

## An Additional New Species of the Genus *Kusumia* (Coleoptera, Trechinae)

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**Abstract** A new species belonging to the trechine genus *Kusumia* is described from the western part of Wakayama Prefecture on the Kii Peninsula, Central Japan, under the name of *Kusumia kitayamai*. Though similar to *K. latior* of the *tanakai* group in external characters, it is easily distinguished from the latter by bearing a fringe of hairs at the sides of the pronotum. It is also evidently different in the structure of the male genital organ, which has a broad aedeagal apical lobe and a well differentiated copulatory piece in the inner sac.

The trechine genus *Kusumia* is endemic to the Kii Peninsula, Central Japan, and consists of relatively large, hairy, and anophthalmic species. By the 1960's, three species and one subspecies of *Kusumia* were described by UÉNO, though no additional species were properly recorded for a long time after that. In his recent revision of the genus (UÉNO, 1999), eight new species and one new subspecies were described and the distributional range of the genus became fairly clear. In the early summer of 1999, a colleague of the author, Mr. Kenji KITAYAMA, obtained a pair of *Kusumia* specimens from the upper hypogean habitat on Wasa-yama Hill near Gobô City of Wakayama Prefecture, which was rather remote from the distributional area of *Kusumia* theretofore known. As the two individuals were somewhat teneral, Mr. KITAYAMA and the author made an attempt to obtain additional specimens, but they were able to add only a single male. After that, several coleopterists made searches around there, but in vain. Although the specimens available are not yet sufficient, I am going to describe this distinct new species in the present paper under the name of *K. kitayamai*.

The abbreviations used herein are as follows: HW – greatest width of head; PW – greatest width of pronotum; PL – length of pronotum, measured along the midline; PA – width of pronotal apex; PB – width of pronotal base; EW – greatest width of elytra; EL – greatest length of elytra; M – arithmetic mean.

I wish to express my deep gratitude to Dr. Shun-Ichi UÉNO of the National Science Museum (Nat. Hist.), Tokyo, for his kind guidance and revising the manuscript. Heartly thanks are also due to Messrs. Kenji KITAYAMA, Shôtarô TANAKA and Takumi SAITÔ for their kind support throughout this study.

*Kusumia kitayamai* ASHIDA, sp. nov.

[Japanese name: Kawabe-mekura-chibigomimushi]

(Figs. 1–4)

Length: 4.95–5.15 mm (from apical margin of clypeus to apices of elytra).

Similar in external characters to *K. latior* S. UENO (1999, pp. 289, 306, figs. 16–17, 20) of the group of *K. tanakai*, with wide pronotum and elytra, but easily distinguished from the latter species by the presence of a fringe of hairs at the sides of pronotum. Obviously different from *K. latior* in the structure of male genital organ, which has a broader aedeagal apical lobe and a larger copulatory piece in the inner sac.

Color reddish brown with yellowish brown appendages. Head as in *K. latior*, though the genae are a little more convex and the basal part between the frontal furrows is hairier; antenna fairly slender. Pronotum similar to that of *K. latior*, but remarkably different from the latter by bearing about a dozen hairs in apical two-thirds of each side and one or two at basal part, widest at five-sevenths from base, a little wider on an average than in *K. latior*; sides strongly arcuate in front, moderately sinuate at about one-fourth from base, and subparallel or slightly divergent at base; hind angles almost rectangular; postangular setae present; disc with fairly long hairs. PW/HW 1.45–1.47 (M 1.46), PW/PL 0.99–1.04 (M 1.02), PW/PA 1.47–1.51 (M 1.49),

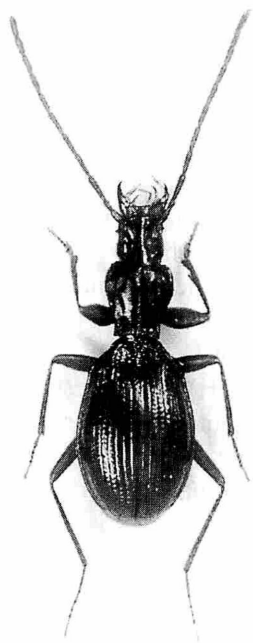
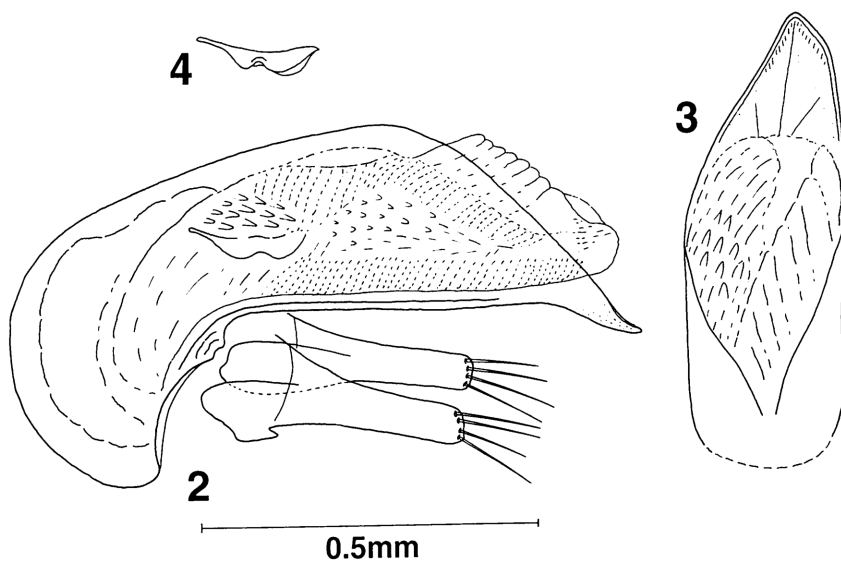


Fig. 1. *Kusumia kitayamai* ASHIDA, sp. nov., ♂, from Wasa-yama Hill; dorsal view.

PW/PB 1.48–1.53 (M 1.51), PB/PA 0.96–1.00 (M 0.99). Elytra similar to those of *K. latior*, but somewhat larger and ampler, widest at about middle, more gradually narrowed posteriad than anteriorly; EW/PW 1.70–1.78 (M 1.73), EL/PL 2.59–2.72 (M 2.67), EL/EW 1.49–1.54 (M 1.52); shoulders more prominent and subtuberculate; pre-humeral borders oblique and fringed with five to seven hairs; sides as in *K. latior*; stria 3 on each elytron without dorsal pore; preapical pore ordinary; stria 5 with two setiferous dorsal pores at 1/9–1/7 and about 2/3 from base, respectively. Ventral surface as in *K. latior*. Legs as in *K. latior*, though somewhat stouter.

Male genital organ basically similar to that of *K. latior*, but obviously different in the shape of aedeagal apical lobe and copulatory piece in the inner sac. Aedeagus about one-fourth as long as elytra, moderately sclerotized, robust and shorter than in *K. latior*; viewed laterally, aedeagus moderately curved ventrad at the basal part, which is ampler than in *K. latior*, gradually narrowed in apical third, produced ventro-apically, and slightly reflexed at the tip; ventral margin slightly convex at middle in profile; sagittal aileron absent; viewed dorsally, apical lobe obviously broader and shorter than in *K. latior*, with a subtriangular tip. Inner sac wholly covered with minute scales and teeth-patches, and armed with a copulatory piece; teeth-patches as in *K. latior* except for the teeth at the left side which are poorly sclerotized and not fused completely; copulatory piece heavily sclerotized, lying at middle, two-ninths as long as aedeagus, and scoop-shaped with the left margin sinuate. Styles as in *K. latior*, left style slightly shorter than right one, each bearing four setae at apex.

*Type series.* Holotype: ♂, 15–VI–1999, K. KITAYAMA leg. Paratypes: 1 ♀,



Figs. 2–4. *Kusumia kitayamai* ASHIDA, sp. nov., from Wasa-yama Hill; male genitalia, left lateral view (2), apical part of aedeagus, dorsal view (3), and separated copulatory piece (4).

15-VI-1999, K. KITAYAMA leg.; 1♂, 20-VI-1999, K. KITAYAMA leg. The holotype is preserved in the collection of the National Science Museum (Nat. Hist.), Tokyo.

*Type locality.* Matsuse (50 m alt.), northwestern slope of Wasa-yama Hill (488.5 m in height), Kawabe-chô, Wakayama Prefecture, Central Japan.

*Notes.* Although the members of the genus *Kusumia* are distributed in the southern half of the Kii Peninsula, there was a large blank area in its northwestern part. This is the first record of *Kusumia* from this area and is also the westernmost record.

As mentioned above, *K. kitayamai* shows a resemblance to *K. latior* of the *tanakai* group in external characters. It is reasonable because Matsuse, the type locality of *K. kitayamai*, is in the same drainage area of the Hidaka-gawa River as the Hirano-dani Valley, the type locality of *K. latior*. However, *K. kitayamai* has a fringe of hairs at apical two-thirds of the pronotal sides, which is a unique character in the members of *Kusumia*. In contrast to the similarity to *K. latior* in external characters, the male genital organ of the present species is remarkably different in conformation from those of all the other species. The aedeagus is basically similar to that of *K. latior*, but different from the latter in its broad apical lobe and the shape of the copulatory piece in its inner sac. The members of the *tanakai* group have two sclerotized copulatory pieces in the inner sac, while *K. kitayamai* has one scoop-shaped copulatory piece, which seemingly resembles that of the species of the *elongata* group. Although *K. kitayamai* is considered to have been derived from a common ancestor with *K. latior*, it might be an isolated species judging from these unique characters.

Matsuse is situated on the left side of the Hidaka-gawa River at 50 m above sea-level. The locality is about 30 km west by south of the Hirano-dani Valley, the type locality of *K. latior*, and is about 35 km northwest of the northernmost known locality of *K. tanakai*. Three type specimens were dug out from a talus in a gully flowing into the Hidaka-gawa River and shaded mostly with evergreen broadleaved trees, at a depth of about 50 cm or more.

On the southwestern hillside of Wasa-yama Hill, there is the artificially modified sandstone cave called Gonji-ana, the type locality of *Stygiotrechus nishikawai* S. UÉNO (1980). Although the distance between Matsuse and Gonji-ana is only 1.5 km, *Kusumia* has not been found so far in that cave.

## 要 約

芦田 久：キイメクラチビゴミムシ属の新種。——和歌山県西部より、*Kusumia*属の新種、カワバメクラチビゴミムシ *Kusumia kitayamai* sp. nov. を記載した。本種はタナカメクラチビゴミムシ群のキイリュウジンメクラチビゴミムシ *K. latior* S. UÉNO に体の外形が近似するが、前胸背板の側縁に細毛列を有することにより *Kusumia* 属の他のすべての種から容易に識別することができる。また、雄交尾器の形態も基本的に *K. latior* に類似するが、幅広く短い中央片先端部や、一見クマノメクラチビゴミムシ群のそれに似た交尾片を内蔵することにより区別できる。

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*Elytra, Tokyo*, **28** (2): 245–246, November 15, 2000

## A Record of *Wittmercantharis curtata* (Coleoptera, Cantharidae) from Hokkaido, Japan

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*Wittmercantharis curtata* (KIESENWETTER, 1874) has been collected only in Honshu for a long time since it was described from Osaka, Honshu. Recently, it was recorded for the first time from Shikoku other than Honshu (OKUSHIMA, 1997).

We can record now some specimens of this species from Hokkaido. Their collecting data are as given below. We thank Dr. Shun-Ichi UÉNO (Tokyo) and Mr. Tatsumi MIYATA (Sapporo) for their kind support in preparing the present report.

### *Wittmercantharis curtata* (KIESENWETTER)

*Cantharis curtata* KIESENWETTER, 1874, Berl. ent. Z., **18**: 273.

*Wittmercantharis curtata*: M. SATÔ, 1986, Trans. Shikoku ent. Soc., **17**: 259. — OKUSHIMA, 1997, *Elytra*,