Elytra, *Tokyo*, **36**(1): 205–208, May 30, 2008

Notes on the Pterostichine Subgenus *Eosteropus* (Coleoptera, Carabidae) from Japan

Part 2. A New Species from the Tôhoku District, with a Note on the Cotype of *Pterostichus fuligineus*

Seiji MORITA

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

Abstract A new pterostichine carabid beetle is described from the Tôhoku District, North Japan, under the name of *Pterostichus* (*Eosteropus*) *noborui*. It is related to *P.* (*E.*) *tokui* MORITA, but differs from it in the shape of the hind angles of pronotum. A problem about the cotype of *Pterostichus* (*Eosteropus*) *fuligineus* MORAWITZ is noted.

The main purpose of this short paper is to describe a new species and to accommodate it in my earlier key given in the last year.

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 Dr. Shun-Ichi UÉNO of the National Museum of Nature and Science, Tokyo, for critically reading the original manuscript of this paper. My thanks are also due to Mr. Noboru ITO for supplying me with important material.

Dr. Shun-Ichi YOSHIMATSU gave me an opportunity of examining the specimen of this new species. I thank him for his kind help. Dr. German Sh. LAFER offered me invaluable information about the cotype of *P.* (*E.*) *fuligineus*. I thank him for his kind advice.

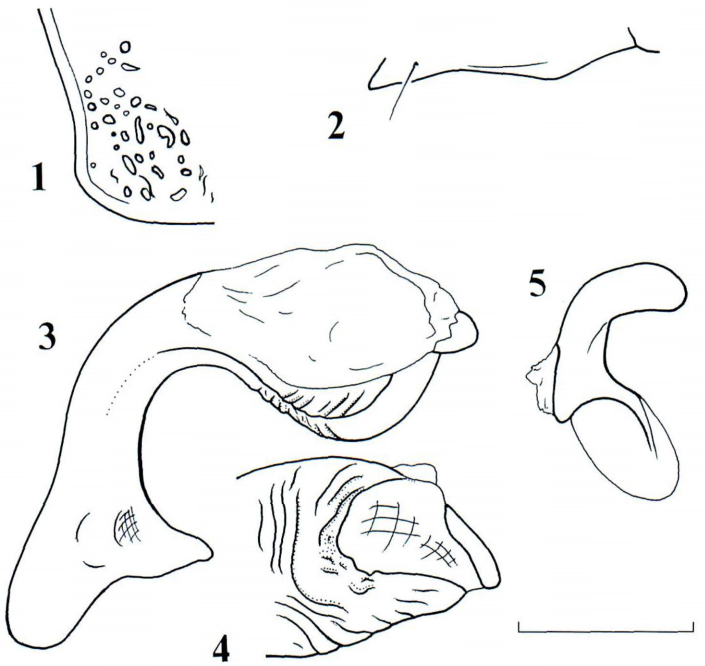
Pterostichus (*Eosteropus*) *noborui* MORITA, sp. nov.

[Japanese name: Iide-kuro-naga-gomimushi]

(Figs. 1–5)

Diagnosis. Sides of pronotum slightly sinuate before hind angles; hind angles of pronotum angulate or obtuse; in ♂, anal sternite with a carina; basal half of aedeagus weakly arcuate; right wall of aedeagus very high; ventral edge of right wall strongly incurved towards the narrow fovea; right paramere of male genitalia small and C-shaped.

Description. L: 14.0–14.6 mm. Body rather large; colour as in *P.* (*E.*) *tokui*



Figs. 1–5. Body parts in *Pterostichus* (*Eosteropus*) *noborui* MORITA, sp. nov. —— 1, Left hind angle of pronotum; 2, anal sternite, right lateral view; 3, aedeagus, left lateral view; 4, apical part of aedeagus, ventral view; 5, right paramere, left lateral view. (Scale: 1.0 mm.)

MORITA. Head as in *P.* (*E.*) *tokui* MORITA, but the eyes are more convex; relative lengths of antennal segments as follows:— I : II : III : IV : V : VI : XI ≒ 1 : 0.50 : 0.85 : 0.93 : 0.90 : 0.92 : 0.85.

Pronotum less convex; sides moderately arcuate, strongly convergent, and then sinuate before hind angles which are angulate or obtuse; PW/HW 1.33–1.34 (M 1.34), PW/PL 1.20–1.27 (M 1.22), PW/PA 1.34–1.37 (M 1.36), PW/PB 1.39–1.53 (M 1.45), PA/PB 1.02–1.15 (M 1.08) in 3 ♂♂; basal foveae very shallow and with many coarse punctures and irregular wrinkles; microsculpture consisting of fine transverse lines.

Elytra rather narrow at basal parts; EW/PW 1.28–1.38 (M 1.33), EL/EW 1.50–1.55 (M 1.52) in 3 ♂♂; striae smooth; basal part of interval VIII usually with several transverse sulci; microsculpture composed of wide meshes; marginal series composed of 17–18 pores; epipleuron gradually narrowed apicad; interval III with three pores; the first pore adjoining stria 3 and situated at about basal 1/5 of elytra, the second one adjoining stria 2 and situated at a little before the middle, and the third one adjoining stria 2 and situated at about basal 4/5 of elytra; WL/EL 0.33 in 1 ♂; TL/HW 1.35, 1.42 in 2 ♂♂; in ♂, anal sternite narrowly arcuate, and with a blunt apex and a longitudinal carina at middle.

Aedeagus of moderate size, and with elongate and arcuate basal part; fovea rather

narrow and deep; left wall with several wrinkles; right wall very high and ventral edge curved inwards; median part of ventral surface widely depressed and strongly and densely wrinkled; right paramere small and C-shaped.

Type series. Holotype: ♂ "VII. 23, 1959" / "Mts. Iide" / "Yamagata P" / "Y. ASANO". Paratypes: 1 ♂, 11–VIII–1984, Nukumidaira, N. ITO leg.; 1 ♂, 13–VIII–1984, same locality, N. ITO leg. The holotype is deposited in the National Institute of Agro-environmental Sciences, Tsukuba.

Locality. Mt. Iide-san, Yamagata Prefecture, Tôhoku District, North Japan.

Notes. My earlier key (2007, p. 409) is modified in order to accommodate *P.* (*E.*) *noborui* MORITA, sp. nov.

8 (3) Right paramere of male genital organ C-shaped, and with rather wide and rounded apex in lateral view.

9 (10) Sides of pronotum arcuate, and not sinuate; hind angles of pronotum rounded or obtuse; anal sternite in ♂ with a carina; right wall of aedeagus very high; [Miyagi, Yamagata, Fukushima and Ibaraki Prefectures]……*P.* (*E.*) *tokui* MORITA.

10 (9) Sides of pronotum sinuate just before hind angles; hind angles of pronotum obtuse or angulate; anal projection and right wall of aedeagus variable.

11 (12) Anal projection triangular; right wall of aedeagus of moderate size; right paramere large; [Fukushima Prefecture]……*P.* (*E.*) *mizunoyai* MORITA.

12 (11) Anal sternite in ♂ with a carina; right wall of aedeagus high; right paramere small; [Yamagata Prefecture]……*P.* (*E.*) *noborui* MORITA, sp. nov.

Postscript

Just after the first part of this study was published, Dr. LAFER informed me of the taxonomic problem about the cotypes of *Pterostichus* (*Eosteropus*) *fuligineus* MORAWITZ. He pointed out that the male shown by myself is not a cotype.

According to the original description, MORAWITZ described this species based on a female. However, there are two males and one female from the type locality, Hakodate, in the Zoological Institute of the Academy of Sciences, Sankt-Peterburg. Therefore, further investigation is needed.

要　　約

森田誠司: 日本産クロナガゴミムシの研究. 2. 東北地方で採集された1新種. —— 山形県飯豊山から採集された標本を基にイイデクロナガゴミムシ *Pterostichus noborui* を記載し, 前報で示した種の検索表を, 改訂した. さらに *Pterostichus fuligineus* の基準標本の問題点について簡単に述べた.

Reference

MORITA, S., 2007. Notes on the pterostichine subgenus *Eosteropus* (Coleoptera, Carabidae) from Japan. Part 1. Complex of *Pterostichus japonicus*. *Elytra, Tokyo*, **35**: 407–432.

Elytra, Tokyo, **36**(1): 208, May 30, 2008

A New Record of *Stenocladius azumai keramensis* KAWASHIMA et F. SATOU, 2004 (Coleoptera, Lampyridae) in the Kerama Group of the Middle Ryukyus

Itsuro KAWASHIMA[1] and Fumiyasu SATOU[2]

[1] Nagasawa 1–50–9, Yokosuka, Kanagawa, 239–0842 Japan
[2] The Kumejima Firefly Museum, Ôta 420, Kumejima-chô, Okinawa, 901–3123 Japan

The luminescent beetle of the lampyrid genus *Stenocladius*, *S. azumai keramensis* was originally described from Tokashiki-jima Is. of the Kerama Group, the middle Ryukyus (KAWASHIMA, & SATOU, 2004, pp. 394–398, figs. 2, 4, 6, 9–10 & 12). In 2006, the junior author was able to collect this subspecies from Aka-jima Island of the same group. We will record it below in this short report.

Specimens examined. [Aka-jima Is., Kerama Group] 5 ♂♂, 2 ♀♀, 5 larvae (2 full-grown & 3 younger to mid-instar individuals), 6–XII–2006, F. SATOU leg.

Distribution. Kerama Group, Okinawa Isls., M. Ryukyus: Tokashiki-jima Is. and Aka-jima Is. (new record).

Notes. It is concluded from comparison of adult males from the two islands recorded above that they cannot be discriminated from each other in any of the following external characteristics: 1) body size; 2) coloration of body including appendages; 3) relative lengths of antennal pectinae and 4) shape of male genitalia. Besides, the color-marking patterns in thoracic and abdominal tergites of larvae are the same as those of individuals from Tokashiki-jima Island.

The adult male has a pair of spot-like luminous organs at the sides of the 7th abdominal segment, which are luminescent weakly but continuously in yellowish green light.

Reference

KAWASHIMA, I., & F. SATOU, 2004. The lampyrid genus *Stenocladius* (Coleoptera, Lampyridae) from the Okinawa Islands, middle Ryukyus, Southwest Japan, with descriptions of two new local populations. *Elytra, Tokyo*, **32**: 389–403.