

A New Species of the Genus *Rhagonycha* (Coleoptera, Cantharidae)
from the Koshiki-jima Islands, off Southern Kyushu, Japan¹⁾

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Abstract A new cantharid species of the genus *Rhagonycha* is described and illustrated from Shimo-Koshiki-jima Is., Kyushu, Japan, under the name of *Rhagonycha bicolor*.

The genus *Rhagonycha* comprises about 400 species in the Holarctic and Oriental Regions, but predominantly occurs in the Palearctic Region and discoveries of new species have continued up to the present.

As regards the Japanese species of the genus, DELKESKAMP (1977-'78) enumerated three species in his Coleopterorum Catalogus, and NAKANE (1993) added six species in his review, and as the result, nine species are known to occur in Japan at present. All but one of them are, however, also distributed in the Russian Far East. In Japan, *R. coreana* PIC, *R. geniculata* GEBLER, *R. kurilica* WITTMER, *R. latiuscula* J. SAHLBERG, *R. nopporensis* WITTMER, and *R. sibirica* WITTMER are distributed mainly in Hokkaido. *Rhagonycha caroli* PIC is found in Honshu, and *R. transita* WITTMER is known from the Islands of Tsushima, north of Kyushu. *Rhagonycha arakawadakensis* M. SATÔ is the only endemic species known from the Southern Japanese Alps of central Honshu.

Recently, we had an opportunity to examine a new species collected from Shimo-Koshiki-jima Is., off the southern part of Kyushu, which is the southernmost known locality of *Rhagonycha* in Japan. So far as known to us, it is considered closer to Taiwanese species than to the above-mentioned Japanese ones judging from the characteristics of the male genitalia. Therefore, this interesting new species will give us information on the relationship between the Japanese and Taiwanese components of the genus *Rhagonycha*.

Before going further, we wish to express our sincere gratitude to Professor Katsura MORIMOTO of Kyushu University for his continuous guidance and reading the original manuscript of the present paper, and to Mr. Teruhisa UENO of Kyushu University for his kindness in offering the interesting specimens. We also thank Assoc. Prof.

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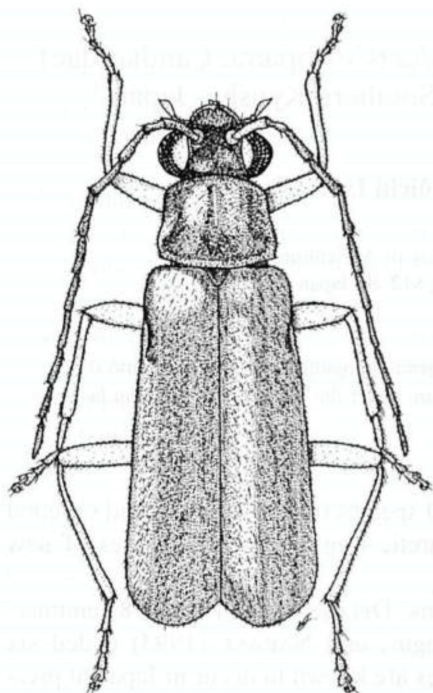


Fig. 1. Habitus of *Rhagonycha bicolor* N. TAKAHASHI et IMASAKA, sp. nov., male. Scale: 2.0 mm.

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***Rhagonycha bicolor* N. TAKAHASHI et IMASAKA, sp. nov.**

[Japanese name: Koshiki-kurohime-jōkai]

(Figs. 1-2)

Male (Fig. 1). Head, pronotum, scutellum, and elytra black or brownish black; antennae except for basal two segments, ventral side of body, and basal part of each coxa dark brown; basal two segments of antennae, eyes, apical halves of mandibles, and anterior part of head dark reddish brown; ventral side of 1st and 2nd antennal segments, basal part of mandibles, maxillary and labial palpi, and legs light reddish yellow.

Body elongate, closely covered with pale reddish-yellow pubescence; anterior part of head sparsely covered with longish pubescence; antennae and legs covered with reddish yellow or reddish brown pubescence.

Head broader than long; disc slightly convex and finely shagreened, smooth and somewhat shining from frons to clypeus, weakly concave in anterior area of vertex and

longitudinal line between antennal pits; apical margin of clypeus arcuate with a faint median indentation; eyes globular and strongly prominent, the distance measured at the widest part of head with compound eyes 2.35 times (in the holotype; range 1.67–2.74) as large as the transverse diameter of compound eye; antennae filiform, reaching about four-sevenths of elytra from the base, 1st and 2nd segments subclavate, 3rd to 11th subcylindrical, relative lengths of antennal segments from the base as follows:—19.3 : 10.6 : 19.6 : 21.3 : 23.0 : 22.0 : 21.8 : 21.0 : 20.0 : 18.3 : 22.0.

Pronotum subquadrate, 1.08 (0.90–1.14) times as wide as head with compound eyes and 1.36 (1.15–1.50) times as wide as long, slightly dilated posteriad; disc somewhat convex dorsally, weakly warped dorsad and strongly arcuate at anterior margin, with anterior angles widely rounded, weakly arcuate at posterior margin and weakly depressed along it between posterior angles including around them, with posterior angles obtuse, feebly explanate and obtuse or slightly rounded at lateral margins just before posterior angles. Scutellum triangular with round apex, closely punctate.

Elytra about 2.90 (2.63–3.06) times as long as wide at humeri, straight at sides and weakly dilated posteriad, with apices separately rounded; disc closely and rugosely punctate. Legs slender, relative lengths of tarsal segments of hind leg as follows:—18.3 : 11.9 : 8.7 : 8.4 : 10.8. Ventral side of body shagreened, 8th abdominal segment roundly produced posteriad at lateral sides and 9th weakly emarginate at the apex (Fig. 2 D).

Male genitalia (Fig. 2 E–G) relatively stout; dorsal plate of lateral lobe roundly and shallowly emarginate at the apex; ventral process of each lateral lobe becoming slightly narrower to each rounded apex, of which the basal parts are laterally obtuse; each ventral margin of dorsal plate of lateral lobe widely explanate.

Length of body: 5.7 (5.0–6.4) mm; length of hind tibia: 1.7 (1.3–1.9) mm.

Female. Similar to male except for the following features: body stouter, antennae a little shorter, compound eyes smaller than in the male, the distance measured at the widest part of head with compound eyes 2.86–4.43 times as large as the transverse diameter of compound eye. Relative lengths of antennal segments as follows:—19.5 : 11.3 : 18.3 : 19.4 : 19.9 : 19.4 : 19.0 : 18.7 : 17.3 : 16.1 : 19.7. Pronotum 1.35–1.62 times as wide as long, 1.21–1.44 times as wide as head with compound eyes. Elytra 2.34–2.83 times as long as wide at humeri. Relative lengths of tarsal segments of hind leg as follows:—18.7 : 12.2 : 9.4 : 9.3 : 11.3. Lateral sides of 8th abdominal segment roundly produced posteriad and middle area obtusely projected (Fig. 2 C).

Length of body: 5.3–6.8 mm; length of hind tibia: 1.3–1.8 mm.

Type series. Holotype: ♂ (Type No. 3045, Kyushu Univ.), Teuchi, Shimo-Koshiki-jima Is., Kagoshima Pref., 17–V–1994, T. UENO leg. Paratypes: 7 ♂♂, 1 ♀, Mt. Otake, Shimo-Koshiki-jima Is., Kagoshima Pref., 15–VI–1982, S. IMASAKA leg.; 4 ♂♂, 2 ♀♀, ditto, but 20–VI–1982, S. IMASAKA leg.; 1 ♂, 4 ♀♀, ditto, but 22–VI–1982, S. IMASAKA leg.; 2 ♀♀, ditto, but 18–V–1994, T. UENO leg.; 4 ♂♂, 3 ♀♀, Sesenoura, Shimo-Koshiki-jima Is., Kagoshima Pref., 16–VI–1982, S. IMASAKA leg.; 16 ♂♂, 10 ♀♀, Teuchi, Shimo-Koshiki-jima Is., Kagoshima Pref., 17–V–1994, T. UENO leg.; 4 ♂♂, 6 ♀♀, ditto, but

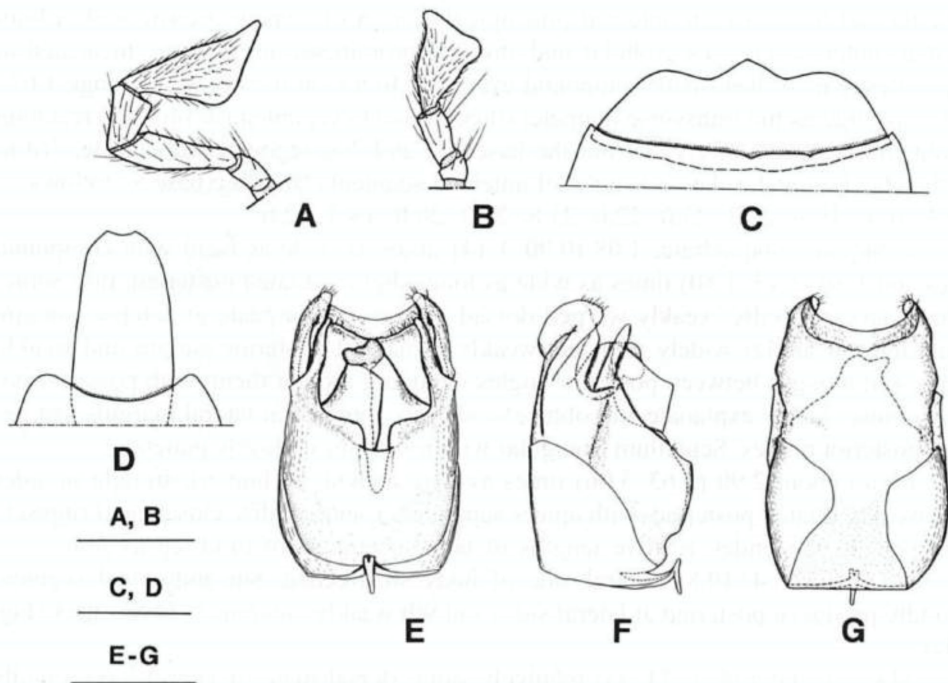


Fig. 2. *Rhagonycha bicolor* N. TAKAHASHI et IMASAKA, sp. nov.; A, maxillary palpus (dorsal view); B, labial palpus (ventral view); C, outline of 7-8th abdominal segments in female (macerated condition); D, outline of 8-9th abdominal segments in male (macerated condition); E-G, male genitalia (E, ventral view; F, lateral view; G, dorsal view). Scales: 0.2 mm for A and B, 0.5 mm for C-G.

17~18-V-1994, T. UENO leg.

The holotype is preserved in the collection of the Entomological Laboratory, Faculty of Agriculture, Kyushu University. The paratypes are preserved in the collection of Kyushu University, Kurashiki Museum of Natural History, Okayama, ours, and so on.

Distribution. Japan: Kyushu (Shimo-Koshiki-jima Is.).

Remarks. This new species is different from the Japanese congeners in somewhat transverse pronotum, light reddish yellow legs, and the characteristic male genitalia whose dorsal plate of lateral lobe is broad from the base to the apex and widely emarginate at the apex. This is similar to *Rhagonycha taiwanonigra* WITTMER, 1982 in general structure of the male genitalia, but the compound eyes are larger in the male, the pronotum is less transverse, the legs are reddish yellow, and the ventral process of each lateral lobe of male genitalia is slightly narrower.

Etymology. The specific name of this new species is derived from the coloration of the body.

要 約

高橋直樹・今坂正一：甌島列島産クロヒメジョウカイ属の1新種。——下甌島からクロヒメジョウカイ属の1種を新たに記載し、*Rhagonycha bicolor* sp. novと命名した。本種は、これまで日本から知られている同属の種とは前胸や雄交尾器の形状および脚の色彩を異にし、雄交尾器の外観からは台湾より記載された*Rhagonycha taiwanonigra* WITTMER, 1982に近縁と思われるが、複眼が雄では雌よりも大きくなること、前胸がそれほど横長にならないこと、脚が淡橙色であること、および雄交尾器の腹面突起がやや細いことで区別される。

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