

A New Species of *Stenichnus* Thomson (Coleoptera, Scydmaenidae) from Nakanoshima Is., Tokara Archipelago, Japan

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Abstract A new scydmaenid beetle from Japan, *Stenichnus mitai* sp. nov., is described and illustrated. It was collected on Nakanoshima Is., a part of the Tokara Archipelago (Tokara Rettô), Kagoshima Prefecture, and is the first species of the Scydmaenidae known to occur on this island. The new species is externally similar to small Japanese *Stenichnus bellulus* Jąłoszyński and *S. minipollens* Jąłoszyński; its rather small body, dark pigmentation, relatively dense punctation on the elytra and unique aedeagus are unambiguous identification characters. Following recent taxonomic changes in *Stenichnus*, *S. totoro* Jąłoszyński, *S. bellulus* Jąłoszyński, and *S. minipollens* Jąłoszyński, previously treated as *incertae sedis*, are placed in the subgenus *Stenichnus*.

Key words: Insecta, Coleoptera, Scydmaenidae, *Stenichnus*, taxonomy, new species, Japan, Tokara Archipelago.

Introduction

Four species of *Stenichnus* Thomson (Scydmaeninae, Cyrtoscydmini) have been described from Japan. *Stenichnus minipollens* Jąłoszyński is known to occur in Hokkaido, *S. pollens* (Sharp) was reported from Kyushu, and two species inhabit the subtropical Yaeyama Islands of the Ryukyus: *S. totoro* Jąłoszyński, and *S. bellulus* Jąłoszyński (Sharp, 1886; Jąłoszyński, 2004). The latter species was also found in Taiwan (Jąłoszyński, 2004). Interestingly, this genus has not been found in Honshu, the largest Japanese island, though its occurrence there is highly plausible. Several more species are known to inhabit areas close to Japan: in the Russian Far East (*S. aemulator* Kurbatov, *S. dividus* Kurbatov and *S. saltuarius* Kurbatov), and in Taiwan (*S. klapperichi* Franz, *S. taiwanicus* Franz, and *S. taiwanensis* (Franz)) (Kurbatov, 1993; Franz 1985; Jąłoszyński, 2004).

Thanks to the kindness of Shiho and Kôji Arai, I had an opportunity to study an interesting material of the Scydmaenidae collected by Mr. Toshiharu Mita on Nakanoshima Island, one of

the northern islands of the Tokara Rettô. A new species of *Stenichnus* discovered in the course of that study is described below as *S. (S.) mitai* sp. nov. Its morphology is illustrated, including the unique aedeagus. The type material is deposited in the National Science Museum, Tokyo (NSMT).

The species described by Jąłoszyński from Japan and Taiwan were treated by the author as *incertae sedis*, due to the fact that their characters matched equally diagnoses of the subgenus *Stenichnus* and of the subgenus *Cyrtoscydmus* Motschulsky. The controversies and problems concerning unclear differences between the two subgenera were thoroughly discussed by Jąłoszyński (2004). Shortly after the publication of that paper, Meybohm (in Lobl & Smetana, 2004) formally recognized *Cyrtoscydmus* as a junior synonym of the nominotypical subgenus. Therefore, *S. totoro* Jąłoszyński, *S. bellulus* Jąłoszyński, and *S. minipollens* Jąłoszyński are herein placed in the subgenus *Stenichnus*. Also remaining Japanese and Taiwanese *Stenichnus* belong to this subgenus (already treated as such in Lobl & Smetana, 2004), and most likely the

Far Russian species described by Kurbatov may also be placed in the subgenus *Stenichnus*. However, examination of *S. aemulator*, *S. dividus* and *S. saltuarius* is necessary to confirm such an action, and at the moment they are left as *incertae sedis*, as treated by their author (Kurbatov, 1993) and Löbl & Smetana (2004).

Stenichnus mitai sp. nov.

(Figs. 1, 2A–D)

Diagnosis. This *Stenichnus* belongs to a group of small Japanese species, and differs from similar congeners in the elytral punctuation, which is composed of relatively dense and large punctures, not reducing in diameter in posterior part of the elytra. However, examination of the aede-

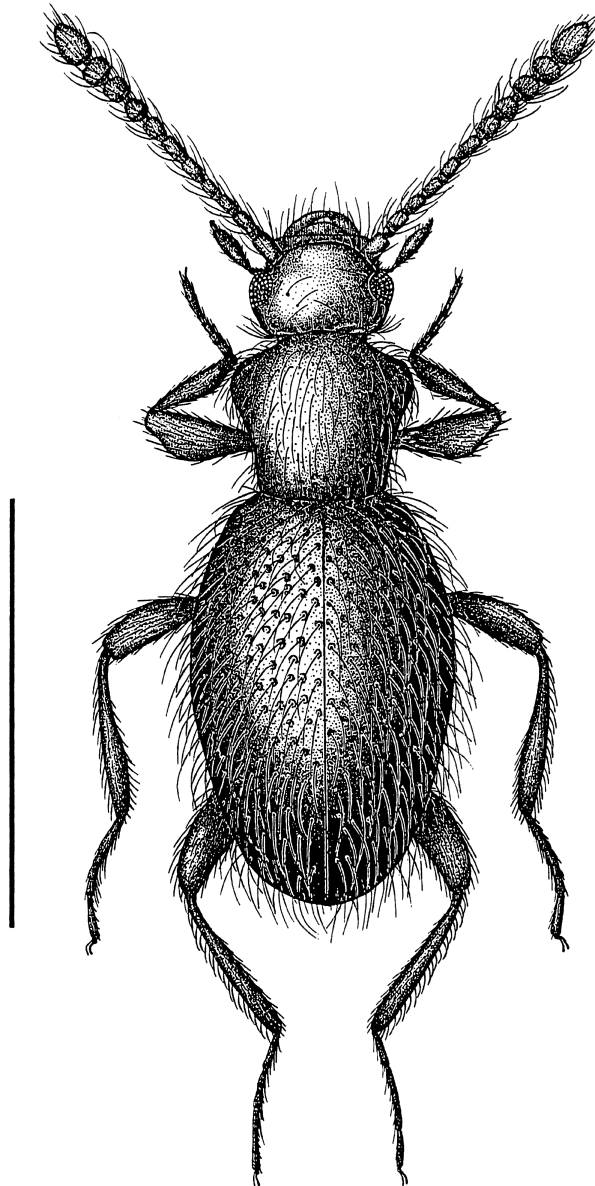


Fig. 1. *Stenichnus mitai* sp. nov.; holotype male habitus. Scale: 1 mm.

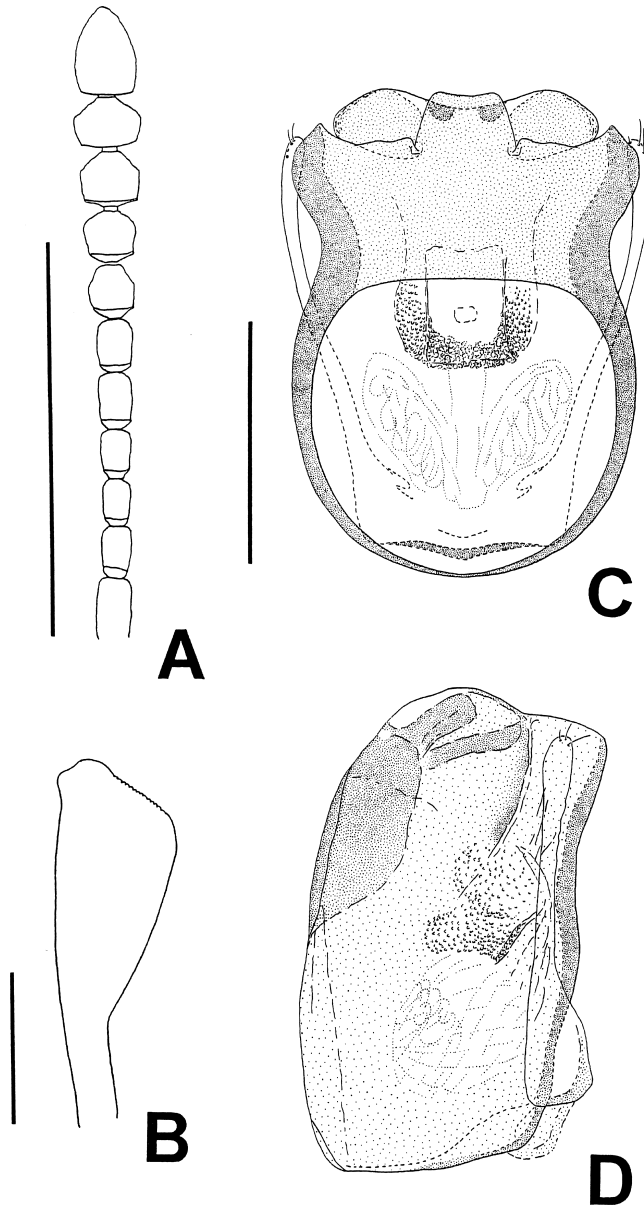


Fig. 2. *Stenichmus mitai* sp. nov., holotype male; left antenna in dorsal view (A), left femur in lateral view (B), aedeagus in dorsal (C) and lateral (D) views. Scale: A, B: 0.5 mm; C, D: 0.1 mm.

gus may be necessary to confirm identification.

Description. Body small, moderately slender, moderately dark brown with slightly lighter legs, antennae and palpi; setation yellowish.

Male. (Fig. 1). Body length 1.67 mm; head broadest at large, oval and finely faceted eyes, slightly broader than long, length 0.30 mm, width 0.35 mm; tempora weakly convergent posteriorly

just behind eyes, near occiput rapidly bent at obtuse angle toward occipital constriction; vertex weakly convex; frons moderately steeply lowering anteriorly; supraantennal tubercles barely marked. Punctuation very sparse, relatively fine; setation sparse, composed of long, curved suberect setae; tempora with groups of long lateral postocular setae. Antennae as in Fig. 2A,

slender, 0.8 mm in length.

Pronotum as long as wide, widest near anterior fourth, length 0.45 mm, maximum width 0.45 mm, width at base 0.32 mm, broadest near anterior fourth, with rounded anterior margin, distinctly narrowing toward base, with lateral margins concave between widest place and hind angles, basal margin slightly arcuate. Basal row of pits composed of about 12 large punctures distributed slightly irregularly and reducing in diameter and depth toward sides of pronotum. Disc with very fine and sparse punctures; setation moderately dense, composed of long, curved suberect to erect setae.

Elytra oval, broadest anterior to middle, length 0.92 mm, width 0.67 mm, elytral index (i.e. length divided by combined width) 1.37. Humeri weakly marked; internal humeral impressions barely recognizable; single basal pit on each elytron very shallow and small, hardly visible. Scutellum very small, triangular. Punctuation of elytra composed of large, shallow punctures, moderately dense, not reducing in diameter or depth in posterior part; setation long, moderately dense, composed of curved erect setae. Hind wings well developed.

Legs slender, with all tarsi longer than half length of tibiae; profemora (Fig. 2B) with expanded and very finely serrate dorsal margin of clavate part.

Aedeagus (Figs. 2C, D) stout, relatively small (0.2 mm in length), with thick, darkly sclerotized walls, multilobate apex and relatively simple endophallus; parameres shorter than median lobe, each with 2–3 short apical setae.

Female. Unknown.

Distribution. Japan: Nakanoshima Island, Tokara Archipelago (Tokara Rettô), Kagoshima Prefecture.

Holotype, ♂, Japan, Kagoshima Pref., Tokara Rettô, Nakanoshima Island, Takamote-sen, 6–10. vi. 2005, by a flight intercept trap, Toshiharu Mita leg. (NSMT).

Etymology. The name of the new species is dedicated to Mr. Toshiharu Mita, a young Japanese entomologist, who collected the type material.

Remarks. Among Japanese species, *S. mitai* is distinctly smaller than *S. totoro* and *S. pollens*. The body length of the new species is similar to that of *S. bellulus* and *S. minipollens*. The former species is distinctly lighter brown, has smaller punctures on the elytra, and is known only from the distant Yaeyama Islands. *Stenichnus minipollens* is as dark as *S. mitai*, but it has elytral punctures distinctly reducing in diameter and depth toward apices of the elytra, which is not the case in the new species. Moreover, *S. minipollens* has been found only in distant Hokkaido. *Stenichnus mitai* is the first scydmaenid known from Nakanoshima Island, and second described species from the Tokara Archipelago (the first one being *Scydmaenus takaranus* Nakane, inhabiting Takarajima Island).

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