

Description of a New Species of the Genus Euconnus (Coleoptera: Scydmaenidae) from Niigata Pref., Honshu, Japan

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Description of a New Species of the Genus *Euconnus* (Coleoptera: Scydmaenidae) from Niigata Pref., Honshu, Japan

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Abstract. A new species, *Euconnus (Euconophron) matsunoyamensis* sp. nov., is described from Niigata Pref., Honshu, Japan. As a result of the discovery of that species, the number of Japanese species of the genus *Euconnus* becomes twelve.

Introduction

Eleven species of the genus *Euconnus* have been known to occur in Japan (Sharp, 1874; 1886; Franz, 1976; O'Keefe & Li, 1998; Hoshina et al., 2003; Hoshina, 2004a; 2004b). In the field survey in 2005, we collected one male specimen of *Euconnus* by the flight intercept traps from Matsunoyama, Niigata Pref., Honshu. Our careful examination showed that is a new member of *Euconnus*. In this paper, we describe the new species, under the name, *Euconnus (Euconophron) matsunoyamensis* sp. nov. The holotype designated in this study is deposited in the collection of the Museum of Nature and Human Activities, Hyôgo (MNHA).

Before going further, we wish to express our sincere gratitude to Mrs. Hikaru Murayama, Kazuya Satô, and Yûya Takahashi (Matsunoyama Jr. High School) for their corporations.

***Euconnus (Euconophron) matsunoyamensis* Hoshina et Nagano, sp. nov.**

(Japanese name: Matsunoyama-hime-kokemushi)

(Figs.1-5)

Distribution. Japan: Honshu (Niigata Pref.).

Type series. Holotype: male, Suyama, Matsunoyamamatsuguchi, Tokamachi City, Niigata Pref., Honshu, Japan, 29. vii-10. viii. 2005, M. Nagano, H. Murayama, K. Satô, Y. Takahashi, and H. Hoshina leg. (MNHA).

Diagnosis. *Euconnus (Euconophron) matsunoyamensis* sp. nov. is the smallest in the Japanese species of the genus *Euconnus*. Body is brown and less than 1mm in length. Dorsum is pubescent. Pronotum has four basal foveae. Hind wings are well developed.

Measurement: Body 0.92 mm long; head 0.17 mm long (from clypeus to base) and 0.20 mm wide; pronotum 0.25 mm long and 0.28 mm wide; elytra 0.51 mm long and 0.40 mm wide.

Coloration. Dorsum shining, almost concolorous brown; maxillary palpus very light brown; antennal segments light brown but terminal four segments a little lighter than the rest; meso- and metasterna brown except for a black median carina of mesosternum; venter otherwise brown; tarsi very light brown, other parts of legs light brown.

Head almost impunctate and smooth, and weakly curved towards base from eyes at lateral margins (Fig.1), weakly and simply raised on vertex, and sparsely and shortly pubescent on vertex but moderately pubescent at lateral margins; eyes oval, and about 0.30 times as long as head; inter-occipital distance about 0.62 times as wide as the maximal width of head; mentum smooth and impunctate; antenna 0.37 mm in length, with a distinct four segmented club; 1st, 2nd, and 5th-7th segments longer than wide, 4th segment almost as long as wide, 3rd and terminal four segments wider than long; 11th segment robust (Fig.2); relative lengths of antennal segments from 2nd to 11th segments as follows: -3.2 : 1.1 : 1.8 : 2.4 : 2.1 : 2.5 : 2.6 : 2.8 : 2.8 : 3.3.

Pronotum strongly convex, widest at about basal 1/4, sparsely and shortly pubescent but basal half of lateral margins moderately pubescent, sparsely and very minutely punctate, and almost smooth; lateral margins weakly curved in an arc; basal four foveae distinct (Fig.1); basal transverse groove absent.

Elytra widest at about basal 2/5, almost smooth, impunctate, and with moderately scattered short pubescence; pubescence of elytra about as long as those of head and pronotum (Fig.1); each elytron with a basal depression extending to basal 1/7 of elytra, and with two small basal pits; inner pits located closer to scutellum than lateral margins; external pits situated more inlying than external foveae of pronotum; sutural striae absent.

Hind wings normal.

Legs similar to those of other species of the genus *Euconnus*; hind coxae distant from each other at intervals of 1/3 of length of hind coxae; front tibiae almost as long as middle tibiae; hind tibiae about 1.1 times as long as front tibiae; all tibiae thin, narrowed from about basal 1/3 position towards base.

Metasternum strongly convex, sparsely pubescent, smooth, and impunctate; venter densely pubescent and weakly microreticulate.

Aedeagus robust (Figs. 3-5); length of median lobe about 0.11 mm and width 0.089 mm in ventral view; median lobe weakly curved along lateral margins in ventral and dorsal views, sharply protuberant ventrally in lateral view; each paramere not pointed at apex, with an apical seta, and feebly curved in ventral and lateral views; inner sac complex.

Remarks. *Euconnus (Euconophron) matsunoyamensis* sp. nov. is the smallest species in the Japanese *Euconnus*. The present new species can be distinguished from *Euconnus (Euconophron) kojiroi* Hoshina, 2004 by having the dorsum relatively sparsely pubescent (Fig.1). In contrast, *E. (E.) kojiroi* has the dorsum relatively densely pubescent. Moreover, *E. (E.) matsunoyamensis* sp. nov. can be separated from *E. (E.) fustiger* (Sharp, 1874) by having the 8th antennal segment smaller than 9th and 10th (Fig.2). In contrast, *E. (E.) fustiger* has the 8th longer than 9th and 10th.

Etymology. This specific epithet is derived from the type locality, Matsunoyamamatsuguchi.

要 約

保科英人・永野昌博：新潟県からの鞘翅目コケムシ科 *Euconnus* 属の1新種の記載

新潟県十日町市松之山から、*Euconnus* 属（和名：ヒメコケムシ属）の未記載種を採集し、本稿にて *Euconnus (Euconophron) matsunoyamensis* sp. nov.（和名：マツノヤマヒメコケムシ）と命名して記載した。本種は、体サイズが1 mm 未満であり、日本産ヒメコケムシ属としては、最小のものである。体サイズや背面の毛の密度等の形態的特徴により、日本産同属他種との区別は容易である。

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Explanations of Figures

Fig.1-5. *Euconnus (Euconophron) matsunoyamensis* sp. nov. 1, body; 2, antenna; 3-5, aedeagus (3, ventral view; 4, dorsal view; 5, lateral view). Scale A: 0.5 mm for Fig.1. Scale B: 0.2 mm for Fig.2 and 0.1 mm for Figs. 3-5.

