Notes on the Bembidiinae (Coleoptera, Carabidae) of Japan

XXV. Redescription of Bembidion (Plataphodes) komareki FASSATI from Central Japan

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Abstract *Bembidion (Plataphodes) komareki* FASSATI is redescribed from Central Japan based on the holotype and newly obtained specimens.

Bembidion (Plataphodes) komareki was originally described by FASSATI (1954, p. 164) based on the specimens collected from Mt. Norikura-dake on the borders between Nagano and Gifu Prefectures, Central Japan. Kirschhofer (1984, p. 79) recorded it from Kamikôchi collected by Suenson. Since then, little information has been added for the species.

In this paper, I am going to redescribe the species based on the holotype and newly obtained specimens.

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 the late Dr. Miloš FASSATI for the loan of the type of *Bembidion (Plataphodes) komareki* FASSATI under his care.

My thanks are also due to Dr. Michiaki HASEGAWA, the late Mr. Sumao KASAHARA, Mr. Hanmei HIRASAWA and Mr. Masahiro SAITÔ for their kind helps. Without their cooperation, I could not have undertaken this study.

Bembidion (Plataphodes) komareki FASSATI

[Japanese name: Ao-yotsuana-mizugiwa-gomimushi]

(Figs. 1-6)

Bembidion komáreki FASSATI, 1954, 29: 164; type locality: Mt. Norikura.

Diagnosis. Body of moderate size; elytra oval; head and pronotum black with greenish lustre; elytra with usually weak brownish lustre; eyes strongly convex; carinae of hind angles of pronotum elongate on each side; viewed laterally, aedeagal apical lobe elongate.

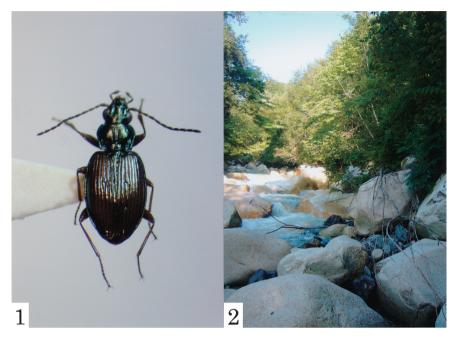
Description mainly based on the four males from the type locality. L: 4.21–5.03 mm. Body of moderate size.

Head and pronotum black with very weak greenish lustre; elytra black with very weak brownish lustre sometimes with bluish lustre; ventral side black; appendages dark brown to blackish brown; when alive, dorsal side with bluish or greenish lustre.

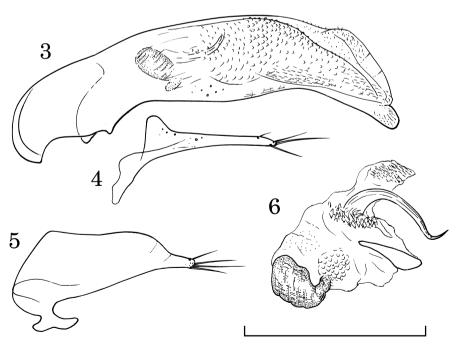
Head moderately convex; eyes strongly convex; frontal furrows deep, wide, a little divergent posteriad and reaching basal 1/3 of eyes; frons and vertex impunctate; PW/HW 1.21–1.28 (M 1.26); anterior supraorbital pore situated a little behind the mid-eye level; posterior ones situated a little behind the post-eye level or that level; microsculpture strongly impressed, composed of isodiametric meshes; genae very short and oblique; neck wide; relative lengths of antennal segments as follows: — I:II:III:IV:V:VI:XI \rightleftharpoons 1:0.69:0.90:1.00:0.99:0.97:1.13.

Pronotum transverse, moderately convex, and widest at basal 17/25; PW/PL 1.37–1.41 (M 1.39);

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Figs. 1–2. *Bembidion (Plataphodes) komareki* FASSATI. —— 1, Male from Mt. Norikura-dake; 2, habitat (Horigane-mura, Nagano Prefecture).



Figs. 3–6. *Bembidion (Plataphodes) komareki* FASSATI. —— 3, Aedeagus, left lateral view; 4, right style, left lateral view; 5, left style, left lateral view; 6, extracted inner sac. Scale 0.5 mm for 3–5; 0.4 mm for 6.

PW/PA 1.37–1.41 (M 1.39); PW/PB 1.23–1.27 (M 1.25); PA/PB 0.88–0.92 (M 0.89); apex weakly emarginate, and strongly and narrowly bordered at the sides; sides weakly arcuate in front, rather strongly so at the widest part, usually convergent towards hind angles on each side or rarely very weakly sinuate at basal 3/20–1/4; reflexed sides very narrow at anterior halves, though rather wide at posterior halves; anterior transverse impression shallow at median part and vanished at the sides; median line deeply and widely impressed between anterior transverse impression and base, not reaching apex, and being close to base; base very weakly arcuate at median part, and oblique at the sides; apical angles weakly and narrowly advanced, and rounded at the tips; hind angles right, with an elongate carina on each side; basal foveae rounded, deep, with oblique wrinkles and punctures; microsculpture clearly impressed and composed of wide or transverse meshes.

Elytra oval and moderately convex; EW/PW 1.46–1.59 (M 1.55); EL/EW 1.40–1.53 (M 1.44); shoulders widely rounded; sides moderately arcuate throughout and without preapical emargination; apex of each elytron rounded, forming a small re-entrant angle at suture; intervals weakly convex and impunctate; striae rather shallow and impunctate; scutellar striole rather short, impunctate, and situated on interval I; apical striole very deep, impunctate, weakly curved inwards, and adjoining apex of stria 5; two dorsal pores situated on interval III, and adjoining stria 3; anterior dorsal pore situated between basal 1/3–2/5 of elytra and posterior one between basal 17/20–4/5, respectively; microsculpture rather sharply impressed, and composed of fine transverse meshes. Hind wings developed.

Ventral surface almost smooth.

Aedeagus elongate and not arcuate at the middle; viewed laterally, apical part rather long and weakly produced ventro-apicad; apex simply rounded.

Inner sac covered with poorly sclerotized scales and armed with five components of sclerites; elongate sclerite poorly sclerotized, with wide basal part; bundle of fibres large, situated at basal 1/3 of aedeagus, and with a patch of sclerotized teeth; whip-shaped piece rather short, moderately sclerotized and with strongly curved apical part; two patches of poorly sclerotized teeth present; ostium flag narrow near apical orifice.

Left style a little longer than the right, each bearing a long setae and several short setae at apex and a short seta at subapical part.

Specimens examined. 1 \(\phi \), holotype, "2900 2500 MT. NORIKURA. JAPAN-ALPS." // "18–VII.1952. Coll. S. Eda" // "Collectio M. Fassati" // "alatus" // "TYPUS" // "B. komáreki m., HOLOTYPUS det M. Fassati 54". [Tochigi Prefecture] 1 \(\sigma \), Mt. Kôshin-zan, 8–VI–1979, S. Morita leg. [Nagano Prefecture] 1 \(\phi \), Tokugô, 13–VII–1978, S. Kasahara leg.; 1 \(\sigma \), Ichinose, Shiga-kôgen, 17–VI–1995, S. Morita leg.; 13 \(\sigma \sigma \), 2 \(\phi \phi \), Mitsumata, Horigane-mura, 7–VII–1997, S. Morita leg.; 4 \(\sigma \sigma \), Mt. Norikura-dake, 4–VII–1992, Saga leg.; 9 \(\sigma \sigma \), 5 \(\phi \phi \), Misaka Pass, Achi-mura, 26–VI–1994, S. Morita leg. [Gifu Prefecture] Ooshirakawa, 19~21–VII–1988, M. Hasegawa leg. [Fukui Prefecture] 1 \(\sigma \), Mt. Kanmuri-yama, Ikeda-chô, 29–IV–1994, S. Morita leg.

Range. Tochigi Pref., Nagano Pref., Gifu Pref., and Fukui Pref., Central Japan.

Notes. This species can be easily distinguished from all the Japanese members of the subgenus *Plataphodes* by the coloration and the shape of elytra. This beetle is found under stones at the edges of streams.

The standard ratios of body parts shown in the descriptive part are those of $4 \, \text{Poly}$ from the type locality.

The standard ratios of body parts in $5 \, \mathcal{S} \, \mathcal{S}$, $4 \, \stackrel{\circ}{\uparrow} \, \stackrel{\circ}{f}$ from Misaka Pass are as follows: PW/HW 1.27–1.31 (M 1.29) in \mathcal{S} , 1.24–1.29 (M 1.27) in $\stackrel{\circ}{\uparrow}$; PW/PL 1.39–1.50 (M 1.44) in \mathcal{S} , 1.37–1.45 (M 1.43) in $\stackrel{\circ}{\uparrow}$; PW/PA 1.41–1.45 (M 1.43) in \mathcal{S} , 1.40–1.44 (M 1.43) in $\stackrel{\circ}{\uparrow}$; PW/PB 1.24–1.30 (M 1.27) in \mathcal{S} , 1.26–1.32 (M 1.28) in $\stackrel{\circ}{\uparrow}$; PA/PB 0.88–0.90 (M 0.89) in \mathcal{S} , 0.80–0.91 (M 0.88) in $\stackrel{\circ}{\uparrow}$; EW/PW

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要 約

森田誠司:日本産ミズギワゴミムシ類の知見. XXV. Bembidion (Plataphodes) komareki FASSATI アオヨツアナミズギワゴミムシの再記載 (コウチュウ目オサムシ科). — FASSATI により乗鞍岳から記載された Bembidion komareki アオヨツアナミズギワゴミムシを,正基準標本ならびに各地 (栃木,長野,岐阜,福井の各県) から採集された標本をもとに再記載した.

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