Elytra, *Tokyo*, New Series, **9** (2): 199–202
December 25, 2019

Notes on the Species of the Carabidae (Coleoptera) of Japan

II. A New Species of the Genus *Platynus*

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Abstract *Platynus kurosai* Morita, sp. nov., is described from the island of Nakano-shima of the Tokara Islands in the Ryukyus, southwestern Japan. It is related to *Platynus magnus* (Bates).

Since the monograph of "Platynini" (Habu, 1978) was published, more than forty years have passed. Nowadays, the understanding of taxa of Japanese species has advanced significantly. However, many problems still remain. Though only two specimens of the new species of the genus *Platynus* are now at hands, I have decided to describe it in this paper.

The late Dr. Kazuyoshi Kurosa, who was the specialist on scutacarid mites associated with carabid beetles and passed away in this year, affectionately watched my study of carabid beetles for a long time. My deep thanks are due to him, and the new species of *Platynus* described herein is named to his memory.

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; H — holotype; P — paratype. The PB value was taken by the width between the roots of hind angular setae.

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

Platynus kurosai Morita, sp. nov.

[Japanese name: Kurosa-ôhirata-gomimushi]

(Figs. 1 & 3)

Platynus (*Pseudoplatynus*) *magnus*: Morita, 1994: 259 (partim.).

Description. L: 11.10–13.29 mm. Body relatively flat and narrow. Colour as in *Platynus magnus*.

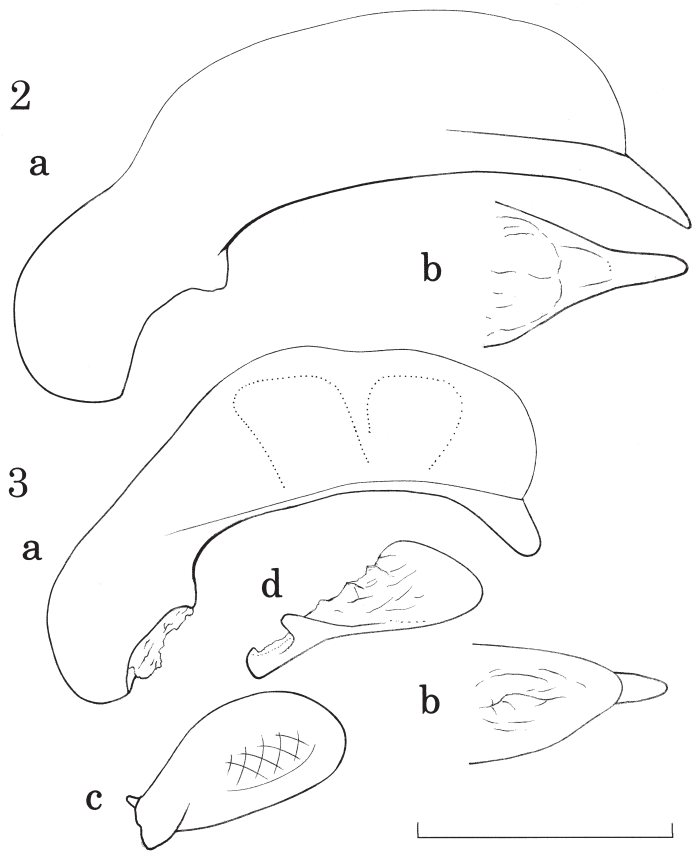
Head moderately convex and polished; eyes strongly convex; frontal furrows deep and linear, parallel to each other in front, thence weakly divergent posteriad, and reaching the level of the anterior supraorbital pore on each side; a pair of anterior supraorbital pores situated at the level of basal 2/3 of eyes; a pair of posterior supraorbital pores situated a little before or at the post-eye level; genae short, oblique and very weakly arcuate; PW/HW 1.28 in H, 1.28 in P; vertex moderately convex; neck rather short; labrum transverse with almost straight or weakly emarginate apical margin; mental tooth narrow, moderately porrect and narrowly rounded at the tip; penultimate segment of maxillary palpus about as long as terminal segment; penultimate segment of labial palpus a little longer than terminal segment; antennae long, reaching basal 1/3–4/11 of elytra; relative lengths of antennal segments as follows: I : II : III : IV : V : VI : XI ≒ 1 : 0.64 : 1.07 : 1.18 : 1.11 : 1.11 : 0.98 in H, 1 : 0.52 : 1.08 :

Fig. 1. *Platynus kurosai* MORITA, sp. nov.

1.26 : 1.20 : 1.12 : 1.08 in P.

Pronotum rather wide, rather weakly convex and widest at basal 2/5; PW/PL 1.33 in H, 1.28 in P; PW/PA 1.60 in H, 1.56 in P; PW/PB 1.38 in H, 1.36 in P; PA/PB 0.86 in H, 0.87 in P; apex weakly emarginate, and clearly bordered throughout; apical angles moderately produced and widely rounded at the tips; sides rather strongly arcuate in front, and convergent towards hind angles; lateral side reflexed and wide, becoming wider towards base; side gutters vague; microsculpture very weakly impressed, composed of minute transverse meshes or lines on the disc; anterior transverse impression shallow in median part, but obliterated or vestigial on the sides; posterior transverse impression shallow; median line clearly impressed, thin and not reaching apex nor base; base slightly emarginate in median part, weakly arcuate on the sides and bordered between basal foveae; a pair of anterior marginal setae inserted at the widest part; hind angles obtuse, each with a seta at the tip.

Elytra elongate, moderately convex and widest a little behind the middle; EW/PW 1.67 in H, 1.69 in P; EL/EW 1.65 in H, 1.65 in P; basal border weakly and posteriorly arcuate between suture and base of interval VI on each side; basal part rather wide; shoulders moderately rounded; sides very slightly divergent towards the widest part, deeply emarginate in subapical part; apex rounded; striae rather shallow and impunctate; scutellar striole long, usually free at the apical end, rarely very close to stria 1; three dorsal pores situated on interval III of which the first adjoins stria 3 while the remaining two adjoins stria 2; the first pore situated at a level of basal 1/5, the second situated a little before the middle, and the third situated at a level of basal 3/4 or basal 7/10; microsculpture strongly impressed,



Figs. 2–3. Male genital organ of *Platynus* spp. —— 2, *Platynus magnus* (BATES) from Takara-jima Is.; 3, *P. kurosai* MORITA, sp. nov. —— a, Aedeagus, left lateral view; b, apical part of aedeagus, dorsal view; c, left paramere, left lateral view; d, right paramere, left lateral view. Scale: 1.00 mm.

composed of transverse meshes; intervals moderately convex; marginal series composed of 19 umbilicate pores on each side; epipleuron very wide in basal part, becoming narrower towards apex.

Ventral surface smooth, with genae transversely wrinkled; sternite VII wide, with two or three setae.

Legs rather slender; mid tibia with mass of rug-like pubescence (cf. HABU, 1978, p. 18); protarsomeres smooth on dorsal side; basal two segments of mesotarsomeres longitudinally bisulcate, though inner sulcuses are vestigial; basal three segments of metatarsomeres longitudinally bisulcate, though inner sulcuses are vestigial; segment 4 of metatarsomeres without subapical setae (cf. HABU, 1978, p. 14) ; TL/HW 1.43 in H, 1.41 in P.

Genital segment elongate; handle short and wide.

Aedeagus short, robust, strongly bent at apical 1/4 and highest at the middle in lateral view; basal orifice narrow and small; basal part not large, without sagittal aileron; apical lobe elongate and simply rounded at the apex in dorsal view, and very thick in lateral view.

Right paramere elongate with narrow basal part. Left paramere oval.

Type series. Holotype: ♂, Satomura, 21–27.III.1976, S. MORITA leg. Paratype: 1 ♂, Mt. Ô-take, 24.X.1992, S. KANENO leg.

Locality. Satomura and Mt. Ô-take, Nakano-shima Is., of the Tokara Islands, Kagoshima Prefecture, southwestern Japan.

Specimens compared. *Platynus magnus* (BATES): 5 ♂♂, Takara-jima Is., the Tokara Islands, Kagoshima Prefecture, southwestern Japan., 29.III–7.IV.1976, S. MORITA leg.

The body length and standard ratios of body parts of five males from Takara-jima Is. are as follows: — L: 11.71–14.85 mm; relative lengths of antennal segments as follows: I : II : III : IV : V : VI : XI ≒ 1 : 0.45 : 1.10 : 1.19 : 1.18 : 1.12 : 1.04; PW/HW 1.28–1.31 (M 1.29); PW/PL 1.25–1.34 (M 1.29); PW/PA 1.47–1.60 (M 1.56); PW/PB 1.26–1.38 (M 1.32); PA/PB 0.80–0.87 (M 0.84); EW/PW 1.61–1.69 (M 1.66); EL/EW 1.65–1.72 (M 1.68); TL/HW 1.41–1.55 (M 1.48).

Notes. Judging from the shape of the pronotum and the structure of mid tibiae, this new species is closely allied to *Platynus magnus* (BATES, 1873, p. 278). It is, however, distinguished from the latter by the following points: 1) body smaller, 2) pronotum with narrower reflexed sides, and 3) aedeagus decisively different in shape (strongly bent at basal 1/4 in lateral view and with shorter and thicker apical lobe).

Derivation of specific epithet. The specific epithet is dedicated to the late Dr. Kazuyoshi KUROSA.

要　　約

森田誠司：日本産オサムシ科甲虫（鞘翅目）の研究 II. オオヒラタゴミムシ属 *Platynus* の 1 新種．——— MORITA (1994) が，トカラ列島中之島から記録したオオヒラタゴミムシ *Platynus magnus* (BATES) の雄標本のなかから，顕著な交尾器を有する未記載種を見出したので，クロサオオヒラタゴミムシ *Platynus kurosai* MORITA, sp. nov. として命名，記載した．

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Manuscript received 1 March 2019;
revised and accepted 7 June 2019.