

Koleopterologische Rundschau	79	65–70	Wien, Juli 2009
------------------------------	----	-------	-----------------

Description of *Aleochara (Maseochara) hiranoi* sp.n. from Japan (Coleoptera: Staphylinidae: Aleocharinae)

S. YAMAMOTO & M. MARUYAMA

Abstract

Aleochara (Maseochara) hiranoi sp.n. (Staphylinidae: Aleocharinae: Aleocharini) is described from Japan (Honshû). This species is closely related to *A. (M.) javana*, but is easily distinguished by the larger body and by the male genitalia; it differs from other Japanese species by its flattened and slender body. Although *A. (M.) hiranoi* is considerably different from American species of *Maseochara* SHARP, including the type species, we tentatively assign it to this subgenus.

Key words: Coleoptera, Staphylinidae, Aleocharinae, *Aleochara*, *Maseochara*, new species.

Introduction

The staphylinid beetle genus *Aleochara* GRAVENHORST comprises about 400 species, and except for Antarctica, is distributed worldwide. Most species are found near carrion, animal droppings, or decaying plant material. Some species are characterized by very unusual life histories. Certain larvae, for instance, parasitize in cyclorrhapheous fly puparia, thus playing an important role in pest management (MAUS et al. 2001).

Taxonomic knowledge of the genus *Aleochara* is limited. Numerous unpublished synonyms exist. Adequate keys for specific identification are lacking (KLIMASZEWSKI 1984). Knowledge of the Japanese *Aleochara* fauna is also still incomplete; to date, only 18 species have been recorded (SMETANA 2004). A thorough revision, based on type material, is dearly needed.

Recently, we examined several *Aleochara* specimens collected from Central Japan (Honshû) and found that they belong to an apparently new species. This paper describes the new species, although a revisional study is still necessary.

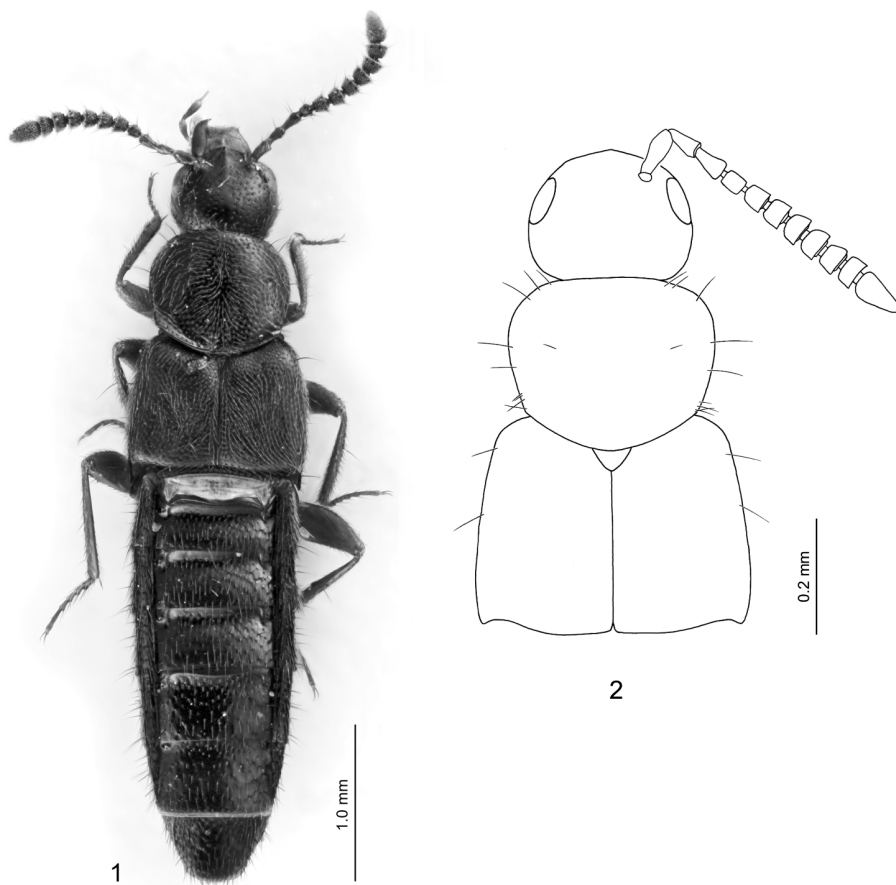
Material & methods

Most of the type material is deposited in the collection of the Kyûshû University Museum, Fukuoka, Japan (KUM), some paratypes are stored in The Natural History Museum, London, UK (BM), and the Naturhistorisches Museum Wien, Vienna, Austria (NMW). The technical procedures and terminology adopted here follow MARUYAMA (2006). All measurements are given in millimeters. The number of setae described refers to one side of the body.

Aleochara hiranoi sp.n.

TYPE LOCALITY: Tanzawa, Kanagawa-ken, Honshû, Japan.

TYPE MATERIAL (8 specimens): **Holotype** ♂: “Dôdaira, Tanzawa [mountains of Tanzawa, boarder of Kiyokawamura and Hadano-shi, Kanagawa-ken], 13. VI. 1992, Y. Hirano leg.” (KUM).



Figs. 1–2: *Aleochara hiranoi* sp.n., 1) habitus, holotype, 2) fore body, outline and distribution of macrosetae.

Paratypes: 1 ♂, 1 ♀, “Yushin, Tanzawa [Yamakita-machi, Kanagawa-ken], 8.IX.1984, Y. Hirano leg./Gen. n. sp. Det. Y. Hirano, 2003” (KUM); 1 ♀, “Fudakake, Tanzawa, 10.X.1986, Y. Hirano leg.”; 1 ♂, “Dôdaira, Tanzawa, 13.VI.1992, Y. Hirano leg.” (NMW); 1 ♂, “same data, but 1.VI.1993” (BM); 1 ♂, “Ono~Fujisawa, Tatsuno-town, Nagano Pref. [Tatsuno-machi, Nagano-ken], 11.V.1997, Y.Hirano leg. / Gen. n. sp. Det. Y.Hirano, 2003.” (KUM); 1 ♀, “Nagamine-shizenkoen, Ikaho T, Gunma [Ikaho-machi, Gunma-ken], Japan, 21.IV.2003, T. Watanabe leg.”.

DESCRIPTION: Body slender. Black in ground colour; antennae, mouthparts and legs reddish brown to brown. Head (Figs. 1–2) widest just behind eyes; surface finely reticulate, sparsely covered with long setae, being slightly longer than those on pronotum and elytra. Eyes small, their longitudinal diameter longer than postocular part, 0.34 times as long as head width. Antennae shorter than head, pronotum and elytra combined; segment 4 longer than wide; segments 5–6 almost as long as wide, segments 7–9 wider than long; segment 10 much wider than long; approximate relative lengths of segments from basal to apical: 16: 11: 11: 7: 7: 7: 6: 6: 6: 5: 16. Pronotum (Figs. 1–2) 1.16 times as wide as long, widest around anterior 1/4, narrowed posteriorly; postero-lateral corner rounded; surface finely reticulate between punctures, densely covered with setae, with eight or nine small macrosetae along lateral margin. Scutellum finely punctate, densely covered with setae. Elytra (Figs. 1–2) subparallel-sided; surface finely

punctate, reticulate between punctures, densely covered with setae, with around four macrosetae laterally. Legs moderate in length; hind tibia 0.82 times as long as elytra; approximate relative lengths of tarsal segments from basal to apical: 6: 3: 4: 4: 10 in fore tarsus; 10: 4: 6: 5: 12 in mid tarsus; 13: 7: 7: 7: 14 in hind tarsus. Abdomen (Figs. 1–2) slender, 0.98 times as wide as elytra, widest around segments IV and V; surface weakly reticulate; tergite III sparsely covered with setae and with row of setae along posterior margin; tergites IV–VI glabrous except for a row of setae along each posterior margin; tergite VII almost glabrous except for lateral areas roughly covered with setae; tergite VIII with about 12–15 macrosetae; sternite VIII with posterior margin rounded and with 13–17 macrosetae; tergite X moderately emarginate.

Male: tergite VIII (Fig. 3) with 12–13 macrosetae, its posterior margin truncate and dentate; sternite VIII (Fig. 4) with 16–17 macrosetae. Median lobe of aedeagus (Figs. 7–8) with apical lobe as long as basal capsule; apical lobe of median lobe narrowed and pointed at apex in lateral view; symmetric in parameral view; inner sac without flagellum, with distinctive and symmetric sclerites.

Female: tergite VIII (Fig. 5) with 12–14 macrosetae, its posterior margin shallowly emarginate; sternite VIII (Fig. 6) shaped as in male but macrosetae longer.

MEASUREMENTS: Body length = 4.53–5.53 (5.01) mm; fore body length (from front margin of head to apices of elytra at suture) = 2.07–2.60 (2.28) mm; head length = 0.53–0.73 (0.63) mm; head width = 0.73–0.87 (0.79) mm; eye length = 0.2–0.33 (0.27) mm; antennal length = 1.27–1.60 (1.41) mm; pronotal length = 0.67–1.00 (0.88) mm; pronotal width = 0.80–1.13 (1.02) mm; elytral length = 0.8–1.07 (0.97) mm; elytral width = 1.07–1.47 (1.30) mm; hind tibial length = 0.60–1.00 (0.80) mm.

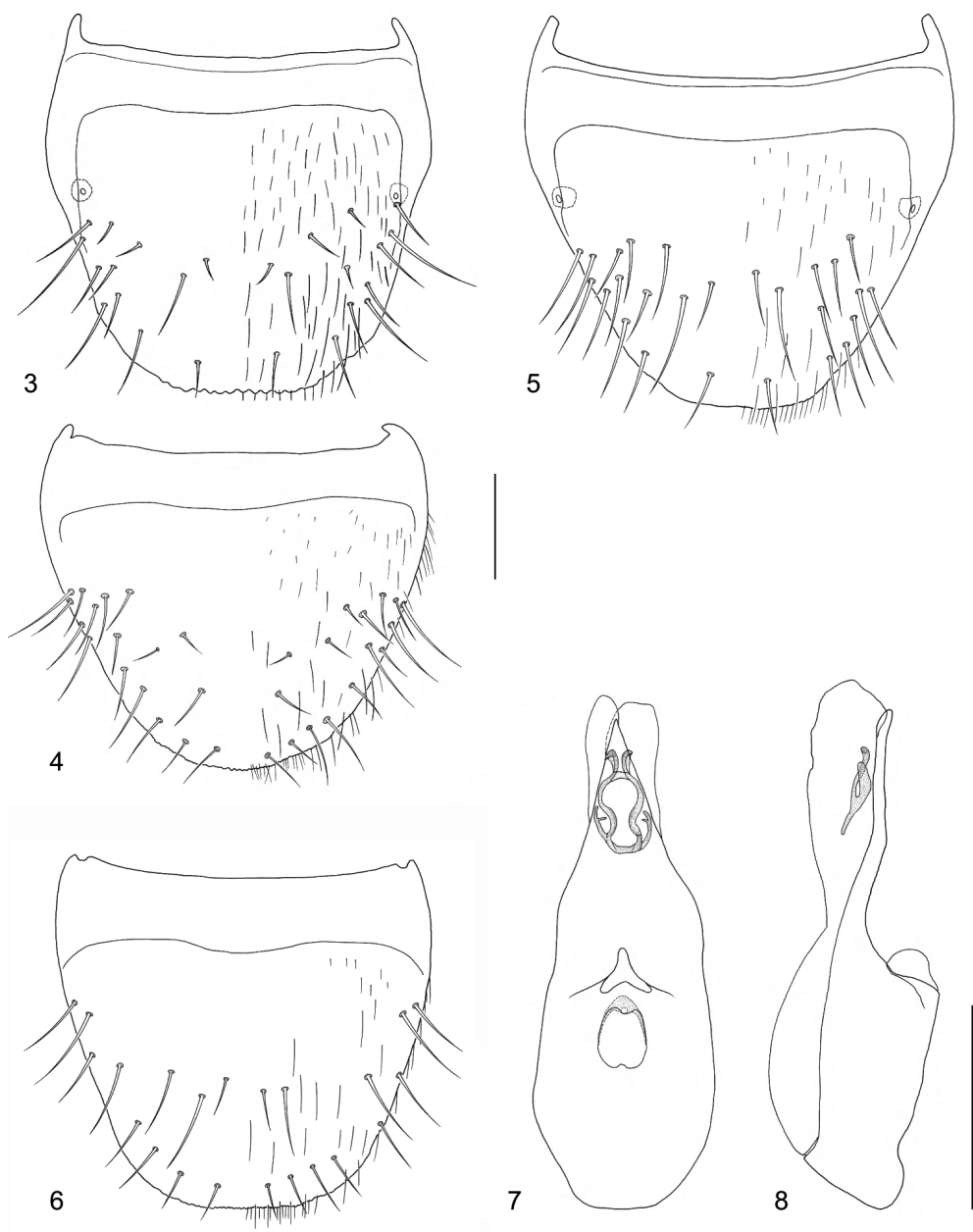
REMARKS: Most Japanese *Aleochara* species are found at decaying animals or plants, or dung. While some specimens of the type series of *Aleochara (Maseochara) hiranoi* were collected under the bark of rotten wood (Hirano, pers. comm.), further observation of *A. (M.) hiranoi* is necessary to establish its microhabitat.

This species is similar to the Indonesian *Aleochara (Maseochara) javana* FAUVEL in general appearance, but is easily distinguished from it by the larger body and by the male genitalia. It differs from other Japanese species by its flattened and slender body form.

Maseochara has been found in the Nearctic, Afrotropical, and Oriental Regions (KLIMASZEWSKI 1994); two species, *A. javana* and *A. horni* BERNHAUER, occur in the Oriental Region (SMETANA 2004). *Aleochara (M.) hiranoi* is the first species of *Maseochara* to be recorded from the Palearctic Region. Both *A. (M.) javana* and *A. (M.) hiranoi* (*A. horni* was not examined) are considerably different from American species of *Maseochara*, including the type species. Notable differences include the flattened body and the absence of coarse microsculpture on the forebody; microsculpture is an especially important diagnostic character in the subgenus. Therefore, *A. (M.) hiranoi* could be assigned to a new subgenus. However, monophyly of most of the subgenera of *Aleochara* is not well established. Proper subgeneric diagnostics do not exist, and some characters, such as pronotal shape, punctuation, and setation, are often homoplastic. The establishment of another subgenus could create further confusion in the systematics of *Aleochara*. Although its assignment is not certain, we tentatively place *A. hiranoi* in *Maseochara*.

DISTRIBUTION (Fig. 9): Japan (Honshū).

ETYMOLOGY: Named in honour of the collector of the holotype, Mr. Yukihiro Hirano, for his great contribution to the knowledge of the beetle fauna in Kanagawa.



Figs. 3–8: *Aleochara hiranoi* sp.n., 3) male tergite VIII, 4) male sternite VIII, 5) female tergite VIII, 6) female sternite VIII, 7) median lobe of aedeagus, parameral view, 8) ditto, lateral view.

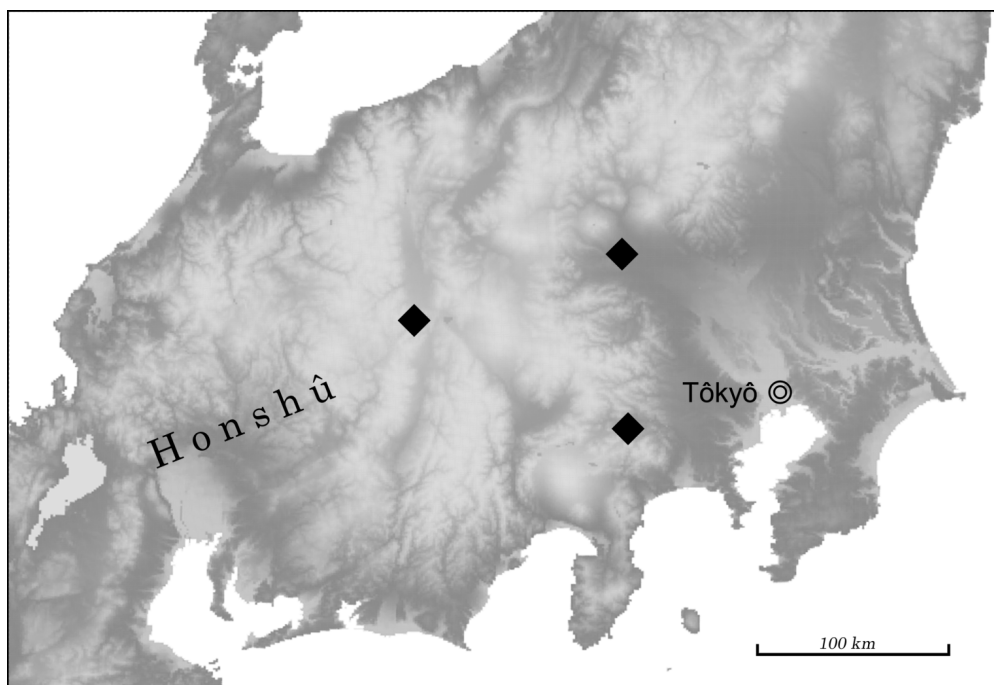


Fig. 9: *Aleochara hiranoi* sp.n., known localities in Japan.

Acknowledgements

The cooperation of the persons mentioned above by providing the material used in this paper is greatly appreciated. In addition, we thank Yukihiro Hirano, Yasutoshi Shibata, and Takashi Watanabe, who have allowed us to use their material for this study. This paper is supported by a Grant-in-Aid for Scientific Research from the Japan Society for the Promotion of Science (Startup 20870031) funded to the junior author.

References

- MARUYAMA, M. 2006: Revision of the Palearctic species of the myrmecophilous genus *Pella* (Coleoptera, Staphylinidae, Aleocharinae). – National Science Museum, Tokyo Monograph 32: 1–207.
- MAUS, C., PESCHKE, K. & DOBLER, S. 2001: Phylogeny of the genus *Aleochara* inferred from mitochondrial cytochrome oxidase sequences (Coleoptera: Staphylinidae). – Molecular Phylogenetics and Evolution 18 (2): 202–216.
- KLIMASZEWSKI, J. 1984: A revision of the genus *Aleochara* Gravenhorst of America north of Mexico (Coleoptera: Staphylinidae, Aleocharinae). – Memories of the Entomological Society of Canada 129: 3–211.
- KLIMASZEWSKI, J. 1994: Systematics, biology and distribution of *Aleochara* Gravenhorst. Part 4: subgenus *Maseochara* Sharp in the Afrotropical region. – Journal of African Zoology 108 (2): 163–180.

SMETANA, A. 2004: Aleocharinae, pp. 353–494. – In: Löbl, I. & Smetana, A. (ed.): Catalogue of Palaearctic Coleoptera, Volume 2. – Denmark: Apollo Books.

Shûhei YAMAMOTO

c/o M. Maruyama, The Kyûshû University Museum, Hakozaki 6-10-1, Fukuoka, 812-8581 Japan
(s.yamamoto.64@gmail.com)

Dr. Munetoshi MARUYAMA

The Kyûshû University Museum, Hakozaki 6-10-1, Fukuoka, 812-8581 Japan (dendrolasius@gmail.com)

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Koleopterologische Rundschau](#)

Jahr/Year: 2009

Band/Volume: [79_2009](#)

Autor(en)/Author(s): Yamamoto Shuhei, Maruyama Munetoshi

Artikel/Article: [Description of Aleochara \(Maseochara\) hiranoi sp.n. from Japan
Coleoptera: Staphylinidae: Aleocharinae\) 65-70](#)