

Description of a new species of *Eurysthea* Thomson (Coleoptera, Cerambycidae, Cerambycinae)

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Abstract. *Eurysthea vandenberghaei*, new species from Nicaragua is described, and *E. vandenberghaei* Santos-Silva, Heffern & Botero, 2021 is considered a *nomen nudum*.

Keywords. Central America; Longhorned beetles; Neotropical region; Taxonomy.

INTRODUCTION

Recently, Santos-Silva *et al.* (2021) described *Eurysthea vandenberghaei* but unfortunately the publication did not meet the requirements of Article 8.5.3 (ICZN, 1999). This is because the PDF did not follow one of the rules of the Code: "To be considered published, a work issued and distributed electronically must ... be registered in the Official Register of Zoological Nomenclature (ZooBank) (see Article 78.2.4) and contain evidence in the work itself that such registration has occurred [ICZN, 1999: Art. 8.5]."

One of the requirements of the journal in which the species was described (Neotropical Biodiversity) was to provide information regarding taxonomic acts to ZooBank. This information was provided by the authors to the editor prior to the first proof of the work. Unfortunately, the authors did not notice that the registration in ZooBank was not present in the final proof of the work. We tried to solve this problem with the editor several times but without success, and the resulting published PDF document did not contain the registration. Additionally, we contacted Dr. Miguel Alonso-Zarazaga, ex-commissioner of the International Commission on Zoological Nomenclature, who is extremely respected for his performance during his time in the Commission, asking his opinion. According to him, it would be better to publish a full description again, to avoid future problems.

MATERIAL AND METHODS

Photographs of the holotype are available in Santos-Silva *et al.* (2021) and Bezark (2022).

The collection acronyms used in the text are as follows: **DHCO** – Daniel Heffern Collection, Houston, Texas, USA; **MZSP** – Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil; **TAMU** – Texas A&M University, College Station, Texas, USA.

RESULTS

CERAMBYCINAE Latreille, 1802 ELAPHIDIINI Thomson, 1864

Eurysthea vandenberghaei sp. nov.

Eurysthea vandenberghaei Santos-Silva *et al.*, 2021: 532 (*nomen nudum*).

Description. Holotype female. Integument mostly dark brown, almost black on some areas; mouthparts mostly reddish brown with irregular dark brown areas, except palpalomes dark brown with apex reddish brown; anteclypeus and labrum dark brown anteriorly, reddish brown posteriorly; antennae gradually lighter toward apex. Elytra with large, transverse orangish-brown macula dorsally just before middle (anterior margin slightly projected forward along suture); posterior

half slightly lighter than basal area, except dark margins. Femoral peduncles orangish brown. Tibiae brown on narrow basal area, orangish-brown toward dark brown apex. Apex of tarsomere V dark reddish brown. Apex of abdominal ventrites 1-4 reddish brown.

Frons moderately depressed on each side of median groove, except triangular area close to clypeus; sides forming wide carina from antennal tubercles to clypeus; coarsely, confluent punctate (general appearance rugose), except obliquely striated triangular central area close to clypeus; with abundant yellowish-brown pubescence not obscuring integument, slightly shorter laterally, except glabrous triangular area close to clypeus. Area between antennal tubercles and beginning of upper eye lobes finely, densely punctate, except smooth median groove; with abundant yellowish-brown pubescence not obscuring integument. Remaining surface of vertex distinctly lower than area between antennal tubercles; finely, densely punctate, except glabrous median groove (median groove widened between upper eye lobes); with short, abundant yellowish-brown pubescence not obscuring integument, except glabrous median groove. Area behind upper eye lobes finely, densely punctate; with moderately abundant yellowish-brown pubescence not obscuring integument, slightly denser close to eye, and a few long, erect yellowish-white setae close to eye. Area behind lower eye lobes almost smooth close to eye; remaining surface finely, moderately abundantly punctate close to upper eye lobe, longitudinally striate-punctate toward ventral surface; with short, suberect, moderately sparse yellowish-brown setae close to eye, sparse yellowish-brown pubescence on punctate area, glabrous on striate-punctate area; with a few long, erect yellowish-white setae close to eye toward inferior area. Median groove distinct from clypeus to prothoracic margin. Antennal tubercles with sculpturing as on frons, except smooth apex; with yellowish-brown pubescence not obscuring integument, except glabrous apex. Genae finely, abundantly punctate on posterior half close to eye, smooth on anterior half; with yellowish-brown pubescence not obscuring integument on punctate area, glabrous on smooth area. Gulamentum smooth, glabrous on center of posterior half, transversely striate, with sparse yellowish-brown pubescence on sides of posterior $\frac{2}{3}$ and central area close to smooth posterior half; anterior area depressed, opaque, with minute, sparse tubercles, and both, short and long yellowish setae, distinctly sparser centrally. Wide central area of post-clypeus moderately concave; finely, abundantly punctate, punctures coarser, sparser centrally; wide central area with yellowish-brown pubescence not obscuring integument, denser, with long, erect setae of same color interspersed laterally; sides smooth, glabrous. Labrum coplanar with anteclypeus at posterior half, inclined at anterior half; sides of posterior half with small, minutely, densely punctate depression, each one with erect, both short and long yellowish-brown setae; center of anterior half with transverse band of long brownish setae directed forward. Distance between upper eye lobes 0.83 times length of scape (0.36 times distance between

outer margins of eyes); in frontal view, distance between lower eye lobes 1.25 times length of scape (0.54 times distance between outer margins of eyes). Antennae 1.15 times elytral length, reaching posterior seventh of elytra; with yellowish-brown pubescence partially obscuring integument; with long, erect yellowish setae ventrally on scape, pedicel, and antennomeres III-VII (setae shorter and sparser toward VII); dorsal surface of scape, pedicel and apex of antennomeres III-X with long, erect, sparse yellowish setae (setae shorter toward X); inner apex of antennomeres III-VI with spine (spine distinctly short in V and VI); spine of antennomeres III-IV shorter than diameter of apex of the antennomere. Antennal formula (ratio) based on length of antennomere III (without spine): scape = 0.70; pedicel = 0.23; IV = 0.86; V = 0.94; VI = 0.94; VII = 0.90; VIII = 0.76; IX = 0.69; X = 0.57; XI = 0.55.

Thorax. Prothorax wider than long, sides moderately tuberculate centrally, divergent from anterolateral tubercles to middle, convergent toward posterolateral angles. Pronotum with median longitudinal carina from anterior fifth to posterior fifth (carina more distinct from apex of anterior third); with large, almost M-shaped carina on posterior $\frac{2}{3}$; coarsely, moderately abundantly punctate; with abundant yellowish-brown pubescence not obscuring integument, denser on lateral "arms" of M-shaped carina, slightly dense on anterior third and sides of posterior third; with long, erect, moderately abundant yellowish setae on anterior third and sides of posterior third. Sides of prothorax coarsely, sparsely punctate; with abundant yellowish-brown pubescence not obscuring integument, denser, yellower around lateral tubercle; with long, erect, sparse yellowish setae interspersed. Prosternum finely, sparsely punctate on posterior third, transversely striate on anterior third; with yellowish-brown pubescence not obscuring integument, distinctly sparser anteriorly, and with long, erect, abundant yellowish setae interspersed. Prosternal process distinctly narrowed toward apex; with pubescence and setae as on posterior area of prosternum. Ventral surface of mesothorax with moderately abundant yellowish-brown pubescence not obscuring integument, distinctly sparser on center of anterior area of mesoventrite. Mesoventral process gradually narrowed toward emarginate apex; with both, short and long, decumbent yellowish-brown pubescence partially obscuring integument. Metanepisternum and sides of metaventrite with abundant yellowish-brown pubescence partially obscuring integument, and long, suberect yellowish setae interspersed (suberect setae almost absent on metanepisternum); central area of metaventrite with both, short and long yellowish setae distinctly not obscuring integument, except glabrous area of metathoracic discrimen. Scutellum with dense golden pubescence. **Elytra.** Moderately coarsely, abundantly punctate, with coarser punctures interspersed, especially on posterior $\frac{2}{3}$; apex rounded, with sutural angle slightly projected; with abundant yellowish-brown pubescence almost obscuring integument (pubescence not obscuring punctures), and long, erect, sparse yellowish setae interspersed. **Legs.** Procoxae slightly tab-shaped close to

trochanter. Femora pedunculate-clavate (profemora less so); apex of femora with short rounded lobe; peduncles with both, short and long erect yellowish-brown setae distinctly not obscuring integument (short setae more decumbent); clubs with abundant yellowish-brown pubescence not obscuring integument, and long, erect setae interspersed. Tibiae with both, short and long yellowish-brown setae not obscuring integument (shorter setae denser on apex of dorsal and lateral surfaces), except posterior $\frac{2}{3}$ of ventral surface of protibiae with dense, bristly yellowish-brown pubescence; sides of tibiae not longitudinally carinate. Metatarsomere I distinctly longer than II-III together (about as long as 0.75 times length of II-V).

Abdomen: Ventrates with yellowish pubescence not obscuring integument, sparser centrally, and long, erect setae of same color interspersed (erect setae more brownish on posterior area of 5). Apex of ventrite 5 truncate.

Dimensions in mm (♀): Total length, 23.85; prothorax length, 3.20; anterior width, 3.10; posterior width, 3.30; widest prothoracic width, 3.95; humeral width, 5.15; elytral length, 15.30.

Type material: Holotype ♀ from NICARAGUA, Jinotega: Cerro Diablo, 1,300-1,500 m, 09-10.IV.2005, E. van den Berghe leg. (TAMU, formerly DHC).

Etymology: It is a pleasure to name this species for Dr. Eric van Berghe, collector of the holotype, who has provided the second author and others in the scientific community with numerous specimens from Nicaragua and Honduras for over 30 years.

Remarks. *Eurysthea vandenberghae* sp. nov. differs from all other species of the genus, except *E. sordida* (Erichson, 1847), and *E. llinasi* Taboada-Verona & Botero, 2018, by the outer apical angle of the elytra rounded. It differs from *E. sordida* (see photographs on Bezark, 2022) by the elytra with distinctly shorter pubescence (longer in *E. sordida*), presence of large orangish-brown macula on elytra (absent in *E. sordida*), and femora bicolorous (unicolorous in *E. sordida*). *Eurysthea vandenberghae* can be easily separated from *E. llinasi* (see photographs of the

holotype on Bezark, 2022), by the elytra with transverse large orangish-brown macula about middle (with inverted V-shaped band, from about apex of anterior quarter to about middle prolonged along suture to about posterior third, and almost V-shaped yellow band in posterior quarter in *E. llinasi*).

AUTHORS' CONTRIBUTIONS: ASS, DH, JPB: Conceptualization, Writing – review & editing; ASS, JPB: Methodology, Writing – original draft, Visualization, Investigation. All authors actively participated in the discussion of the results, they reviewed and approved the final version of the paper.

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