

## A Beautiful New Mordellid of the Genus *Variimorda* (Coleoptera, Mordellidae) from the Southern Ryukyus

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**Abstract** A new mordellid species from the Yaeyama group of the Ryukyu Islands is described under the name of *Variimorda kurosawai* sp. nov. It is very closely related to *V. miyarabi* NOMURA from the central Ryukyus, but distinguished from it by the well developed yellowish maculations of the elytra, slenderer antennae and thinner pygidium.

Up to the present, I have regarded the specimens of the genus *Variimorda* MÉQUIGNON from the Yaeyama group of the Ryukyu Islands as *V. miyarabi* NOMURA (TAKAKUWA, 1976, 1985), though some apparent differences are recognized between these two populations. My view has been based upon a plausible reason that they have somewhat similar male genitalia at a glance. After a detailed examination, however, I have come to the conclusion that the population of the Yaeyama Islands should be considered a good species because of the unique characteristics in external morphology and rather weak but stable characteristics of the male genitalia. I am going to describe it as a new species in this paper.

Before going further, I wish to express my deep gratitude to Dr. Shun-Ichi UÉNO of the National Science Museum (Nat. Hist.), Tokyo, for critically reading the original manuscript. My cordial thanks are also due to Mr. Takeichiro HATAYAMA of Osaka for loaning me the mordellid specimens used in this paper and to Mr. Tatsuya NIISATO of Bioindicator Co., Ltd., Tokyo for literature.

This short paper is dedicated to the memory of the late Dr. Yoshihiko KUROSAWA, formerly of the National Science Museum (Nat. Hist.), Tokyo. I am sincerely grateful to him for his kind guidance and encouragement extended to me in the course of the study of mordellid beetles, and also pay my heartfelt respect to him for his great contributions on various fields of entomology.

*Variimorda kurosawai* sp. nov.

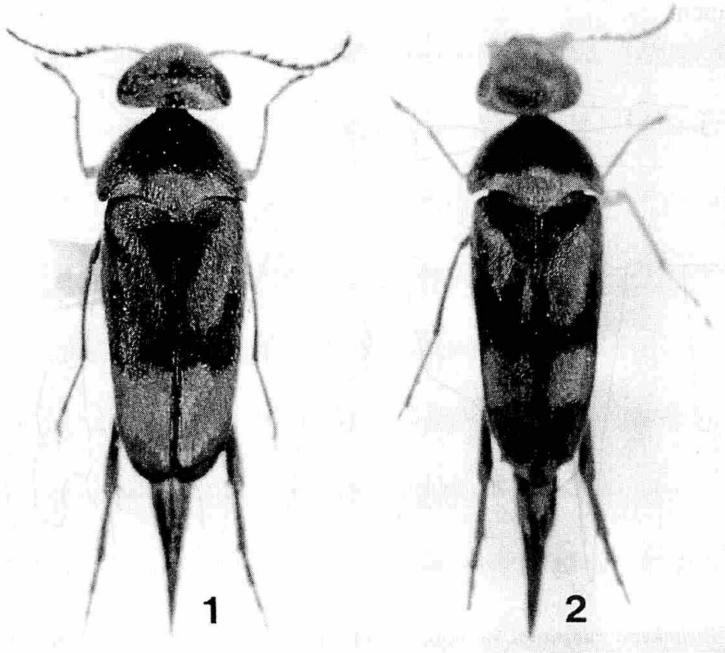
(Figs. 1, 3–9)

*Variimorda miyarabi*: TAKAKUWA, 1976, *Elytra, Tokyo*, **3**: 17, pl. 3, no. 8; 1985, *Coleopt. Japan Col.*, Osaka, **3**: 385, pl. 66, no. 23.

Closely allied in external morphology to *V. miyarabi* NOMURA from Amami-Oshima Is. and *V. sp.* from Taiwan, but readily distinguished from them by the developed flavous pubescence which bears on the most parts of body surface.

Male. Black; mouth-parts yellow to yellowish brown except for dark castaneous apices of mandibles; each antenna yellow to castaneous, basal three segments yellow, segment 4 and basal parts of segments 5–10 yellowish brown, the remainders castaneous; fore and middle legs yellowish, more or less darkened apicad; hind legs and apical areas of abdominal segments 1–5 reddish brown to castaneous; terminal spurs of hind tibiae brown.

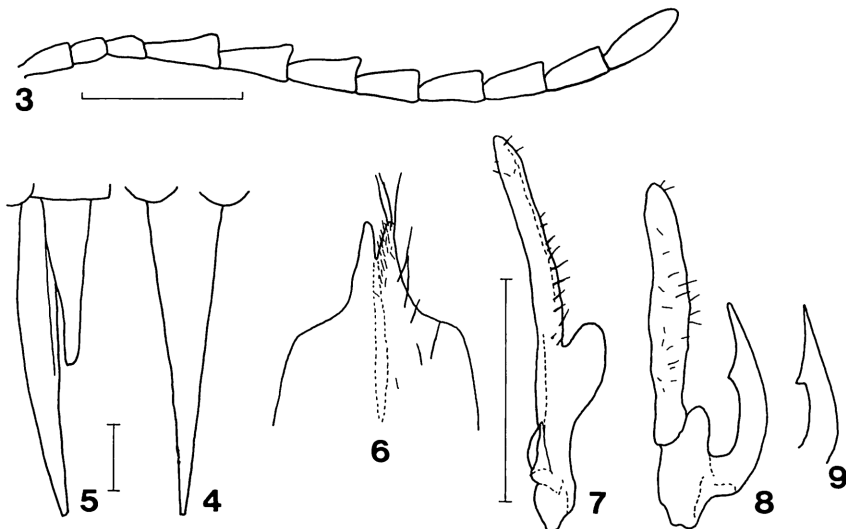
Head densely clothed with light flavous pubescence; eye subcircular, rather sparsely bearing long hairs; tempora very narrow. Terminal segment of maxillary palpus right-angled isosceles triangular though the apical angles are rounded; anterior margin a little longer than outer one (1.1 : 1). Antenna slender, as illustrated; segment 4 as long as segments 2 and 3 combined; terminal segment elongate fusiform, extremely narrowly rounded at apex, about three times as long as wide. Pronotum densely clothed with flavous pubescence almost all over though often with a vague longitudinal median blackish spot, about 1.43 times as wide as long, widest at basal 3/10; sides gently rounded. Scutellum tongue-shaped, bearing light flavous pubescence. Elytra about 2.1 times as long as wide; sides very slightly broadened to basal 1/4 to 1/5, then



Figs. 1–2. Habitus of *Variimorda* spp. — 1, *V. kurosawai* sp. nov., ♂, holotype; 2, *V. miyarabi* NOMURA, ♂.

almost straightly attenuate posteriad, and rather rapidly, arcuately convergent to near each apex; surface clothed with fuscous pubescence, decorated with flavous one as follows: a pair of very broad oblique fasciae from humeral parts to just before the middle, which are broadly touched each other at sutural lines and prolonged to behind scutellum along each basal margin and to behind middle along each lateral side; a pair of extremely enlarged posterior fasciae which are broadly contiguous both to sutural and lateral margins and usually barely connected with the former maculations at lateral sides. Pygidium slender and thin, attenuate apicad with slightly excavating sides, about 1.71 times as long as elytra, 1.24 times as long as elytral width, and just twice as long as anal sternite; dorsum gently arcuate in profile, clothed with fuscous hairs except for basal 1/4 to 1/3; apex extremely narrowly truncate in dorsal view and obliquely so in lateral view. Abdomen clothed with flavous pubescence almost all over; anal sternite parabolical, narrowly rounded at apex; eighth abdominal sternite very thin, with apical projection deeply divergent. Legs slender, hind one at least reaching apex of pygidium; fore tibia curved downwards and slightly so inwards, with a few long erect setae on dorso-basal portion; inner terminal spur of hind tibia about twice as long as outer one, considerably thickened, scarcely attenuate towards apex which is rather truncate.

Parameres slender, as illustrated; left paramere apparently longer than right one (1:1.15); right paramere rather stout though the membranous piece is slender and elongated oblong, with developed apical protruding of basal piece, and with stout sclerotized branch.



Figs. 3–9. *Variimorda kurosawai* sp. nov., ♂, holotype. — 3, Right antenna; 4, pygidium in dorsal view; 5, pygidium and anal abdominal sternite in lateral view; 6, apical part of 8th abdominal sternite; 7, left paramere in inner view; 8, right paramere in inner view; 9, sclerotized branch of right paramere in lateral view. Scales: 0.5 mm.

Female. Terminal segment of maxillary palpus obtuse triangular with arcuate outer and apical margins; outer margin about twice as long as inner one, a little longer than inner one (1:0.9). Antenna shorter and broader than in male. Pygidium shorter than in male, about 1.11 times as long as elytral width. Fore tibia straight in dorsal view though curved downwards as in male.

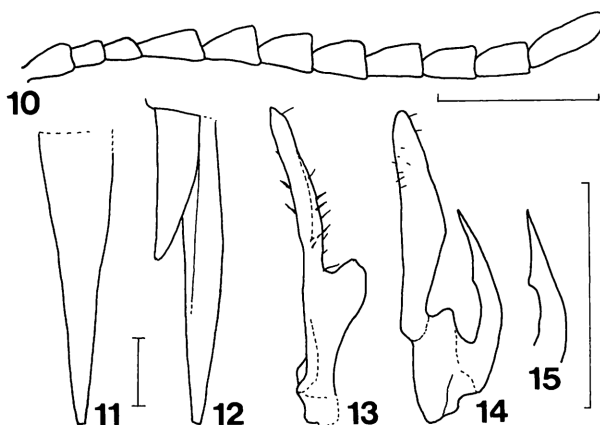
Length: ♂: 5.4–6.2 mm (incl. head and excl. pygidium); ♀: 5.0 mm (excl. head and pygidium).

*Type series.* Holotype: ♂, Shirahama, Iriomote Is., Yaeyama group of the Ryukyus, 30–V–1974, M. TAKAKUWA leg. Paratypes: Ishigaki Is., Yaeyama Isls.: 1 ♂, Yonehara, 5–VI–1973, K. MASAKI leg.; 1 ♂, same, 20–VI–1973, K. AKIYAMA leg.; 1 ♂, Arakawa, 31–V~1–VI–1997, M. TAKAKUWA leg. Iriomote Is., Yaeyama Isls.: 1 ♀, Sonai, 16–VI–1974, T. MIKAGE leg.; 1 ♂, Ohtomi-rindō, 6~7–VI–1993, M. TAKAKUWA leg.

*Type depositories.* The holotype is deposited in the collection of the Kanagawa Prefectural Museum of Natural History, Odawara. The paratypes are preserved in the collection of the National Science Museum (Nat. Hist.), Tokyo, and the author's and Mr. HATAYAMA's private collections.

*Distribution.* Yaeyama Isls., SW. Ryukyus, SW. Japan.

The present new species doubtless forms a unique group together with *V. miyarabi* NOMURA from the central Ryukyus and *V. sp.* from Taiwan, particularly in having similar genitalic features, but clearly differs from *V. miyarabi* in the following characters: body stouter; surface clothed with flavous pubescence almost all over, with elytral yellowish maculations much more developed; antennae distinctly slenderer, with terminal segments elongated fusiform; pygidium thinner, about 1.71 times as long as elytra in male (about 1.61 times in *V. miyarabi*); left paramere of male genitalia slenderer, apparently longer than the right (very slightly longer in *V. miyarabi*); right paramere with



Figs. 10–15. *Variimorda miyarabi* NOMURA, ♂. — 10, Right antenna; 11, pygidium in dorsal view; 12, pygidium and anal abdominal sternite in lateral view; 13, left paramere in inner view; 14, right paramere in inner view; 15, sclerotized branch of right paramere in lateral view. Scales: 0.5 mm.

stouter basal piece which is provided with developed apical protruding, and with slender membranous piece which is elongated oblong (knife-like in *V. miyarabi*).

*Notes.* *Variimorda* sp. from Taiwan preliminarily recorded in the present paper is somewhat similar in dorsal maculations to *V. taiwana* (NAKANE et NOMURA) from Taiwan which is regarded as a junior synonym of *V. truncatopyga* (PIC) from China, but doubtless differs from the latter at least in the characteristics of the pygidium.

### 要 約

高桑正敏：琉球南部産キンオビハナノミ属の美しい1新種。—— 琉球列島の八重山諸島からハナノミ科の1新種, *Variimorda kurosawai* sp. nov. (ハデキンオビハナノミ) を記載した。本種はその雄交尾器を含めた形態の特徴から、奄美大島産の *V. miyarabi* NOMURA および台湾産の *V. sp.* と密接な関係をもち、これらとともに1つのまとまったグループを形成する。このなかにあつて本種は、体表がほぼ全体に黄色微毛で被われ、鞘翅の金黄色紋がいちじるしく発達する点で容易に区別されるほか、前種とは触角と尾節板がより細く、雄交尾器側葉片の左片が右片より明らかに長い点などで明瞭に異なっている。

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