

# New species of the genus *Pachyrhynchus* Germar, 1824 (Coleoptera: Curculionidae: Pachyrhynchini) from the Luzon Island, Philippines

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A new species of the genus *Pachyrhynchus* Germar, 1824 from the Luzon Island, Barlig, Bontoc, Philippines is described and illustrated: *P. subpalidius* sp. nov.

Key words: Coleoptera, Curculionidae, Pachyrhynchini, *Pachyrhynchus*, taxonomy, Philippines, fauna, Luzon Island.

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## INTRODUCTION

The genus *Pachyrhynchus* Germar, 1824 is currently represented in Oriental region by 171 species, with 94% distributed on Philippines (Rukmane-Bārbale & Cabras, 2021). Considering recent descriptions of new taxons (Yoshitake, 2019a, 2019b), Luzon Island is inhabited by 79 species which is 46% of all species number within the genus *Pachyrhynchus*.

During my research on genus *Pachyrhynchus*, I had an opportunity to observe new weevil material from Barlig, Bontoc which is part of Mountain Province on the North of the Luzon Island. The specimens were similar to *P. inclytus* Pascoe, 1871, but after careful examination I concluded, that species is new to science. Description, photos and detailed differential analyses is provided herein.

## MATERIAL AND METHODS

The study was based on specimens deposited at the Daugavpils University Beetle Collection (DUBC).

The laboratory research and measurements have been carried out using Nikon SMZ 745T and NIS-Elements 6D software. The illustrations were made using digital camera Canon EOS 6D with Canon MP-E 65mm macro lens, using stack shot system and Helicon Focus auto montage, subsequently was edited using Photoshop.

Label data are cited *verbatim*. In the text the following symbols and abbreviations were used:

/ = different lines;

// = different labels;

LB = body length, from apical margin of pronotum to the apex of elytra;

LE = elytral length;

LP = pronotal length;

LR = length of the rostrum;

WE = maximum width of the elytra;  
 WP = maximum width of the pronotum;  
 WR = maximum width of the rostrum.

***Pachyrhynchus subpalidius* sp. nov.**

(Fig. 1, 2)

**Type material.** Holotype, male: “PHILIPPINES / Luzon, Barlig, Bontoc / IV. 2019 / local collector leg.” (white rectangular label, printed); “HOLOTYPE / male / *Pachyrhynchus subpalidius* / Rukmane-Bārbale 2022 / det. Rukmane-Bārbale 2022” (red rectangular label, printed) (DUBC).

Paratypes (1♂, 2♀): “PHILIPPINES / Luzon, Barlig, Bontoc / IV. 2019 / local collector leg.” (1♂, 1♀) // “PHILIPPINES / Luzon, Barlig, Bontoc / V. 2020 / local collector leg.” (white rectangular label, printed); all with the following red printed label: “PARATYPE / *Pachyrhynchus subpalidius* / Rukmane-Bārbale 2022 / det. Rukmane-Bārbale 2022” (DUBC).

**Description.** Male. Measurements: LB: 13.2-14.1 (holotype 13.2, mean 13.65); LP: 4.2-4.3 (holotype 4.2, mean 4.25); LE: 9.0-9.6 (holotype 9.0, mean 9.3); LR: 2.3 (holotype 2.3, mean 2.3); WP: 4.7-4.9 (holotype 4.7, mean 4.8); WE: 6.1-6.2 (holotype 6.1, mean 6.15); WR: 2.2 (holotype 2.2, mean 2.2). N=2 for all measurements. Dorsal habitus as shown in Fig. 1A.

Body smaragd green, strongly shiny on most except elytra and underside with weaker lustre; markings of pale green round to recumbent scales on elytra, pronotum, rostrum, femur and underside.

Head subovate, nearly smooth, with light pubescence, without puncture; forehead bulged dorsally, 2.5 times as wide as eye width; eyes small, slightly prominent from the outline of the head, peak just in the middle; genae with patch of pale green scales; rostrum with pubescence at apical half, nearly straight in dorsal contour, with moderate rectangular impression at apical part, slightly bulging at basal part; patch of scale dorsally from the middle of rostrum to base of fore-

head; lateral part with triangular patch of scales at apical part; antennal scape with long light hairs at apical half, without hairs at basal half; segment I 1.5 times longer than II, segments II to VII subequal, gradually increasing in length in apical direction; nearly same length and width, LR/WR: 1.05.

Prothorax subspherical, wider than long, WP/LP 1.12, nearly smooth, with the following markings of pale green scales: 1) transverse line just before the middle from one latero-ventral part to other; 2) large, irregular ventral patch; in dorsal contour widest just before the middle, in lateral contour slightly bulged just before the middle.

Elytra sub-lanceolate, smooth, without expressed intervals of puncture rows, with slight pubescence in all length; very slightly punctured; widest in the middle; LE/WE 1.48, each elytron with the following scaly markings: 1) transverse line of scales at medial part from one lateral margin to other; 2) two longitudinal patches from subbasal part to basal 1/2, each patch wide at base and narrows in apical direction, first patch near suture, second at dorso-lateral part; 3) solid longitudinal line along lateral margin; 4) longitudinal line from apical 1/2 to apex along interval III; wider than prothorax, WE/WP: 1.3; more than two times as long as prothorax, LE/LP: 2.14.

Each femora with fine patch of scales at apical part just before the middle, patch circumscribes femora as a solid line; femora smooth, without pubescence, without pubescence, tibia with long light hairs along internal margin.

Male genitalia as shown in Fig. 2A–D.

Female. Measurements: LB: 13.6-14.2 (mean 13.9); LP: 3.7-3.9 (mean 3.8); LE: 9.9-10.1 (mean 10.0); LR: 2.0-2.1 (mean 2.05); WP: 4.1-4.7 (mean 4.4); WE: 7.0-7.1 (mean 7.05); WR: 2.3 (mean 2.3). N=2 for all measurements. Elytra significantly wider, apex more strongly extended, prothorax narrower, otherwise as in male; LE/WE 1.41, LE/LP: 2.63, WE/WP: 1.6. Dorsal habitus as shown in Fig. 1B. Genitalia as shown in Fig. 2E–F.

**Differential analyses.** By the body colour *P. subpalidius* sp. nov. is similar to *P. inclytus* Pascoe, 1871 from the Luzon Island. The new species can be easily distinguished by the following characters: 1) shape of elytra: elytra of *P. subpalidius* sp. nov. wider at base but narrower at widest point than in *P. inclytus*, 2) suture in *P. inclytus* with furrow while smooth in *P.*

*subpalidius* sp. nov.; 3) elytra of *P. subpalidius* sp. nov. matt, while shiny in *P. inclytus*; 4) different pronotal and elytral markings for both species.

**Distribution.** Luzon Island, Mountain Province.

**Etymology.** The new species is named after its pale green markings on the body.

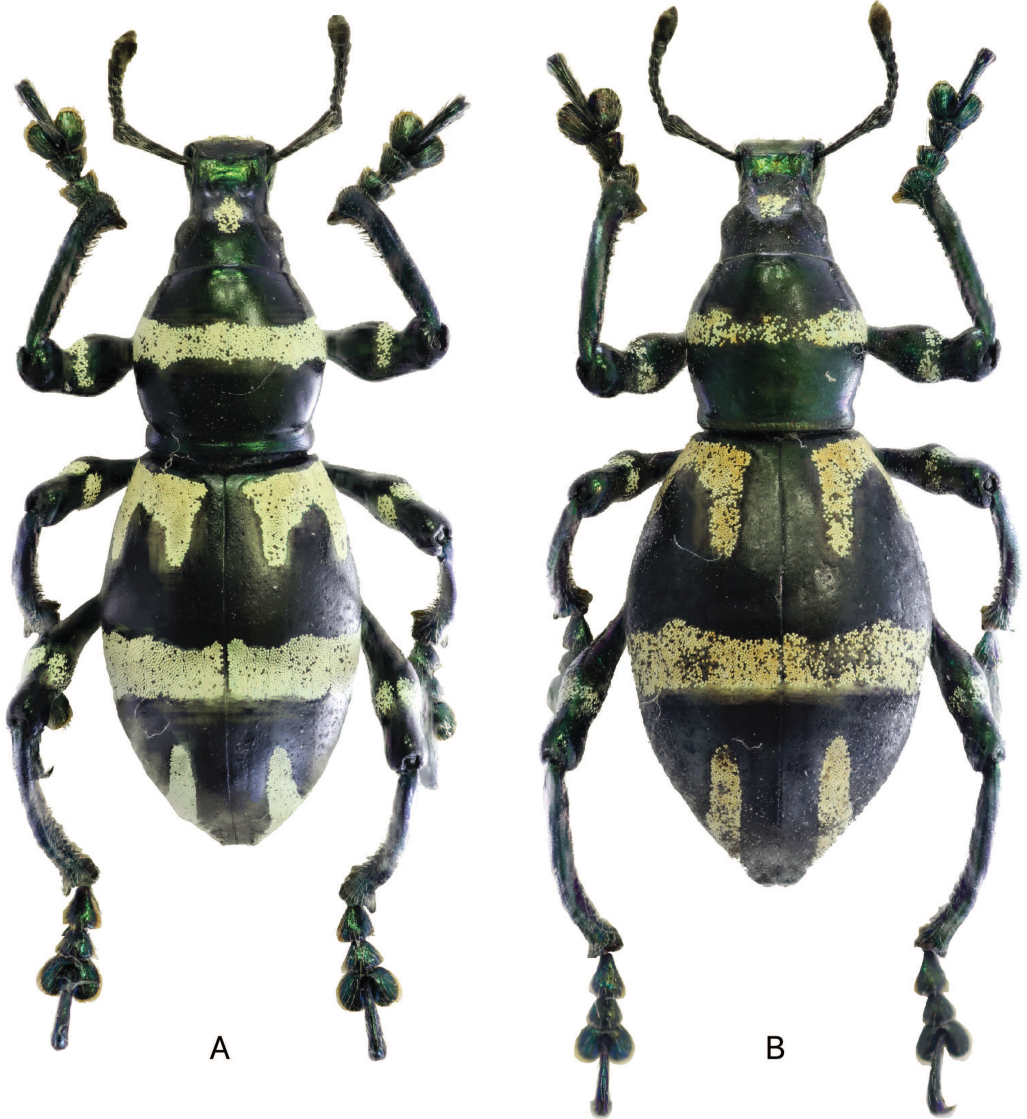


Figure 1. *Pachyrhynchus subpalidius* sp. nov. **A** – Holotype male, dorsal view. **B** – paratype female, dorsal view.

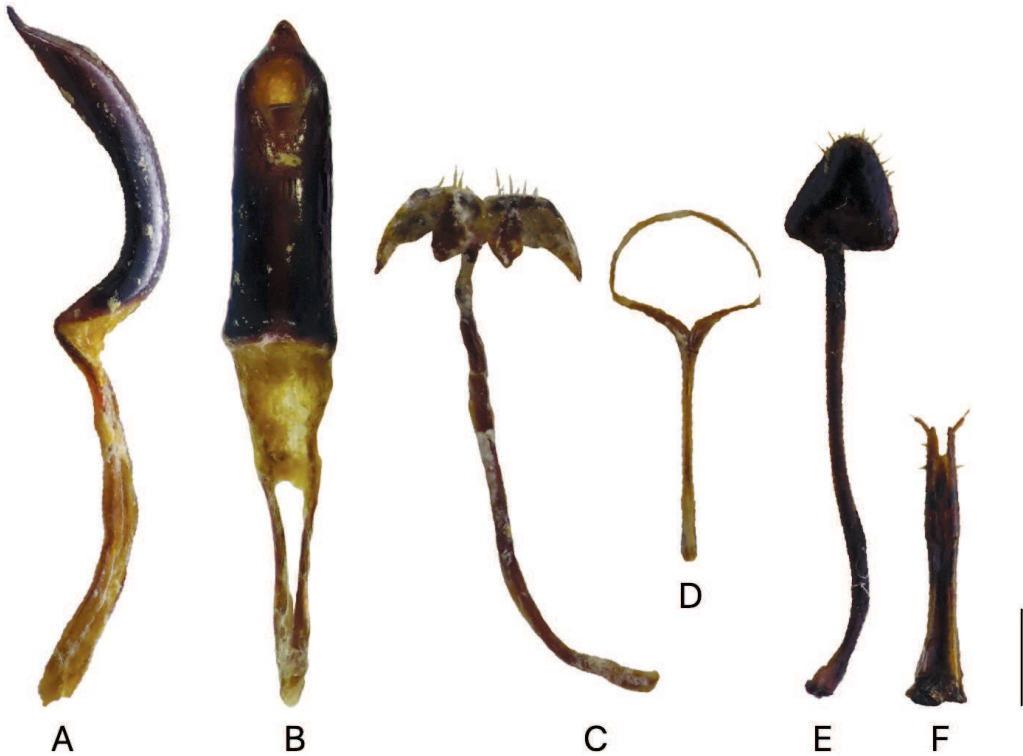


Figure 2. **A–D.** Male genitalia of *Pachyrhynchus subpalidius* sp. nov. **A** – aedeagus in lateral view, **B** – aedeagus in dorsal view, **C** – sternite IX in dorsal view, **D** – tegmen; **E–F.** Female genitalia of *Pachyrhynchus subpalidius* sp. nov. **E** – sternite VIII in ventral view, **F** – ovipositor in dorsal view; scale bar 1mm.

## REFERENCES

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