https://doi.org/10.59893/abud.24(2).013
Acta Biol. Univ. Daugavp. 24(2) 2024
ISSN 1407 – 8953

NEW SPECIES OF THE GENUS *LAMPROBITYLE* HELLER, 1923 (COLEOPTERA: CERAMBYCIDAE) FROM MINDANAO ISLAND, PHILIPPINES

Arvīds Barševskis*, Chrestine Torrejos

Barševskis A., Torrejos C. 2024. New species of the genus *Lamprobityle* Heller, 1923 (Coleoptera: Cerambycidae) from Mindanao Island, Philippines. *Acta Biol. Univ. Daugavp., 24(2): 279-282.*

Abstract
Lamprobityle bagobutabagawa sp. nov, a new species of the genus *Lamprobityle* Heller, 1923 from Philippines, Mindanao Island is described and illustrated. The new species is named after the Bagobo Tabagawa, one of the local tribes living on the island of Mindanao. There are currently 15 known species of this genus, all of which are endemic to the Philippines.

Keywords: Coleoptera, Cerambycidae, Oriental, Mindanao, new species.

*Corresponding author: *Arvīds Barševskis. Coleopterological Research Center, Institute of Life Sciences and Technology, Daugavpils University, Vienības Str. 13, LV-5401, Daugavpils, Latvia; Coleoptera Research Center, Institute of Biodiversity and Environment, University of Mindanao, 8000, Davao City, Philippines. E-mail: arvids.barsevskis@du.lv. ORCID: https://orcid.org/0000-0001-9703-0115*

Chrestine Torrejos. Coleopterological Research Center, Institute of Life Sciences and Technology, Daugavpils University, Vienības Str. 13, LV-5401, Daugavpils, Latvia; Coleoptera Research Center, Institute of Biodiversity and Environment, University of Mindanao, 8000, Davao City, Philippines. ORCID: https://orcid.org/0000-0002-4432-5902

INTRODUCTION

Lamprobityle Heller, 1923 is a genus of long-horned beetles from the tribe Apomecynini Thomson, 1860 under subfamily Lamiinae Latreille, 1825. This genus is known to be endemic in the Philippines (Barševskis & Cabras, 2019; Barševskis, 2018) and is currently represented by fourteen (14) species (Tavakilian & Chavillotte 2024) with an addition of a new species *Lamprobityle bagobotabagawa sp. nov.* from Mindanao Island. Heller (1923) described the genus *Lamprobityle* as monotypic after the species *Lamprobityle magnifica* Heller, 1923. Four years later, Aurivillius (1927) described *L. conspersa* Aurivillius, 1927 from Sibuyan Island. All other species were described in the last 15 years. While this genus is widely distributed throughout the Philippines, most species have a very restricted distribution range, and some are even deemed endemic to each island. Based on the latest distribution records, six (6) species from this genus can be found in Luzon Island: *L. marifelipeae* Barševskis, 2017;

L. kristinae Barševskis, 2014; *L. rugulata* (Vives, 2012); *L. fasciata* (Vives, 2012); *L. mariae* (Vives, 2009); and *L. magnfica* Heller, 1923 which is also known to be distributed in Negros Island (Barševskis 2014); two in Samar Island: *L. katrinae* Barševskis, 2014; *L. azurea* (Vives, 2012); one (1) in Sibuyan Island: *L. conspersa* (Aurivillus, 1927); and five (5) in Mindanao Island: *L. danae*Barševskis & Cabras, 2019; *L. medinai* Barševskis, 2018; *L. cabrasae* Barševskis, 2018; *L. mindanaoense* Barševskis & Jager, 2014; *L. zeltitae* Barševskis, 2014 (Barševskis 2018, Tavakilian & Chavillotte 2024).

Mindanao is an Island well known to be home to rare and endemic species of long-horned beetles. It is the second largest island in the Philippines, in the archipelago's southern part, surrounded by Sulawesi and Sulu Sea. It is characterized by mountainous, heavy-forested landscapes and is one of the enduring sites in the country with abundant biodiversity. Regretfully, it is a critical biodiversity hotspot with vulnerable ecosystems (DENR-BMB 2014). Nevertheless, an increasing number of species are being added to the island's local cerambycid fauna as a result of increased efforts to document the region's rich beetle diversity. This paper describes *Lamprobityle bagobotabagawa* sp. nov. from Lanao del Sur, Mindanao Island, Philippines.

Barševskis et al. (2023) published data about new findings of *L. danae* from Lanao del Sur and photos of beetles belonging to newly described subspecies.

MATERIAL AND METHODS

The studied material is deposited in the beetles collection of Daugavpils University, Institute of Life Sciences and Technology, Coleopterological Research Centre (DUBC; Ilgas, Daugavpils Distr., Latvia).

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* 65 mm macro lens, using *Helicon Focus* auto montage, and subsequently was edited with *Photoshop*. All measurements are given in millimeters. In the present paper, we followed the taxonomic nomenclature provided by Tavakilian and Chavillotte (2024).

RESULTS

***Lamprobityle bagobotabagawa* sp. nov.** (Fig. 1).

Type material.

Holotype: Male. Philippines: Mindanao isl. / Lanao del Sur, /Kapai, 04.2024. / local collector leg./ [handwrited on white label]; HOLOTYPUS: / *Lamprobityle / bagobotabagawa* sp. nov. / A.Barševskis and Ch. Torrejos/ descr. 2024/ [handwrited on red label].

Paratypes: Male. Philippines: Mindanao isl. / Lanao del Sur, /Kapai, 06.2023. / local collector leg. / [handwrited on white label]; PARATYPUS: / *Lamprobityle / bagobotabagawa* sp. nov. / A.Barševskis and Ch. Torrejos / descr. 2024 / [handwrited on red label].

Male. Philippines: Mindanao isl. / Lanao del Sur, /Kapai, 08.2023 / local collector leg.) / [handwrited on white label]; PARATYPUS: / *Lamprobityle / bagobotabagawa* sp. nov. / A.Barševskis and Ch. Torrejos/ descr. 2024/ [handwrited on red label].

Female. Philippines: Mindanao isl. / Lanao del Sur, / Kapai, 07.2023 / local collector leg.) / [handwrited on white label]; PARATYPUS: / *Lamprobityle / bagobotabagawa* sp. nov. / A.Barševskis and Ch. Torrejos / descr. 2024/ [handwrited on red label].

Female. Philippines: Mindanao isl. / Lanao del Sur, / Kapai, 06.2023 / local collector leg.) /

[handwrited on white label]; PARATYPUS: / *Lamprobityle/ bagobotabagawa* sp. nov. / A.Barševskisand Ch. Torrejos/ descr. 2024 / [handwrited on red label].
Male. Philippines: Mindanao isl. / Lanao del Sur, / Kapai, 06.2023 / local collector leg.) / [handwrited on white label]; PARATYPUS: / *Lamprobityle/ bagobotabagawa* sp. nov. / A.Barševskisand Ch. Torrejos/ descr. 2024 / [handwrited on red label].
Male. Philippines: Mindanao isl. / Lanao del Sur, / Kapai, 08.2023 / local collector leg.) / [handwrited on white label]; PARATYPUS: / *Lamprobityle/ bagobotabagawa* sp. nov. / A.Barševskisand Ch. Torrejos/ descr. 2024 / [handwrited on red label].

Figure 1. *Lamprobityle bagobotabagawa* sp. nov. (paratype). Image courtesy A. Anichtchenko.

General distribution: Philippines; Mindanao island.
Description. Body length: 7.1-7.9 mm, body width: 2.6-3.1 mm. The tegument of body black, with greenish luster. Elytra before middle with transverse greenish - whiteband and with sparse small and some bigger spots of the same color pubescence as transverse band.
Head elongated, narrower as pronotum, dorsallycovered with greenish-white, sparse, very fine pubescence. Fron flat, black, with metallic greenish luster and thin elengated middle line. Eye not extended, bilobate. Cheeks narrow, not extended, with fine and sparse pubescence.Clypeus black, narrow, shiny. Labrum black, shiny, covered with sparse pubescence and numerous setaes. Mandibles black, massive, shiny, sharp at end, but laterally with pubescence. Antennae slender. First and second antennomeres black, shiny, with greenish metallicluster. Third antennomere black, with very fine greenish luster,and fine pubescence, apically widened, with dark setae.Fourth and remaining antennomeres, dark, withfine grey pubescence, except darkened apex.
Pronotum subcylindrical, slightly elongated, withparallel side. Pronotum on basal and apical margin emarginated with thin, transverse, parallel, slightly curved line. Pronotal disc with coarse punctures and very sparse pubescence, shiny, with greenish metallic luster. Basal margin of pronotum with band of greenish-white pubescence. Pronotum is wider then head andmore narrower as elytra. Forelegs dark, shiny, with bluish or greenish metallic lusterand very fine micro sculpture. Front tibia widened, flat, covered with fine pubescence and withdark dense setae. Tarsomeres metallic, shiny, covered with grey pubescence and dark setae. Middle and hind legs are black, with bluish or greenish metallic luster.Scutellum apically rounded, shiny, covered with fine greenish pubescence. *Pars stridens*not visible under basal margin of pronotum.
Elytra very convex, black, shiny, with greenish metallic luster. Shoulders visible, but not extended. Behind shoulders dorsallywith wide extended dark humps. Elytra black, with greenish metallic luster. Before middle with perpendicular – lar to suturae transverse band

of greenish – white pubescence. Basal thirdof elytra (especially in area of extended humps) with coarse punctures and dark pubescence, butbehind greenish – white band with very fine pubescence and smaller or some biggergreenish – white spots.
Upper side of body black, shiny, with bluish metallic luster and pubescence.

Differential diagnosis. The new species is similar to *Lamprobityle danae* Barševskis & Cabras 2019 from Mt. Talomo, Mindanao island, but differs from it by the following characters: 1) all legs of the new species are black, with metallic luster, but the middle and hind legs of *L. danae* are yellow-red; 2) basal margin of pronotum of new species with well developed band greenish – white pubescence, but the basal margin of pronotum of *L. danae* only with spars white pubescence, not forming well visible band; 3) tegument of new species black, with greenish metallic luster, but on *L. danae* – with bluish metallic luster.

Etymology. The new species is named in honor of one of the local tribes living on the territory of the island of Mindanao, the Bagobo Tabagawa, showing respect and gratitude for the opportunity to conduct research on the beetle fauna during expeditions in the territory of the tribe.

ACKNOWLEDGEMENTS

We wish to express our gratitude to Alexander Anichtchenko (Daugavpils, Latvia) for help in the preparation of beetle image.

REFERENCES

Aurivillius C. 1927. Neue oder wenig bekannte Coleoptera Longicornia. 23. *Arkiv för Zoologi.* Uppsala 19A(23): 549–589.

Barševskis A. 2014. New species and new records of the genus Doliops Waterhouse, 1841 (Coleoptera: Cerambycidae). *Baltic Journal of Coleopterology* 14(1): 113–135.

Barševskis A. 2018. A new species of the genus *Lamprobityle* Heller, 1923 (Coleoptera: Carambycidae) from Mindanao Island, Philippines. *Baltic Journal of Coleopterology* 18(1): 91–95.

Barševskis A., Cabras A.A. 2019. A new species of the genus *Lamprobityle* Heller, 1923 (Coleoptera: Cerambycidae) from Mt. Talomo, Mindanao island, Philippines. *Baltic Journal of Coleopterology* 19(2): 237–242.

Barševskis A., Cabras A.A, Medina M.N., Barševska Z., Garajeva S. 2023.Taxonomic notes on the less studied long-horned-beetle fauna (Coleoptera: Cerambycidae) endemic in the Philippines. Part 1. *Baltic Journal of Coleopterology* 23(1): 93–103.

DENR-BMB 2014. The Fifth National Report to the Convention on Biological Diversity. [Accessed in 28.10. 2024.].

Heller K.M. 1923. Neue Bokkäfer von den Philippinen und aus Borneo. *Deutsche Entomologische Zeitschrift.:* 414–425.

Tavakilian G., Chavillotte H. 2024. Base de données Titan surles Cerambycidés ou Longicornes. *http://titan.gbif.fr.* [Accessed in 01.09.2024].

Received: 29.10.2024
Accepted: 29.11.2024