

Notes on the Bembidiinae (Coleoptera, Carabidae) of Japan  
XVII. A New Species of the Genus *Armatocillenus*

Seiji MORITA

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

**Abstract** A new species belonging to the genus *Armatocillenus* is described from Southwest Japan under the name of *A. nakamurai* MORITA, sp. nov.

There are more than 2,000 specimens of the genus *Armatocillenus* of Japan in my carabid collection. Since 1973, I have made collecting trips in various parts of the coral reefs, estuaries of rivers or seashores of Japan. Besides, materials of various parts have been accumulated steadily by friends of mine.

The present part deals primarily with a new species, though a revision of Japanese species will require several years more to complete.

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; WL – length of hind wing; FL – length of metafemur; ML – length of metatrochanter; M – arithmetic mean; NSMT – National Museum of Nature and Science, Tokyo.

I am deeply indebted to Mr. Keisuke NAKAMURA for his supplying me with important material used in this study, and to Mr. Michiaki HASEGAWA for his kind help.

*Armatocillenus* (*Desarmatocillenus*) *nakamurai* MORITA, sp. nov.

[Japanese name: Satsuma-kibanaga-mizugiwa-gomimushi]  
(Figs. 1–2)

**Diagnosis.** Body small and fragile; colour light reddish brown; elytra with dark brown part; apical part of left mandible without tooth; hind wings reduced; metatrochanter normal (ML/FL 0.37–0.44); aedeagal apical lobe rather elongate and not straight in lateral view.

**Description.** L: 3.00–3.57 mm. Body small and fragile. Colour light reddish brown and not polished; elytral basal parts, lateral margins and apical parts light reddish brown, but the remaining part of elytra dark brown and vaguely defined; labrum, sides of clypeus and mandibles slightly darker than dorsum; antennae and legs pale yellowish

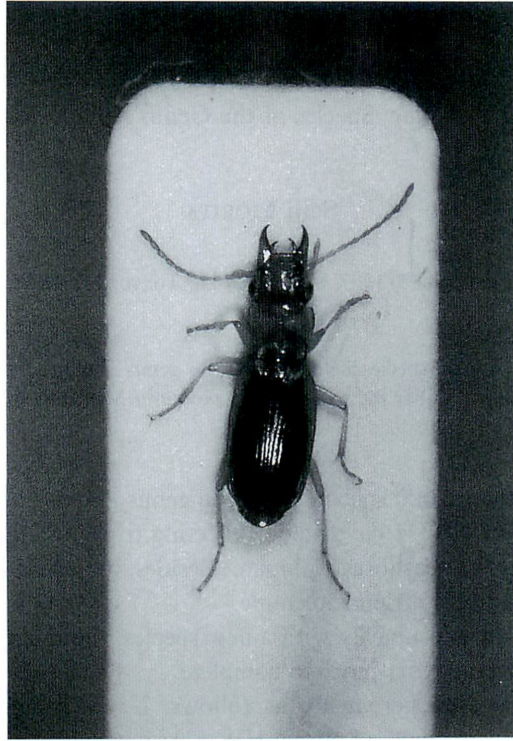


Fig. 1. *Armatoctenellus* (*Desarmatoctenellus*) *nakamurai* MORITA, sp. nov.

brown.

Head weakly convex; eyes moderately convex; PW/HW 1.00–1.07 (M 1.04) in ♂, 1.05–1.10 (M 1.07) in ♀; frontal furrows shallow, parallel to each other or divergent posteriad, and reaching the mid-eye level; anterior supraorbital pore situated at the mid-eye level, posterior ones situated a little before the post-eye level; microsculpture composed of isodiametric meshes; neck wide; apical part of left mandible without tooth; relative lengths of antennal segments as follows:— I : II : III : IV : V : VI : XI = 1 : 0.69 : 0.78 : 0.76 : 0.95 : 0.83 : 1.11.

Pronotum transverse and moderately convex; PW/PL 1.25–1.32 (M 1.29) in ♂, 1.15–1.17 (M 1.16) in ♀; apex almost straight or very weakly emarginate; PW/PA 1.09–1.14 (M 1.12) in ♂, 1.25–1.36 (M 1.29) in ♀; sides weakly and widely arcuate in front and weakly sinuate at about basal 1/4, and then almost parallel or very weakly divergent towards hind angles; marginal gutters deep; anterior marginal seta situated at apical 1/6; PW/PB 1.28–1.40 (M 1.34) in ♂, 1.29–1.36 (M 1.33) in ♀; PA/PB 1.12–1.26 (M 1.20) in ♂, 1.15–1.25 (M 1.19) in ♀; median line impressed between anterior and posterior transverse impressions, and deeply impressed at basal 1/4; base moderately arcuate, and oblique at the sides; apical angles rather strongly produced and rather pointed at the tips;

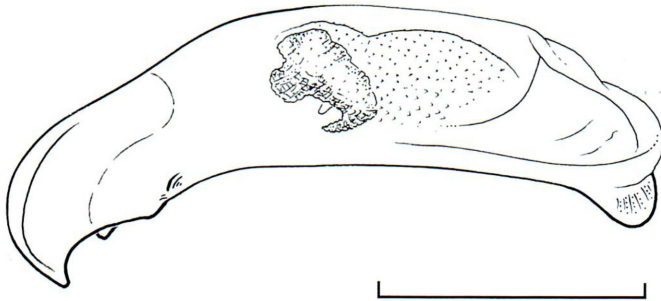


Fig. 2. Aedeagus of *Armatocillenus* (*Desarmatocillenus*) *nakamurai* MORITA, sp. nov., left lateral view. Scale: 0.3 mm.

hind ones right and with a seta near the tip on each side; basal foveae deep and narrow; anterior transverse impression obliterated; posterior transverse impression deep and transverse and laterally merging into basal foveae; microsculpture composed of isodiametric meshes, but partially disordered.

Elytra elongate with arcuate shoulders; EW/PW 1.25–1.30 (M 1.27) in ♂, 1.24–1.27 (M 1.26) in ♀; EL/EW 1.67–1.74 (M 1.71) in ♂, 1.67–1.79 (M 1.74) in ♀; sides weakly arcuate; preapical emargination usually shallow, rarely rather deep; apical parts rather widely separated from each other; apices obtuse; intervals very weakly convex; striae impressed and impunctate; striae 6 and 7 disappearing at basal 7/10 of elytra; two dorsal pores situated on interval III, close to stria 3 or adjoining the stria 3; anterior dorsal pore situated between basal 2/5 and 3/7 of elytra; posterior one at 3/4 and 17/20; microsculpture coarsely impressed, consisting of isodiametric meshes. WL/EL 0.90–1.00 (M 0.95) in 5 ♂♂.

Metatrochanter normal; ML/FL 0.37–0.44 (M 0.41) in ♂, 0.40–0.44 (M 0.42) in ♀.

Aedeagus elongate, hardly arcuate at middle in lateral view; apical lobe rather elongate and simply rounded at the tip in lateral view; inner sac armed mainly with a mat of scales and several small sclerites; each style provided with a long seta and a short or long seta.

*Type series.* Holotype: ♂ (NSMT), allotype: ♀, 19-IV-2008, S. MORITA & K. NAKAMURA leg. Paratypes: 1 ♂, 6 ♀♀, 28-VI-2007, K. NAKAMURA leg.; 7 ♂♂, 9 ♀♀, 23-XII-2007, K. NAKAMURA leg.; 21 ♂♂, 15 ♀♀, 18-IV-2008, S. MORITA & K. NAKAMURA leg.; 8 ♂♂, 10 ♀♀, 19-IV-2008, S. MORITA & K. NAKAMURA leg.

*Type locality.* Miyazato-chō (the estuary of Riv. Sendai-gawa), Satsuma-sendai-shi, Kagoshima Prefecture, Southwest Japan.

*Notes.* This new species can be distinguished from the other members of the subgenus in having a combination of the following features: 1) body small and fragile, 2) elytral with dark brown part, 3) apical part of left mandible without tooth, 4) PA/PB 1.12–1.26, 4) elytral preapical emargination shallow, 5) hind wings reduced, 6) metatro-



chanter normal (ML/FL 0.37–0.44), and 7) aedeagal apical lobe rather elongate and not straight in lateral view.

The standard ratios of body parts given in the descriptive part are those of five males and five females.

## 要 約

森田誠司：日本産ミズギワゴミムシ類の知見. XVI. キバナガミズギワゴミムシ *Armatocillenus* の1新種. — 鹿児島県薩摩川内市から発見されたキバナガミズギワゴミムシ属 *Armatocillenus* の1新種を記載した. この種は、小型で、後翅は縮小し、特徴的な上翅の色彩などから、容易にほかの種と識別される.

## References

- BAEHR, M., 1995. Three new species of *Bembidion* (s. l.), subgenus *Desarmatocillenus* NETOLITZKY, from the Philippines and Australia (Insecta: Coleoptera: Carabidae: Bembidiinae). *Stuttgarter Beitr. Naturk.*, (A) (525): 1–8.
- LINDROTH, C. H., 1980. A revisional study of the taxon *Cillenus* SAMOUELLE, 1819 and related forms (Coeloptera [sic]: Carabidae, Bembidiini). *Ent. Scand.*, 11: 179–205.