

A New Species of the Genus *Asiopodabrus* (Coleoptera, Cantharidae) from Eastern Honshu, Japan

Kazuhiro TAKAHASHI

239–11, Nagamochi, Hiratsuka, 259–1217 Japan

Abstract A new cantharid species is described from eastern Honshu under the name of *Asiopodabrus tochiensis* sp. nov., which is included in the *fukudai* lineage of the subgroup of *A. syozoi*. The genus *Asiopodabrus* is regarded herewith as an independent genus.

The genus *Asiopodabrus* which has hitherto been regarded as a subgenus of *Podabrus* is the largest genus-group of the Japanese Cantharidae, and comprises 88 known species at present. This is divided into several species-groups and -subgroups (TAKAHASHI & KIRIYAMA, 2000).

The subgroup of *A. syozoi* (the names of species-group and subgroup are simplified as the “*syozoi* subgroup” in the following text lines) is one of the subgroups of the *macilentus* group, and characterized by the male genitalia bearing widely U-shaped dorsal processes united. In the *syozoi* subgroup, I recognize four lineages, that is, the lineages of *syozoi*, *hyogoensis*, *tsuchikawai* and *fukudai*. The *fukudai* lineage is characterized by having a triangularly projected basal tooth at the inner piece of each middle claw in male, though not only the other lineages of the *syozoi* subgroup but also the other groups or subgroups of the genus *Asiopodabrus* usually have bifurcated claws. This unique lineage consists of only two species, *A. fukudai* (NAKANE et MAKINO, 1990) and *A. kawaianus* (TAKAHASHI et KIRIYAMA, 2000), at present.

NAKANE and MAKINO (1990) described *fukudai* on the basis of the specimens from Aomori Prefecture, northernmost Honshu, and added specimens from Oze, northern Kantô, eastern Honshu to the type series. Through the comparative study of specimens collected from both the localities, however, I concluded that those from northern Kantô are not conspecific with those from Aomori Prefecture. In the present paper, therefore, I am going to describe the latter as a new species. At the same time, I will give a key to the species of this lineage for facilitating determination, a redescription of *A. fukudai*, and some new knowledge about *A. kawaianus*.

Before going further, I wish to express my deep gratitude to Prof. Dr. Masataka SATÔ of Nagoya Women's University for his continuous guidance on my study of the Cantharidae, to Dr. Masatoshi TAKAKUWA of Kanagawa Prefectural Museum of Natural History, Odawara for his critically reading the original manuscript of this paper,

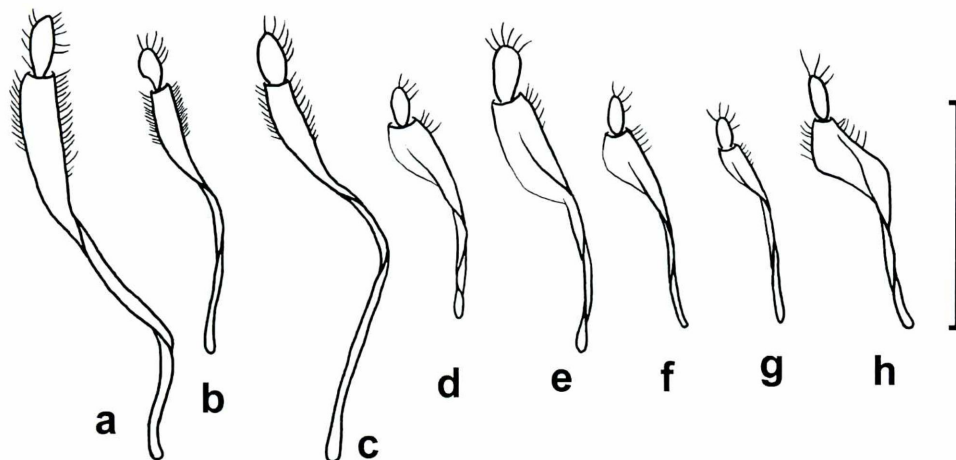


Fig. 1. Right coxite of female genitalia of *Asiopodabrus* spp. and other related species. — a, *Podabrus* (*Podabrus*) *logissimus* PIC from Hokkaido; b, *P. (Dichelotarsus) flavimanus* (MOTSCHULSKY) from Shumushu Is., Kuril Is.; c, *Hatchiana heydeni* (KIESENWETTER) from Ōita Pref., Kyushu; d, *Asiopodabrus macilentus* (KIESENWETTER) from Wakayama Pref., C. Honshu (*macilentus* group); e, *A. pseudolictrius* (TAKAHASHI) from Kanagawa Pref., C. Honshu (*pseudolictrius* group); f, *A. kadowakii* (NAKANE et MAKINO) from Niigata Pref., C. Honshu (*kadowakii* group); g, *A. inexpectus* (TAKAHASHI) from Kanagawa Pref., C. Honshu (*inexpectus* group); h, *A. hinokiboranus* (TAKAHASHI) from Kanagawa Pref., C. Honshu (*hinokiboranus* group). (Scale 0.5 mm.)

- genitalia relatively narrowly conjoined to lateral sides of parameres 2.
- 2. Ventral processes of male genitalia moderately widely conjoined to lateral sides of parameres; dorsal processes relatively narrow, slightly bent inwards near apices *A. tochiensis* sp. nov.
- Ventral processes of male genitalia narrowly conjoined to lateral sides of parameres; dorsal processes relatively broad and nearly straight *A. fukudai* (NAKANE et MAKINO), comb. nov.

Asiopodabrus fukudai (NAKANE et MAKINO, 1990), comb. nov.

(Fig. 2)

Podabrus fukudai NAKANE et MAKINO, 1990, *Fragm. coleopterol.*, Kagoshima, (45/48): 191.

Male. Body medium-sized, almost brownish black; antennal segments 1 and 2 yellowish brown, 3 infusate, 4–11 dark brown; head before eyes, mouth parts, gular suture, lateral sides of pronotum, prosternum except for prosternal process and legs except for tarsi brownish yellow; elytral suture and shoulders testaceous; prosternal process, outer two-thirds of mesosterna and tarsi dark brown; 1st to 7th abdominal segments brownish yellow at each lateral and posterior margin.

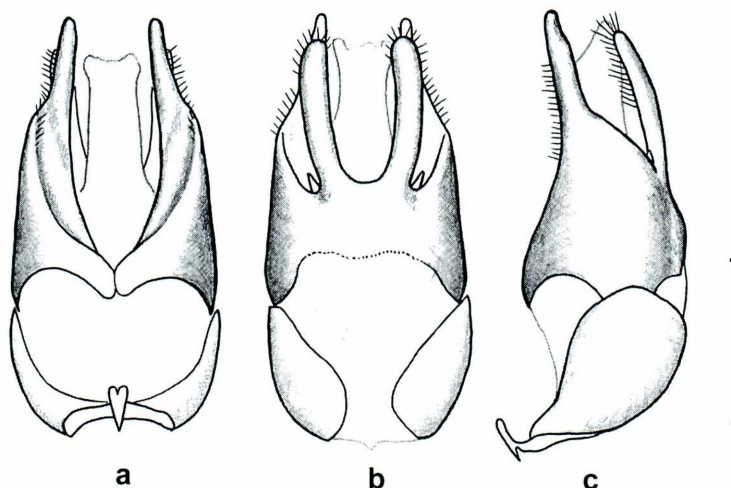


Fig. 2. Male genitalia of *Asiopodabrus fukudai* (NAKANE et MAKINO), comb. nov.; a, ventral view; b, dorsal view; c, lateral view. (Scale 0.5 mm.)

Head scattered with very fine punctures in front, moderately covered with somewhat large punctures behind eyes, and densely so on neck. Antennae filiform and rather short, reaching basal fourth of elytra; relative length of each segment as follows:— 1.81 : 1.00 : 1.01 : 1.38 : 1.40 : 1.52 : 1.46 : 1.46 : 1.52 : 1.42 : 1.85.

Pronotum rather narrow, widest at basal half to three-fourths; PW/HW (0.76–0.82), PW/PL (1.06–1.02), PW/PA (1.34–1.41), PW/PB (1.02–1.06); surface closely covered with moderate punctures in basal half and anterior third except for lateral depressed areas, the remainder sparsely covered with fine punctures; frontal and basal margins almost straight, lateral ones evidently sinuate; anterior angles angulate, posterior ones prominent; disc well elevated except for lateral margins and basal half of middle area. Elytra slender, clearly wider than pronotum; EW/PW (1.47–1.56), EL/EW (3.32–3.52). Front claws and each outer piece of middle ones bifurcated, the other pieces of claws each with a triangularly projected tooth at base.

Male genitalia elongate; ventral processes perfectly conjoined to lateral sides of parameres, lobes rather narrow, gradually narrowed toward apices which are separately rounded; dorsal processes widely U-shaped together, each lobe broad, nearly straight, almost the same in thickness from base to near apex; laterophyses slightly developed, barely visible in dorsal view (Fig. 2).

Length: 7.0–8.3 mm; breadth: 1.4–1.7 mm.

Female. Similar to male, but body relatively larger and broader, eyes smaller and antennae shorter. Clypeus with a dark brown macula. Each claw with a triangularly projected tooth at base.

Length: 7.4 (7.4–8.4) mm; breadth: 1.6 (1.6–1.8) mm.

Specimens examined. Holotype (Towada, Aomori Pref., Honshu, Japan, 22–VI–

1952, A. FUKUDA leg.); and the following localities in Aomori Prefecture: Ikuri-zawa, Aomori-shi; Sanai-zawa, Ajigasawa-machi; Wari-sawa, Ikarigaseki-mura; Akane-zawa, Ohwani-machi; Miroku-rindô, Takko-machi; Sarukura, Towadako-machi; Utarubetakeyama, Towadako-machi; Eboshi-dake, Noheji-machi. For further detailed data, see TAKAHASHI *et al.* (1999).

Distribution. Japan (Aomori and Iwate Prefectures, northernmost Honshu, *Fagus crenata* zone). Recently, TAKAHASHI (2000) reported additional collecting data from Iwate Prefecture.

Asiopodabrus tochiensis sp. nov.

(Figs. 3, 4)

Male. Body medium-sized, almost brownish black; antennal segments with basal three-fourths of segment 1 yellowish brown, the remainder of 1, 2 and 3 infuscate, 4–11 dark brown; head before eyes, lateral sides of pronotum, prosternum, coxae, trochanters, femora and tibiae brownish yellow; elytral suture and shoulders narrowly, and tarsi entirely dark brown; outer halves of mesosterna dark brown, the remainder yellowish brown; 1st to 7th abdominal segments brownish yellow at each lateral and posterior margin.

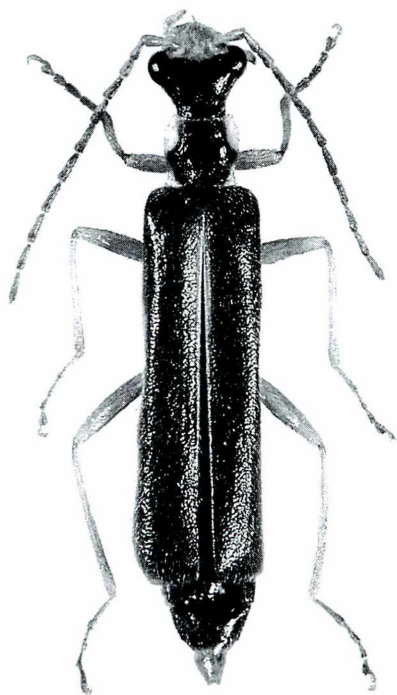


Fig. 3. Habitus of the holotype of *Asiopodabrus tochiensis* sp. nov.

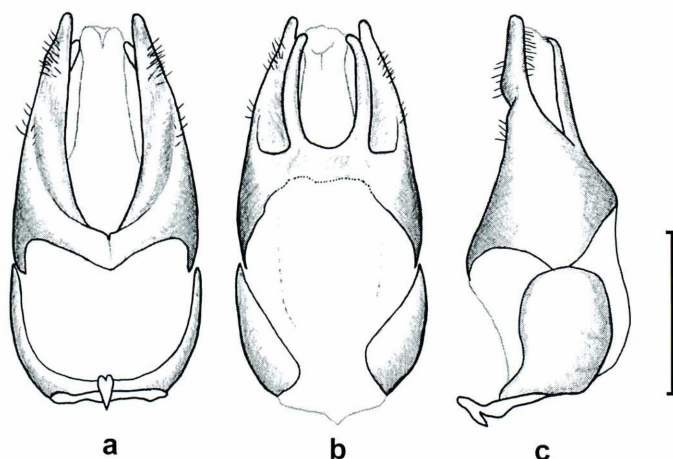


Fig. 4. Male genitalia of *Asiopodabrus tochiensis* sp. nov.; a, ventral view; b, dorsal view; c, lateral view. (Scale 0.5 mm.)

Head scattered with very fine punctures in front, somewhat sparsely covered with moderate punctures behind eyes, and densely so on neck. Antennae filiform and relatively short, 4.64 mm in length, reaching basal fourth of elytra; relative lengths of each segment as follows:— 1.82 : 1.00 : 1.02 : 1.48 : 1.40 : 1.40 : 1.46 : 1.55 : 1.46 : 1.33 : 1.60.

Pronotum rather narrow, widest at basal one-third to two-thirds; PW/HW 0.75 (0.75–0.79), PW/PL 1.11 (1.08–1.12), PW/PA 1.37 (1.37–1.50), PW/PB 1.05 (1.02–1.05); surface closely covered with moderate punctures at basal third and anterior fourth except for lateral depressed areas, the remainder sparsely covered with fine punctures; frontal and basal margins very slightly curved inwards, lateral ones sinuate; anterior angles angulate, posterior ones prominent; disc well elevated except for lateral margins and a circular area situated at basal third. Elytra slender, clearly wider than pronotum; EW/PW 1.58 (1.53–1.60), EL/EW 3.32 (3.31–3.49). Front claws and each outer piece of middle ones bifurcated, the other pieces of claws each with a triangularly projected tooth at base.

Male genitalia elongate; ventral processes perfectly conjoined to lateral sides of parameres, lobes gradually narrowed toward apices which are separately rounded; dorsal processes broadly U-shaped together, lobes slender, gently curved inwards and bent inwards near apices (Fig. 4).

Length: 7.4 (7.4–8.4) mm; breadth: 1.6 (1.6–1.8) mm.

Female. Unknown.

Type series. Holotype: ♂, Yunishigawa, Kuriyama-mura, Tochigi Pref., 29–V–1997, K. SATŌ leg. Paratypes: 1♂, same data as for the holotype; 3♂♂, Tsunaki-Hatomachi, Katashina-mura, Gunma Pref., 8–VII–1994, K. TAKAHASHI leg.

Distribution. Japan (eastern Honshu, *Fagus crenata* zone).

Asiopodabrus kawaiianus (TAKAHASHI et KIRIYAMA, 2000), comb. nov.

Podabrus (*Asiopodabrus*) *kawaiianus* TAKAHASHI et KIRIYAMA, 2000, Jpn. J. syst. Ent., **6**: 138.

This species was originally described on the basis of only one specimen from the Nara Pass, Kawai-mura, Gifu Prefecture, central Honshu, though an additional specimen was recently collected from the same area as recorded below. Collecting and measurement data are as follows. See TAKAHASHI and KIRIYAMA (2000) for more detailed description.

Measurement data: PW/HW 0.81, PW/PL 1.15, PW/PA 1.40, PW/PB 1.03; EW/PW 1.51, EL/EW 3.11.

Length: 8.0 mm; breadth: 1.8 mm.

Specimen examined. 1♂, Mannami, Miyagawa-mura, Gifu Pref., 14–VI–2000, I. KIRIYAMA leg.

要 約

高橋和弘：本州東部に産する *Asiopodabrus* 属の1新種。——本州東部から *Asiopodabrus* 属に属するジョウカイボシの1新種を記載した。この新種は、*macilentus* groupの *syozoi* subgroupのうちで、フクダクビボソジョウカイ *A. fukudai* に近縁の種で、この系統のなかでは3種目の発見となる。また、じゅうらい *Podabrus* 属の亜属として扱われていた *Asiopodabrus* を独立属に昇格させた。

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