

A New *Pterostichus* (Coleoptera, Carabidae)
from Gifu Prefecture, Central Japan

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Abstract A new macrocephalic pterostichine carabid beetle, *Pterostichus kuraiyamanus* sp. nov., is described from Gifu Prefecture, Central Japan.

The purpose of this paper is to describe a new pterostichine carabid species discovered recently.

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; M – arithmetic mean; NSMT – National Museum of Nature and Science, Tokyo.

Before going further, I wish to express my deep gratitude to Dr. Shun-Ichi UÉNO of the National Museum of Nature and Science, Tokyo, for critically reading the original manuscript of this paper.

Pterostichus kuraiyamanus MORITA et OHKAWA, sp. nov.

[Japanese name: Kuraiyama-ôzu-naga-gomimushi]

(Figs. 1–9)

Diagnosis. A *Pterostichus* species with extremely large head and entirely flat eyes; body rather smooth; in ♂, anal sternite polished; aedeagal ventral side with a small tumor at apical half.

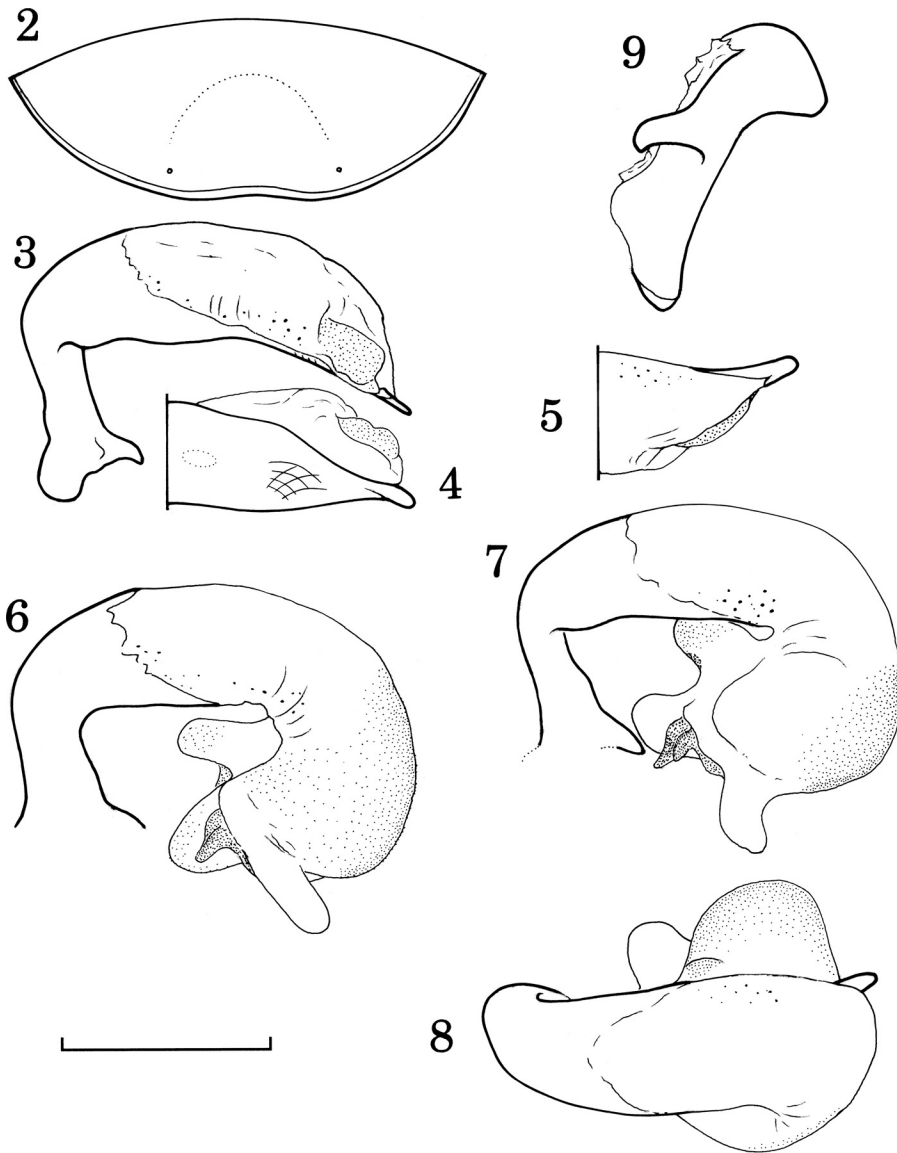
Description. L: 13.28–15.57 mm in ♂, 16.42–17.86 mm in ♀. Body flat. Colour brown to dark brown; appendages dark brown.



Fig. 1. *Pterostichus kuraiyamanus* MORITA et OHKAWA, sp. nov.

Head very large and convex; eyes entirely flat; frontal furrows shallow, short and almost parallel to each other or weakly curved inwards at the posterior ends; lateral grooves deep, straight, wide in front, becoming narrower towards posterior ends and reaching posterior supraorbital pore on each side; several additional grooves or oblique wrinkles situated a little outside lateral groove and convergent towards posterior end of lateral groove on each side; surface sparsely and very finely punctate; PW/HW 1.05–1.12 (M 1.09) in ♂, 1.00–1.03 (M 1.01) in ♀; genae strongly convex; microsculpture almost obliterated, partially consisting of wide meshes; mentum tooth stout and bifid; relative lengths of antennal segments as follows:— I : II : III : IV : V : VI : XI = 1 : 0.44 : 0.78 : 0.77 : 0.75 : 0.76 : 0.72 in ♂ and ♀.

Pronotum trapezoidal, weakly convex and widest at about apical 1/5 in ♂ (mea-



Figs. 2-9. *Pterostichus kuraiyamanus* MORITA et OHKAWA, sp. nov. — 2, Anal sternite in ♂; 3, aedeagus, left lateral view; 4, apical half of aedeagus, ventral view; 5, apical part of aedeagus, dorsal view; 6, aedeagus, showing everted inner sac, slightly oblique left lateral view; 7, same, showing individual variation; 8, same, dorsal view; 9, right paramere, left lateral view. (Scale: 1 mm for Figs. 2-8; 2 mm for Fig. 9.)

sured along the median line), apical 1/10 in ♀; apex widely and moderately emarginate; PW/PL 1.49–1.54 (M 1.51) in ♂, 1.49–1.66 (M 1.56) in ♀; sides widely and weakly arcuate in front, and then shallowly sinuate at basal 1/5 in ♂ (measured along mid line), 1/5–1/4 in ♀, and weakly divergent towards hind angles; base moderately emarginate at median part, transverse or slightly oblique inside each hind angle; PW/PA 1.13–1.15 (M 1.14) in ♂, 1.07–1.11 (M 1.08) in ♀, PW/PB 1.23–1.29 (M 1.27) in ♂, 1.27–1.34 (M 1.31) in ♀, PA/PB 1.09–1.13 (M 1.11) in ♂, 1.18–1.22 (M 1.21) in ♀; apical angles strongly produced and simply rounded at the tips; hind angles sharp; anterior pair of marginal setae inserted at the widest part; posterior ones a little before and inside hind angles; anterior transverse impression very shallow at the median part and obliterated at the sides; median line moderately impressed between anterior and posterior impressions; basal foveae shallow, linear at the bottom, and sparsely and finely punctate; disc with fine and transverse wrinkles; microsculpture composed of fine and wide or transverse meshes in ♂, and of fine and transverse meshes in ♀; surface finely and very sparsely punctate; basal part between bottoms of basal foveae weakly wrinkled.

Elytra elongated ovate, very weakly convex and widest at about middle or a little behind the middle; EW/PW 1.19–1.21 (M 1.20) in ♂, 1.14–1.17 (M 1.15) in ♀, EL/EW 1.55–1.58 (M 1.57) in ♂, 1.59–1.68 (M 1.64) in ♀; shoulders square but the corners are rounded; sides very weakly arcuate, and then moderately arcuate at the apical parts, with shallow and narrow preapical emargination on each side; apices widely separated from each other, and sutural angle obtuse in ♂; apices usually weakly separated from each other and sutural angle rather sharp or dentate in ♀; in 1 ♀, apices conjoint each other; scutellar striole rather long, situated on interval I, and joining basal border which is weakly arcuate; striae very shallow throughout and smooth or very weakly crenulate; basal pore situated at base of stria 1 or at interval II and adjoining stria 1; two dorsal pores situated on interval III and adjoining stria 2; anterior dorsal pore situated at basal 3/7 to a little behind the middle; posterior dorsal pore situated at basal 4/5–17/20; intervals weakly convex, very sparsely and finely punctate; basal parts of intervals VII and VIII usually with transverse wrinkles; microsculpture rather coarsely impressed, composed of wide or polygonal meshes; inner plica visible; epipleuron gradually narrower towards apex; marginal series composed of 13–14 pores. TL/HW 0.94–1.00 (M 0.99) in ♂, 0.87–0.93 (M 0.90) in ♀.

Genae usually smooth on ventral side; prepisternum sparsely and finely punctate; mesosternum, mesepisternum, metasternum and sides of sternite 1 sparsely and finely punctate.

Anal sternite shallowly concave at median part, the concavity being smooth and polished, and very narrowly emarginate at apex in ♂; in ♀, anal sternite wide, narrowly depressed and obliquely wrinkled along the margin, and impressed with microsculpture of polygonal meshes.

Aedeagus elongate, strongly bent at basal third; basal part thin; viewed dorsally, apical lobe rather elongate, weakly inclined to the right and with simply rounded apex; ventral side with a small tumor at apical half. Inner sac composed of three small lobes

as in Figs. 6–8. Right paramere small and strongly bent at apical third and with obtuse apex; left paramere square.

Type series. Holotype: ♂, 23-IX~17-X-2009, H. OHKAWA leg. (NSMT). Paratypes: 1 ♂, 5 ♀♀, 19-VIII~23-IX-2009, H. OHKAWA leg.; 2 ♂♂, 2 ♀♀, 23-IX~17-X-2009, H. OHKAWA leg.; 3 ♂♂, 2 ♀♀, 17-X~15-XI-2009, H. OHKAWA leg.

Locality. Mt. Kurai-yama, Ichinomiya-machi, Takayama-shi, Gifu Prefecture, Central Japan.

Notes. This new species is closely allied to *Pterostichus shojii* SUGIMURA (2006, p. 34). It is, however, distinguished from the latter mainly by rather smooth surface, the polished anal sternite in ♂ and the aedeagus with a small tumor.

It is difficult to make a comparison in the illustrations of the aedeagus and right paramere given by the workers, including ourselves, because they are in different directions. Although the original description of *P. shojii* was given very carefully, the illustration of the aedeagus of that species is not the left lateral view, but the left ventro-lateral view.

The standard ratios of body parts shown in the descriptive part are those of 4 ♂♂ and 6 ♀♀.

要 約

森田誠司・大川秀雄：岐阜県産オオズナガゴミムシ（コウチュウ目オサムシ科）の1新種——岐阜県高山市から採集されたナガゴミムシを新種と認め、クライヤマオオズナガゴミムシ *Pterostichus kuraiyamanus* sp. nov. と命名記載した。この種は、岐阜県下呂市から知られているゲロオオズナガゴミムシ *P. shojii* SUGIMURA に近い種と思われるが、体表面の点刻が少なく、雄腹端節が、完全に滑沢であること、陰茎下面の状態などで識別される。

Reference

- SUGIMURA, A., 2006. A new species of the genus *Pterostichus* (Coleoptera, Carabidae) from Mt. Shirakusayama in Gero-shi of Gifu Prefecture, Central Japan. *Elytra, Tokyo*, **34**: 33–39.