

New species of the genus *Doliops* Westwood, 1841 (Coleoptera: Cerambycidae) from Philippines

Arvīds Barševskis

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Doliops kaupersi sp. nov. (Coleoptera: Cerambycidae) from Mindanao Island, (Philippines) is described and illustrated. The genus *Doliops* Waterhouse, 1841 in the world fauna is now represented by 75 species and subspecies. There are currently 27 species of this genus found on the Mindanao island.

Key words: *Microplocia*, long-horned beetles, fauna, new species, taxonomy, Luzon, Philippines.

Arvīds Barševskis. *Daugavpils University, Institute of Life Sciences and Technologies, Coleopterological Research Center, Vienības Str. 13, Daugavpils, LV-5401, Latvia; email: arvids.barsevskis@du.lv*

Coleoptera Research Center, Institute of Biodiversity and Environment, University of Mindanao, Davao City, 8000, Philippines.

ORCID: <https://orcid.org/0000-0001-9703-0115>

INTRODUCTION

The genus *Doliops* Waterhouse, 1841 (Coleoptera: Cerambycidae) belongs to the tribe Apomecynini, subfamily Lamiinae. This genus is endemic to the Philippines, except for two taxa known from the nearby Taiwan Archipelago. Most species have very small distribution ranges, often associated with a particular island or even mountain range in the Philippine archipelago.

Almost all species of the genus *Doliops* form a mimicry complex with *Metapocyrtus*, *Polycatus*, etc. genera of weevils. In terms of *Doliops/Pachyrhynchus* mimicry complexes, Van Dam et al. (2024) indicates coevolutionary interactions arise from community assembly events, not host

tracking structural colors in model and mimetic systems use different nano-level mechanisms. On the other hand Chen (2022) writes that although those color patterns of *Pachyrhynchus* weevils are known to function as an aposematic signal or camouflage, the evolutionary history of color patterns on *Pachyrhynchus* weevils remain unclear. Currently, the species composition of the genera *Doliops* and *Pachyrhynchus* is not sufficiently well studied. Almost every year, new species are discovered and described, adding information about new mimicry complexes Barševskis & Kairišs (2019), Barševskis (2021), Rukmane - Bārbale (2020a, 2020b, 2022), Rukmane (2019).

The aim of the present article is the description of the new species of *Doliops*

from Kiamba, Sarangani, Mindanao island (the Philippines). In total in the world fauna genus *Doliops* represented by 75 species and subspecies, but in Mindanao island - 27 species and subspecies.

MATERIAL AND METHODS

The laboratory research and measurements have been performed using Nikon AZ 100, Nikon SMZ 745T and Zeiss Stereo Lumar V12 digital stereomicroscopes, NIS-Elements 6D software. The habitus photograph was obtained with a digital camera Canon EOS 6D with Canon MP-E 65mm macro lens, using Helicon Focus auto montage and subsequently was edited with Photoshop. All measurements are given in millimeters.

The studied material (holotype) is deposited in Daugavpils University Institute of Life Sciences and Technologies, Coleopterological Research Center beetles collection (DUBC).

In the present paper I followed the taxonomic nomenclature provided by Tavakilian & Chavillotte (2024).

RESULTS

Doliops kaupersi sp. nov. (Fig. 1)

Type material. Holotype, male: PHILIPPINES / Kiamba, Sarangani, Mindanao / January.2019 / [printed]; HOLOTYPE: / *Doliops kaupersi* sp. nov. / A.Barševskis desc. 2024 [red, handwritten] (DUBC).

General distribution: Philippines; Mindanao Island.

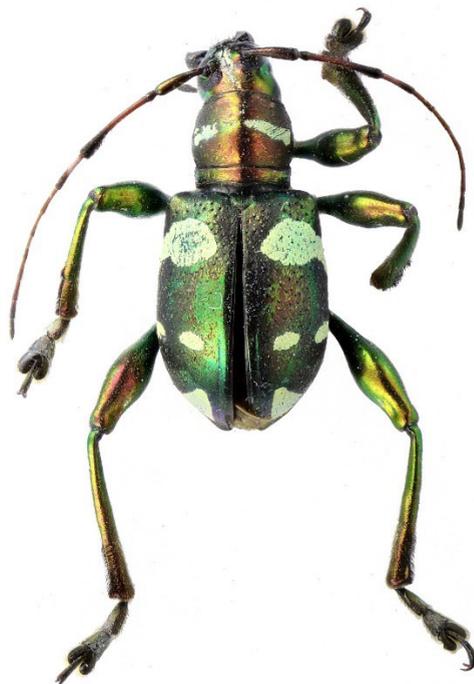


Fig. 1. *Doliops kaupersi* sp. nov. (holotype)

Description. Body length: 11.9 mm, body width: 4.7 mm. Dorsal surface of body metallic copper-colored, shiny, with spots of greenish scales.

Head copper-colored, elongate, narrower than pronotum, metallic shiny, with very fine dorsal microsculpture, covered with very fine and sparse pubescence. Frons slightly convex, very shiny. Middle portion between eyes with wide elongate band of greenish scales, widened after antennal bases of antennae and in the middle with longitudinal very thin and shiny line, which continue to clypeus. Eyes flattened, not extended, bilobate. Cheeks narrow, not extended, shiny, with some small spots of greenish scales. Clypeus brown, narrow, shiny. Labrum black, shiny, covered with dark sparse pubescence. Mandibles black, massive, shiny, with acute apices. Antennae slender, relatively short. First antennomere metallic copper - colored. Remaining

antennomeres brown, with row of black setae and very fine pubescence; antennomere 2 very short, and dark, antennomere 3 elongated and darkened apically, antennomeres 4 darkened and slightly widened apically. Remaining antennomeres apically not widened, with very fine pubescence in basal portions.

Pronotum subcylindric, convex, slightly transverse, wider than head and narrower than elytra, copper-colored. Basal part with two thin, transverse, parallel and slightly curved lines, but apical part with one impressed line. Lateral disc of pronotum between apical and basal lines shiny, smooth in middle, with some very sparse punctures and very fine transverse microsculpture. In the middle with transverse, relatively wide band of greenish scales, slightly interrupted in the middle. Lateral sides rounded, without visible angles.

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

Elytra wide, convex, dark copper-colored, shiny. Shoulders visible, but not protruded. Lateral and dorsal parts of each elytron behind shoulders with dumbbell-shaped transverse band of greenish scales. Surface of elytra behind middle with two longitudinal oval spots of greenish scales. Apex of elytra with semitriangular spot of greenish scales. Legs metallic copper-colored, shiny, with very fine microsculpture. Apical part of tibia covered with dense, dark pubescence and setae. Tarsomeres metallic, dark and shiny, covered with dark pubescence and setae.

Ventral side of body metallic, shiny, mostly covered with greenish scales.

Differential diagnosis. Based on the coloration of the body, the new species is

similar to *D. viridisignatus* Breuning, 1947, but differs from it by the different pattern and color of pronotum and elytra. Pronotum and head of new species copper-colored, very shiny, but dorsal part of body dark-green, with more coarse unctures. Lateral and dorsal parts of each elytron of a new species behind shoulders without two round spots of greenish scales, and with transverse dumbbell-shaped wide band before middle. Two longitudinal oval spots before apex by new species is further from the apex than on elytra of *D. viridisignatus*. Pronotum of a new species with wide transverse band of greenish scales, more widener as at *D. viridisignatus*.

Etymology. A new species is named in honor of the outstanding Latvian musician, singer, soloist of the group "Brain Storm" Renārs Kaupers (Latvia), in gratitude for his contribution to Latvian and world culture, integration of Latvian multinational society, and due to his anniversary.

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REFERENCES

- Barševskis A., Kairišs K. 2019. Three new species of the genus *Doliops* Waterhouse, 1841 (Coleoptera: Cerambycidae). *Baltic Journal of Coleopterology*, 19 (2): 243 – 251.
- Barševskis A. 2021. A new species of the genus *Doliops* Waterhouse, 1841 (Coleoptera: Cerambycidae) from Leyte Island, the Philippines. *Baltic*

- Journal of Coleopterology*, 21 (2): 147–150.
- Chen Sh.-M. 2022. Phylogeny, biogeography and mimicry of the *Pachyrhynchus* weevils and *Doliops* longhorn beetles. *NTU PhD theses*, <http://tdr.lib.ntu.edu.tw/jspui/handle/123456789/86276>
- Rukmane-Bārbale A. 2022. New species of the genus *Pachyrhynchus* Germar, 1824 (Coleoptera: Curculionidae: Pachyrhynchini) from the Luzon Island, Philippines. *Baltic Journal of Coleopterology*, 22(2): 433–436.
- Rukmane-Bārbale A. 2020a. Two new species of the genus *Pachyrhynchus* Germar, 1824 (Curculionidae: Entiminae: Pachyrhynchini) from the Luzon Island, Philippines. *Baltic Journal of Coleopterology*, 20(2): 179–184.
- Rukmane-Bārbale A. 2020b. Short contribution to distribution and appearance of *Pachyrhynchus decussatus* Waterhouse, 1841 (Entiminae: Pachyrhynchini) with description of one new taxon from Catanduanes Island, Philippines. *Baltic Journal of Coleopterology*, 20(1): 81–85.
- Rukmane A. 2019. Four new species and two subspecies of the genus *Pachyrhynchus* Germar, 1824 (Coleoptera: Curculionidae: Pachyrhynchini) from Luzon Island, Philippines. *Baltic Journal of Coleopterology*, 19(2): 141–150.
- Tavakilian G., Chavillotte H. 2024. Base de données Titan sur les Cerambycides ou Longicornes. <http://titan.gbif.fr> [accessed: 01.06.2024]
- Van Dam M.H., Parisotto A., Medina M.N., Cabras A.A., Gutierrez - Trejo N., Wilts B.D., Lam A.V. 2024. Biogeography confounds the signal of cospeciation in Batesian mimicry. *Current Biology*, <https://doi.org/10.1016/j.cub.2024.09.084>

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