

**On a new Scaphidiini (Coleoptera: Staphylinidae: Scaphidiinae),
Scaphidium coerulescens sp. nov., from New Guinea**

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LÖBL I. 2023: A new Papuan Scaphidiini (Coleoptera, Staphylinidae, Scaphidiinae), *Scaphidium coerulescens* sp. nov. from New Guinea. *Acta Musei Moraviae, Scientiae biologicae* **108(1–2):** 39–42. – A new species of *Scaphidium* Olivier, 1790 found in the mountains of southeastern Papua is described. It is similar to *S. coerulans* Löbl, 1978 and *S. viride* Löbl, 1978, notably by its unicolor body with a metallic-like shine.

Keywords. Shining fungus beetles, taxonomy, new species, Papua New Guinea

Introduction

Scaphidium Olivier, 1790 with 350 recognized extant species (LÖBL, 2018, and subsequent descriptions) represents one of the more species-rich genera of mycophagous beetles. While the genus is notably diverse in the Oriental realm, it appears depauperated in New Guinea. To date, only ten species have been reported from New Guinea, one of them undescribed (LÖBL, 1978). Notable is also the scarcity of Melanesian *Scaphidium* in modern collections. While thousands of New Guinean Scaphisomatini are present in MHNG, specimens of *Scaphidium* turn up exceptionally. Another particularity of the Melanesian *Scaphidium* is their colour pattern. All but *S. atripenne* Gestro, 1879 and *S. rugatum* Löbl, 1976 have a striking metallic-like shining body, or parts of body. This feature is rarely seen in Asian congeners, and absent from the Australian ones (see LÖBL, 1976). Interestingly, the unique Scaphisomatini Casey, 1893 with a metallic shine, *Scaphisoma papua* (Löbl, 1975), comes also from New Guinea.

Material and methods

The material examined or mentioned is deposited in the following collections:

MHNG	Muséum d'histoire naturelle, Geneva
NBCL	Naturalis Biodiversity Center, Leiden

The label data of the primary types are reproduced verbatim. The body length is measured from the anterior pronotal margin to the posterior inner angles of elytra. The widths are measured at the widest points of the respective body parts. The sides of the aedeagus refer to its morphological sides with the ostium situated dorsally, while it is in resting position rotated 90°. The dissected aedeagus is embedded in Euparal and fixed on a separate card on the same pin as the respective specimen.

Results

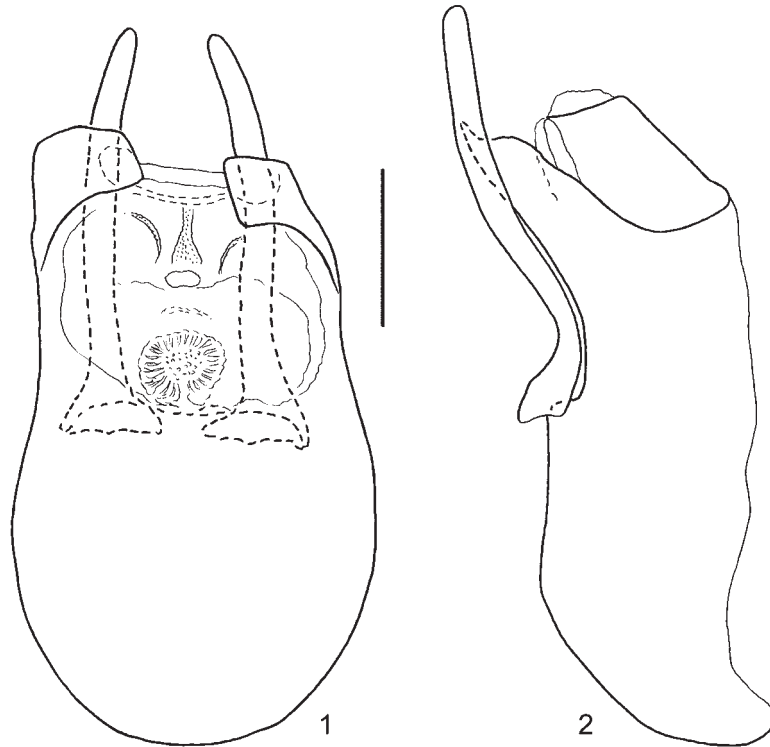
Scaphidium coerulescens sp. nov.

(Figs 1, 2)

Type material. Holotype male, INDONESIA, Papua, Star Mountains, ABMISIBIL, 1950-2200 m, 4°38'S, 140°30'E, 29.i.-9.ii.2005, leg. T. Lackner / ZMA.INS. 5117729 (NBCL). Paratypes, 3 males, 4 females, with same data as the holotype (NBCL, MHNG); 1 male, INDONESIA, Papua, Kecamatan Nipsan WALMAK 1800 m 4°07'S – 139°36'E 18-25.ii.2005, 1750-2250 m leg. T. Lackner (NBCL).

Description. Length 3.90-4.10 mm. Head, body, femora, and tibiae blackish with blue or green metallic shine, antennae and tarsi black. Head width at posterior margins of eyes 1.03-1.22 mm, frons at narrowest point between eyes 0.13-0.15 mm wide. Frons at narrowest point between eyes 0.13-0.15 mm wide (about a third of eye width in dorsal view), with punctation irregularly scattered and fine, becoming dense posterior on the level of hind eye margins. Length/width ration of antennomere, in dorsal view: I 20/8: II 14/7: III 11/5: IV 15/5: V 12/6: VI 10/7: VII 15/15: VIII 13/21: IX 15/25: X 14/28: XI 23/27 (holotype). Pronotum 2.23-2.30 mm long, at base 2.60-2.67 mm wide, at anterior margin 1.47-1.50 mm wide; disc not raised above level of elytra, lateral margins sinuate; lateral margin striae coarsely and sparsely punctate, punctures smaller than puncture intervals; anterior margin striae densely and finely punctate; antebasal puncture row weakly impressed, interrupted in middle, consisting of coarse, not or hardly elongate punctures about as large or smaller than puncture intervals; discal punctation fine and rather sparse, punctures well delimited, puncture intervals about two to five times as large as puncture diameters. Scutellum slightly convex, its exposed part as long as wide at base. Elytra along suture 2.36-2.40 mm long, at longest point 2.80-3.10 mm, combined 2.75-2.92 mm wide; lateral contours evenly rounded, lateral margin carina exposed in dorsal view, lateral margin striae finely punctate; entire apical margin crenulate; sutural striae with punctures somewhat coarser than discal punctures; adsutural areas flat except near apex, widest in middle, narrowing anteriorly and apically; basal striae impressed with round punctures becoming gradually larger laterally; discal punctation similar to discal punctation of pronotum. Exposed tergites very finely punctate, with punctulate microsculpture. Hypomera, mesanepisterna and lateral parts of metaventrite smooth. Prosternum with low, triangular mesal ridge and dense row of coarse punctures along anterior margin. Pseudepimeron narrowly impressed along entire anterior and inner margins, and along inner half of posterior margin, with small triangular impression near inner margin, deep impression on level of anterior margin of metanepisternum. Mesoventrite with mesal ridge appears to be gradually raising anteriorly due to lateral areas impressed gradually. Metaventrite with discal area entire, apical margin uneven, hardly notched in middle, and oblique antecoxal striae. Metanepisterna with fine elongate striae and impressed, furrow-like suture. Metatibiae weakly curved, similar to mesotibiae, Ventrites very finely punctate.

Male. Profemur with anterior side flattened. Protibia slightly shorter than profemur, straight in basal third, curved and gradually thickened apically posterior of basal third, near apex nearly three times as wide as near base, with small, elongate apical tubercle on inner side. Protarsus nearly as long as half of protibia, with tarsomeres I to III widened and



Figs 1–2. *Scaphidium coerulescens* sp. nov., aedeagus in dorsal and lateral views. Scale = 0.3 mm.

bearing tenent setae. Mesotibia about 1.4 times as long as protibia and 1.6 times as long as mesotarsus, slightly curved and slightly thickened apicad, Mesotarsomeres I to III with ventral setae yellowish, much longer than protasal setae. Metaventrite with puncture patch very dense, covering posterior third of mesal area; setae raising from apical and apicolateral margins of patch yellowish, long and curled. Aedeagus (Figs 1, 2) 1.36 mm long.

Female. Profemur with rounded inner side. Protibia about as long as four fifth of profemur, nearly straight, slightly thickening apicad, near apex about 1.5 times as wide as near base, lacking tubercle. Protarsus as long as half of protibia. Mesotibia about 1.5 times as long as protibia and 1.8 times as long as mesotarsus, evenly, weakly curved and slightly thickened apicad. Entire metaventrite very finely punctate, lacking obvious pubescence.

Etymology. The species epithet is a Latin adjective meaning dark bluish.

Differential diagnosis. This new species is similar to the Papuan *S. coerulans* Löbl, 1978 by the shape of the body, the colour pattern, and the punctuation. It may be readily distinguished from the latter species by the crenulate apical margins of the elytra, the

smooth hypomera, the mesal ridge of the mesoventrite not raised at its anterior end, and the genital characters. Notable among the secondary genital characters is the setose patch extending over the apical third of the metaventrite, with lateral setae conspicuously long. The aedeagi of these two species are also different. Unlike to *S. coerulans*, the apical margin of the median lobe is concealed in dorsal view, the apicomesal sclerite of the internal sac is not expanded and T-like, two small crescent-like sclerites are present at each side of the apicomesal sclerite, and a pocket with spines oriented toward centre is present in *S. coerulescens*. The New Guinean *S. viride* Löbl, 1978 has also a spinose pocket in the proximal part of the internal sac, not noticed in its description. Thus, *S. coerulescens* shares a possible synapomorphy with *S. viride*. These two species share also smooth hypomera and the mesoventral ridge not raised at its anterior margin. Both *S. coerulescens* and *S. viride* may be easily distinguished by their colour pattern and the shape of the male tibia.

Acknowledgements

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