

## A New Species and a Newly Recorded Species of the Genus *Mycetochara* (Coleoptera, Tenebrionidae, Alleculinae) from Japan, with Notes on the Subgeneric Position of Three *Mycetochara* Species

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**Abstract** *Mycetochara (Ernocharis) kawasei* M. SAITÔ, a new species, is described from Honshu, Japan, and *M. (Mycetochara) flavipes* (FABRICIUS, 1792) is newly recorded from Hokkaido and Honshu, Japan. The subgeneric positions of *M. collina* (LEWIS, 1895), *M. mimica* (LEWIS, 1895) and *M. nakamurai* AKITA et MASUMOTO, 2014 are reviewed.

*Mycetochara* BERTHOLD, 1827 (Coleoptera, Tenebrionidae, Alleculinae) comprised 52 species from the Palearctic Subregion (NOVÁK & PETERSSON, 2008), amongst which seven species were from Japan (MIYATAKE, 1985; NAKANE, 1991; HANATSUKA *et al.*, 2006). Recently, AKITA and MASUMOTO (2014) described nine new species from Japan and proposed a new junior synonym, and consequently 15 species are known from Japan in the present.

A new species and a new distributional record were found based on my examination of *Mycetochara* materials from Hokkaido and Honshu, Japan. In addition, by reviewing the subgeneric position of *M. collina* (LEWIS, 1895), *M. mimica* (LEWIS, 1895) and *M. nakamurai* AKITA et MASUMOTO, 2014, I propose to transfer them to the subgenus *Ernocharis* C. G. THOMSON, 1859 from the nominated subgenus, *Mycetochara* BERTHOLD, 1827 as the former two species were listed in the Catalogue of Palearctic Coleoptera (NOVÁK & PETERSSON, 2008), and the last was determined by descriptions.

The entomological collection codes for each specimen depository used in this study are listed below:

National Museum of Nature and Science, Tsukuba (NSMT);

Collection of Daniel YOUNG (DYCC) [deposited eventually in the University of Wisconsin Insect Research Collection (WIRC)];

Zoological Museum of Moscow Lomonosov State University (ZMMU);

Collection of M. SAITÔ (MSC);

Collection of T. OZAKI (TOC).

Morphological abbreviations used herein are as follows: L — body length (= length from apical margin of clypeus to elytral apices); W — body width (= width across humeri); FW — width across frons (= distance between eyes); TL — temporal length; ED — compound eye diameter; CL — clypeal length; CW — clypeal width; PL — pronotal length; PW — pronotal width; HW — cranial width; EL — elytral length; EW — elytral width; MtiL — metathoracic tibial length; Mta1stL — length of 1st metathoracic tarsomere; AL — length of aedeagus; BpL — length of basal piece; BpW — width of basal piece; PmL — length of fused parameres; PmW — width of fused parameres. The measurement number of specimens examined is listed in parentheses after the range.

***Mycetochara (Mycetochara) flavipes*** (FABRICIUS, 1792)

[Japanese name: Kiashi-hime-kuchikimushi]

(Figs. 1 a, b)

*Cistela flavipes* FABRICIUS, 1792, 45 (Type locality: Muf. Dom. Banks).*Leptura bipustulata* THUNBERG, 1784, 17.*Mycetochara flavipes*: GEBLE, 1829, 128.*Mycetocharis flavipes*: SAHLBERG, 1834, 458.*Mycetocharis bimaculata* MANNERHEIM, 1844, 197.*Mycetocharis flavipes*: KÜSTER, 1850, 93.*Mycetocharis (Mycetophila) flavipes*: REITTER, 1884, 242.*Mycetochara (Mycetochara) flavipes*: NOVÁK & PETTERSSON, 2008, 328 (catalogue).

*Specimens examined.* 1 ♀ (Fig. 1 a; in the collection of Mr. S. HORI), Kami-muri, Maruseppu, Monbetsu, Hokkaido, 20.VII.1997, S. HORI leg.; 1 ♀ (Fig. 1b; MSC), Mt. Miura-fuji, Yokosuka-shi, Kanagawa Pref., 5.V.1989, A. IZUMI leg.

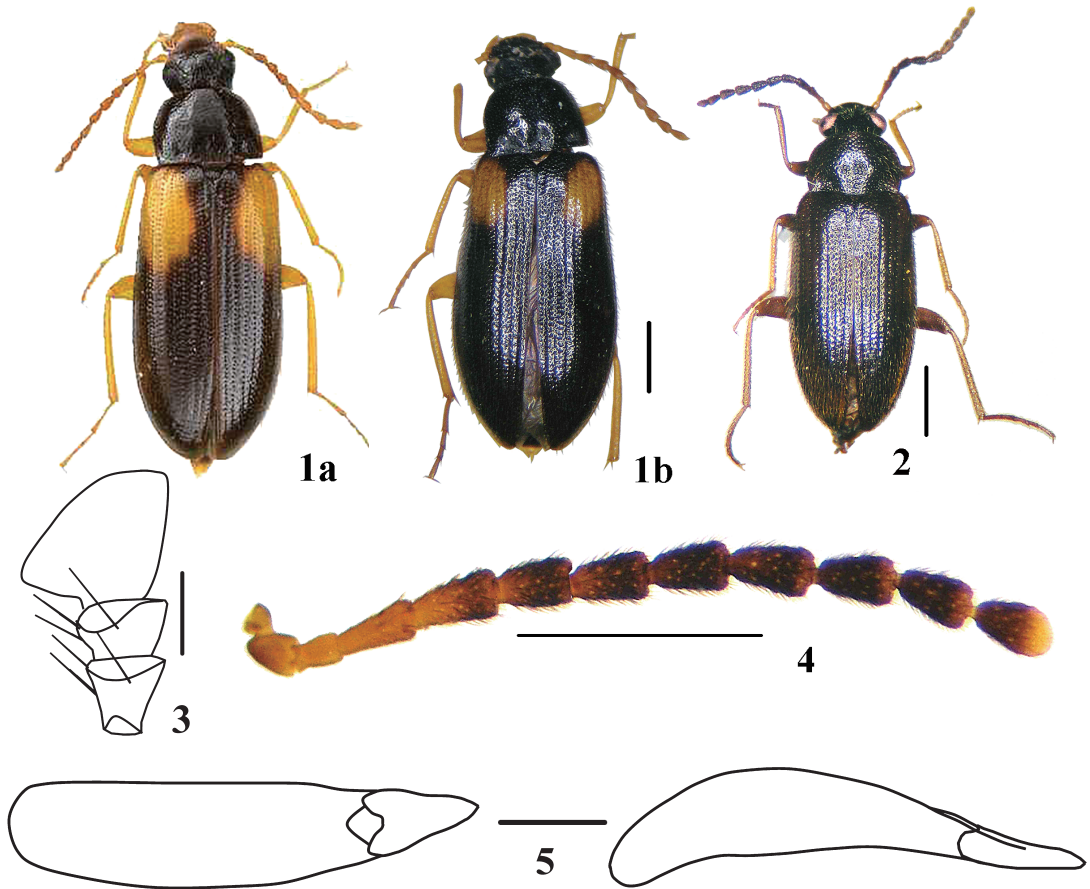
*Distribution.* Europe, Russia (Far East), Mongolia, Japan (Hokkaido, Honshu). New record.

*Notes.* This well known species is widely distributed from Europe to the Russian Far East. It can be easily recognized by the relatively large and yellowish orange humeral marking on each elytron, and the yellow antennae and legs.

***Mycetochara (Ernocharis) collina*** (LEWIS, 1895)*Mycetocharis collina* LEWIS, 1895, 253 (Type locality: Kashiwagi).*Mycetochara collina*: MIYATAKE, 1985, 348, pl. 59, fig. 23.*Mycetochara (Mycetochara) collina*: NOVÁK & PETTERSSON, 2008, 328 (catalogue).

*Specimens examined* (MSC). 1 ♀, Ikegahara, Ôno-shi, Fukui Pref., 8.VIII.1982, M. SAITÔ leg.; 1 ♂, Kami-makitani, Imajô-chô, Fukui Pref., 31.V.1996, S. INOUE leg.; 1 ♂, Yasyaga-ike, Imajô-chô, Fukui Pref., 6.VII.1992, M. SAITÔ leg.; 2 ♀♀, Onyû-tôge, Obama-shi, Fukui Pref., 22.VII.2012, M. SAITÔ leg.; 1 ♀, Hirakura, Tsu-shi, Mie Pref., 15.VI.1991, H. KAWASE leg.; 1 ♂, ditto, 23.VII.1995, H. KAWASE leg.; 1 ♂, Yuzurio, Eigenji, Higashiômi-shi, Shiga Pref., 6.IV.1998, M. YAMAMOTO leg.; 1 ♀, Kibune, Kyoto-shi, Kyoto Pref., 15.VI.1958, T. KISHII leg.; 3 ♂♂, 3 ♀♀, Mt. Kongô-san, Minamikawachi, Osaka Pref., 23.VI.1990, collector unknown.

*Notes.* *Mycetichara collina* and the following two Japanese species of *Mycetochara* were listed as belonging to the subgenus *Mycetochara* BERTHOLD, 1827 by NOVÁK and PETTERSSON (2008) and AKITA and MASUMOTO (2014). However, in each of these species, the procoxae are clearly separated by the prosternal process and the elytral edges are slightly bent downwardly beyond the metathoracic legs in lateral view. Thus, these species belong to the subgenus *Ernocharis* C. G. THOMSON, 1859. Moreover, *M. (M.) amamiensis* AKITA et MASUMOTO, 2014, *M. (M.) okinawaensis* AKITA et MASUMOTO, 2014, *M. (M.) chiniroae* AKITA et MASUMOTO, 2014, *M. (M.) hiranoi* AKITA et MASUMOTO, 2014, *M. (M.) sakaii* AKITA et MASUMOTO, 2014, *M. (M.) scutellaris* (LEWIS, 1895), *M. (M.) elongata* MIYATAKE, 1985, *M. (M.) oodaigaharaensis* AKITA et MASUMOTO, 2014, *M. (M.) ontakensis* AKITA et MASUMOTO, 2014, *M. (M.) kimotoi* HANATSUKA, MASUMOTO et KON, 2006, and *M. (M.) tsuyukii* AKITA et MASUMOTO, 2014 also seem to belong to the subgenus *Ernocharis*, although I have not examined them. *Mycetochara (E.) koltzei* REITTER, 1896 holds the systematic position of the subgenus.



Figs. 1–5. *Mycetochara* spp. — 1 a, 1 b, *M. (M.) flavipes*; 2–5, *M. (E.) kawasei* sp. nov. — 1–2, Habitus (2, holotype); 3, maxillary palpus; 4, antenna; 5, aedeagus (left, dorsal view; right, lateral view). Scale: 1 mm for 1–2; 0.1 mm for 3; 0.5 mm for 4; 0.2 mm for 5.

***Mycetochara (Ernocharis) mimica* (LEWIS, 1895)**

*Mycetochares mimica* LEWIS, 1895, 253 (Type locality: Hitoyoshi, Wada-togé, Sapporo and Junsai).

*Mycetochara mimica*: MIYATAKE, 1985, 348, pl. 59, fig. 25.

*Mycetochara (Mycetochara) mimica*: NOVÁK & PETTERSSON, 2008, 328 (catalogue).

*Specimens examined* (MSC). 1 ♀, Taniyama, Ôno-shi, Fukui Pref., 14.VII.1991, M. SAITÔ leg.; 1 ♂, Otomi, Takahama-chô, Fukui Pref., 31.V.1998, M. SAITÔ leg.; 6 ♂♂, 5 ♀♀, Kami-negori, Obama-shi, Fukui Pref., 23.VI.2012, M. SAITÔ leg.

***Mycetochara (Ernocharis) nakamurai* (AKITA et MASUMOTO, 2014)**

*Mycetochara (Mycetochara) nakamurai* AKITA et MASUMOTO, 2014, 215 (Fig. 5), 217 (Figs. 19–21), 221–222, 233 (in key), (Type locality: Gokuraku-tôge, Yamagata Pref.).

*Specimens examined*. 2 ♂♂ (MSC), Dake, Iwaki-chô, Aomori Pref., 17.VI.2000, T. OZAKI leg.; 2

♂♂ (TOC), ditto, 16.VI.2001, T. OZAKI leg.; 1 ♂ (MSC), Dake-tozandô, Iwaki-chô, Aomori Pref., 20.VII.1986, T. OZAKI leg.; 1 ♂ (MSC), Nagadaira, Ajigasawa-chô, Aomori Pref., 2.VII.2000, T. OZAKI leg.; 1 ♂ (TOC), Kôsei-rindô, Ajigasawa-chô, Aomori Pref., 25.VI.1995, T. OZAKI leg.; 1 ♂, 1 ♀ (TOC), ditto, 12.VII.1997, T. OZAKI leg.; 1 ♀ (TOC), Kiraichi, Kanagi-chô, Aomori Pref., 9.VII.1995, T. ICHITA leg.; 1 ♀ (TOC), Tashiro-daira, Aomori-shi, Aomori Pref., 11.VII.1999, T. OZAKI leg.

*Mycetochara (Ernocharis) kawasei* M. SAITÔ, sp. nov.

[Japanese name: Shiwame-hime-kuchikimushi]

(Figs. 2–5)

**Male.** Body elongate, L/W 2.66–3.79 (2.99, n = 4), subparallel-sided, moderately convex dorsad; dorsum glossy, without metallic luster, with white lustrous pubescence, with setae longer than the width of elytral interval. Dorsal surface (Fig. 2) entirely brownish black; mouth-parts and legs yellowish brown; antennae brownish black with three basal antennomeres, basal half of 4th and apical third of terminal antennomere yellowish brown. Ventral surface entirely brownish black.

Head pentagonal, densely and coarsely punctate. Frons flat, trapezoidal, FW/ED 1.26–1.62 (1.48, n = 4); frontoclypeal furrow well-developed. Eyes longitudinally ovate, emarginate at the antennal insertions. Tempora narrow in dorsal view, TL/ED 0.28–0.33 (0.31, n = 4). Clypeus rectangular, CL/CW 2.19–2.27 (2.22, n = 4), sparsely and coarsely punctate; anterior margin straight. Terminal maxillary palpomere (Fig. 3) triangular; aboral margin more than twice as long as the adoral margin; apical margin somewhat longer than the aboral margin. Antennae (Fig. 4) thickly filiform, extending beyond the basal margin of pronotum at the mid-length of the 9th antennomere; terminal antennomere spindle-shaped; relative lengths of each antennomere from base to apex (n = 1): 0.67, 0.48, 1.00, 1.10, 0.95, 0.95, 0.95, 1.05, 1.05, 1.00, 1.14; ratio of the width to the length of each antennomere from base to apex (n = 1): 1.17, 1.11, 1.91, 1.64, 1.54, 1.54, 1.43, 1.57, 1.69, 1.62, 1.71.

Pronotum campanulate, PW/PL 1.41–1.54 (1.49, n = 4), PW/HW 1.38–1.40 (1.39, n = 4), PW/EW 0.72–0.75 (0.74, n = 4), widest at the middle; lateral and basal margins distinctly and very narrowly margined; lateral margins weakly arcuate; anterior angles widely rounded; basal angles indistinctly acuminate apicad; basal margin weakly and widely bisinuate; disc densely punctate, with a deep basal fovea at each side which opens outwardly and joins to the lateral depressions, a shallow median longitudinal depression, and a pair of weak foveae along the median depression. Scutellum triangular, pointed apically, roughly punctulate.

Elytra elongate, EL/EW 1.82–2.59 (2.12, n = 4); lateral margins subparallel in basal half; apices narrowly rounded; disc clearly punctate-striate; intervals flat, roughly punctate and wrinkled.

Prosternum coarsely and roughly punctate; prosternal process narrow, distinctly widened apico-mesally, subtruncate apically, raised in equiheigh of procoxae at the middle. Propleuron with a few punctures, nitid; procoxal cavities closed behind. Mesoventrite roughly punctate and wrinkled. Mesopleura densely, coarsely punctate. Metaventrite sparsely punctate, more densely so laterad; metaepisternum densely, coarsely punctate. Abdominal ventrites sparsely punctate; 8th ventrite widely rounded at apex.

Legs slender. Metathoracic tibiae straight, MtiL/EL 0.39–0.45 (0.42, n = 4) and MtiL/EW 0.83–0.97 (0.90, n = 4). Metathoracic tarsi simple, MtaL/MtiL 0.77–0.80 (0.79, n = 4), relative lengths of each metathoracic tarsal segment to the 1st one (n = 4): 1.00, 0.43, 0.30, 0.45.

Aedeagus (Fig. 5) elongate with lateral margins subparallel, pointed apically, AL/AW about 5.5 (n = 1), feebly curved in lateral view. BpL/BpW about 4.3 (n = 1). Fused parameres isosceles-trian-

gular, PmL/PmW about 2.0 (n = 1), and PmL/BpL about 0.3 (n = 1).

**F e m a l e.** Unknown.

**Measurement** (n = 4 ♂♂, in mm). L: ♂ 4.40–5.00 (ave. 4.68); W: ♂ 1.50–1.60 (ave. 1.54).

**Type series.** Holotype (Fig. 2): ♂, Mt. San'kai-zan, 1,391m in alt., Ina-shi, Nagano Pref., 26.VI.2010, H. KAWASE leg. (NSMT). Paratypes: 3 ♂♂ (Figs. 3–5), Mt. San'kai-zan, 1,391m in alt., Ina-shi, Nagano Pref., 26.VI.2010, H. KAWASE leg. (DYCC, ZMMU & MSC).

**Notes.** This new species can be distinguished from other species of *Mycetochara* (*Ernocharis*) known from the Palaearctic Subregion by the following characteristics (cf. DUBROVIN, 1992; KASZAB, 1969; MIYATAKE, 1985; NOVÁK, 2007): 1) body somewhat flat, robust; length about 2.1 times as long as the maximal elytral width; 2) elytral intervals roughly wrinkled; and 3) dorsal color brownish black without bluish luster nor yellowish orange maculations.

**Etymology.** The specific name is given in honor of Mr. Hideo KAWASE who collected the type series.

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### 要 約

齋藤昌弘：日本産ヒメクチキムシ属 *Mycetochara* (鞘翅目ゴミムシダマシ科クチキムシ亜科) 1新種と日本産初記録の1種、および亜属の所属について。——本州より採集された本属の1種を新種シワメヒメクチキムシ(新称) *Mycetochara* (*Ernocharis*) *kawasei* M. SAITÔ, sp. nov. と命名記載した。加えてキアシヒメクチキムシ(新称) *Mycetochara* (*Mycetochara*) *flavipes* (FABRICIUS, 1792)を日本から初めて記録した。一方、ヨツボシヒメクチキムシ *M. collina* (LEWIS, 1895), カタアカヒメクチキムシ *M. mimica* (LEWIS, 1895)およびナカムラヒメクチキムシ *M. (Mycetochara) nakamurai* AKITA et MASUMOTO, 2014については亜属を *Ernocharis* に変更した。

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