A New *Pterostichus* (Coleoptera, Carabidae) from the Gotô Islands off Western Kyushu, Southwest Japan

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Abstract A new pterostichine carabid beetle, *Pterostichus (Pterostichus) gotoensis* sp. nov., is described from the Gotô Islands off western Kyushu, Japan. It belongs to the *sphodriformis* group, but is easily distinguished from all the other known members of the species-group by having peculiarly shaped terminal sternite in the male.

A large species of *Pterostichus* was recently obtained on Wakamatsu-jima of the Gotô Islands, off western Kyushu, Southwest Japan. Though not unlike *P. amanoi* NAKANE (1968, pp. 85–86) at first sight, it belongs to the *sphodriformis* group and is doubtless new to science. In the following lines, we are going to describe it under the name of *Pterostichus* (*Pterostichus**) gotoensis.

We deeply thank Dr. Shun-Ichi UÉNO of the National Science Museum (Nat. Hist.), Tokyo, for his advice and for reading the manuscript of this paper, to Ms. Takako NAKAHIRA for her kind support in field researches, and to Messrs. Yoshihiro IKEZAKI and Shôichi IMASAKA for giving us valuable information about the nature of the Gotô Islands.

Pterostichus (Pterostichus) gotoensis sp. nov.

[Japanese name: Gotô-nagagomimushi]

(Figs. 1-3)

Description. Male. Length (measured from apex of labrum to apices of elytra) 19.2 mm. Width 6.3 mm. Black, shiny; labrum and mandibles dark reddish brown to blackish; palpi, antennae and legs reddish brown; venter reddish brown to dark reddish brown.

Head convex; eyes well convex, somewhat prominent; temporae half as long as eyes, swollen; genae smooth; labrum and mandibles normal, though the latter are relatively long; clypeal suture very fine, rather obsolete on each side; frontal furrows

^{*} Sensu Танака, 1985, р. 113.

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shallow though distinct; surface smooth, microsculpture slightly visible; antennae long, extending to a little before the middle of elytra; relative lengths of scape and segments 2-6 as follows:— 1: 0.6: 0.9: 1.05: 1.05: 1; segment 2 ventrally unisetose at apex.

Pronotum subcordate, moderately convex, widest at apical third, 1.3 times as wide as head, 1.24 times as wide as long; lateral margins evenly arcuate in apical halves, then well convergent posteriad, and sinuate before base, basal parts almost parallel; apical margin gently emarginate, not bordered, apical angles produced, rounded at the tips; basal margin a little narrower than the apical, widely emarginate at middle, not bordered, basal angles almost rectangular, blunt at the tips; median line deep; basal foveae distinct, punctate; apical crescent and basal transverse depressions obsolete; surface smooth, microsculpture slightly visible.

Apterous. Elytra oblong-subovate, convex, widest at about middle, 1.23 times as wide as pronotum, 2.63 times as long as pronotum, 1.7 times as long as wide; shoulders rounded; preapical emarginations rather distinct; sutural angles distinct, though blunt at the tips; scutellar striole short, lying on interval 2, and arising from basal pores; striae deeply and finely impressed, minutely crenulate at bottoms; intervals convex, microsculpture well visible, formed by transverse meshes; interval 3 with three dorsal pores, anterior one at about basal third and adjoining stria 3, while the posterior two adjoin stria 2, at about middle and apical fourth, respectively; marginal series of pores 19 in number. Legs slender; metatarsus 1.45 times as long as width of head.

Venter smooth; prosternal process furrowed at middle, vaguely bordered at apex; terminal sternite widely and deeply excavated at middle, apical margin distinctly produced between a pair of marginal setae. Aedeagus strongly bent at basal two-fifths, then widely and distinctly tumid ventrad; ventral surface longitudinally carinate at middle of preapical part, the carina interrupted by a notch; apical lobe small, rounded at apex; inner sac containing a sclerotized copulatory piece near apical aperture; left paramere wide, square; right one rather stout, rounded at apex.

Female unknown.

Holotype. J, Wakamatsugoe, Wakamatsu-jima, Gotô Islands, Nagasaki Pref., 1-V-1988, T. MATSUMOTO leg.

The holotype is preserved in the collection of the Department of Zoology, National Science Museum (Nat. Hist.), Tokyo.

Notes. Most pterostichine carabids belonging to the *sphodriformis* group cannot be easily distinguished from one another, because their specific characters are not prominent in general. The present new species is, however, so distinctive in the shape of male terminal sternite that it cannot be confused with any of its relatives hitherto known. Its existence seems to suggest an interesting zoogeographical situation of the Gotô Islands.

Unfortunately, no female specimen of *P. gotoensis* has been available for our study. IMASAKA and EJIMA (1981, pp. 353-361, fig. 4 B) recorded a pterostichine

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New Pterostichus from the Gotô Islands

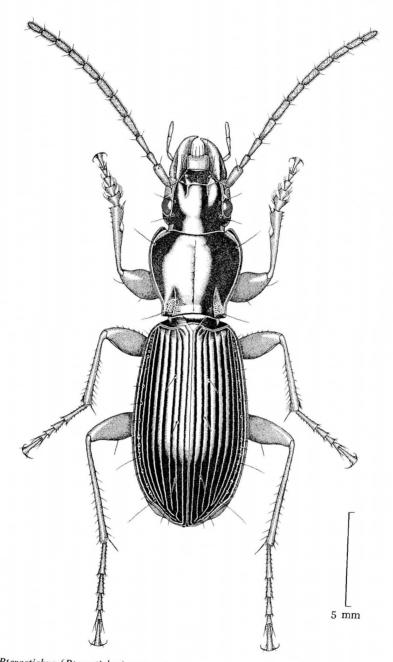


Fig. 1. Pterostichus (Pterostichus) gotoensis sp. nov., S, from Wakamatsu-jima of the Gotô Islands in Nagasaki Prefecture.

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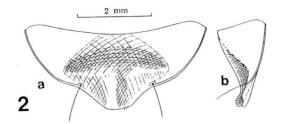


Fig. 2. Terminal sternite in the male of *Pterostichus (Pterostichus) gotoensis* sp. nov., from Wakamatsu-jima of the Gotô Islands in Nagasaki Prefecture; a, ventral view; b, left lateral view.

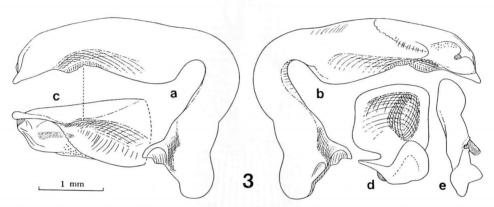


Fig. 3. Male genitalia of *Pterostichus (Pterostichus) gotoensis* sp. nov., from Wakamatsu-jima of the Gotô Islands in Nagasaki Prefecture; a-c, aedeagus; a, right lateral view; b, left lateral view; c, apical third in ventral view; d, left paramere; e, right paramere.

as *P. amanoi* NAKANE and illustrated it. Judging from the picture and IMASAKA's information, it is highly probable that the specimen in question is not *P. amanoi* but may be the female of *P. gotoensis*.

要 約

笠原須磨生・松本俊信:九州の五島列島産ナガゴミムシ属(オサムシ科)の1新種. — 長崎県五 島列島の若松島から,ナガゴミムシ属の1新種,ゴトウナガゴミムシ Pterostichus (Pterostichus) gotoensis を記載した.本種はヒョウゴナガゴミムシ種群 sphodriformis group に属する. 雄の腹板 末端節の中央が深く凹み,後縁が顕著に幅広く突き出していて,種群のなかでも例外的に特異な形態 的特徴をもつため,近縁種との識別はよういである. 雌は未知であるが,今坂・江島(1981)が, P. amanoi NAKANE として図示した個体は,その形態と今坂の私信から推察して,ゴトウナガゴミムシ の雌である可能性が高い.いずれにせよ,本種の発見は,五島列島の動物相に新たな興味を加えるも のである.

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Elytra, Tokyo, 18 (1): 43, May 15, 1990

Chlaenius junceus ANDREWES (Coleoptera, Carabidae) New to the Fauna of Taiwan

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Recently, I recorded a callistine carabid beetle, *Chlaenius junceus* ANDREWES, from Japan (KASAHARA & MATSUMOTO, 1989). Since then, I have had an opportunity to examine a male example of the same species through the courtesy of Mr. Norio OHTANI, to whom I wish to express my sincere thanks.

Chlaenius junceus was originally described from China. According to ANDREWES, four examples designated as syntypes may have come from Hong Kong and Shanghai. It has not been recorded from Taiwan until now.

Chlaenius junceus ANDREWES

ANDREWES, 1923, Annls. Mag. nat. Hist., (9), 11: 336–337 [China]; 1930, Cat. Ind. Ins., (18): 95; 1941, Annls. Mag. nat. Hist., (11), 7: 307. — СSIKI, 1931, Coleopt. Cat., pars 115: 958. — КАЗАНАКА & МАТЅИМОТО, 1989, Coleopt. News, Tokyo, (87/88): 5–7.

Specimen examined. 1 3, Kenting, Taiwan, 25-V-1972, Н. Үокоуама leg.

Though the Taiwanese individual (length 9.7 mm) is smaller than the Japanese one (length 12 mm), almost no difference can be observed between the two.