



## Systematics, Morphology and Biogeography

# Description of a new species of *Adetus* and of the female of *Wappesoeme camiri*, new records and updates to type depository for three species of *Amphicnæia* Bates (Coleoptera, Cerambycidae)

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### ABSTRACT

A new species of *Adetus* LeConte, 1852 is described from Bolivia. Additions to the description of *Wappesoeme* Galileo et al., 2015 and differences between males and females of *Wappesoeme camiri* Galileo et al., 2015 are provided. New country and state records are provided in Cerambycinae and Lamiinae. The type depository is corrected for three species of *Amphicnæia* Bates, 1866.

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## Introduction

*Adetus* LeConte, 1852 is a genus of Apomecynini including 79 species occurring from the United States of America to Southern South America (Monné, 2016b). The study of specimens sent by Frederick W. Skillman, Jr. allowed us to describe a new species from Bolivia.

James E. Wappes collected and recognized three more specimens of *Wappesoeme camiri* Galileo et al., 2015. Two of these specimens are females, which made possible to add some features in the description of the genus and provided differences between males and females of *W. camiri*. He has also informed us about the incorrect type depository of some species of *Amphicnæia* Bates, 1866 described recently (Galileo, 2015).

Additionally, the study of specimens from MZSP and USNM collections enabled us to establish new geographical records for some species of Cerambycinae and Lamiinae.

## Material and methods

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

Stacker AutoMontage software. Measurements were taken in "mm" using a micrometer ocular Hensoldt/Wetzlar – Mess 10 in the Leica MZ6 stereomicroscope, also used in the study of the specimen.

The collection acronyms used in this study are as follows:

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

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

FWSC – Frederick W. Skillman Jr., Pearce, Arizona, USA;

MNKM – Museo de Historia Natural, Noel Kempff Mercado, Santa Cruz de la Sierra, Bolivia;

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

USNM – National Museum of Natural History, Smithsonian Institution, Washington, D.C., USA.

## Results

### APOMECYNINI

*Adetus* LeConte, 1852

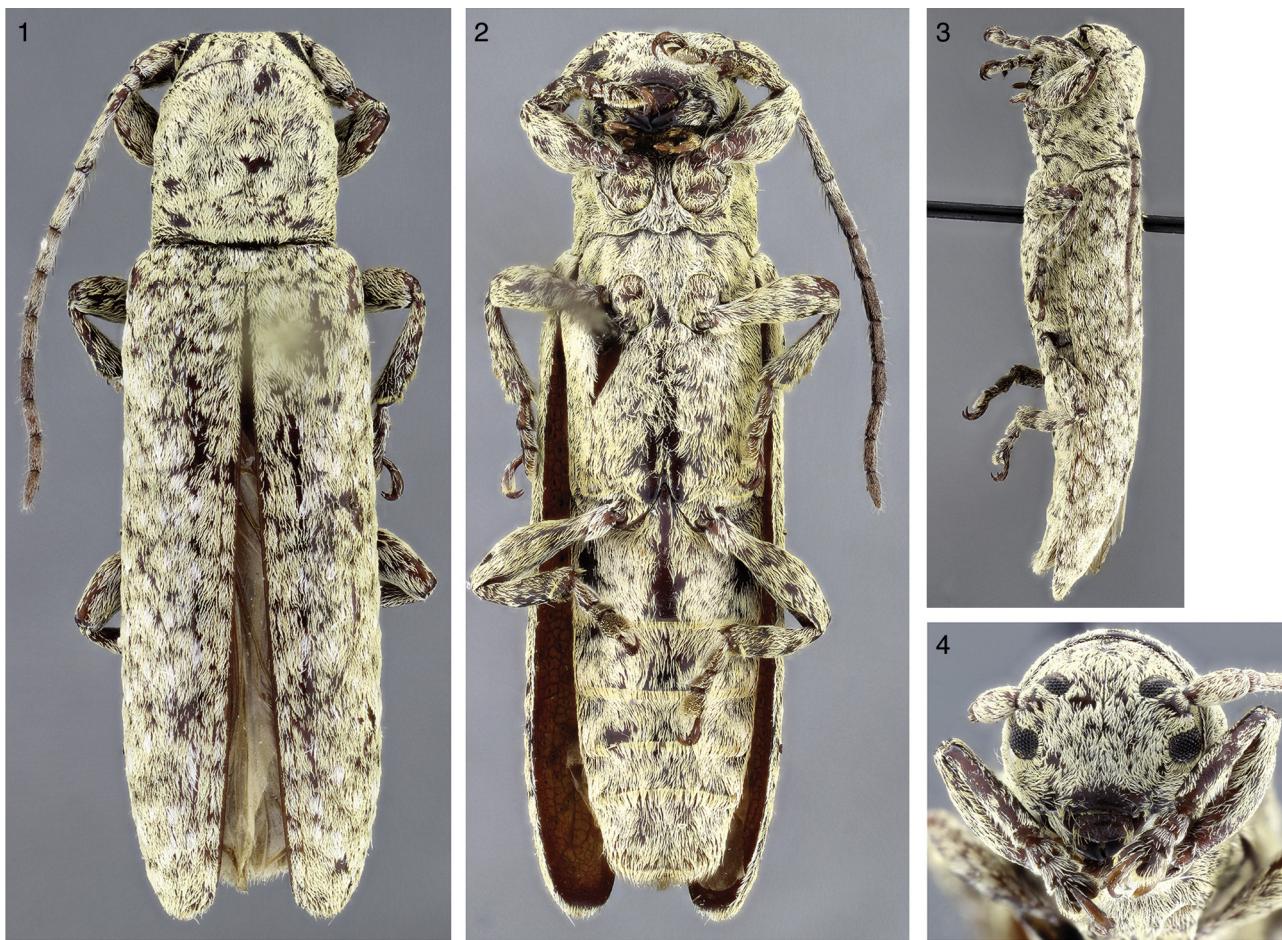
*Adetus* LeConte, 1852: 161; Monné, 2016b: 340 (cat.)

### *Adetus herrerae* Santos-Silva & Galileo sp. nov.

(Figs. 1–4)

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Figs. 1–4. *Adetus herrerae* sp. nov., holotype female: (1) Dorsal habitus; (2) Ventral habitus; (3) Lateral habitus; (4) Head, frontal view.

### Description

**Male.** Integument dark-brown, darker reddish-brown on some areas; mouthparts reddish-brown. Pubescence almost entirely obscuring integument, yellowish-white; dorsally with small spots with decumbent white pubescence (mainly on elytra); ventral side with pubescence more whitish centrally (at prothorax, only on prosternal process), interspersed with irregular areas with yellowish-white pubescence.

**Head.** Frons transverse, finely, sparsely punctate (punctures absent close to clypeus). Vertex finely, sparsely punctate (punctures slightly denser between antennal tubercles and upper eye lobes). Coronal suture distinct from clypeus to posterior level of upper eye lobes. Area behind upper eye lobes with row of fine punctures close to eye. Genae 1.65 times length of lower eye lobes. Labrum almost glabrous centrally, with long, erect setae laterally. Upper and lower eye lobes connected by slender band with ill-formed ommatidia; distance between upper eye lobes 0.95 times length of scape; distance between lower eye lobes in frontal view 1.75 times length of scape. Antennae 0.8 times elytral length, reaching about middle of elytra; antennomeres with short, erect, sparse setae ventrally (close to inner side), gradually sparser toward distal antennomeres; antennal formula (ratio) based on antennomere III: scape = 0.59; pedicel = 0.18; IV = 0.64; V = 0.42; VI = 0.44; VII = 0.42; VIII = 0.39; IX = 0.35; X = 0.34; XI = 0.39.

**Thorax.** Prothorax as long as wide, wider at base than apically; sides slightly, gradually narrowed on anterior third, with two slightly distinct, rounded tubercles. Pronotum slightly, gradually

sloped downward from basal margin to apex of basal third, then distinctly sloped upward to distal margin; finely, sparsely punctate. Prosternal process distinctly sloped upward from prosternum, then gradually sloped downward toward apex. Metasternum finely, sparsely punctate laterally. Elytra. Coarsely, partially confluent punctate on base, gradually finer, sparsely punctate toward apex; surface irregularly, slightly rugose; apex individually rounded. Legs. Apex of dorsal side of tibiae with triangular area sloped downward, almost glabrous on this region that is surrounded by band of short, erect setae. Metatarsomere I 0.7 times length II–III together.

**Abdomen.** Ventrite V about as long as I (excluding central projection), truncate at apex.

### Dimensions in mm

Total length, 12.0; prothoracic length, 2.50; anterior prothoracic width, 2.30; posterior prothoracic width, 2.50; humeral width, 3.10; elytral length, 9.10.

### Type material

Holotype male from BOLIVIA, Santa Cruz: Florida province (4 km N Bermejo; Refugio Los Volcanes; 18°06' S/63°36' W; 1000–1200 m), 29.X.2011, Skillman & Wappes col. (MNKM). Paratype, sex unknown: same data as holotype except 28.X.2011 (FWSC).



Figs. 5–6. *Wappesoeme camiri*, female: (5) Dorsal habitus; (6) Ventral habitus.

#### *Etymology*

The new species is named after Patricia Herrera, director of the MNKM.

#### *Remarks*

*Adetus herrerae sp. nov.* is characterized mainly by the pubescence almost entirely obscuring integument; genae longer than lower eye lobes; upper and lower eye lobes connected by slender band with ill-formed ommatidia; prosternal process distinctly sloped upward from prosternum, then gradually sloped downward toward apex.

*Adetus herrerae sp. nov.* resembles *Amietophrynus tuberosus* Galileo & Martins, 2003 by the distribution of the pubescence, but differs as follows: general pubescence yellowish-white; elytral apex without dark macula; spots with white pubescence on elytra decumbent. In *A. tuberosus*: general pubescence ochraceous; elytral apex with dark macula; spots with white pubescence on elytra somewhat bristly.

#### OEMINI (OEMINA)

#### *Wappesoeme Galileo, Martins & Santos-Silva, 2015*

*Wappesoeme Galileo, Martins & Santos-Silva, 2015: 382; Monné, 2016a: 710* (cat.).

#### *Remarks*

The original description of *Wappesoeme* was based on a single male. The discovery of two females allows us to add features of

this sex in the description of the genus as follows: antennae in female slightly longer than body; scape slender than in male; antennomeres III–IV in female without blunt spine ventrally near apex; prothorax in female distinctly wider than long; prosternal process slightly widened or not at apex in both sexes (the second known male have the apex of prosternal process as in female); apex of metafemora in female not reaching apex of abdominal ventrite III.

#### *Wappesoeme camiri Galileo, Martins & Santos-Silva, 2015* (Figs. 5–6)

*Wappesoeme Galileo, Martins & Santos-Silva, 2015: 383; Monné, 2016a: 710* (cat.).

#### *Description*

Females differs from males as follows: ventral side yellowish-brown with irregular reddish-brown areas; color of prosternum distinctly contrasting with that on pronotum and sides of prothorax; distance between upper eye lobes from 0.35 to 0.40 times length of scape, from 1.0 to 1.2 times length of one lobe; distance between lower eye lobes in frontal view 0.85 times length of scape; antennae from 1.50 to 1.55 times elytral length, reaching elytra apex at about middle of antennomere IX; antennal formula based on antennomere III (2 females): scape = 0.56/0.61; pedicel = 0.13/0.17; IV = 1.01/1.06; V = 0.88/1.00; VI = 0.80/0.89; VII = 0.72/0.82; VIII = 0.59/0.67; IX = 0.57/0.61; X = 0.49/0.52; XI = 0.52/0.54; longitudinal bands on pronotum finely, abundantly punctate, but punctures distinctly coarser than remaining areas of pronotal surface, or partially smooth; emargination of basal margin of pronotum from distinct as in male to slightly distinct; elytral with two distinct carinae (slight distinct in holotype male).

### Dimensions in mm (holotype male/male/females)

Total length, 13.10/17.50/15.60–18.60; length of prothorax at center, 2.10/2.90/1.80–2.20; largest width of prothorax, 2.30/3.45/2.20–2.90; anterior width of prothorax, 1.60/2.30/1.70–2.05; posterior width of prothorax, 1.55/2.30/1.75–2.20; humeral width, 2.30/3.50/2.90–3.60; elytral length, 8.30/12.10/10.10–13.00.

### Material examined

BOLIVIA, Santa Cruz: 20 km N Camiri (Road to Eytí; 1250 m; 6–8 km E Highway 9; 19°52' S/63°29' W), 1 male, 2 females, 8–9.XII.2015, Wappes & Kuckartz col. (1 male, 1 female – ACMT; 1 female – MZSP).

### New records

#### CERAMBYCINAE ELAPHIDIINI

*Megapsyrassa testacea* Giesbert, 1993

Material examined: COSTA RICA, Limón: near Guapiles town (N10.1683°/W083.779°), 1 female, VI.2015, A. Kozlov col. (MZSP) (new country record). It was described from Guatemala. Currently it is known from Mexico (Chiapas), Guatemala and Honduras ([Monné, 2016a](#)).

*Pseudomallocera auriflua* (Klug, 1825)

Material examined: BRAZIL, Minas Gerais: Parque Estadual do Rio Doce, 1 specimen, 27.X–14.XI.2013, L. Migliore col. (MZSP) (new state record). It was described from Brazil, without detailed place. Currently is known from Brazilian states of Bahia and Espírito Santo ([Monné, 2016a](#)).

#### NEOIBIDIONINI (COMPSINA)

*Microibidion exiguum* Martins, 1962

Material examined: BOLIVIA, Santa Cruz: Refúgio los Volcanes (18°06' S/063°36' W; 3400–4200 ft.), 3 males, 16–20.IX.2012, Wappes, Skelley, Bonaso and Hamel col. (ACMT) (new country record). This species was described from Brazil (Paraná, Rio Grande do Sul), Paraguay (Alto Paraná), and Argentina (Misiones). Currently it is also recorded to Brazilian states of Bahia, Minas Gerais, Espírito Santo, Rio de Janeiro, São Paulo and Santa Catarina, and to province of Corrientes in Argentina ([Monné, 2016a](#)).

#### PIEZOCERINI (PIEZOCERINA)

*Piezosecus tymaiuba* Martins & Galileo, 2003

Material examined: BRAZIL, Minas Gerais: Parque Estadual Rio Doce, 2 males, 25.IX–13.X.2013, L. Migliori col. (MZSP); 1 female, 27.X–14.XI.2013, L. Migliori col. (MZSP) (new state record). It was described and is known from Brazil (Bahia, Espírito Santo, São Paulo) ([Monné, 2016a](#)).

### TORNEUTINI

*Praxithea guianensis* Tavakilian & Monné, 2002

Material examined: BRAZIL, Mato Grosso: Utiariti, (Papagaio River), 1 female, 1–12.XI.1966, Lenko & Pereira col. (MZSP); Sinop, 1 female, 12–13.IX.2009, F. Stefanello col. (MZSP) (new country record). This species was described and it is known from French Guiana ([Monné, 2016a](#)). [Martins and Monné \(1980\)](#) recorded *Praxithea peruviana* Lane, 1966 to Brazil (Pará and Mato Grosso). As the specimen from Utiariti was identified as *P. peruviana* in the collection MZSP, it is possible that the record of this species to Mato Grosso had been based on a misidentified specimen. Unfortunately, [Martins and Monné \(1980\)](#) did not give a list of material examined.

#### LAMIINAE AGAPANTHIINI

*Grammopsoides tenuicornis* (Casey, 1913)

Material examined: PERU, Piura: Nomala, 2 males, 27.IV.2012, C. H. T. Townsend col. (USNM) (new country record). It was described from Panama and currently it is also known from Ecuador and Colombia ([Monné, 2016b](#)). This species shows a considerable variation of the shape of elytral apex.

#### ANISOCERINI

*Onychocerus aculeicornis* (Kirby, 1818)

Material examined: BRAZIL, Minas Gerais: Parque Estadual do Rio Doce, 1 male, 27.X–14.XI.2013, L. Migliore col (MZSP) (new state record). This species was described from Brazil, without detailed place. [Monné \(2016b\)](#) recorded the species to French Guiana, Bolivia, Paraguay, Argentina (Misiones) and Brazil (Rondônia, Goiás, Maranhão, Bahia to Rio Grande do Sul). However, there is no formal record to Minas Gerais.

#### COLOBOTHEINI

*Colobothea grisescens* Zajciw, 1962

Material examined: BRAZIL, Minas Gerais: Parque Estadual do Rio Doce, 1 male, 27.X–14.XI.2013, L. Migliore col. (MZSP) (new state record). It was described and is known only from Brazilian state of Espírito Santo ([Monné, 2016b](#)).

### Correction for type depository

According to [Galileo \(2015\)](#) the holotypes of her new species *Amphicnæa ubirajarai*, *A. martinsi*, *A. amicusbira* belong and are deposited at ACMT. However, they are deposited, respectively: MZSP, MNKM and FSCA.

### Conflict of interest

The authors declare no conflicts of interest.

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