

A new jewel from the crown jewel of the South – Lake Holon: *Eupyrigops almae* sp. nov. (Cagas, C.L.A. & Mohagan, D.P., 2023) (Coleoptera: Curculionidae: Celeuthitini) from Mt. Melibengoy, Sitio Salacafe, T'boli, South Cotabato, Mindanao, Philippines

Cindy Love A. Cagas 1, Dave P. Mohagan 2, Romeo M. Tubongbanua Jr. 1, Michelle S. Suelo 1, Rona Mae P. Viernes 1, Kent Sean Alan T. Dargantes 1, Aimee C. Abdul 3

1 Central Mindanao University, Department of Biology, University Town, MusuanMaramag, Bukidnon, Philippines

2 Central Mindanao University, Zoological Museum, University Town, MusuanMaramag, Bukidnon, Philippines

3 Notre Dame of Marbel University, Department of Biology, Marbel, Koronadal City, South Cotabato, Philippines

DOI: <https://doi.org/10.56293/IJASR.2022.5500>

IJASR 2023

VOLUME 6

ISSUE 2 MARCH - APRIL

ISSN: 2581-7876

Abstract: A new species of weevil under the genus *Eupyrigops* (Berg, 1898) of the family Curculionidae is discovered on the Salacafe Trail going to Lake Holon, Mt. Melibengoy, T'boli, South Cotabato, Philippines. The genus *Eupyrigops* is poorly known in the Philippines. There are only 11 species recorded. However, these species were only recorded on Luzon Island. Thus, making this new species a new and lone record in Mindanao, would update the list to 12 species. The new species was collected in an opportunistic manner last May 16-18, 2022. The new species *Eupyrigops almae* sp. nov. has a resemblance with *Eupyrigops mitorajii* (Alessandro Bramanti, Andrea Bramanti and Rukmane Barbale, 2020) from Luzon. This single (female holotype) specimen was deposited at the zoology section of the CMU – University Museum as a repository of the vertebrate and invertebrate fauna of Mindanao.

Keywords: *Eupyrigops*, Lake Holon, Mt. Melibengoy, Curculionidae, Philippines

1. Introduction

The genus *Eupyrigops*, Berg 1898 was under the subfamily Entiminae. Yunakov, 2021 provided a checklist of the subfamily Entiminae. It is noted to be the largest subfamily of the family Curculionidae. They are noted to be small to medium sized and phyllophagous weevils with deciduous mandibular process with root-feeding larva.

Beetles of the family Curculionidae are known to be diverse in the Philippines. However, only species under the genera *Pachyrhynchus* and *Metapocyrtus* are most commonly described. Species under the genus *Eupyrigops* are not commonly described. Currently, only nine species are recorded under the genus; eight are present in the Philippines and commonly found on Luzon Island. The latest described specimen was *Eupyrigops mitorajii* and *Eupyrigops sabatiensis* described by Bramanti et al, 2020. The other species present in the Philippines are the *E. Amabilis* Yoshitake, 2017, *E. granulosis* Faust, 1897, *E. maquilingi* Heller, 1934, *E. semperi* Faust, 1897, *E. subannulatus* Faust, 1897, *E. variabilis* Yoshitake, 2017, and *E. waltonianus* Adams, 1848. And these species are mostly recorded from Luzon Island and none from Mindanao.

In addition to the list, is the new discovery from the Salacafe Trail going to Lake Holon, Mt. Melibengoy, T'boli, South Cotabato, Mindanao, Philippines. Thus, making this new species a new record of the genus *Eupyrigops* (Berg, 1898) in Mindanao. The new species is named: *Eupyrigops almae* sp.nov. has a resemblance with *Eupyrigops mitorajii* (Alessandro Bramanti, Andrea Bramanti and RukmaneBarbale, 2020) from Luzon. It was collected in an opportunistic manner last May 16-18, 2022. The single female holotype is deposited at the CMU – Zoological Museum CMU-01, 2022, ABM.

2. Entry Protocol and Permits

Prior Informed Consent was obtained from the Local Government Unit and Tourism Office of T'boli, South Cotabato for conducting the study in Lake Holon, Mt. Melibengoy. In compliance with RA 9147, a Gratuitous Permit is also obtained from the Department of Environment and Natural Resources for the collection of the specimens.

3. Materials and Methods

The specimen was collected by hand picking and sweep-netting along the trail of Mt. Melibengoy going to Lake Holon via the Sitio Salacafe trail. The specimen is now deposited at Central Mindanao University Museum – Zoological Section. Morphological characters are recorded and observed using a stereomicroscope. Images were taken with a Canon 60D DSLR camera, Helicon Focus for stacking images, and Adobe Photoshop to enhance the photos. All measurements are in mm, label data, and measurements are provided.

4. Results

Eupyrgops almae sp. nov. (Figs. 2,3, &4)

Type Material. Holotype (Female)

Type Locality. PHILIPPINES / Mindanao, South Cotabato, Mt. Melibengoy., Mohagan, Alma B.//Holotype: 01,203, ABM. CMU Museum Zoological Section

5. Distribution

Philippines, Mindanao Island, South Cotabato, T'boli (6°06'51.5" N, 124°50'48.4" E) (Fig. 1)



Figure 1. Map of the (a) Philippines (b) Mindanao, Philippines (c) T'boli, South Cotabato, showing the Salacafe Trail going to Mt. Melibengoy (Lake Holon/Lake Maughan)

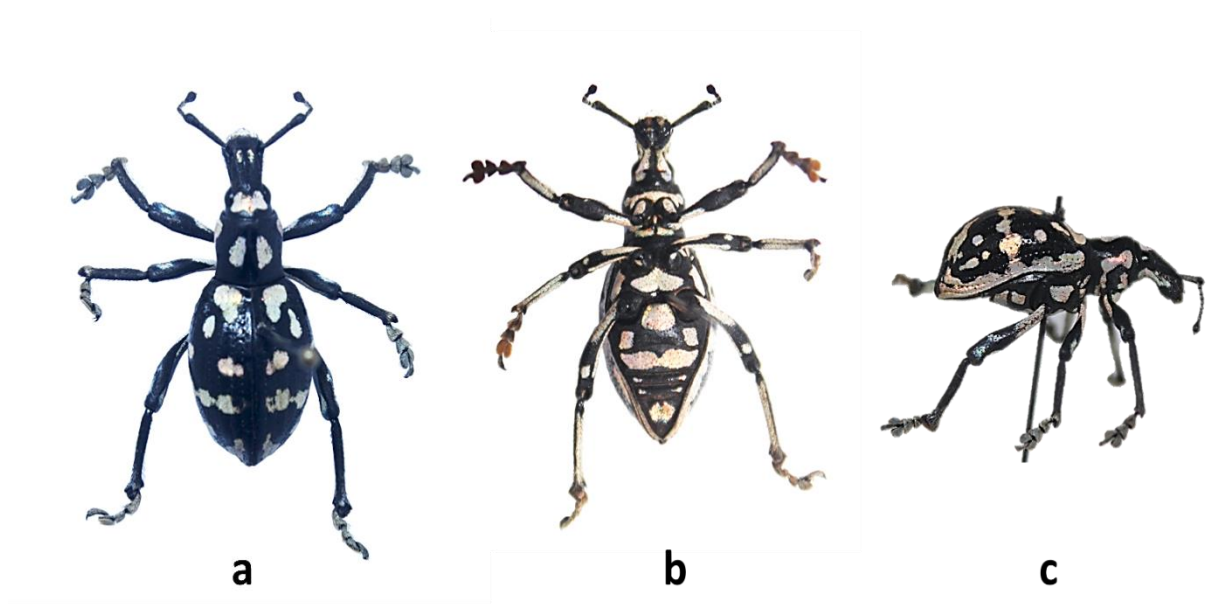


Figure 2. *Eupyrigopsalmae* sp. nov. (a) dorsal (b) ventral (c) lateral view

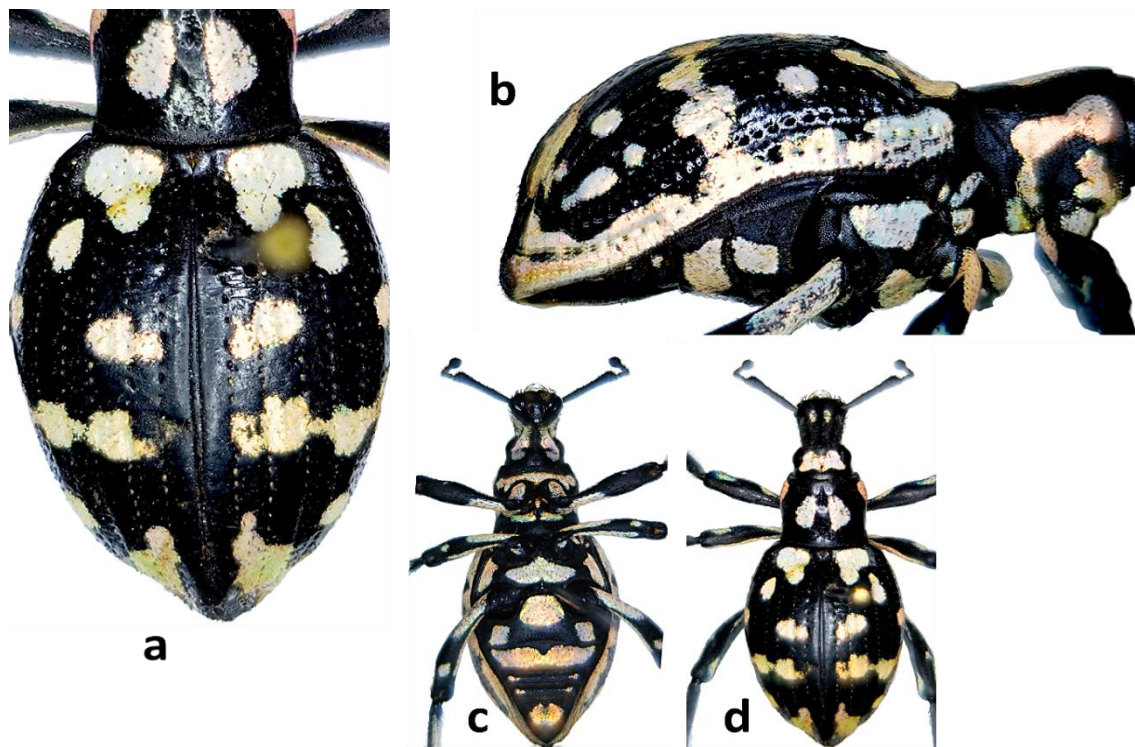


Figure 3. Close-up photo of the scaly markings (a) dorsal view of the elytra (b) lateral view of the elytra (c) ventral view of the body (d) dorsal view of the body

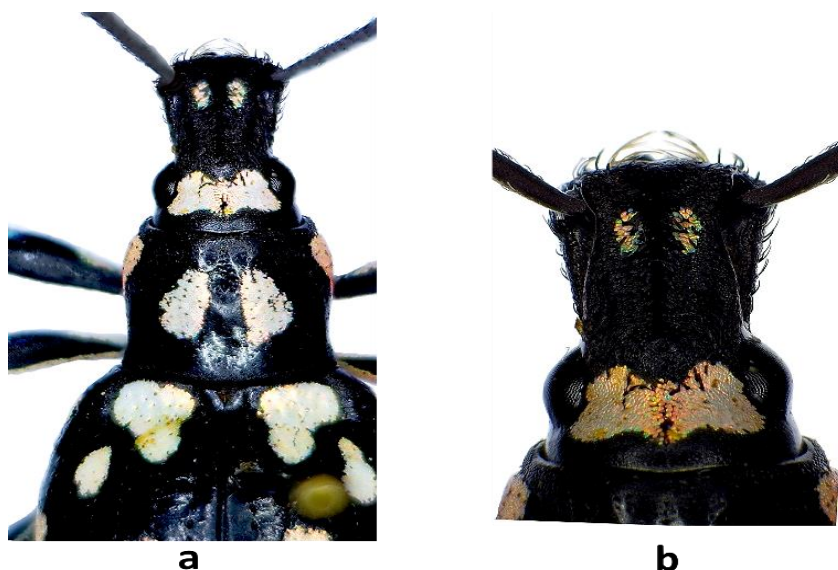


Figure 4. Close-up photo of the anterior part of *Eupyrigops almae* sp. nov. (a) pronotum and the head (b) head

6. Description

Body Length: 200 mm **Width:** 70 mm. The integument is black. The body surface is lustrous including the ventral side of the body. Includes markings of yellow, orange, and pink scales with orange-pink reflections. **Head:** 60 mm. The Head is slightly pubescent with a longitudinal groove in the middle of the rostrum. The **rostrum** (length = 30 mm) is slightly elongated with the prorostrum displaying two dot markings that are separated by the longitudinal groove on the dorsal side and banded markings on the ventral side. The forehead is slightly raised dorsally with scale markings in the median area which displays a butterfly shape in between the eyes. The eyes are black and prominent from the outline of the head. The antennal scribe is long and can reach the anterior of the eye. Scape is longer than the funicle. Scape and antennomeres project black short hairs. The **pronotum** (length = 40 mm) is highly punctured with distinct scaly markings: (1) analogous cloud-like patch on the dorsal-medial side (2) band marking on the lateral sides (3) transverse bands that continue to the ventral side of the pronotum and surround the coxa of the frontal legs. **Elytra** (length = 110 mm; width = 70 mm) is punctured that are arranged in rows and equal intervals. The apical part displays longer hair as compared to the basal half which is lesser pubescent. Each elytron exudes distinct corresponding scaly markings: (1) distinct irregularly-shaped patches along the medial part of the basal margin of the elytra (2) ovate scaly marking along the medial widest part of the elytra (3) transverse band that connects to the longitudinal band along the lateral margin from the basal portion to the apex (4) irregularly-shaped patches in the apex of the elytra. Ventral side with band markings of yellow, orange, blue, and green scales. Elytra is ovate and convex with a protruding marginal apex. The femur displays black to yellow short-length hairs; widened along the medial portion; with band patches of yellow, orange, blue, and green scales. The tibia is thin and slender, covered with long brown hairs until the tarsites part. Female genitalia are illustrated in Fig. 5. Spicula (length = 30 mm)

7. Differential Diagnoses

Eupyrigops almae sp. nov. in general appearance is similar to *E. mitojarii*, Bramanti et al., 2020 (Fig. 6). Which is recorded to be present in the Luzon Island, Philippines. *Eupyrigops almae* sp. nov. is distinguished to have a different color of scales of pinkish to yellow for the spots while *E. mitojarii* spots are yellow to orange. The shape and patterns of the bands on the elytra also differ. The prorostrum displays two dots, separated by the longitudinal groove on the dorsal side and banded markings on the ventral side.

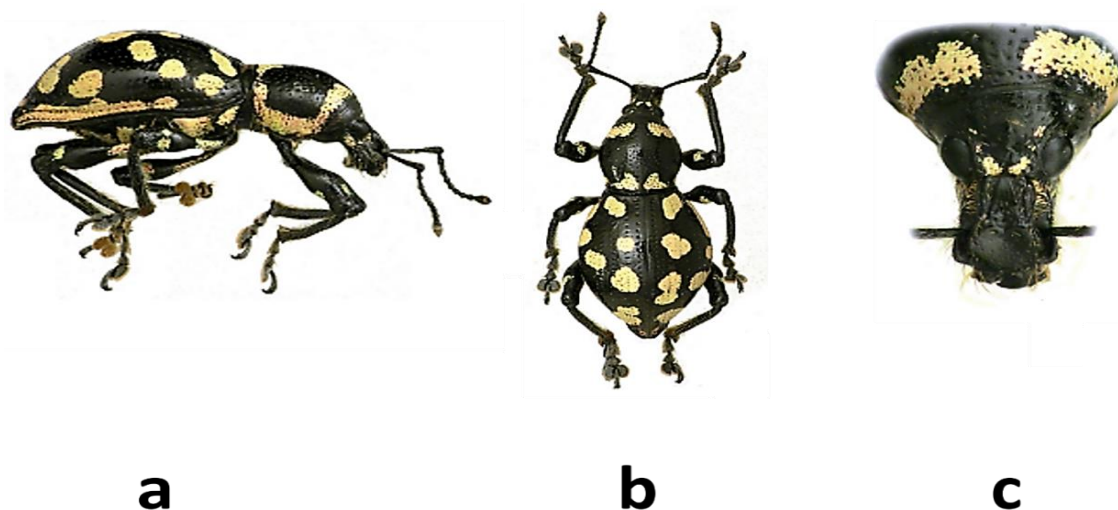


Figure 5. *E. mitorajii*, Bramantietal., 2020 (a) lateral view (b) dorsal view (c) head

8. Etymology

The new species is named in honor of the finder of the specimen Dr. Alma B. Mohagan who champions the fauna diversity research in Mindanao and inspires everyone to do research on fauna and account for new records for the value, restoration, and conservation of the mountain ecosystems in Mindanao and spare headed the expedition in Mt. Melibengoy, South Cotabato.

Acknowledgments

The authors would like to extend their gratitude to the Department of Science and Technology – Science Education Institute for granting a scholarship to the authors thus paving the way to be part of this expedition. They would also like to thank the experts from the Prague National Museum, Czech Republic, for sharing their knowledge in the field. The Provincial Environment and Natural Resources Office – Koronadal, Regional Executive Director – Atty. Felix S. Alicer for granting them the Wildlife Gratuitous Permit. The Local Government Unit and Local Tourism Office of T'boli South Cotabato for granting them consent to conduct fieldwork in Mt. Melibengoy. The CMU-Biology Department for giving opportunities to the authors to be part of this academic exploration and Notre Dame of Marbel University for the collaborative support that they had extended.

References

1. Bramanti, Alessandro, Bramanti, Andrea, Rukname-Barbale, A. 2020. Two new species of the Genus *Eupyrigops* Berg, 1898 (Coleoptera: Curculionidae: Celeuthitini) from the Luzon Island (Philippines). *Acta Biol. Univ. Daugavp.* 20 (2). 147 – 153
2. Yukanov, N. 2021. 3i Taxonomic Bases, Curculionidae, subfamily Entiminae. Catalogue of Life Checklist. <https://doi.org/10.48580/dfp3-3>