

**A new species of the genus *Rodolia* Mulsant, 1850 from Japan
(Coleoptera: Coccinellidae: Ortaliinae)**

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Abstract. A new species *Rodolia shuiro* sp. nov. from Japan is described, illustrated and compared with similar species *R. concolor* (Lewis, 1879), *R. okinawensis* Miyatake, 1959 and *R. pumila* Weise, 1892.

INTRODUCTION

The members of the genus *Rodolia* Mulsant, 1850 are distributed in the Indo-Australian Region and neighbouring areas, and feed on scale insects. Some species are famous in their biological control. In this paper, I would like to describe a new species collected from Okinawa I., Iriomote I, Ishigaki I. and Yonaguni I. of the Okinawa Prefecture. The species described here will be characterized by its colour arrangement and structure of male genitalia.

MATERIAL AND METHODS

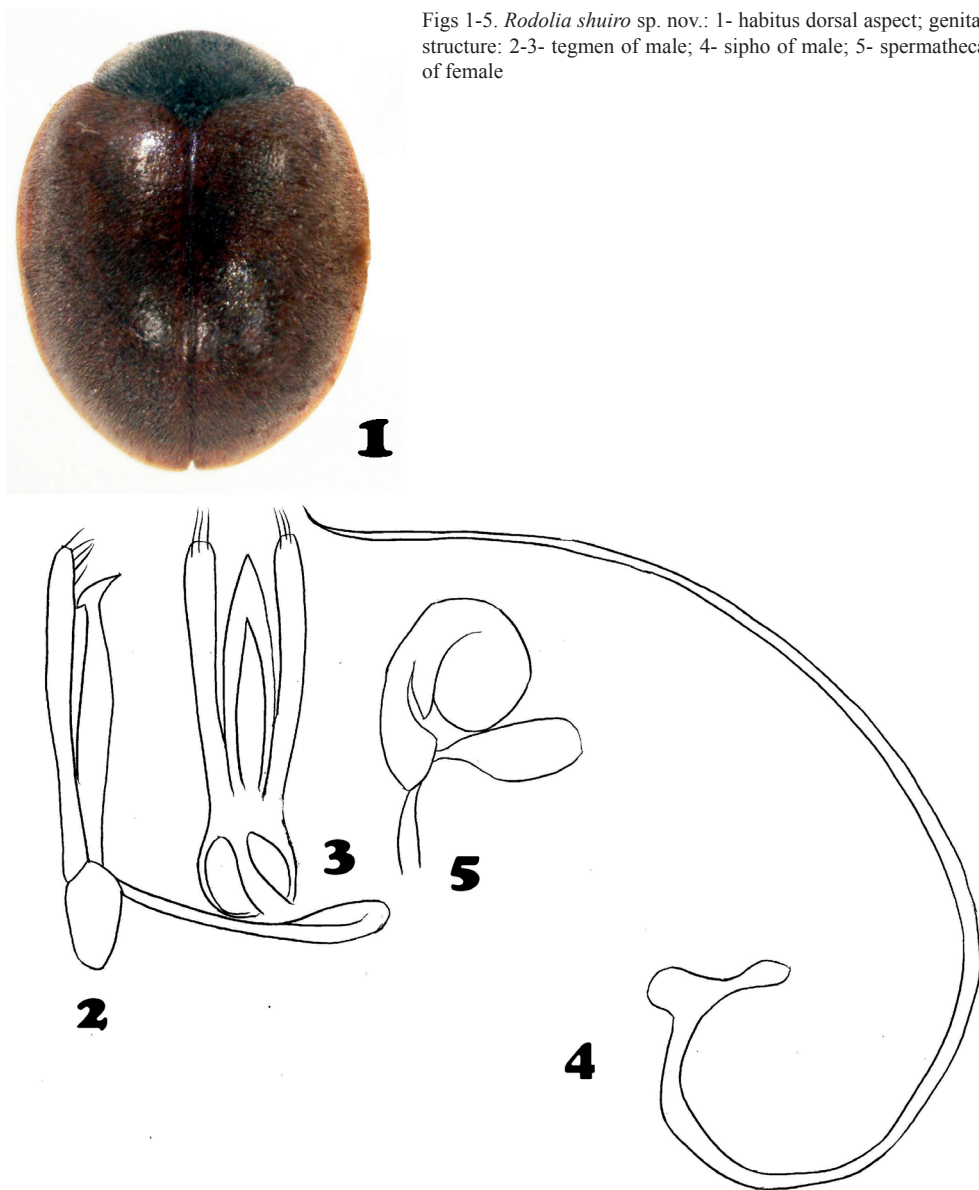
Type series consist of from the following collections:
EUMM Ehime University Museum Matsuyama, Japan;
KUMF Kyushu University Museum, Fukuoka, Japan;
PTK private collection of Takanobu Kitano, Matsuyama, Japan.

DESCRIPTION

***Rodolia shuiro* sp. nov.**
(Figs 1-5)

Type material. Holotype (♂): Japan: Shirahama, 5.v.1974, H. Irie leg., (KUMF). Paratypes. (3 exx.): Uehara, Iriomote Is., 12.iv.1974, T. Kinoshita leg., (EUMM); (1 ex.): Komi, 30.iii.2005, Y. Satoh leg., (EUMM); (2 exx.): Hoshidate, 2.v.1974, H. Irie leg., (KUMF); (2 exx.): Sonai, 29.iv.1974, H. Irie leg., (KUMF); (1 ex.): Kaira River, 30.iv., (KUMF); (1 ex.): Ishigaki Is., Mt. Bannadake, 7.vi.1982, coll. Izumi, M. Kuboki coll., (KUMF); (1 ex.), Mt. Banna, 16.v.1974, H. Irie leg., (KUMF); (1 ex.): Omoto Rindô, 4. iv.1995, K. Kurihara leg., (PTK); Mt. Yarabu, 9.v.2008, C. Han leg., (PTK); (1 ex.): Okinawa Is., Mt. Yonaha-dake, 8.vi.1977, H. Irie leg., (EUMM); (1 ex.): Yonaguni Is., Mt. Urabu-dake, 14. V. 1974, H. Irie leg., (KUMF).

Figs 1-5. *Rodolia shuiro* sp. nov.: 1- habitus dorsal aspect; genital structure: 2-3- tegmen of male; 4- siphon of male; 5- spermatheca of female



Description. Length 4.0-5.0 mm (holotype 4.2 mm); width 3.4-4.0 mm (holotype 3.3 mm).

Body (Fig. 1) moderate in size, cordate, 1.2 times as long as wide, weakly convex above. Colour orange red: head, pronotum and scutellum black; anterior angle of pronotum somewhat pale; labrum and tarsi brown; elytra reddish orange; undersurface black except for red hypomeron, elytral epipleura and abdomen; mesosternum often brown. Pubescence

on dorsum dense, whitish, faintly yellowish: head and pronotum with long ones; elytral pubescence short. Head densely punctate. Pronotum densely punctate: punctures somewhat sparser than on head. Elytra densely punctate: punctures sparser than on pronotum. Scutellum triangular, longer than wide. Prosternum short: central area of prosternum trapezoid, carinate on sides. Anterior margin of mesosternum straight and carinate. Metasternum transversely rugose, sparsely and finely punctate. Elytral epipleura gently oblique, grooves to receive tips of femora absent. Abdomen exposing 6 sternites: femoral line complete; semicircular area narrow, reaching 1/3 in length of the exposed part of 1st visible sternite; 6th of male narrowly and shallowly emarginate at apex; 6th of female simple, rounded at apex. Legs short and stout; tibiae dilated externally at middle; claws with appendix which is 2/3 times as long as claws. Male genitalia: siphon (Fig. 4) extremely long and slender; inner branch of siphonal capsule longer than outer one; tegmen (Figs 2-3) slender; apex of median piece hook-like and well curved ventrally. Female genitalia: spermatheca (Fig. 5) short and bifid near base.

Differential diagnosis. The new species is similar to *R. concolor* (Lewis, 1879) by its body size and immaculate elytra, but distinguishable from the latter by its black pronotum and strongly curved apical hook of the tegmen median piece. The new species might be reported from Iriomote Island and Ishigaki Island by Kamiya (1965) under the name of *Rodolia concolor*. He remarked as follows, "In Japanese material, pronotum usually reddish brown but very rarely blackish. On the other hand, all the above mentioned specimens have the blackish pronotum." Furthermore, this species might be confused with *Rodolia okinawensis* Miyatake, 1959 or *R. pumila* Weise, 1892 by the elytral colour, but will be easily separated from the latter by its depressed body and black pronotum.

Etymology. The specific epithet is derived from the Japanese word, shuiro which means the colour, vermillion.

Distribution. Japan: Okinawa Is., Ishigaki Is., Iriomote Is. and Yonaguni Is.

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REFERENCES

KAMIYA H. 1965: Coccinellid-Fauna of the Ryukyu Islands, south of the Amami Group (Coleoptera). *Kontyû*, 33: 97-122.

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