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**A NEW SPECIES OF THE GENUS *PACHYRHYNCHUS* GERMAR, 1824
(COLEOPTERA: CURCULIONIDAE, ENTIMINAE) FROM DAVAO DE
ORO, MINDANAO, THE PHILIPPINES**

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Summary. A new species *Pachyrhynchus suba* Agbas et Obrial, **sp. n.** is described from the East of Mindanao. Holotype of the species will be deposited at the Philippine National Museum of Natural History (Manila Philippines). Notes on species ecology and threats to the species and its habitat are also discussed.

Key words: Jewel Weevil beetles, taxonomy, new species, description, Oriental region.

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Резюме. Из восточной части острова Минданао описан новый вид *Pachyrhynchus suba* Agbas et Obrial, **sp. n.** Голотип вида будет передан в Национальный музей естественной истории Филиппин (Манила, Филиппины). Также приводятся сведения об экологии вида и обсуждаются угрозы для вида и его местообитания.

INTRODUCTION

The genus *Pachyrhynchus* Germar, 1824 is a group of insular broad nosed-weevils whose distribution ranges from Indonesia, fringes of Japan and Taiwan, and the Philippines (Ho *et al.*, 2025; Cabras *et al.*, 2025). Because of their beautiful coloration and stunning patterns, *Pachyrhynchus* species along with other species under the tribe Pachyrhynchini are highly sought after by both entomologists and hobbyists. Here we describe a new species of *Pachyrhynchus* from the Eastern Mindanao Biodiversity Corridor along with high-definition images of the species habitus, male genitalia, and short notes on the ecology of the species.

MATERIAL AND METHODS

Morphological characters were observed under Nikon SMZ745T stereomicroscope. Images of the habitus were taken using Canon EOS 6D digital camera equipped with an MP-E

65-mm macro lens. Images were stacked and processed using a licensed version of Helicon Focus 6.7.0, then contrast adjusted and background removed in Photoshop CS6 Portable software. Label data are indicated verbatim.

Abbreviations and symbols mentioned are abbreviated as follows: / different lines; // different labels; **LB** – body length, from the apical margin of pronotum to the apex of elytra; **LR** – length of rostrum; **LP** – pronotal length, from the base to apex along the midline; **LE** – elytral length, from the level of the basal margins to the apex of elytra; **WR** – maximum width across the rostrum; **WP** – maximum width across the pronotum; **WE** – maximum width across the elytra.

Comparative materials and specimens used in the study are deposited in the following institutional and private collections: **DGC** – Private Collection of Daven Agbas & Graden Obrial, Mati City, Philippines; **PNM** – National Museum of Natural History (PNMNH) under the National Museum of the Philippines; **SMTD** – Senckenberg Natural History Collections, Dresden Germany.

DESCRIPTION OF NEW SPECIES

Pachyrhynchus suba Agbas et Obrial, sp. n.

<https://zoobank.org/NomenclaturalActs/4184006D-F387-4F93-A4EF-BCBBF9CE5D30>

Fig. 1 A–D

TYPE MATERIAL. Holotype (Fig 1 A, B) – ♂, **Philippines:** Mindanao, Davao de Oro, Maragusan / 8.XI 2025 / leg. D. J. Agbas and G. Obrial (typed on white card) // HOLOTYPE ♂ / *Pachyrhynchus suba* / AGBAS et OBRIAL, (typed on red card)” (Presently at DGC, to be deposited into PNM). Paratypes (6♂, 1♀): 1♂, Twin Falls, Mapawa, Maragusan, Davao de Oro / 3.V 2026/ leg. D. J. Agbas & G. Obrial: 2♂, same data as holotype but 24.X 2023; 2♂, same data as holotype but 27.IV 2024; 1♂, Philippines, Mindanao, Davao de Oro, Maco / 30.X 2024 / leg. P. Camposo, J. Luguinsa, S. Cadayona, and M. Balwit; 1♀, same data as holotype but 24.V 2025 (deposition: 2♂ to be deposited into PNM; 3♂ and 1♀ – in DGC; 1♂ – in SMTD).

DESCRIPTION. Male. Dimensions (N=6): LB: 11.7–12.0mm (holotype 12.0mm). LR: 1.8–2.0mm (holotype 2.0 mm). WR: 1.5–1.7mm (holotype 1.7mm). LP: 3.8–4.0mm (holotype 4.0mm). WP: 4.0–4.2mm (holotype 4.2mm). LE: 7.5–7.8mm (holotype 7.8mm). WE: 5.1–5.5mm (holotype 5.5mm).

Integuments. Body metallic bronze; legs with coppery tinge; lustrous. Head uneven with punctures at middle leveling from posterior margin of eyes up to anterior margin, punctures covered with iridescent tessellated round to elliptical turquoise scales; combination of punctures and tessellated scales forms a rectangular depression at middle of head, shallow at basal third and two-thirds, distinct at apical third; sides of rectangular depression at apical third rugose. Surfaces in between rectangular depression and each eye, smooth with shallow, sparse, and minute punctures.

Rostrum covered with sparse minute punctures, punctures distinct and weakly rugose at sides of base of apical half, slightly longer than wide (LR/WR: 2.0mm/1.7mm). Dorsum of basal half with distinct T-shaped depression at middle composed of the following: a) at middle of base of rostrum with a distinct and deep U-shaped depression connected with the rectangular depression of head; b) U-shaped depression abruptly narrowing towards apex of basal half forming a sub-parallel short-deep median furrow, then abruptly widens into; c) a sub-rectangular deep depression with a constricted middle at apex of basal half of rostrum.

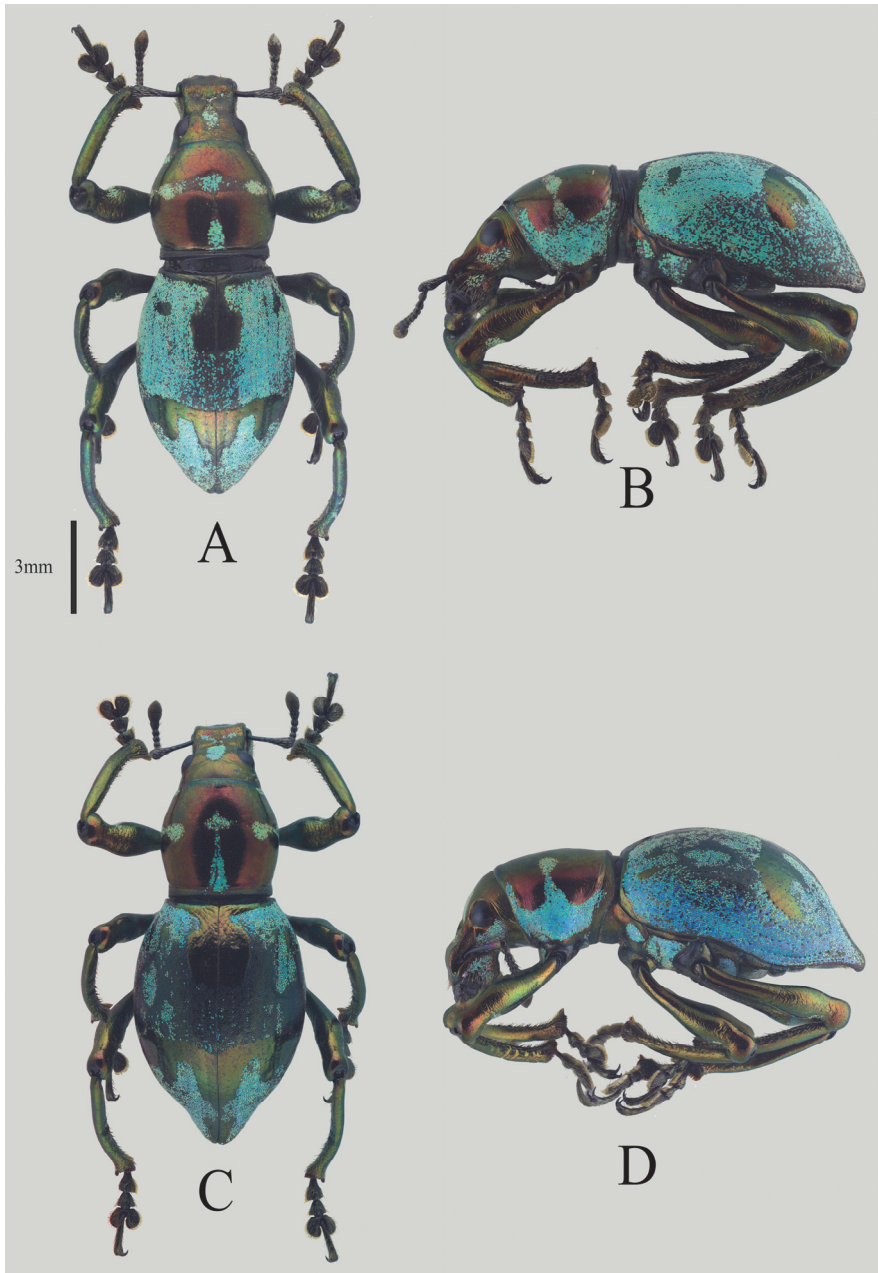


Fig. 1. Habitus of *Pachyrhynchus suba* sp. n. A, B – male holotype: A – dorsal view; B – same, lateral view; C, D – female paratype: C – dorsal view; D – same, lateral view. Scale bar 1mm.



Fig 2. Male genitalia and sternite XI of *Pachyrhynchus suba* sp. n. A – aedeagus, dorsal view; B – same, lateral view, C – sternite XI. Scale bar 1mm.

Apical half of rostrum with the following characters; a) at sides of disc near base of apical half abruptly and distinctly raised, gradually narrowing towards the center forming; b) an almost flat, wide depression gradually declined towards apex of apical half. Lateral surfaces below eyes before antennal scrobe with tessellated iridescent turquoise scales and few sub-appressed to sub-erect piliform scales of the same color, surface after antennal scrobe with the same scaly markings but fewer, interspersed with distinct and deep punctures getting larger towards apex, each punctures with long sub-erect yellowish-brown setae. Antennal scape strongly clavate, shorter than funicles, not reaching beyond the hind margin of eye, sparsely covered with subappressed iridescent light-green piliform scales at apical half, funicles with sub-erect to sub-appressed whitish setae. Funicular segments I and III-VI as long as wide, segment II as wide but slightly longer than segments I and III-VI, segment VII significantly wider than segments I-VI; club short-subellipsoidal. Prothorax weakly subglobular, almost as long as wide (LP/WP: 4.0mm/4.2mm); prothorax with the following scaly markings of tessellated iridescent turquoise round to elliptical scales: as dorsally viewed, with one short scaly marking at basal half connected with a thick long horizontal scaly marking at middle forming a T-shaped scaly marking; b) as viewed laterally with a thick patch of scales starting near base up to apex covering the entire half of lateral surface; c) thick scaly patch of lateral surface with two short vertically extended scaly markings almost reaching dorsolateral surface, one at middle and one along apical margin of prothorax.

Prothorax as viewed dorsally widest at middle with weakly arcuate lateral contour, as viewed laterally with very weak-broad but unevenly arcuate dorsal contour.

Elytra. Ovate, longer than wide (LE/WE: 7.8mm/5.5mm), longer and wider than prothorax (LE/LP: 7.8mm/4.0mm, WE/WP: 5.5mm/4.2mm). Entire elytra covered with iridescent turquoise round to elliptical contiguous scales except with the following denuded patches; a) as dorsally viewed at suture, one squarish denuded patch near base abruptly narrowing towards

basal margin; b) for each elytron, one small elliptical denuded patch near base, at dorsolateral surface; c) at start of elytral apical declivity, one broad m-shaped denuded patch from dorsal surface up to half of lateral surface. Lateral contour of elytra as viewed dorsally very weakly broadly arcuate, dorsal contour in lateral view evenly broadly arcuate with gradual apical declivity, apex subobtusate.

Legs. With strongly clavate femora, inner margin of femora before apex with contiguous appressed round iridescent turquoise scales and few small green appressed to subappressed piliform scales. Tibiae sparsely pubescent at inner edge, denticulate and mucronate at apex but, mucro significantly shorter at meta tibiae. Tarsomeres sparsely pubescent. metasternum with contiguous round to elliptical turquoise scales; meso and meta ventrites depressed at middle, meso with contiguous iridescent green scaly patch, meta rugose with sparse small denticles, each denticule with shallow puncture and small subappressed white setae; sides of ventrites I and II with contiguous iridescent turquoise scales interspersed with few piliform scales, ventrites III and IV with sparse small punctures, punctures with small subappressed setae, ventrite V coarsely punctured, punctures with small suberect white setae.

Male aedeagus shown in Fig. 2.

Female (Fig. 1 C, D). Dimensions: LB: 11.8mm. LR: 2.0mm. WR: 1.5mm. LP: 3.7mm. WP: 3.5mm. LE: 8.0mm. WE: 5.7mm. N=1

Female differ from males with the elytra as dorsally viewed, wider than males and having thinner apical margins especially visible when viewed laterally. Meso and meta ventrites, not concave. Otherwise mentioned, same as male.

DIAGNOSIS. *Pachyrhynchus suba* **sp. n.** is related to *P. shavrini* Rukmane et Barševskis, 2016, *P. cumingi* Waterhouse, 1841, *P. anichtchenkoi* Rukmane et Barševskis, 2016, and *P. valaini* Rukmane et Barševskis, 2016, but is easily distinguishable from all mentioned congeners by its unique elytral scaly markings as shown in Fig. 1, A—D, featuring distinct denuded patches.

NOTES. In the paper of Ho *et al.* (2025) which presents a comprehensive catalog of the genus *Pachyrhynchus*, they noted that *P. anichtchenkoi* Rukmane et Barševskis, 2016 is also distributed in Davao de Oro, formerly known as “Compostela Valley”, we correct the distribution error mentioned, the species does not reach the said province, but instead, *P. suba* **sp. n.**, a close congener of *P. anichtchenkoi* is the existing species in the province of Davao de Oro.

All specimens of *Pachyrhynchus suba* **sp. n.** were collected from a *Cypholophus* sp. (Urticaceae) (Fig. 3 D) situated near the river and or beside water streams from the municipalities of Maragusan and Maco, Davao de Oro, at an elevational range of 800-1400 m. Like all other beetle species described from the papers of Cabras *et al.* (2022), Agbas *et al.* (2024), Medina *et al.* (2024), Obrial *et al.* (2024), Cabras *et al.* (2025), and Avergonzando & Medina (2025), the habitat of the species is highly threatened by anthropogenic activities such as deforestation through land conversion to agricultural spaces, timber poaching/extensive logging, and government projects like road widening and other road development projects (Fig. 3 A, B). These activities threaten not only the new species but all of the endemic flora and fauna of Davao de Oro who rely heavily on forested habitats, especially that there are large scale mining activities that are operational in the province. A proper environmental management plan has to be put into consideration since Majority of the pristine forest areas in Davao de Oro are not being protected by law despite being part of the Mt Kampalili-Puting Bato complex, an identified Key Biodiversity Area (KBA) of Mindanao, part of the Eastern Mindanao Biodiversity Corridor (Philippine Eagle Foundation, 2008).

DISTRIBUTION. *Pachyrhynchus suba* sp. n. is known so far from the Municipalities of Maragusan and Maco, Province of Davao de Oro.

ETYMOLOGY. The species epithet “*suba*” (su-ba) is derived from the Cebuano/Bisayan word meaning “river” or “stream,” referring to the riparian habitat of the new species.

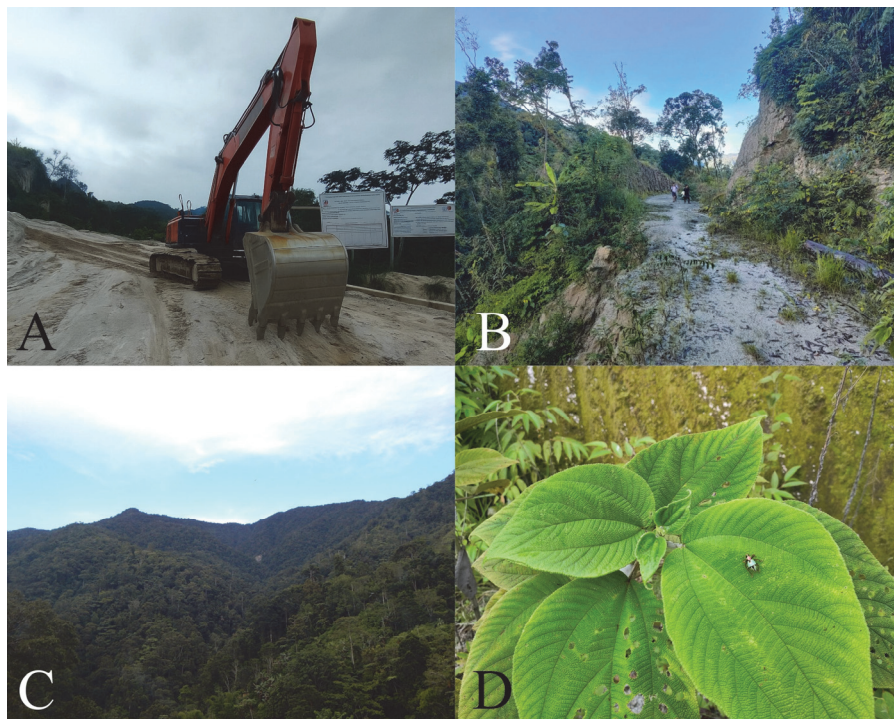


Fig. 3. Habitat of *Pachyrhynchus suba* sp. n. A – ongoing road construction; B – portion of the mountain with a cut slope prepared for the construction of a concrete road; C – pristine forest in the type locality of the species; D – possible plant association, *Cyphotophus* sp. (Urticaceae).

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