

A New Subspecies of *Amara* (*Armatoleirides*) *kenzanensis* (Coleoptera, Carabidae) from Central Kinki District, Japan

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Abstract A new subspecies of *Amara* (*Armatoleirides*) *kenzanensis* is described from the Kii Peninsula, Kinki district, Japan under the name of *A. (A.) k. yadai* MORITA, subsp. nov.

The purpose of this paper is to describe a new subspecies of *Amara* (*Armatoleirides*) *kenzanensis* from the Kii Peninsula, Kinki district, Japan under the name of *A. (A.) k. yadai* subsp. nov.

The abbreviations used herein are the same as those explained in my previous papers.

Before going further, I wish to express my deep gratitude to Messrs. Masato MORI and Hideo YADA for supplying me with important material. Deep gratitude is also due to Mr. Ichiro OSHIO for his assistance in taking the photograph inserted in this paper.

Amara (*Armatoleirides*) *kenzanensis yadai* MORITA, subsp. nov.

(Figs. 1–6)

Description. L: 8.00–9.14 mm. Body rather narrow. Body black; ventral side blackish brown to black; sides of pronotum and appendages brown.

Head wide and convex, with small and moderately convex eyes; genae convex and very short; frontal furrows linear, deep and reaching the mid-eye level, usually slightly divergent posteriad, or almost parallel to each other, sometimes inwardly arcuate; anterior supraorbital pore foveolate of moderate size and situated at the mid-eye level or a little before that level; posterior supraorbital pore weak and situated at the post-eye level; lateral grooves straight, deep, and becoming shallower posteriad; microsculpture consisting of isodiametric meshes in ♂, and of wide to transverse ones in ♀; mentum tooth rather wide and bifid at the tip; apex of labrum narrow and moderately emarginate at the median part; apical margin of clypeus almost straight or weakly emarginate and depressed along the margin; relative lengths of antennal segments as follows:— I : II : III : IV : V : VI : XI ≐ 1 : 0.61 : 1.16 : 1.08 : 1.02 : 0.95 : 1.08 in ♂, ≐ 1 : 0.60 : 1.15 : 1.05 : 0.96 : 0.92 : 1.05 in ♀.

Pronotum wide, moderately convex and widest at about middle; PW/HW 1.49–1.64 (M 1.49) in ♂, 1.57–1.64 (M 1.61) in ♀; PW/PL 1.44–1.54 (M 1.48) in ♂, 1.44–1.55 (M 1.49) in ♀; PW/PA 1.45–1.54 (M 1.49) in ♂, 1.48–1.53 (M 1.51) in ♀; PW/PB 1.23–1.26 (M 1.25) in ♂, 1.25–1.30 (M 1.27) in ♀; apex widely emarginate and vaguely bordered at the sides; apical angles weakly produced and rounded at the tips; PA/PB 0.81–0.86 (M 0.84) in ♂, 0.82–0.87 (M 0.85) in ♀; sides widely and moderately arcuate, and weakly sinuate just before hind angles; median line finely impressed, close to apex, and almost reaching base; anterior marginal setae situated near the widest point; anterior transverse impression vestigial; basal fovea rather deep,

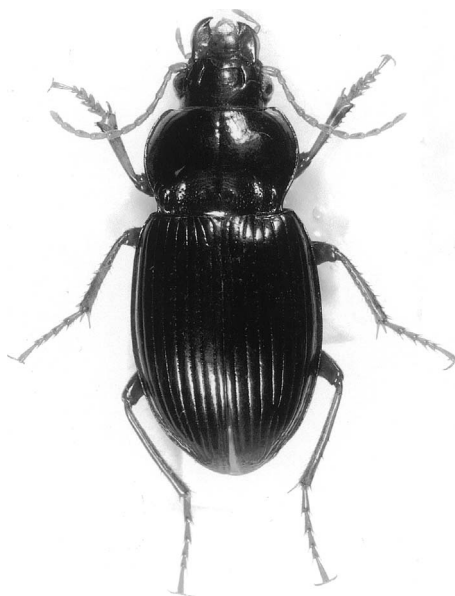


Fig. 1. Habitus of *Amara (Armatoleirides) kenzanensis yadai* MORITA, subsp. nov.

with two linear bottoms on each side, and coarsely and sparsely punctate; hind angles obtuse or rectangular; median part of base weakly produced and finely punctate; microsculpture partially consisting of wide or isodiametric meshes or partially vanished in ♂, and of isodiametric or wide ones in ♀.

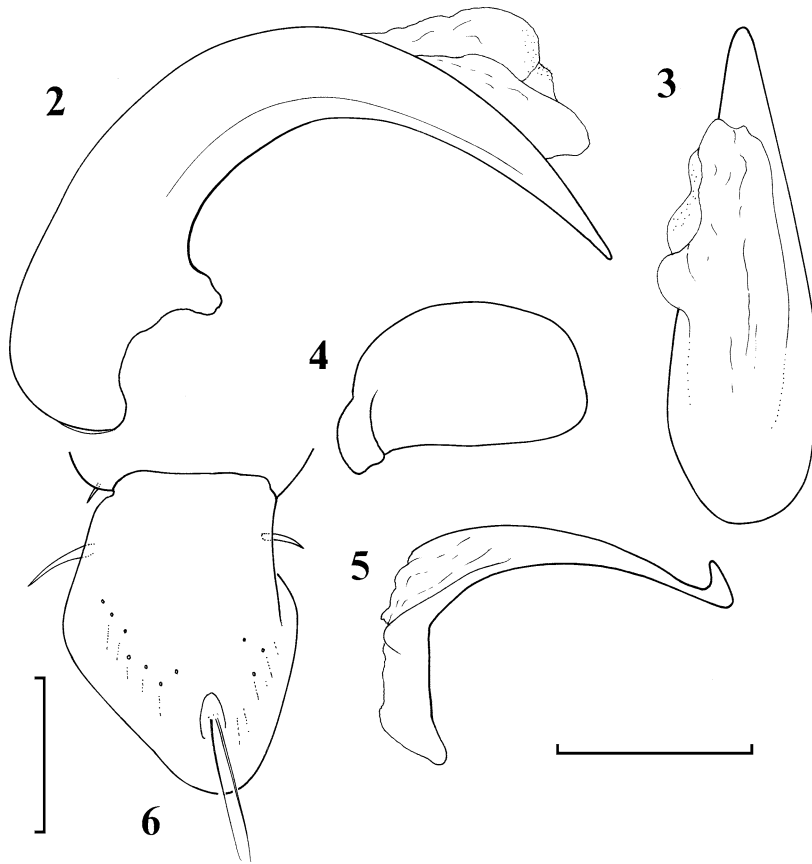
Elytra rather elongate, moderately convex, and widest at about middle; EW/PW 1.15–1.22 (M 1.18) in ♂, 1.14–1.19 (M 1.17) in ♀; EL/EW 1.33–1.39 (M 1.36) in ♂, 1.33–1.43 (M 1.40) in ♀; shoulder with a tooth on each side; sides briefly and moderately arcuate just behind shoulders, very weakly so, and then weakly so towards apices, with very shallow preapical emargination on each side; apices rounded, with a very small re-entrant angle at suture; striae rather deep and weakly crenulate or finely punctate; intervals weakly convex and impunctate; basal border weakly arcuate and usually joining striae 2–6; marginal series of umbilicate pores 14–15 in number; microsculpture very weakly impressed and composed of wide or transverse meshes in ♂, and clearly impressed and consisting of isodiametric meshes in ♀.

Wings reduced; WL/EL 0.28–0.31 in 3 ♂♂, 0.27 in 1 ♀.

Prosternum with a small and rounded fovea at middle in ♂; apical part of mesepisternum and sides of metasternum finely punctate; basal two sternites coarsely and sparsely punctate; in ♂, sides of anal sternite very narrowly bordered at basal part, rather deeply sinuate posteriad, widely bordered at apical part, and with narrowly rounded apex.

Outer apical corner of protibia not produced; inner side of metatibia with many short hairs in apical half in ♂; each metafemur with two setae; claw segment of metatarsus with four pair of hairs below.

Genital segment with short and wide handle. Aedeagus elongate, strongly arcuate, and with large basal part; viewed dorsally, apical part gradually narrowed towards apex; apex simply rounded in dorsal view; apical membranous part very wide, and occupying from right wall to dorsal side.



Figs. 2–6. Genital organ of *Amara* (*Armatoleirides*) *kenzanensis yadai* MORITA, subsp. nov. — 2, Aedeagus, left lateral view; 3, aedeagus, dorso-apical view; 4, left paramere, left lateral view; 5, right paramere, left lateral view; 6, apical styli in female. (Scale: 0.8 mm for 2–5; 0.2 mm for 6.)

Inner sac covered with microscopic spinules. Right paramere elongate with hooked apex as in Fig. 5; left paramere as in Fig. 4. In ♀, apical styli rather elongate, with two thin spines.

Type series. Holotype: ♂, 31-X-2009, H. YADA leg. (NSMT.) Paratypes: 3 ♂♂, 4 ♀♀, 31-X-2009, H. YADA leg.; 5 ♂♂, 1 ♀, 21-XI-2010, M. MORI leg.; 7 ♂♂, 2 ♀♀, 28-XI-2010, H. YADA leg.

Type locality. Mt. Gyôsen-dake, Shimokitayama-mura, Nara Prefecture, Central Kinki district, Japan.

Notes. This new subspecies is distinguished from the nominotypical subspecies (ISHIDA & SHIBATA, 1961) by the following points: 1) body narrower, 2) apex of labrum more strongly emarginate, 3) sides of pronotum more strongly sinuate, 4) elytral base narrower, 5) apical part of anal sternite less strongly produced, and 6) aedeagus strongly arcuate throughout, with robust basal half.

The standard ratios of body parts shown in the descriptive part are those of 7♂♂ and 5♀♀.

要 約

森田誠司：ケンザンミヤママルガタゴミムシ（コウチュウ目オサムシ科）の1新亜種。—— 紀伊半島で採集されたミヤママルガタゴミムシの種を、ケンザンミヤママルガタゴミムシ *Amara* (*Armatoleirides*) *kenzanensis* ISHIDA et SHIBATA の新亜種とみなし、*A. (A.) kenzanensis yadai* MORITA という新名を与えて記載した。この亜種は、体は幅狭く、上唇前縁は、より強く湾入し、前胸背板の側縁は、後角直前で強く波曲する。陰茎は、強く彎曲し、基部は、比較的太いなどの特徴が、みとめられる。

Reference

- ISHIDA, H., & T. SHIBATA. 1961. Three new species of Pterostichini from the mountains of Shikoku, Japan (Coleoptera, Carabidae). *Trans. Shikoku ent. Soc.*, 7: 5–12.

Manuscript received 28 February 2011;
revised and accepted 4 May 2011.