Redescriptions of Three Species of the Genus *Scydmaenus* (Coleoptera: Scydmaenidae) from Japan and Taiwan

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Abstract. Three species of the genus *Scydmaenus* (Coleoptera: Scydmaenidae), *S.* (*Nepaloscydmaenus*) *taiwanensis* Franz, 1985, *S.* (*Mascarensia*) *kasuganus* Franz, 1976, and *S.* (*Scydmaenus*) *taiwanicus* Franz, 1985 are redescribed.

Introduction

Late Dr. H. Franz was established many new taxa of species, subgenera, and genera of the family Scydmaenidae worldwide. However, he usually drew figs of male aedeagus in only one view in his papers, therefore some species often can not be identified. Recently, I had an opportunity to examine type specimens of three Taiwanese and Japanese species of the genus *Scydmaenus* (Coleoptera: Scydmaenidae), which were described by Franz (1976; 1985). In this paper, I give six figs of aedeagus of two species in ventral, dorsal, and lateral views with short redescriptions.

Before going further, I wish to express my sincere gratitude to Dr. H. Schillhammer (Naturhistorisches Museum Wien) for his corporation.

Scydmaenus (Nepaloscydmaenus) taiwanensis Franz, 1985

(Figs. 1, 4, and 7)

Scydmaenus (Nepaloscydmaenus) taiwanensis Franz, 1985: 113; O'Keefe & Li, 1998: 160; Vít, 2004: 226.

Female. Redescription. Measurement of holotype: Body 1.8 mm in length; head 0.30 mm in length and 0.34 mm in width; pronotum 0.46 mm in length and 0.44 mm in width; elytra 0.98 mm in length and 0.78 mm in width.

Coloration. Dorsum shining, almost concolorously brown; palpi very light brown; antennae

light brown with a little darker terminal three segments; legs brown with light brown tibiae and tarsi.

Body about 2.3 times as long as wide, and moderately pubescent on dorsum.

Head almost smooth, simply curved towards base from eyes along lateral margins, slightly convex dorsally on vertex; setal socket punctures of head very minute; eyes oval, and about 0.38 times as long as length of head; antennae elongate, and extremely clavate on terminal three segments as other species of subgenus *Nepaloscydmaenus*; 9th antennal segment about as long as wide, and other segments longer than wide; 11th segment slender conical (Fig. 4); pronotum widest approximately at basal 1/3, almost smooth, and without basal foveae (Fig. 1); setal socket punctures of pronotum very minute; elytra widest approximately basal 2/5, and almost smooth; setal socket punctures of elytra stronger than those of pronotum; hind wings fully developed; spermatheca as shown in Fig. 7.

Distribution. Taiwan.

Specimens examined. Holotype: female, Shaumai, Taiwan, 23. v. 1977, J. Klapperich leg. (preserved in the collection of Naturhistorisches Museum Wien).

Notes. The present species was described based on one female specimen, and males are unknown. *Scydmaenus* (*Nepaloscydmaenus*) taiwanensis is only one species of this subgenus in East Asia (Vít, 2004).

Scydmaenus (Mascarensia) kasuganus Franz, 1976

(Figs. 2, 5, and 8-10)

Scydmaenus (Mascarensia) kasuganus Franz, 1976: 58; O'Keefe & Li, 1998: 160; Vít, 2004: 225.

Male. Redescription. Measurement of holotype: Body 1.3 mm in length; head 0.24 mm in length and 0.29 mm in width; pronotum 0.38 mm in length and 0.35 mm in width; elytra 0.70 mm in length and 0.53 mm in width.

Coloration. Dorsum shining; head and pronotum brown; elytra a little darker than pronotum; palpi very light brown; antennae almost concolorously light brown; legs light brown.

Body about 2.5 times as long as wide, and moderately pubescent on dorsum.

Head almost smooth, simply curved towards base from eyes along lateral margins, slightly convex dorsally on vertex; setal socket punctures of head very minute; eyes oval, and about 0.25 times as long as length of head; antennae elongate, and clavate on terminal three segments as

many other species of genus *Scydmaenus*; 1st-6th and 11th antennal segments longer than wide, 7th and 8th segments wider than long, and 9th and 10th segments about as long as wide; 11th segment slender conical (Fig. 5); pronotum widest approximately at basal 1/3, almost smooth, and with two shallow basal foveae (Fig. 2); setal socket punctures of pronotum minute but distinct; elytra widest approximately basal 3/7, and almost smooth; setal socket punctures of elytra large and deep; hind wings fully developed; aedeagus as shown in Figs. 8-10.

Distribution. Japan: Honshu (Nara Pref.).

Specimens examined. Holotype: male, Mt. Kasuga b., Nara, Honshu, 22. v. 1974, H. Franz leg. (preserved in the collection of Naturhistorisches Museum Wien).

Notes. Scydmaenus (Mascarensia) kasuganus Franz, 1976 was described based on only one male specimen, and no specimens have been collected after then. The present species can be distinguished easily from many other Japanese species of the genus Scydmaenus by having the small body.

Scydmaenus (Scydmaenus) taiwanicus Franz, 1985

(Figs. 3, 6, and 11-13)

Scydmaenus (Scydmaenus) taiwanicus Franz, 1985: 112; O'Keefe & Li, 1998: 160; Vít, 2004: 226.

Male. Redescription. Measurement of holotype: Body 2.7 mm in length; head 0.55 mm in length and 0.54 mm in width; pronotum 0.73 mm in length and 0.66 mm in width; elytra 1.6 mm in length and 1.1 mm in width.

Coloration. Dorsum shining, almost concolorously dark reddish brown; palpi brown; antennae almost concolorously reddish brown; legs reddish brown with brown tarsi.

Body about 2.4 times as long as wide, and moderately pubescent on dorsum.

Head almost smooth, very weakly curved towards base from eyes along lateral margins, slightly convex dorsally on vertex; setal socket punctures of head minute but distinct; eyes small, and about 0.15 times as long as length of head; antennae elongate, and clavate on terminal three segments as many other species of genus *Scydmaenus*; 7th and 8th antennal segments about as long as wide, and other segments longer than wide; 11th segment slender conical (Fig. 6); pronotum widest approximately at basal 2/5, almost smooth, and with four distinct basal foveae (Fig. 3); setal socket punctures of pronotum minute but distinct; elytra widest approximately basal 2/5, and almost smooth; setal socket punctures of elytra minute but distinct; hind wings

fully developed; aedeagus as shown in Figs. 11-13.

Distribution. Taiwan.

Specimens examined. Holotype: male, Fenchihu, 1400m, Taiwan, 18. iv. 1977, J. Klapperich leg. (preserved in the collection of Naturhistorisches Museum Wien).

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Explanations of Figures

- Figs. 1, 4, and 7, Scydmaenus (Nepaloscydmaenus) taiwanensis Franz. 2 and 5, S. (Mascarensia) kasuganus Franz. 3 and 6, S. (Scydmaenus) taiwanicus Franz. 1-3, body. 4-6, antennae. 7, spermatheca. Scale A: 1 mm for Fig. 1. Scale B: 1 mm for Fig. 2 and 2 mm for Fig. 3. Scale C: 0.5 mm for Fig. 4 and 0.1 mm for Fig. 7. Scale D: 0.5 mm for Fig. 5. Scale E: 1 mm for Fig. 6.
- Figs. 8-13, aedeagus. 8-10, *Scydmaenus (Mascarensia) kasuganu*s Franz. 11-13, *S. (Scydmaenus) taiwanicus* Franz. 8 and 11, ventral view. 9 and 12, dorsal view. 10 and 13, lateral view. Scale A: 0.5 mm for Figs. 8-10. Scale B: 0.5 mm for Figs. 11-13.



