

A New *Hikosanoagonum* (Coleoptera, Carabidae) from West Japan

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Abstract A new platynine carabid species, *Hikosanoagonum bungo* MORITA et Y. ITO, sp. nov. is described from Shikoku and Kyusyu, West Japan. It is similar in general appearance to *H. latior* S. UÉNO from Amami-Ôshima Is., southwestern Japan, but differs from that species mainly in the shape of pronotum and elytral basal parts, and the impunctate elytral striae.

The main purpose of this paper is to describe a new platynine carabid species collected in Shikoku and Kyushu, West Japan under the name of *Hikosanoagonum bungo* sp. nov. It is related to *H. latior* S. UÉNO (1964, p. 252) known from Amami-Ôshima Is., southwestern Japan. We will now take this opportunity to give a brief account of the latter species.

The abbreviations employed in this paper are the same as those explained in the previous paper of the first author (MORITA, 2015).

Before going further, we wish to express our deep gratitude to Dr. Shûhei NOMURA of National Museum of Nature and Science, Tsukuba, for giving us the opportunity to study the type specimen of *Hikosanoagonum latior* S. UÉNO. Hearty thanks are also due to Dr. Shun-Ichi UÉNO and Mr. Hiromu KAMEZAWA for their kind help. Our thanks are also due to Dr. Toshio KISHIMOTO and Dr. Takashi KURIHARA, MESSRS. Takeshi MIYAKE and Masahiro NISHI for offering us the invaluable materials. Without their cooperation, we could not have undertaken this study.

Hikosanoagonum bungo MORITA et Y. ITO, sp. nov.

[Japanese name: Nise-munabiro-morihirata-gomimushi]

(Figs. 1, 3–9)

Description. L: 8.47–9.14 mm. Body rather small and weakly convex. Head, disc of pronotum, sides of elytra and appendages brown; reflexed sides of pronotum slightly lighter than the disc; elytra with greenish lustre; ventral side brown.

Head moderately convex and impunctate; eyes strongly convex; frontal furrows deep, strongly divergent posteriad, and reaching anterior supraorbital pore on each side; frons weakly convex; a pair of anterior supraorbital pores situated at the level of basal 2/3 of eyes; a pair of posterior supraorbital pores situated at mid-gena level; neck rather long; genae very long, oblique and very weakly arcuate; PW/HW 1.44, 1.49 in ♂, 1.44–1.48 (M 1.47) in ♀; vertex rather moderately convex; neck constriction distinct; microsculpture almost vanished; labrum transverse with almost straight or weakly emarginate apical margin; mentum tooth wide, moderately porrect and shallowly bifid; penultimate segment of maxillary palpus shorter than terminal segment; penultimate segment of labial palpus about as long as terminal segment, and with two long setae at about the middle and a minute seta at apical part; antennae very long, reaching basal 2/3 of elytra; segment II with three to five setae at subapical part; relative lengths of antennal segments as follows: — I : II : III : IV : V : VI : XI \cong 1 : 0.39 : 0.94 : 1.02 : 1.00 : 0.97 : 0.89 in ♂, \cong 1 : 0.42 : 0.92 : 1.03 : 1.01 : 0.99 : 0.90 in ♀.

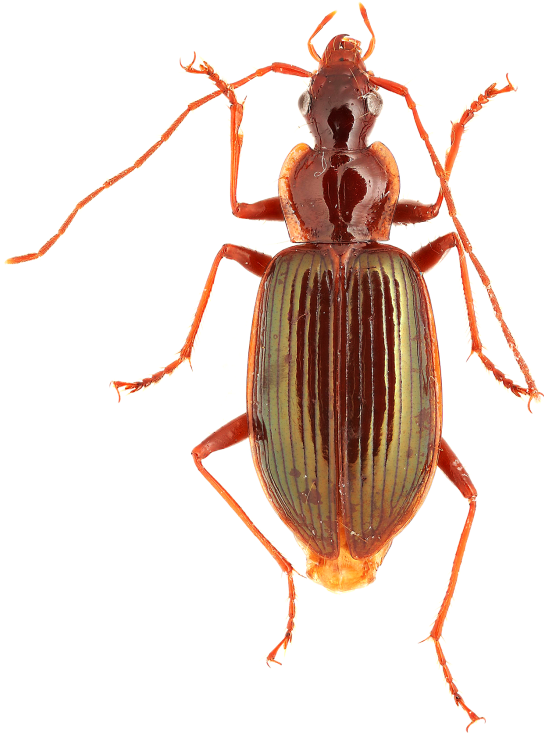
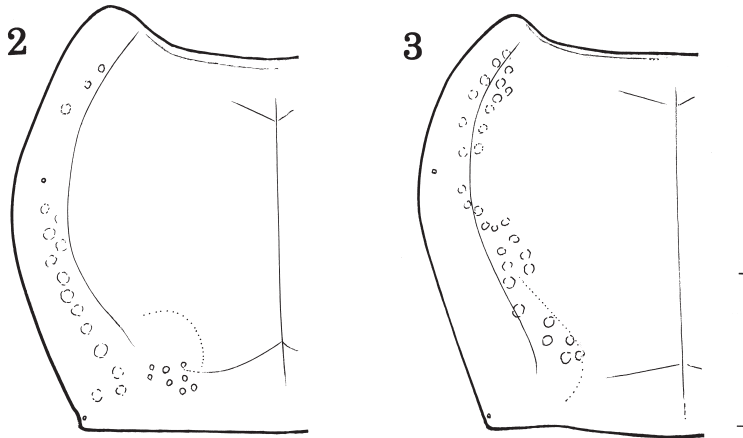


Fig. 1. *Hikosanoagonum bungo* MORITA et Y. ITO, sp. nov. from Enomura, Shimanto-shi, Kôchi Pref.

Pronotum rather wide, flat and widest at basal $13/20$; PW/PL 1.32, 1.36 in ♂, 1.35–1.38 (M 1.36) in ♀; PW/PA 1.64, 1.64 in ♂, 1.59–1.70 (M 1.63) in ♀; PW/PB 1.24, 1.29 in ♂, 1.27–1.34 (M 1.30) in ♀; PA/PB 0.76, 0.79 in ♂, 0.76–0.84 (M 0.80) in ♀; apex almost straight, weakly emarginate at the sides and very narrowly bordered, but the median part is not clearly bordered; apical angles rather strongly produced and moderately rounded at the tips; sides rather moderately arcuate in front, straight and narrowed towards hind angles; reflexed lateral sides very wide throughout, with deep gutters; microsculpture weakly impressed, composed of fine transverse meshes; anterior transverse impression obliterated or vestigial; posterior transverse impression shallow or rather deep; median line clearly impressed, not reaching apex, and close to base; base widely and weakly arcuate at median part and weakly emarginate or oblique at the sides; a pair of anterior marginal setae inserted a little before the widest part; hind angles obtuse, or very weakly produced laterally, and each with a seta.

Elytra elongated oval, moderately convex and widest at about the middle; EW/PW 1.63, 1.58 in ♂, 1.60–1.68 (M 1.63) in ♀; EL/EW 1.58, 1.63 in ♂, 1.57–1.65 (M 1.62) in ♀; basal part wide and rather oblique; basal border weakly arcuate; shoulders moderately rounded; sides very weakly arcuate from shoulders to basal $3/5$ and weakly so towards apices, and with narrow and shallow preapical emargination on each side; apex simply rounded; striae shallow and almost smooth; scutellar striae very long, situated at interval I, free at apical end, shallow, impunctate, and adjoining basal border; three dorsal pores situated on interval III, the first pore adjoining stria 3 and remaining two pores adjoining stria 2; the first pore situated between basal $1/5$ and $1/4$ of elytra, the second one at about the middle, and the third one between basal $3/4$ and $9/10$; microsculpture moderately impressed, composed of fine transverse meshes; intervals very weakly convex and impunctate; marginal series composed of 20–23 pores; epipleuron very wide in basal part, becoming narrower towards apex, and with-



Figs. 2–3. Pronotum of *Hikosanoagonum* spp. — 2, *Hikosanoagonum latior* S. UENO from Yuwan, Amami-Ōshima Is.; 3, *H. bungo* MORITA et Y. ITO, sp. nov. from Morisawa, Shimanto-shi, Kōchi Pref.

out inner plica. Hind wings developed.

Ventral side almost smooth or irregularly and finely wrinkled; sternites III to VI (anal sternite) pubescent; in ♂, anal sternite wide, very weakly emarginate at apex; anal sternite in ♀ with two pairs of setae which are aligned.

Legs rather slender; protarsi almost smooth on dorsal side; tarsi 4 rather deeply bilobed in protarsus; TL/HW 1.13, 1.15 in ♂, 1.13–1.21 (M 1.17) in ♀.

Genital segment elongated oval, with short and rather narrow handle.

Aedeagus elongate and weakly arcuate throughout; basal part rather large without sagittal aileron; dorsal side widely occupied by membranous part; apical lobe short, gradually narrowed towards apex in lateral view; apex narrowly rounded in dorsal view. Inner sac armed with one spine. Right paramere elongate with elongate basal part; left one wider than the right.

Apical styli in ♀ robust, and with two or three rather short and robust spines on ventral side and with one short and robust spine on dorsal side.

Type series. Holotype: ♂, Morisawa, 19.XII.1998, Y. ITO leg. Paratypes: 1 ♂, Enomura, 21. XI.1998, Y. ITO leg.; 1 ♂, 3 ♀♀, Morisawa, 19.XII.1998, Y. ITO leg.; 1 ♀, Ōchi-minaminotani, 3–13. IV.2009, Y. ITO leg.; 1 ♀, Kamiaoe, 3.XI.2007, T. MIYAKE leg.

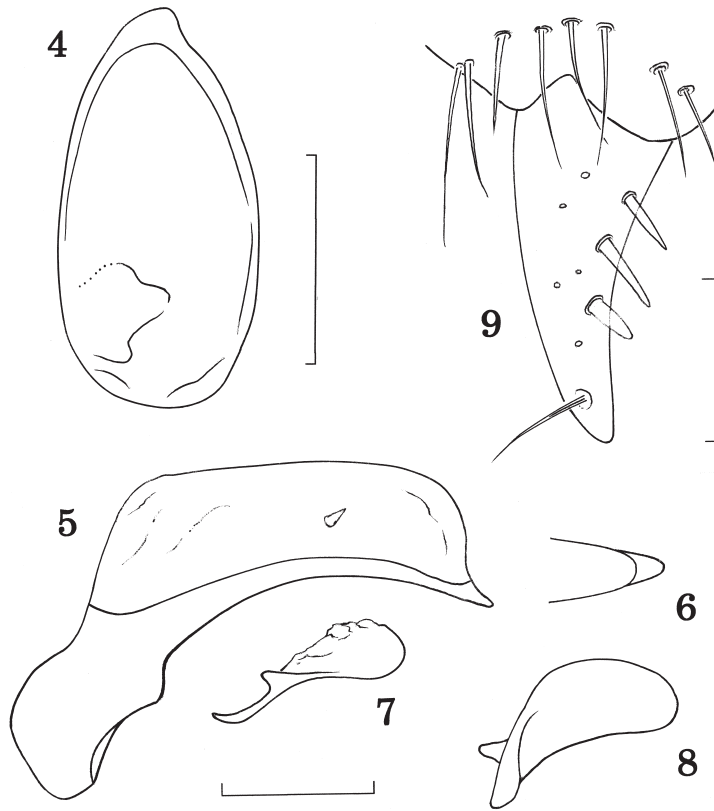
Localities. Morisawa and Enomura, Shimanto-shi; Ōchi-minaminotani, Ino-chō, Kōchi Pref.; Kamiaoe, Tsukumi-shi, Ōita Pref., West Japan.

Range. Kōchi and Ōita Prefs., West Japan.

Depository of the holotype. The holotype is deposited in the Department of Zoology, the National Museum of Nature and Science, Tsukuba.

Specimens dissected and measured. Standard ratios of body parts shown in the descriptive part are those of two males and three females from Morisawa. The genitalia of one male and two females from Morisawa and one female from Kamiaoe were dissected and examined.

Notes. Judging from the body shape and coloration, this new species is very closely allied to *Hikosanoagonum latior* S. UENO (1964, p. 252). It is, however, distinguished from the latter by the following points: 1) eyes flatter, 2) sides of pronotum narrowed towards hind angles, 3) elytra with oblique basal parts, 4) elytral striae impunctate, 5) tarsi narrower, and 7) aedeagal apical lobe flatter in lateral view.



Figs. 4–9. *Hikosanoagonum bungo* MORITA et Y. ITO, sp. nov. from Enomura, Shimanto-shi, Kôchi Pref. — 4, Genital segment; 5, aedeagus, left lateral view; 6, apical part of aedeagus, dorsal view; 7, right paramere, left lateral view; 8, left paramere, left lateral view; 9, apical styli in ♀. (Scale: 1 mm for 4; 0.5 mm for 5–8; 0.1 mm for 9.)

Body length and standard ratios of body parts in one female from Kamiaoe are as follows: L: 9.57 mm; relative lengths of antennal segments, I : II : III : IV : V : VI : XI \cong 1 : 0.41 : 0.97 : 1.14 : 1.14 : 1.07 : 1.00; PW/HW 1.44; PW/PL 1.28; PW/PA 1.63; PW/PB 1.40; PA/PB 0.85; EW/PW 1.62; EL/EW 1.64; TL/HW 1.11.

Etymology. The specific epithet of this new species is derived from the Bungo Suidô (= channel) which is situated between Shikoku and Kyushu Islands.

Specimens compared. *Hikosanoagonum latior*: 1 ♂, “Ikari Amami Is. 3.VIII.1961 K. Yamada” / “HOLOTYPE” / “*Hikosanoagonum latior* S. Uéno, n, sp, det. S. Uéno, 1964”; 2 ♀♀, Yuwan, Amami-Ôshima Is., Kagoshima Pref., 30.VI.1996, M. SUGIMOTO leg.; 1 ♂, same locality, 27.VI.2003, T. KURIHARA leg.; 1 ♂, Kinsakubaru, Amami-Ôshima Is., Kagoshima Pref., 27.VI.2003, T. KURIHARA leg.; 1 ♀, Santaro-tôge, Amami-Ôshima Is., Kagoshima Pref., 1.IX.2012, M. NISHI leg.; 1 ♀, Mikyo, Amagi-chô, Tokuno-shima Is., Kagoshima Pref., 14.III.1993, T. KISHIMOTO leg.

Body length and standard ratios of body parts in two males and two females from Amami-Ôshima are as follows: L: 9.14–10.00 mm; relative lengths of antennal segments as follows: — I : II : III : IV : V : VI : XI \cong 1 : 0.44 : 0.97 : 1.02 : 1.03 : 0.97 : 1.00 in ♂, \cong 1 : 0.42 : 0.92 : 1.05 : 1.00 : 0.96 : 0.96 in ♀; PW/HW 1.59, 1.61 in ♂, 1.52, 1.53 in ♀; PW/PL 1.31, 1.39 in ♂, 1.39, 1.38 in ♀; PW/PA 1.71, 1.71 in ♂, 1.56 (very narrow pronotal apex), 1.71 in ♀; PW/PB 1.28, 1.24 in ♂, 1.16, 1.25 in ♀;

PA/PB 0.75, 0.73 in ♂, 0.75, 0.73 in ♀; EW/PW 1.56, 1.59 in ♂, 1.71, 1.64 in ♀; EL/EW 1.53, 1.54 in ♂, 1.52, 1.56 in ♀; TL/HW 1.19, 1.16 in ♂, 1.15, 1.06 in ♀.

要 約

森田誠司・伊東善之：西日本産シロウズモリヒラタゴミムシ属 *Hikosanoagonum* 属 (鞘翅目オサムシ科) の1新種。—— 四国と九州から採集されたシロウズモリヒラタゴミムシ属の一種を新種と認め、ニセムナビロモリヒラタゴミムシ *Hikosanoagonum bungo* sp. nov. と命名記載した。この新種は奄美大島および徳之島に分布するムナビロモリヒラタゴミムシ *H. latior* に近縁であるが、前胸背板の側縁が直線的に後角に向かって狭まること、上翅の基部がより斜めであること、条線がほとんど平滑であることなどで識別はやさしい。

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