

## New species and subspecies of *Doliops* Waterhouse, 1841 and *Lamprobityle* Heller, 1923 (Coleoptera: Cerambycidae) from the Philippines

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Barševskis A. 2018. New species and subspecies *Doliops* Waterhouse, 1841 and *Lamprobityle* Heller, 1923 (Coleoptera: Cerambycidae) from the Philippines. *Baltic J. Coleopterol.*, 18(2): 297– 304.

New species and a new subspecies of the genus *Doliops* Waterhouse, 1841 and a new species of the genus *Lamprobityle* Heller, 1923 (Coleoptera: Cerambycidae) are described and illustrated: *D. um* sp. n., *D. basilana zamboangana* ssp. n. and *L. medinai* sp. n. The genus *Doliops* in the world fauna is now represented by 59 species, and the genus *Lamprobityle* by 13 species.

Key words: long-horned beetles, Lamiinae, Apomecynini, taxonomy, *Doliops*, *Lamprobityle*, Philippines

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### INTRODUCTION

The genera *Doliops* Waterhouse, 1841 and *Lamprobityle* Heller, 1923 belongs to the tribe Apomecynini Thomson, 1860 of the subfamily Lamiinae Latreille, 1825 (Coleoptera: Cerambycidae). Both genera are widely distributed in Philippines, except of *Doliops similis* Miwa & Mitono, 1933 known from Taiwan Archipelago. Most of species of these genera have very restricted distribution ranges.

In recent years these genera are intensively studied. Several authors described a lot of new species (Barševskis 2013, 2014a, 2014b, 2017a, 2017b, 2017c, 2018; Barševskis & Jaeger, 2014; Cabras & Barševskis 2016; Vives 2013, 2015).

The mimicry between *Doliops* and weevils of genera *Pachyrhynchus*, *Metapocyrtus*, *Macrocyrtus* and *Palycatus* were noted by Barševskis (2013, 2014a, 2014b, 2017b, 2017c, 2018), etc. For some species of *Doliops* and weevils of genera listed above, a large variation of the elytra pattern has been observed.

The aim of the present study is descriptions of several new taxa of *Doliops* and *Lamprobityle* from Philippines: new species and a new subspecies of *Doliops* and a new species of the genus *Lamprobityle*. The genus *Doliops* in the world fauna is now represented by 59 species and genus *Lamprobityle* by 13 species.

## MATERIAL AND METHODS

Examination of the material were made under a *Nikon SMZ745T* binocular stereomicroscope, *NIS-Elements 6D* software. Photographs were taken with a *Canon EOS 6D* camera and *Canon MP-E 65mm* macro lens, and processed using *Helicon Focus* auto montage computer software and subsequently was edited with *Photoshop CS6 Extended*. The maximal length of the body of studied specimens was measured from anterior margin of labrum to apex of elytra; maximal width of the body was – at widest level of basal part of elytra between shoulders.

Type material of all new species deposited in DUBC, Daugavpils University Coleopterological Research Center, ILGAS, Daugavpils Distr., Latvia.

## RESULTS

### *Doliops um* sp. n.

(Fig. 1)

**Type material. Holotype:** Female. PHILIPPINES: Mindanao Isl., / Surigao del Sur, / Hinatuan, 10.2018. / Local collector leg. / [handwritten on white label]; HOLOTYPE: *Doliops um* sp. n., A.Barševskis descr. 2018 [handwritten on red label] (DUBC).

**General distribution:** Philippines; Mindanao Island.

**Description of holotype.** Body length: 12.5 mm, body width: 6.1 mm. Body in comparison with other species of genus more robust, wide. Dorsal surface metallic copper-colored, shiny, with spots of greenish scales.

Head elongated, narrower than pronotum, with very fine punctures and reticulate microsculpture dorsally, covered with very fine pale pubescence. Frons convex, shiny. Head between eyes wide, oval, with elongated band of greenish scales. Eyes not extended, bilobate, flattened. Cheeks narrow,

not extended, covered with greenish scales. Clypeus yellow, narrow, shiny. Labrum metallic green, shiny, covered with sparse pubescence. Mandibles massive, shiny, with sharp apices. Antennae slender, relatively short; antennomeres 1-2 dark, metallic, shiny; antennomere 3 elongated, brown, darkened and widened apically, with row of black setae and with very fine white pubescence; antennomere 4 darkened apically, covered with white pubescence in basal part; remaining antennomeres brown with very fine pubescence.

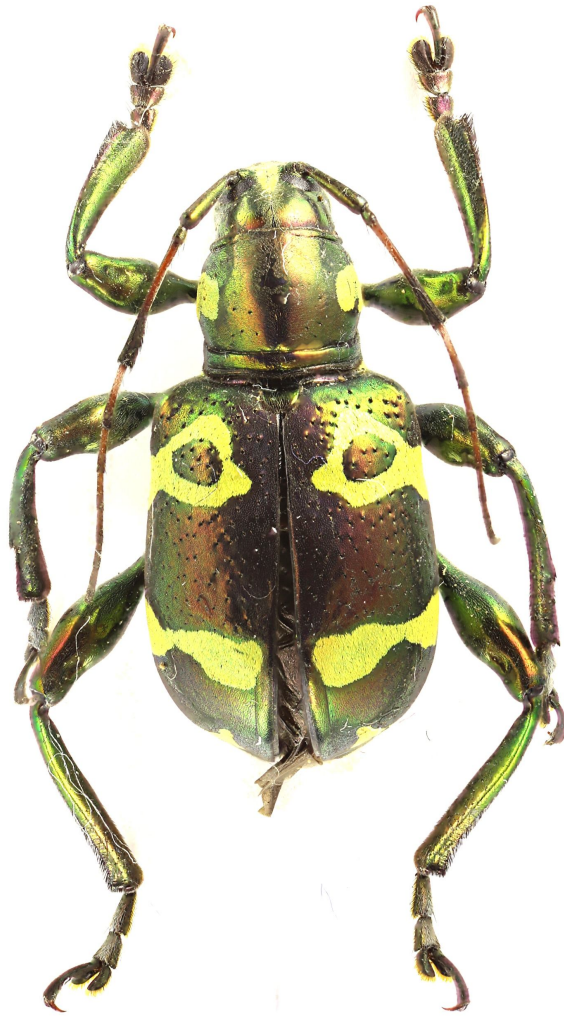
Pronotum subcylindric, slightly transverse, wider than head and narrower than elytra. Basal and apical parts of pronotum emarginated with two thin, transverse, parallel and slightly curved lines. Surface between apical and basal lines shiny, with very sparse, coarse punctures and very fine microsculpture. Lateral sides of pronotum rounded, without visible angles, with wide elongated L-shaped spot of greenish scales.

Scutellum rounded apically, metallic shiny, covered with very sparse dark pubescence. *Pars stridens* not visible under basal margin of pronotum.

Elytra wide, convex, metallic copper-coloured, shiny. Shoulders visible, but not extended. Lateral and dorsal parts of each elytron behind shoulders with transverse spot of greenish scales forming circle-like figure in median portion of elytra. Surface of elytra behind middle with second transverse band, narrowing in middle and interrupted in area of elytral stria. Apex of elytra with third semilunar spot of greenish scales, with small, round area without scales in middle.

Legs metallic, shiny, with very fine microsculpture. Apical part of tibia covered with dense dark pubescence and setae. Tarsomeres metallic, shiny, covered with dark pubescence and setae.

Ventral side of body metallic, shiny, with lateral spots of greenish scales.



A



B

**Differential diagnosis.** The new species differs from all other species of the genus with a unique, drawing of elytra and pronotum. The new species is somewhat similar to *D. serpavginae* Barševskis, 2014, from which it differs and with a different pattern of pronotum and elytra: first transverse band of a new species near stria with area without scales ( in *D. serpavginae* this spot is fully scaled), as well as second and third spots have different shapes.

**Etymology.** The name of species is derived from the abbreviation of University of Mindanao – UM. In last years thanks to the support of University President Guillermo Torres, Jr., this university is becoming one of the most important Coleoptera research centers in the Philippines. It is a great honor for me to dedicate this beautiful species to the University of Mindanao as one of

Fig. 1. *Doliops um* sp. n. A- dorsal view, B - lateral view

the most successful universities in the Philippines.

***Doliops basilana zamboangana* sp. n.**

(Fig. 2A, B, C)

**Type material. Holotype:** Male. PHILIPPINES: Mindanao Isl., / Zamboanga, Gutallac, / 10.2018. local collector leg. / [handwritten on white label]; HOLOTYPE: / *Doliops basilana* / *ssp. zamboangana* sp. n. / A.Barševskis descr. 2018 [handwritten on red label] (DUBC).

**General distribution:** Philippines: Mindanao Island.

**Description of holotype.** Body length: 13.3 mm, body width: 5.4 mm. Dorsal surface of body black, with ocher-coloured scales spots on elytra.

Head elongated, narrower than pronotum, with very fine punctures and reticulate microsculpture dorsally, with very fine pubescence. Frons very convex, shiny. Head between eyes with short spot of yellow scales. Eyes not extended, bilobate, flattened. Cheeks narrow, not extended, parallel-sided, covered with very fine pubescence and very fine transverse microwrinkles. Clypeus yellow, shiny. Labrum dark metallic green, shiny, with sparse pubescence and row of dark setae. Mandibles massive, shiny, with sharp apices. Antennae slender, relatively long; antennomeres 1-2 dark, metallic green, shiny; antennomere 3 elongated, dark-brown, darkened and widened apically, with row of black setae and very fine white pubescence; antennomeres 4-5 dark-brown, darkened apically, covered with white pubescence in basal part; remaining antennomeres brown, with very fine pubescence.

Pronotum subcylindric, slightly transverse, very convex, wider than head and narrower than elytra, emarginated with band of yellow-brown scales; lateral sides of pronotum rounded, without visible angles. Pronotal disc shiny, with very fine micropunctures, with several sparse and coarse punctures laterally.

Scutellum rounded apically, metallic shiny, covered with very sparse dark pubescence. *Pars stridens* not visible under basal margin of pronotum.

Elytra wide, convex, black, shiny. Shoulders visible, but not extended. Basal third of elytra with coarse punctures. Middle portion of elytra with band of oblique, wide, transverse ocher-coloured scales, with large spot of similar color in preapical portions of each elytron.

Legs slender, black, with dark metallic blue luster. Tibia apically widened and covered with numerous dark setae. Tarsomeres black, with greenish luster, covered with grey and dark pubescence.

Ventral side of body metallic, shiny, with spots of ocher-coloured scales laterally.

Aedeagus slightly curved, with sharp apex of lamella (Fig. 2C).

**Differential diagnosis.** The new subspecies differs from the nominative subspecies with fully emarginated pronotum (pronotum of the nominative subspecies is emarginated only on basal and lateral sides) (Fig. 3).

**Mimicry.** The members of new species mimics the weevil *Pachyrhynchus zamboanganus* Yoshitake, 2012 (Fig. 4) and *Pachyrhynchus basilanus* Heller, 1923 (Coleoptera: Curculionidae: Entiminae: Pachyrhynchini).

**Etymology.** The name of subspecies is derived from the type locality where specimens were collected: Zamboanga – *zamboanganus*.

***Lamprobityle medinai* sp. n.**

(Fig. 5)

**Type material. Holotype:** Male. PHILIPPINES: Mindanao Isl., / Agusan del Sur, Borbon / 09.2018. local collect. leg. / [handwritten on white label]; HOLOTYPE:

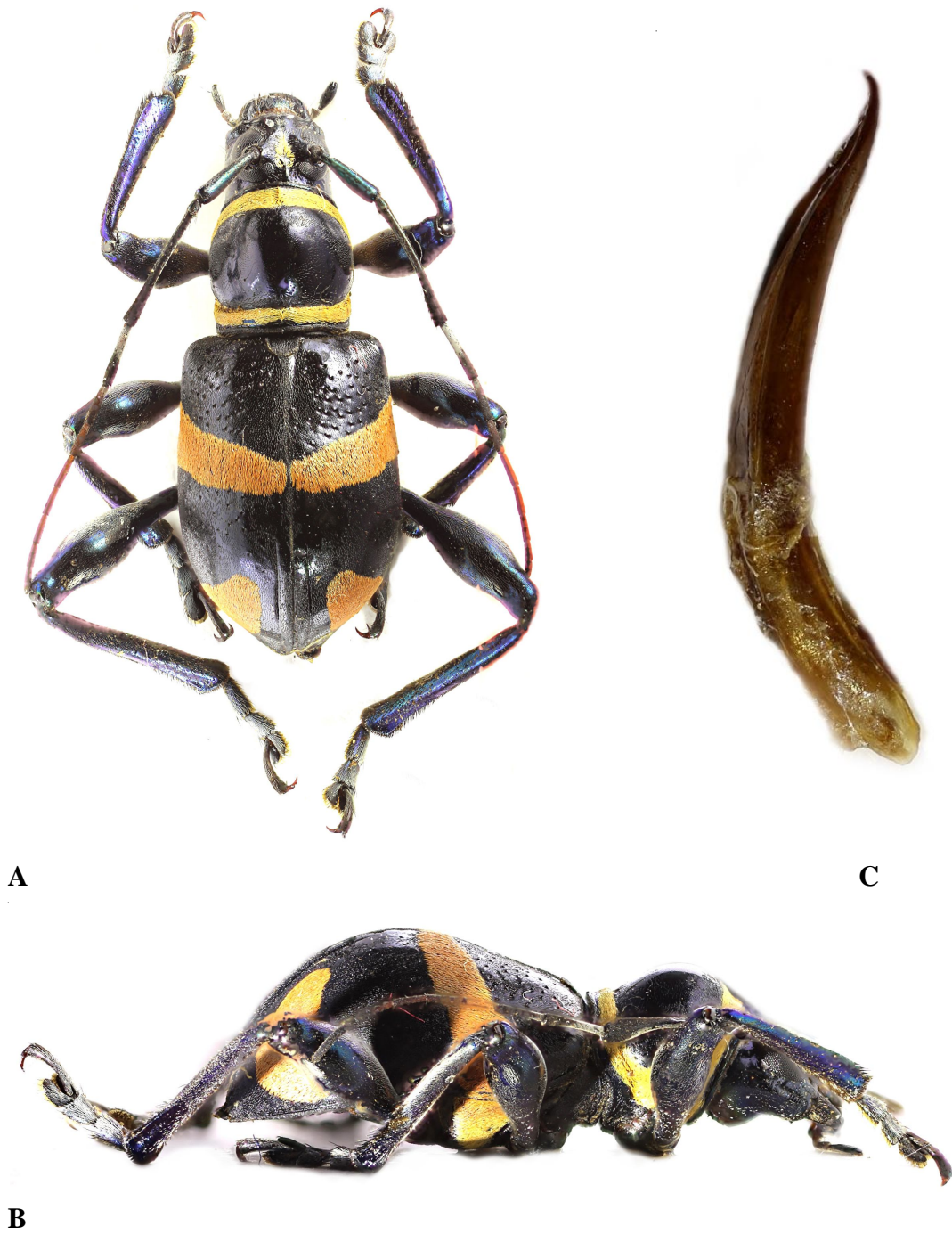


Fig. 2. *Doliops basilana zamboangana* sp. n. A - dorsal view, B - lateral view, C - aedeagus



Fig. 3 *Doliops basilana basilana* Heller, 1924, type (Barševskis, Jaeger 2014)

*Lamprobityle medinai* sp. n., A.Barševskis descr. 2018 [handwritten on red label] (DUBC).

**General distribution:** Philippines: Luzon Island.

**Description.** Body length: 8.2 mm, body width: 3.1 mm. Dorsal surface of body black. Apical part of elytra covered with numerous small spots of grey pubescence.

Head elongated, narrower than pronotum, with punctures dorsally, covered with dark sparse pubescence. Frons flat, dark metallic green. Eyes not extended, bilobate. Cheeks narrow, not extended, with punctures and sparse pubescence. Clypeus yellow, narrow, shiny. Labrum shiny, covered with sparse pubescence and numerous long setae. Mandibles massive, shiny, with sharp apices and dark pubescence laterally. An-

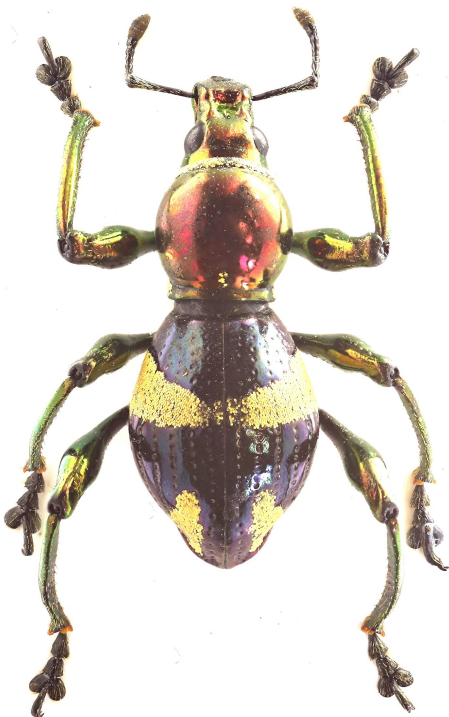


Fig. 3 *Pachyrhynchus zamboanganus* Yoshitake, 2012



Fig. 5 *Lamprobityle medinai* sp. n., holotype

tennae slender; antennomeres 1-2 black, shiny; antennomere 3 black, with grey pubescence in basal and dark in apical portions; remaining antennomeres dark-brown, with fine pubescence, except of darkened apex.

Pronotum subcylindric, slightly elongated, with parallel side, wider than head and distinctly more narrower than elytra. Basal and apical portions of pronotum emarginated with thin, transverse, parallel, slightly curved lines. Pronotal disc with punctures and pubescence, shiny.

Scutellum rounded apically, shiny, covered with very sparse dark pubescence. *Pars stridens* not visible under basal margin of pronotum.

Elytra very convex, unicolor black, shiny. Shoulders visible, but not extended. Dorsal part of elytra behind shoulders with wide extended humps.

Surface of elytra behind middle with small spots of grey pubescence. Basal third of elytra (especially in area of extended humps) with coarse punctures, and dark and grey pubescence.

Legs black, shiny, with very fine microsculpture. Apical part of tibia with dense pubescence and dark dense setae. Tarsomeres metallic, shiny, with dark-grey pubescence and dark setae.

Ventral side of body black, shiny, with spots of green pubescence.

**Differential diagnosis.** The new species similar to *Lamprobityle zeltitae* Barševskis, 2014 and *L. cabrasae* Barševskis, 2018 (Fig. 5A, B), which found also in Mindanao island, but differs from its by the unicolor surface of the elytra (elytra of *L. zeltitae* with transverse

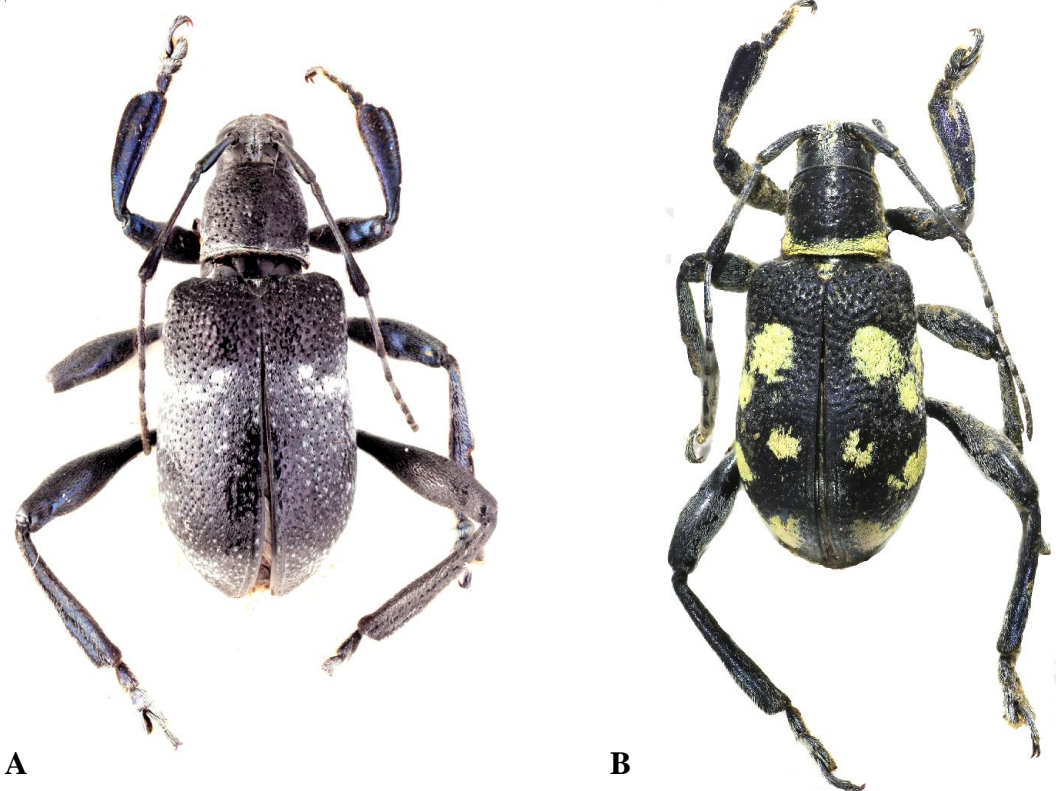


Fig.6 *Lamprobityle zeltitae* Barševskis, 2014, holotype (A); *L. cabrasae* Barševskis, 2018 (B)

white interrupted band, but *L. cabrasae* with big green, blue or yellow spots).

**Etymology.** The species named in honor of my colleague, Philippine entomologist Milton Norman Medina, in appreciation of cooperation.

## ACKNOWLEDGEMENTS

I wish to express my gratitude to my colleagues Alexey Shavrin for help during preparation of the manuscript and Anita Rukmane (both from Daugavpils, Latvia) for help in preparation of photographs of the holotype and the laboratory assistance.

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*Received: 11.11.2018.*

*Accepted: 20.12.2018.*

*Published: 31.12.2018.*