

## A New *Synuchus* (Coleoptera, Carabidae) from Taiwan

Seiji MORITA

Higashi-gotanda 5–19–7, Shinagawa-ku, Tokyo, 141–0022 Japan

**Abstract** A new synuchine carabid beetle is described from Taiwan under the name of *Synuchus* (*Synuchus*) *jengi* MORITA, sp. nov.

Recently, a synuchine carabid beetle was obtained by Dr. TAKAHASHI from Taiwan, and submitted to me for identification. In this paper, I am going to describe result of this study concerning this synuchine species.

The abbreviations used herein are as follows: L — body length, measured from apical margin of clypeus to apices of elytra; HW — greatest width of head; PW — greatest width of pronotum; PL — length of pronotum, measured along the mid-line; PA — width of pronotal apex; PB — width of pronotal base; EW — greatest width of elytra; EL — greatest length of elytra; TL — length of hind tarsus; M — arithmetic mean. The PB value was taken by the width between the roots of hindangular setae, since the hind angles are rounded.

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### *Synuchus* (*Synuchus*) *jengi* MORITA, sp. nov.

(Figs. 1–9)

**Diagnosis.** Body rather small and elongate; terminal segments of palpi not dilated; antennal segment 2 with a seta on each side; sides of pronotum weakly arcuate; hind angles with a seta on each side; reflexed side gutters indistinct; elytral apices not obliquely truncated; subapical pore situated a little before the stria 7 or adjoining the stria; claw with several teeth; anal sternite narrowly arcuate (not emarginate at apex); aedeagus weakly arcuate at basal 1/3 and almost straight from basal 1/3 to apex in lateral view; right paramere weakly bent at about middle, and with slender apical part; left paramere oval, with wide base and pointed apex.

**Description.** L: 7.71–8.86 mm. Body rather small and elongate. Body black to blackish brown; clypeus, femora and sides of pronotum slightly lighter than dorsum; antennae, labrum, palpi, tibiae and tarsi reddish brown.

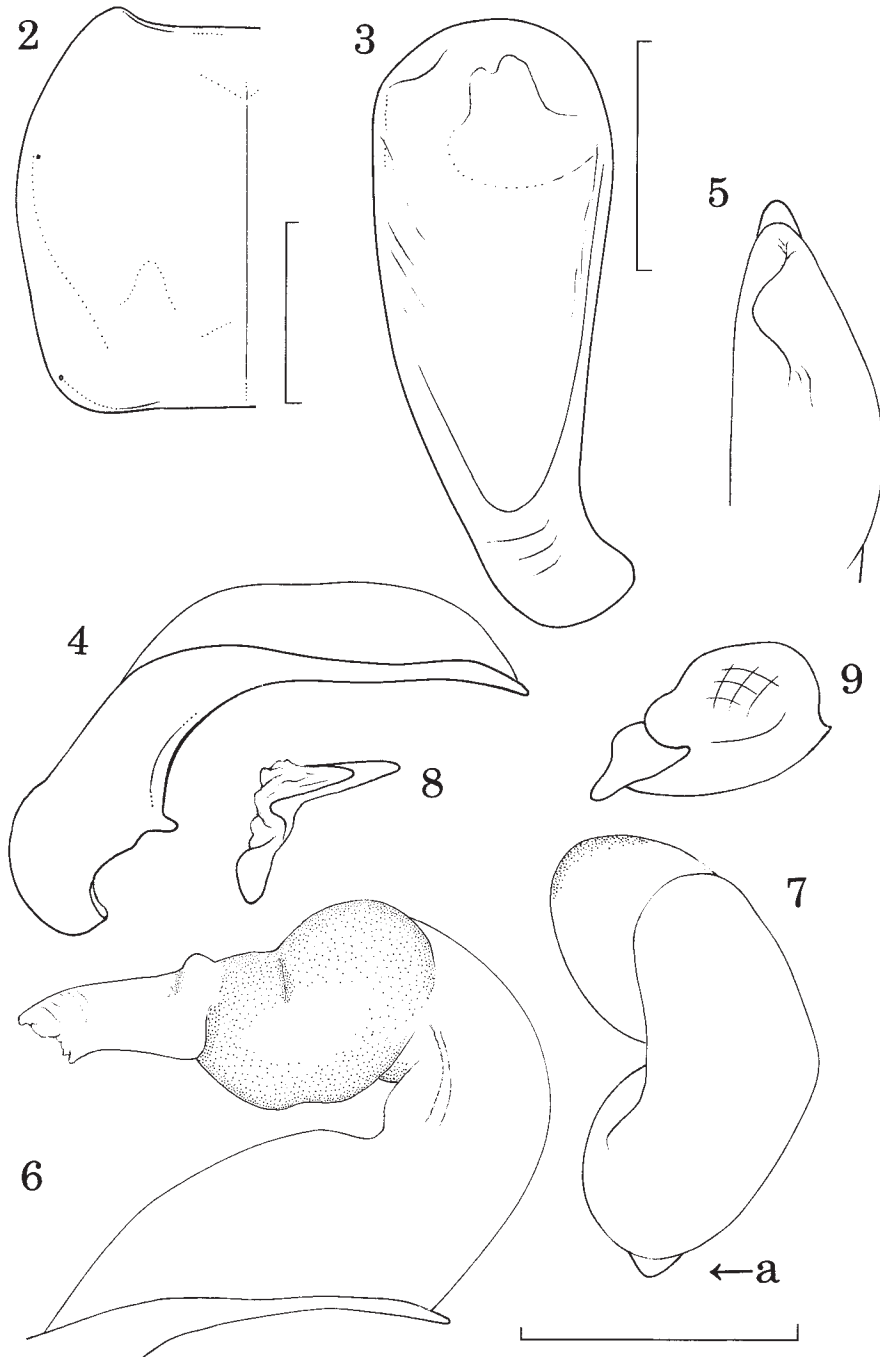
Head weakly convex; eyes weakly convex; frontal furrows very shallow, short, parallel to each other or a little divergent posteriad; lateral grooves linear, deep, straight and reaching the post-eye level; anterior supraorbital pore situated a level of basal 3/5 of eyes; posterior supraorbital pore situated a



Fig. 1. *Synuchus (Synuchus) jengi* MORITA, sp. nov.

little behind the post-eye level; microsculpture sharply impressed, consisting of polygonal meshes; genae short and oblique; mentum tooth wide, very shallowly bifid at the tips; apex of labrum very weakly emarginate; terminal segment of labial palpus cylindrical and widest at about middle (not dilated); terminal segment of maxillary palpus widest at about basal 2/3 and truncated at the tip (not dilated); antennae filiform, long and reaching the basal 2/5 of elytra; antennal segment 2 with a seta on each side; relative lengths of antennal segments as follows: — I : II : III : IV : V : VI : XI  $\approx$  1 : 0.56 : 0.96 : 1.22 : 1.18 : 1.09 : 1.29 in ♂, 1 : 0.54 : 0.89 : 1.05 : 1.09 : 1.08 : 1.18 in ♀.

Pronotum rather narrow, weakly convex and widest at about middle; PW/HW 1.70–1.74 (M 1.72) in ♂, 1.66 in ♀; PW/PL 1.15–1.23 (M 1.20) in ♂, 1.15 in ♀; PW/PA 1.72–1.76 (M 1.74) in ♂, 1.68 in ♀; PW/PB 1.27–1.31 (M 1.30) in ♂, 1.33 in ♀; PA/PB 0.73–0.76 (M 0.74) in ♂, 0.79 in ♀; sides weakly arcuate; apical angles weakly to moderately produced, and moderately rounded at the tips; apex almost straight at middle and moderately emarginate at the sides, or weakly so throughout; median line finely impressed, not reaching apex and close to base; anterior marginal setae situated at the widest part or a little before that level; anterior transverse impression obliterated; basal foveae very shallow and almost smooth; hind angles rounded with a seta on each side; base almost straight at middle and very weakly arcuate at the sides or almost straight throughout; basal part almost smooth;



Figs. 2–9. *Synuchus (Synuchus) jengi* MORITA, sp. nov. — 2, Pronotum, left side; 3, genital segment; 4, aedeagus, left lateral view; 5 apical part of aedeagus, dorsal view; 6, inflated inner sac, left lateral view; 7, inflated inner sac, dorso-apical view; 8, right paramere, left lateral view; 9, left paramere, left lateral view; a, aedeagal apex. (Scale: 1 mm.)

microsculpture clearly impressed and consisting of transverse meshes on the disc and of isodiametric meshes on the base and basal foveae, partially disordered.

Elytra narrow, elongate and moderately convex; EW/PW 1.33–1.35 (M 1.34) in ♂, 1.38 in ♀; EL/EW 1.64–1.67 (M 1.65) in ♂, 1.52 in ♀; sides moderately arcuate throughout, with no preapical emargination; apices weakly produced, usually weakly separated from each other, and each with obtusely or narrowly rounded apex (not obliquely truncated); striae deep and impunctate; scutellar striae rather long and situated on interval I; basal pore situated on the stria 1 or adjoining the stria; microsculpture rather strongly impressed and consisting of transverse meshes; intervals weakly convex and impunctate; marginal series of umbilicate pores 16–18 in number; two dorsal pores very weak, situated on interval III and adjoining stria 2; the first pore situated at basal 3/10; the second one between middle and basal 3/5; subapical pore situated a little before the stria 7 or adjoining the stria (*cf.*, HABU, 1978, p. 329); apical pore situated at the apical end of stria 7; elytral epipleuron gradually narrowed apicad; inner plica usually indistinct.

Ventral surface smooth; anal sternite coarsely and strongly impressed with microsculpture of wide to transverse meshes, and narrowly arcuate at apex in ♂, widely arcuate in ♀.

Legs long and very slender; metatrochanter very short, with rounded apex; outer sides of basal two or three segments of meso- and metatarsi very weakly sulcate; segment 4 of metatarsi with minute setae on dorso-apical part; claw segments of meso- and metatarsi with several setae on ventral side; claw with several teeth; TL/HW 1.81–1.99 (M 1.89) in ♂, 1.73 in ♀.

Genital segment elongate and with wide and curved handle which are transversely wrinkled.

Aedeagus elongate, weakly bent at basal 1/3 in lateral view; basal part rather large without sagittal aileron; ventral side almost flat at basal half with obtuse margin at the right side, and weakly convex at apical part; in lateral view, apical lobe rather short with narrowly rounded apex. Right paramere elongate, weakly bent at about middle, and with narrowly rounded apex; left paramere wide, with pointed apex.

Inflated inner sac elongate and curved; subapical area covered with poorly sclerotized scales. Apical styli elongate in ♀ and with two stout spines.

*Type series.* Holotype: ♂, Bilu Divine Tree, 2,150 m alt., 10–11.XI.2013, K. TAKAHASHI leg. Paratypes: 1 ♂, Ci'n, 1,995 m alt., Hualian County, Taiwan, 13.X.2013, K. TAKAHASHI leg.; 1 ♂, 1 ♀, Bilu Divine Tree, 2,150 m alt., 10–11.XI.2013, K. TAKAHASHI leg.

*Locality.* Bilu Divine Tree, 2,150 m alt., Hualian County, Taiwan.

*Depository of the holotype.* The holotype is deposited in the National Museum of Nature and Science, Taichung.

*Notes.* Judging from the male genital organ, this new species is very closely allied to *Synuchus* (*Synuchus*) *taiwanus* HABU (1978, pp. 43, 66) known from Ha-li-wei, near Fen-ch'i-hu and Chitou, Nantou, Hantou Hsien. It is, however, distinguished from the latter by the following points: 1) wider pronotum, 2) narrower elytra, 3) different shape of aedeagus, 4) narrower right paramere, and 5) pointed apex of left paramere.

## 要 約

森田誠司：台湾産ツヤヒラタゴミシ属の1新種（鞘翅目オサムシ科）。——台湾から採集されたツヤヒラタゴミシを新種と認め、*Synuchus* (*Synuchus*) *jengi* MORITA, sp. nov. と命名し記載した。この種は、*S. (S.) taiwanus* HABU に近い種であるが、外部形態ならびに雄の交尾器において明瞭に識別される。特に、雄の交尾器の左側片の先端部が、突出する点は、特徴的である。

### Reference

- HABU, A., 1978. Notes and descriptions of Formosan Carabidae taken by Dr. S.-I. UENO in 1961 (Coleoptera, Carabidae) VIII. *Synuchus* spp. *Entomological Review of Japan, Osaka*, **31**: 33–67.

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