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A new species of the genus *Orthosinus* Motschulsky, 1863 (Coleoptera, Curculionidae) from Laos

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Abstract

A new species, *Orthosinus tuberculatus* Legalov, sp. nov. from Laos (Hua Phan Prov.) is described and illustrated. This new species is similar to *O. foveatus* Voss, 1953 from China but differs from it in the larger body sizes, the pronotum of equal length and width, wide elytral interstriae and narrow striae. It differs from other species of this genus in the wide elytra evenly rounded at the apex with rounded sides.

Key words: Biodiversity, Curculionoidea, Dryophthorinae, Strombocerini, Asia.

Introduction

The genus *Orthosinus* Motschulsky, 1863 differs from other genera in the suboval lateral eyes distinctly separated ventrally, antennal club obliquely truncate and 6-segmented funicle (Morimoto 1978).

This genus includes ten species, *Orthosinus velatus* Motschulsky, 1863 and *O. tuberculicollis* Voss, 1957 from Sri Lanka, *O. verrucosus* Voss, 1961 from Indonesia (Java), *O. cylindricollis* (Marshall, 1931), *O. direptus* (Marshall, 1931), *O. himalayanus* (Marshall, 1931) and *O. subulirostris* Marshall, 1931 from India, *O. foveatus* Voss, 1953 from China (Fujian), *O. japonicus* Morimoto et Miyakawa, 1985 is from Japan (Izu Isl.) (Marshall 1931; Voss 1953, 1961, 1957; Morimoto and Miyakawa 1985; Grebennikov 2018), and new species from Laos.

In this paper, the new species of the genus *Orthosinus* from Laos is described.

Material and methods

Type specimens are kept in the ISEA = Institute of Systematics and Ecology of Animals (Russia: Novosibirsk).

Descriptions, body measurements, and photographs, were prepared using the Zeiss Stemi 2000-C dissecting stereomicroscope.

The terminology of the weevil body is according to Lawrence et al. (2010).

The systematics of studied taxa are based on the works of Grebennikov (2018) and Legalov (2020).

Systematics

Insecta: Coleoptera: Curculionidae: Dryophthorinae: Strombocerini

Genus: *Orthosinus* Motschulsky, 1863

Orthosinus tuberculatus Legalov, sp. nov.

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(Figs. 1–2)

Type material: Holotype, female (ISEA), NE Laos, Hua Phan Prov., Phu Phan Mountains, 1200–1900 m, 18.V.-2.VI.2012, 20°12'N, 103°59'E, St. Jakl. Paratype: 1 female (ISEA), idem, 1200–1600 m, 10–22.V.2011, 20°12'N, 103°59'E, St. Jakl.



Figure 1. *Orthosinus tuberculatus* sp. nov., female, body, dorsally. Scale bar = 1.0 mm.

Description

Female. Body black, with matted yellowish pubescence. Scape, uncus and tarsi brownish. Head subconical. Mandibles small. Rostrum long, 0.9-1.0 times as long as pronotum, 3.8-4.0 times as long as wide at apex, 3.8-4.5 times as long as wide at midlength, 3.3-3.4 times as long as wide at base, evenly curved, densely punctate. Apex of rostrum almost smooth. Eyes large, not protruding from contour of head, linear, widely separated beneath. Forehead flat, 0.4-0.5 times as narrow as rostrum base width. Antennal scrobes directed ventrally to base of rostrum. Antennae inserted near middle of rostrum. Scape quite long, 4.0 times as long as wide in apex, not reaching eye. Funicle 6-segmented. Antennomere 2 suboval, 1.3 times as long as wide in apex, 0.2 times as long as and 0.6 times as narrow as scape. Antennomere 3 long-conical, 1.3 times as long as wide in apex, 0.8 times as long as and 0.9 times as narrow as antennomere 2. Antennomeres 3-5 subequal in width. Antennomeres 4-8 wide-conical. Antennomeres 4 and 5 subequal in length. Antennomere 4 about 0.6 times as long as wide in apex, about 0.5 times as long as antennomere 3. Antennomere 6 about 0.5 times as long as wide, 1.1 times as long as and about 1.4 times as wide as antennomere 5. Antennomere 7 0.5 times as long as wide, 1.2 times as long as and 1.1 times as wide as antennomere 6. Antennal club compact, obliquely truncate, 1.5 times as long as wide, 0.7 times as long as antennomeres 2-7 combined, with tomentose apex. Pronotum campanulate, 1.5-1.6 times as long as wide at apex, slightly narrower than wide at midlength, equal to width at pronotal base. Pronotal disk weakly convex dorsally, quite sparsely punctate, with weak carina in middle. Intervals between points wider than their diameter. Sides subparallel. Base of pronotum 0.8-0.9 times as narrow as base of elytra. Scutellum small, suboval. Elytra suboval, evenly rounded at apex with rounded sides, at base 1.6-1.7 times as long as wide, at midlength 1.3 times as long as wide, at apical fourth 2.5-3.2 times as long as wide, 1.8-2.0 times as long as pronotum. Humeri weakly convex. Elytral striae distinct, quite narrow. Stria 9 short, fused with stria 10 at level of metacoxae. Interstriae convex, wide, slightly wider than striae, with pilose pustules. Prosternum punctate, with weak postocular lobes. Precoxal portion of prosternum slightly shorter than procoxal cavity. Postcoxal portion of prosternum 0.6 times as long as precoxal portion. Procoxal cavities contiguous. Mesocoxal cavities narrowly separated. Metanepisternum absent. Metaventrite about 1.9 times as long as length of metacoxa, weakly convex, sparsely punctate. Abdomen weakly convex ventrally, punctate. Ventrite 1 about 1.9 times as long as length of metacoxa. Ventrite 2 about 0.9 times as long as ventrite 1. Ventrite 3 about 0.6 times as long as ventrite 2. Ventrite 4 about 0.7 times as long as ventrite 3. Ventrite 5 convex, 3.0 times as long as ventrite 4, coarsely punctate. Pygidium almost vertical. Procoxae subconical. Mesocoxae spherical, narrowly separated. Metacoxae transverse. Femora slightly thickened, without tooth. Tibiae weakly curved, with large uncus. Tarsi long. Tarsomeres 1-3 conical, with erect setae ventrally. Tarsomere 5 elongate. Tarsal claws free, divergent. Total body length (without rostrum) 5.1-5.8 mm. Length of rostrum 1.5-2.0 mm.



Figure 2. *Orthosinus tuberculatus* sp. nov., female, body, laterally. Scale bar = 1.0 mm.

Differential diagnosis. The new species is similar to *O. foveatus* from Fujian (China) but differs from it in the larger body sizes, the pronotum of equal length and width at base, wide elytral interstriae and narrow striae. It differs from other species of this genus in the wide elytra evenly rounded at the apex with rounded sides.

Etymology. From the Latin tubercula (tuberous).

Localisation. Laos, Hua Phan Prov.

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References

- Grebennikov, V.V. (2018) Dryophthorinae weevils (Coleoptera: Curculionidae) of the forest floor in Southeast Asia: illustrated overview of nominal Stromboscerini genera. *Zootaxa*, 4418 (2), 121–135. <https://doi.org/10.11646/zootaxa.4418.2.2>
- Lawrence, J.F., Beutel, R.G., Leschen, R.A.B., Slipinsky, S.A. (2010). Chapter 2. Glossary of Morphological Terms. *Handbook of Zoology. Arthropoda: Insecta. Tb. 40: Coleoptera (Beetles). Vol. 2: Morphology and Systematic (Elateroidea, Bostrichformia, Cucujiformia partim)*, P. 9–20.
- Legalov, A.A. (2020) Annotated key to weevils of the world. Part 4. Subfamilies Eirrhinae, Dryophthorinae and Cossoninae (Curculionidae). *Ukrainian Journal of Ecology*, 10 (2), 319–331. https://doi.org/10.15421/2020_104
- Marshall, G.A.K. (1931) New Indian Curculionidae (Col.). *Indian Forest Records Calcutta*, 16, 263–278.
- Morimoto, K. (1978) Check-list of the family Rhynchophoridae (Coleoptera) of Japan, with descriptions of a new genus and five new species. *Esakia*, 12, 103–118.
- Morimoto, K., Miyakawa, S. (1985) Weevil fauna of the Izu island, Japan (Coleoptera). *Muschi*, 50, 19–85.
- Voss, E. (1953) Über einige in Fukien (China) gesammelte Rüssler. IV. *Entomologische Blätter*, 49, 42–82.
- Voss, E. (1957) Ceylonische Curculioniden aus dem Naturhistorischen Museum zu Basel. *Verhandlungen der Naturforschenden Gesellschaft in Basel*, 68, 97–118.
- Voss, E. (1961) Über einige weitere Curculioniden aus dem indonesischen Raum (Col. Curc.). *Treubia*, 25, 241–267.