly sparser. Prosternum coarsely, moderately abundantly punctate on center, sparser towards lateral sides. Prosternal process with pubescence as on prosternum; punctures slightly smaller than on prosternum, partially confluent. Mesosternum very coarsely, confluent punctate on base. Metasternum laterally very finely, sparsely punctate (punctures more distinct near central longitudinal sulcus. Scutellum with brownish pubescence, laterally, on basal half with narrow band of grayish pubescence. **Elytra.** Covered by brown-yellowish pubescence; moderately coarsely, abundantly, irregularly punctate on basal third, distinctly finer, aligned towards apex; apex slightly obliquely truncate.

Abdomen. Urosternites with grayish pubescence (more brownish depending of angle of incision of light), mixed by long, sparse setae; urosternites I–IV finely, sparsely punctate; urosternite V moderately coarsely punctate on distal half. **Legs.** Pubescence grayish, distinctly brown-yellowish around apex of tibiae (mainly meso- and metatibiae).

Paratype female. Tubercles and callosity on pronotal disc slightly more conspicuous. Antennae 1.5 times as long as elytra; reaching elytral apex at middle of antennomere X. Distal area of urosternite V distinctly depressed.

Dimensions in mm (male/female). Total length, 18.3/18.1; length of prothorax at center, 3.7/3.4; anterior width of prothorax, 3.1/3.0; posterior width of prothorax, 3.7/3.4; largest width of prothorax, 5.0/4.5; humeral width, 5.1/4.8; elytral length, 13.1/13.1.

Type material. Holotype male (MZSP) and paratype female (IMCQ) from PERU, *Pasco*: Pozuzo, VIII.2013, local collector.

Etymology. Latin, *bella* = beautiful.

Remarks. *Esthlogena (Pseudotaxia) bella* differs from *E. (P.) proletaria* Thomson, 1868, mainly by the discal tubercles on pronotum less distinctly elevated (well-elevated in *E. (P.) proletaria*) and by the pronotal pubescence almost totally obliterating the integument (not so in *E. (P.) proletaria*). It differs from *E. (P.) obliquata* Breuning, 1940 by the scutellum mostly with dark pubescence (whitish in *E. (P.) obliquata*) and by the lateral tubercles of prothorax large (small in *E. (P.) obliquata*, according to Breuning 1940).

The two new species of *Colobothea* herein described can be included in the alternative of couplet “2”, from Breuning (1961) (translated):

- | | | |
|-------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| 2. | Scutellum pubescence white, differing from elytra | <i>E. (P.) obliquata</i> Breuning, 1940 |
| — | Scutellum pubescence not white (the same as elytra) | 3 |
| 3(2). | Pronotal pubescence dense, obliterating almost totally the integument; pronotal tubercles and callosity slightly elevated | <i>E. (P.) bella</i> sp. nov. |
| — | Pronotal pubescence not quite obliterating integument; pronotal tubercles and callosity well marked | <i>E. (P.) proletaria</i> Thomson, 1868 |

New Distribution Records

***Ataxia obscura* (Fabricius, 1801)** (Lamiinae, Pteropliini) is recorded from Peru, **new country record**. PERU, *Pasco*: Pozuzo, 1 female, VI.2012, local coll. (MZSP). This species was described from “America meridionali”, without detailed place. Currently it is known from Ecuador, Guyana, French Guiana, Bolivia, and Brazil (Amazonas, Pará, Rondônia, Mato Grosso, Maranhão) (Monné 2014 – with omission of Guyana).

***Adetus cylindricus* (Bates, 1866)** (Lamiinae, Apomecynini) is recorded from Peru, **new country record**. PERU, *Pasco*: Pozuzo, 1 female, VI.2012, local Coll. (MZSP). This species was described from Brazil (Pará), and it is also known from Ecuador and Bolivia (Monné 2014).

Acknowledgments

We thank Ivan Callegari for supplying very interesting material from Bolivia over the years as well as Patrick Demez for Peruvian material and many professional courtesies. We express our sincere thanks to Steven W. Lingafelter (Systematic Entomology Laboratory, Plant Sciences Institute, Agriculture Research Service, U. S. Department of Agriculture, National Museum of Natural History, Washington, D.C.), and Yves Bousquet (Canadian National Collection of Insects, Arachnids and Nematodes, Agriculture and Agri-Food Canada, Ottawa, Ontario, Canada) for corrections to the manuscript.

Literature Cited

- Bates, H. W. 1869.** XXV. New species of Coleoptera from Chontales, Nicaragua. The Transactions of the Entomological Society of London 1869: 383–389.
- Breuning, S. 1940.** Novae species Cerambycidarum. IX. Folia Zoologica et Hydrobiologica 10(1): 115–214.
- Breuning, S. 1961.** Révision des Pteropliini (Col. Cerambycidae). Pesquisas (Zoologia) 5(9): 5–61.
- Monné, M. A. 2014.** Catalogue of the Cerambycidae (Coleoptera) of the Neotropical Region. Part II. Subfamily Lamiinae. (Available at <http://www.cerambyxcat.com/> Last accessed July 2014).
- Monné, M. A., and M. L. Monné. 2010.** Synopsis of the genus *Colobothea* Lepeletier and Audinet-Serville in Bolivia, with descriptions of two new species and new country records (Coleoptera, Cerambycidae). Zootaxa 2542: 33–47.
- Napp, D. S., and U. R. Martins. 1995.** Revisão do gênero *Chrysoprasis* A.-Serville, 1834 (Coleoptera, Cerambycidae, Cerambycinae, Heteropsini). I. Grupo basalis. Revista Brasileira de Entomologia 39(4): 901–910.
- Napp, D. S., and U. R. Martins. 1997.** Revisão do gênero *Chrysoprasis* A.-Serville, 1834 (Coleoptera, Cerambycidae, Cerambycinae, Heteropsini). III. Grupo chalybea. Revista Brasileira de Entomologia 41(1): 17–41.
- Napp, D. S., and U. R. Martins. 1998.** Revisão do gênero *Chrysoprasis* A.-Serville, 1834 (Coleoptera, Cerambycidae, Cerambycinae, Heteropsini). IV. Grupo hypocrita. Revista Brasileira de Entomologia 41(2–4): 465–499.
- Napp, D. S., and U. R. Martins. 1999.** Revisão do gênero *Chrysoprasis* A.-Serville, 1834 (Coleoptera, Cerambycidae, Cerambycinae, Heteropsini). V. Grupo aurigena. Revista Brasileira de Entomologia 43(3–4): 147–161.
- Schmid, H. 2010.** Zwei neue Neotropische Bockkäfer (Coleoptera: Cerambycidae). Koleopterologische Rundschau 80: 189–191.

Received August 30, 2014; Accepted September 3, 2014.

Review Editor Eugenio H. Nearn.

