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A new species of *Odochilus* Harold, 1877 (Coleoptera: Scarabaeidae: Aphodiinae) from Siberut Island

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Abstract. A new species of *Odochilus* Harold, 1877 from the Siberut Island - *O. (Parodochilus) siberutensis* sp. nov. is described and illustrated.

INTRODUCTION

While examining specimens from the authors' collection, we found an undescribed species of the genus *Odochilus* Harold, 1877 collected by the second author. Although we are placing it in subgenus *Parodochilus* Rakovič, 1997 it is somewhat atypical. Species of the subgenus *Parodochilus* are characteristic mainly due to the fourth transverse pronotal ridge being divided into several smaller elements. *Odochilus* (*P.*) *siberutensis* sp. nov. has a fourth transverse pronotal pronotal ridge not so clearly divided in the central part; in addition, dust-like, very short macrosetae cover the interrupted part of the ridge over a large area - and for this reason it appears to be somewhat distinctive in the subgenus, and somewhat similar to subgenus *Odochilus*.

MATERIAL AND METHODS

The specimen was observed with a Nikon SMZ-U stereoscopic microscope. The photos published here were taken by the use of a Canon EOS 5D Mark III connected with Canon MP-E 65mm macro lens. Photos were edited in Helicon Focus 7 and Adobe Photoshop Elements 2018 programs.

For morphological terms used in the description of specimens we follow Dellacasa et. al. (2010) and Rakovič (1987 and 1997).

The holotype of the new species is indicated by a red, printed label bearing the status of the specimen, sex, its name, name of the authors and year and month of the designation.

The type specimens belong to the authors' private collections and are deposited there. For the sake of clarification, the following abbreviations (which have been taken in square brackets) have been used to denote the deposit of specimens:

ISEA Łukasz Minkina private collection, deposited in Institute of Systematics and Evolution of Animals, Kraków, Poland
SJCP Stanislav Jákl private collection, Praha, Czech Republic.

TAXONOMY

Odochilus (*Parodochilus*) *siberutensis* sp. nov.
(Figs. 1-6)

Type locality. Indonesia, Mentawai Islands, Siberut Island, Bojakan.

Type material. Holotype (♂): Indonesia, Mentawai Isls | Siberut Isl., north, 50-200 m. | Bojakan vill. env., v.2004 | St. Jakl lgt. [ISEA] ||. Paratypes (8 spec.): the same as holotype, (6 spec. SJCP; 2 spec. ISEA).

Description of the holotype. Dorsum (Fig. 1). Body length 2.65 mm, oblong oval, convex, shiny, brownish with orange-brownish extremities; tibiae, tarsi and antennae yellowish.

Head (Fig. 4) widely trapezoidal, convex, shiny, with microreticulation. Clypeus anteriorly distinctly bordered, margin with two edges: upper edge convex, distinct, lower edge obtuse and not visible from above; widely rounded, laterally widely rounded, very weakly notched before genae, clypeal border with very short and very sparse macrosetae. Genae obtuse, distinctly exceeding eyes, with few short macrosetae. Clypeus distinctly granulate anteriorly, without macrosetae. Vertex with two pairs of very indistinct, long, distinctly separate oblique ridges. Additionally oblique ridges and some of granules apically with extremely short, dust-like macrosetae. Eyes visible from above.

Epipharynx (Fig. 6) transverse, with sides broadly rounded, anterior margin concave, corypha absent. Mesoepitorma in shape of drop, covered by very short, thick celtes, apically with few thick, very short celtes, pateoepitorma absent. Acanthopariae relatively sparse, very thin; acropariae absent; chaetopariae very long, relatively thin, arranged in very dense row; adelochaetae absent; chaetopediae very long, very thick, arranged in dense row. Tormae relatively thin, quite long.

Pronotum transverse, about 1.5 times as wide as long, as wide as base of elytra, widest at apex of anterior lobe, convex, shiny, without microreticulation, with four transverse ridges. First to third ridges sharp, continuous, fourth ridge interrupted medially and not so distinctly divided on smaller elements as in other *Parodochilus* species - with median pair of elements quite long, divided from the other ones, but still covered with dust-like macrosetae. Sides and basal margin with very long, distinctly widened apically macrosetae; four transverse ridges without normal macrosetae, covered only by extremely short, dust-like, very dense macrosetae. Pronotum between transverse ridges with longitudinal, very long and distinct wrinkles. Lateral margins with two very distinct emarginations and due to it with three distinct lobes. Base of pronotum before hind angles very distinctly sinuate.

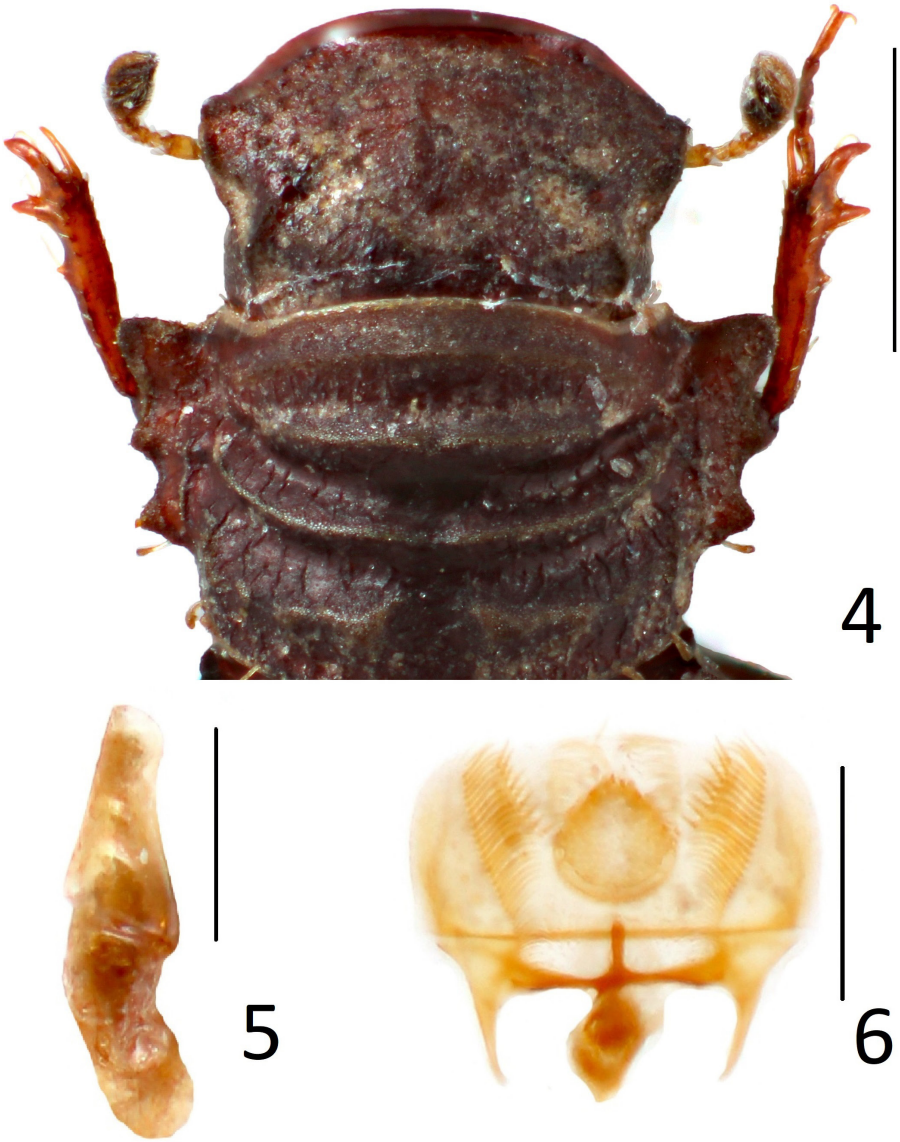
Scutellum small, elongate, with sides widely ogival and rounded apex, matt, with distinct microreticulation, with dense, extremely short dust-like macrosetae.

Elytra convex, elongate, widened apically, widest after the middle, shiny, without microreticulation; without humeral denticles; with five intercostae and six costae. All costae

Figs. 1-3. *Odochilus (Parodochilus) siberutensis* sp. nov., ♂, holotype: 1- dorsal view; 2- ventral view; 3- lateral view. Figs. 1-3: scale lines: 1.0 mm.

very distinctly convex, covered by extremely short, dense, dust-like macrosetae. Intercostae with two rows of coarse, dense, x-shaped punctures.

Legs. Femora moderately shiny, with quite distinct microreticulation. Profemora with very dense, variably connected, elongate punctures, with very short, dust like macrosetae near borders and sparse, very long, acute at apex macrosetae; meso- and metafemora with similar structure, but with much sparser, less elongate punctures located mainly nearby border. Protibiae thin, distinctly tridentate laterally, proximally not serrulate; dorsal side



Figs. 4-6. *Odochilus (Parodochilus) siberutensis* sp. nov., ♂, holotype: 4- head; 5- aedeagus, lateral view; 6- epipharynx. Figs. 4-5: scale lines: 0.5 mm; Fig 6: scale lines: 0.2 mm.

shiny, with row of rather fine punctures; apical spur long, straight, very thin, with acute apex. Metatibiae with superior apical spur somewhat shorter than basimetatarsomere, latter as long as next two metatarsomeres together. Claws short, thin, distinctly arcuate.

Macropterous.

Pygidium with similar structure to ventrites, but with few long, apically widened macrosetae.

Venter (Fig. 2). Meso-metaventral plate weakly shiny, concave, with indistinct shallow longitudinal line at middle, in basal half; with very dense, very variable in shape, very variably connected punctures, additionally with few quite long, apically rounded macrosetae. Abdominal ventrites shiny, with sides minutely punctate; last abdominal ventrite covered by dense, extremely short dust-like macrosetae. Last ventrite distinctly fluted.

Aedeagus (Fig. 5). Parameres as long as phallobase, in basal part weakly sinuate in lateral view, regularly rounded at apex.

Sexual dimorphism. Meso-metaventral plate in male slightly more concave.

Variability. Body length from 2.5 to 3.0 mm. Proportions of elytra are weakly variable - some specimens are slightly more plump than holotype. Granulation on head is weakly variable in size and density. The degree of development of the oblique ridges is weakly variable - structures are low to very low. Wrinkles on intercostae of pronotum are somewhat variable. Third tooth of protibia can be more or less distinctly developed.

Bionomy. All specimens of newly described species have been collected at light. The light trap (two 125W bulbs with white sheet) was installed in the middle of village garden, approximately 50 m from the sandy bank of river and 20-30 m from the primary rain forest.

Etymology. Toponymic; an adjective derived from the name of the Siberut Island, where the new species was collected.

Affinity. Due to the presence of two pairs of oblique ridges on the head and flat elytral intercostae, lacking dusty, very short macrosetae on its surface - *O.* (*P.*) *siberutensis* sp. nov. is similar only to *O.* (*P.*) *borneensis* Rakovič & Anichtchenko, 2021. Both species are similar also due to the rather weakly divided fourth transverse ridge, but the shape of this ridge is clearly different between the species. The structures of the head of *O.* (*P.*) *siberutensis* sp. nov. are much lower and much less developed, additionally with many more granules than on the head of *O.* (*P.*) *borneensis*. The shape and proportions of the lateral lobes of the pronotum are also different in *O.* (*P.*) *siberutensis* sp. nov. The anterior lateral lobes are more clearly developed than the middle and posterior lobes. Additionally the anterior lobes are higher than the middle lobes, which are then larger and higher than the posterior lobes.

SHORT DISCUSSION

In recent years, a number of descriptions of new species of the genus *Odochilus* have been made (Masumoto & Kiuchi (2019), Masumoto, Lan & Kiuchi (2016), Minkina (2020), Minkina, Bezděk & Král (2023), Ochi, Kon & Kawahara (2017), Rakovič & Anichtchenko (2021)) - thus succeeding in expanding the knowledge of this still enigmatic genus. The

most recent list of species in the genus was provided by Minkina, Bezděk & Král (2023). Such a rapid description of further species indicates that the systematics as well as the distribution of insects of the tribe Odochilini Rakovič, 1987 is still insufficiently known. *O.* (*P.*) *siberutensis* sp. nov. represents the south-western limit of the occurrence of this tribe. The degraded structure of convex elements on head, as well as not frequent for *Parodochilus* weakly interrupted fourth transverse ridge make the newly described species somewhat different from others known in the genus. It should also be noted that epipharyngi are weakly variable structures within the tribe. In contrast, aedeagi vary to a greater or lesser extent - thus serving as supporting evidence in taxonomic studies.

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