

A New Cantharid Species of the Genus *Yukikoa* from
Western Honshû, Japan, with Additional Records of
Five Congeneric Species (Coleoptera, Cantharidae)

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Abstract A new cantharid species of the genus *Yukikoa* is described and illustrated from western Honshû, Japan, under the name of *Y. maniwana*. This is the westernmost distributional record of the genus. Some additional records are given for other members of the same genus.

The genus *Yukikoa* M. SATÔ, 1976 was established on the basis of *Themus wittmeri* NAKANE, 1963 from Osaka, Honshû, Japan. TAKAHASHI (2003) revised it and recognized eight species. All of them are endemic to Honshû and has been unknown from other areas of Japan or other countries.

Recently, we had an opportunity to examine one male specimen collected from north-central area of Okayama Prefecture, western Honshû, which is not included in the known distributional range of the genus. After a careful examination, it has become clear that the beetle must belong to a species new to science. It is the 9th member of the genus *Yukikoa*, and will be described in this paper under the name of *Yukikoa maniwana*.

On the other hand, we have tried to reexamine the specimens recorded as “*Yukikoa wittmeri*” before TAKAHASHI (2003). As the result, we were able to re-identify and correct some previous records. Besides, we also examined some specimens certainly belonging to *Yukikoa*. Therefore, we will record them additionally in this paper.

Before going into further details, we wish to express our deep gratitude to Dr. Shun-Ichi UÉNO of the National Museum of Nature and Science, Tokyo, for critically reading the original manuscript. Our thanks are also due to the following friends of ours for their kind support in loaning specimens or in other ways: Mr. Akihiko WATANABE

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Materials and Methods

The holotype is deposited in the Kurashiki Museum of Natural History (KURA), and the other materials recorded in this paper are preserved in the collections of the Kurashiki Museum of Natural History (KURA), Tokushima Prefectural Museum (TKPM), Messrs. Kôji ARAI (KA), Isao KIRIYAMA (IK) and Kunio SATÔ (KS).

The methods used herein mainly follow OKUSHIMA (2005). The abbreviations used in the text are as follows: HW – width of head; PW – width of pronotum; PL – length of pronotum; EW – maximum width of conjoint elytra; HEW – humeral width of conjoint elytra; EL – length of elytra.

Yukikoa maniwana OKUSHIMA et TAKAHASHI, sp. nov.

(Figs. 1, 2)

Holotype. ♂, Yamanori-yama, Maniwa-shi, Okayama-ken, Honshû, Japan, 26-IV ~9-V-2009, A. WATANABE leg., FIT (KURA).

Distribution. Japan: western Honshû (Chûgoku Mountains, Fagetea crenatae Region).

Description. Male. Body mostly yellowish brown in dorsal view and mostly blackish brown in ventral view; head in dorsal view, pronotum, scutellum, elytra, mouth parts, tarsi and tibiae almost entirely yellowish brown; mandibles and claws mostly reddish brown; antennae, coxae, trochanters and femora almost blackish brown, but often a little pale-coloured at their segmental portions; ventral side of head and thorax mostly blackish brown to black, though partly pale brown; each abdominal ventrite yellowish brown, both lateral sides more or less blackish brown in 2nd to 6th segments. Body closely covered with brown pubescence which is shorter on 3rd to 11th antennal segments; apical margin of clypeus fringed with pale bristles.

Body relatively broad. Head slightly shorter than width; dorsum depressed between antennal sockets, on clypeus and in lateral areas before eyes; surface smooth without lustre and minutely rugose; clypeus slightly arcuate at apical margin, faintly indented at centre; eyes moderately small, globular and prominent, ratio of the diameter of an eye to interocular space 1 : 3; mandible strongly curved at basal 4th; each of labial and maxillary palpi with triangular apical segment; antennae almost filiform but weakly serrate in basal several segments, gradually thinning apicad, attaining to middle of elytra, 1st segment clavate, 2nd and 3rd a little dilated apicad, 4th to 11th subcylindrical,



Fig. 1. *Yukikoa maniwana* OKUSHIMA et TAKAHASHI, sp. nov., ♂ (holotype), from Yamanori-yama, Okayama-ken, Honshû, Japan.

comparative lengths of antennal segments as follows: — 21 : 10 : 12 : 17 : 17 : 18 : 18 : 17.5 : 17.5 : 16.5 : 19.5.

Pronotum transverse trapezoidal; PW/HW 1.63, PW/PL 1.67; anterior margin weakly emarginate; posterior margin weakly protruding; lateral margins feebly sinuate; all angles obtuse and rounded; disc convex, particularly so in the posterior areas of both sides of median line, strongly depressed in lateral areas and along the posterior margin; medio-longitudinal furrow clearly perceptible except near anterior margin; surface smooth without lustre and minutely rugose. Scutellum triangular with blunt apex.

Elytra relatively short and wide, distinctly dilated posteriad, broadest at posterior third; HEW/PW 1.04, EW/PW 1.43, EL/EW 1.64; dorsum closely and rugosely punctate, depressed along outer margin; each elytron provided with three vague costae.

Legs considerably slender; each femur mostly straight; each tibia mostly straight though feebly arcuate in basal part.

Aedeagus elongate; each ventral process of paramere moderately slender, broad at base and apical portion, and the latter forming a hook with pointed tip towards ventral

side; dorsal plate broad, apical margin weakly arcuate and shallowly emarginate at the middle, lateral sides faintly emarginate, ventral surface provided with a transverse protuberance at the middle of each side of dorsal plate. Median lobe simple at the apical portion; inner sac lengthened and swollen dorso-posteriorly, shorter than tegmen, provided with minute hairs at apical portion; each laterophyse stout and broad in ventral view and slender and curved in lateral view, with the tip towards the protuberance on the ventral side of dorsal plate, the apex obviously not reaching that of ventral process (Fig. 2).

Length of body: 13.7 mm (measured from the anterior margin of clypeus to the posterior margin of the 9th tergite in normal condition); breadth of body: 5.35 mm (measured at the widest part of conjoint elytra).

F e m a l e. Unkown.

Differential diagnosis. This new species resembles other known species of the genus *Yukikoa*, especially *Y. onzuiensis*, *Y. wittmeri*, *Y. akitai*, and *Y. mizunoi* having short elytra, all known from western Honshū, but can be easily distinguished from the others

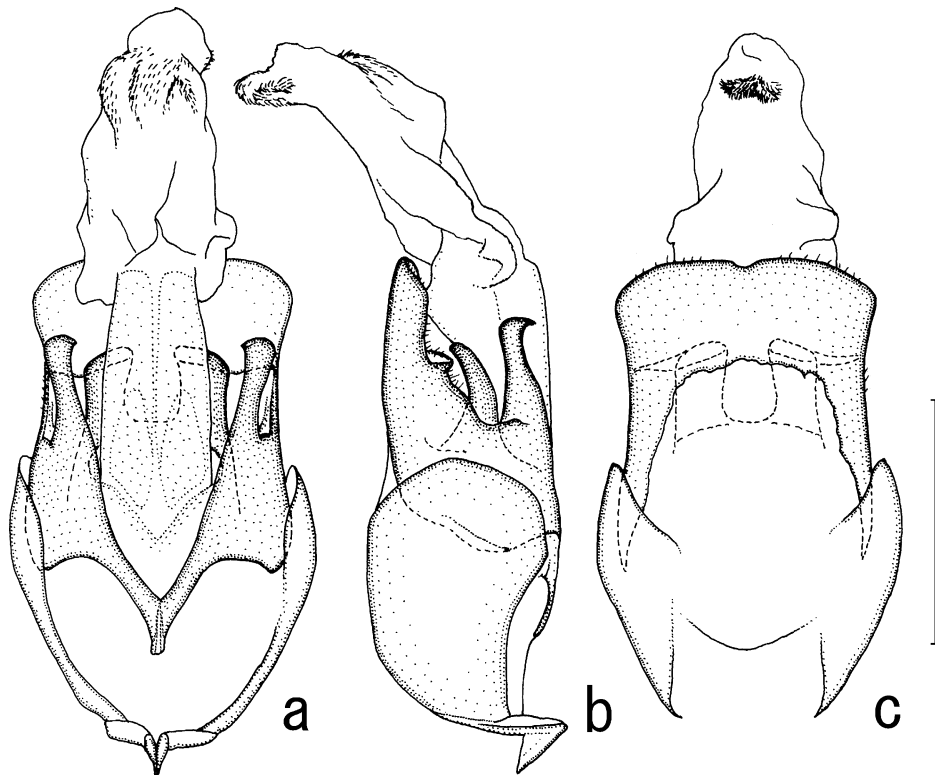


Fig. 2. Aedeagus of *Yukikoa maniwana* OKUSHIMA et TAKAHASHI, sp. nov.; a, ventral view; b, lateral view; c, dorsal view. (Scale: 1.0 mm.)

by the structure of aedeagus, particularly characteristic dorsal plate which is devoid of distinct emargination at the middle of apical margin.

Remarks. This new species occurs in the westernmost part of the hitherto known range of *Yukikoa*, though the type locality of *Y. maniwana* is only about 55 km distant from the nearest locality of *Y. onzuiensis*, and both of them lie on the Chûgoku Mountains, their aedeagi are widely different from each other. At the moment, it is difficult to find particular relationship between this and other species.

Biology. The holotype was collected by a flight interception trap (FIT) placed in the natural forest of *Fagetea crenatae* Region.

Etymology. The specific name is derived from the type locality, Maniwa-shi which is located in the northern area of Okayama Prefecture, western Honshû.

Yukikoa onzuiensis TAKAHASHI, 2003

Yukikoa onzuiensis TAKAHASHI, 2003, Jpn. J. syst. Ent., Matsuyama, 9: 86.

Additional specimens examined. 1♀, Kirigataki-keikoku, Kishida, Onsen-chô, Mikata-gun, Hyôgo-ken, 25-V-1986, K. SATÔ leg. (KS); 1♀, "OKAYAMA / Aida gun / Ushiroyama / VI. 20. 1972. / KOIWATA-Sa.", "ISHIDA-Masaaki / collection / no. 2337", "Themus/ wittmeri NAKANE /キイロシリプトジョウカイ/ d. Isida-Ma. 1972.", "Yukikoa ♀ / wittmeri (NAKANE) /キイロシリプトジョウカイ/ do. ISIDA-Ma. 1986" (TKPM).

Distribution. Japan: western Honshû (northwestern Kinki District to northeastern Chûgoku District, eastern Chûgoku Mountains, *Camellietea japonicae* to *Fagetea crenatae* Region).

Remarks. Though one female from Ushiro-yama located in northeastern Okayama Prefecture (by ISHIDA and KUSAKARI, 1986) and one female from Onsen-chô located in northwestern Hyôgo Prefecture (by SATÔ, 1993) were recorded as "*Yukikoa wittmeri*", respectively, it has become clear after our examination that both of these materials should be identified as *Y. onzuiensis*.

Yukikoa masatakai TAKAHASHI, 2003

Yukikoa masatakai TAKAHASHI, 2003, Jpn. J. syst. Ent., Matsuyama, 9: 90.

Additional specimen examined. 1♂, Ôami, Otari-mura, Nagano-ken, 5-V-1993, S. FURIHATA leg. (IK).

Comments for additional specimen. This specimen can be determined as *Y. masatakai* for the reason of differentiation from *Y. kamezawai* as follows: comparative lengths of 2nd and 3rd antennal segments 1.00 : 1.55; elytra relatively short, EL/EW 1.97; aedeagus with laterophyses short, not reaching the tips of ventral processes in lateral view.

Remarks. The locality of the specimen recorded above is about 10 km apart from

the type locality of *Y. kamezawai*. Both the localities lie on the right bank of the Hime-gawa River which has been regarded as the distributional border of the two species. This means that the present record is a violation of the territory of *Y. kamezawai* by *Y. masatakai*. Similar case can also be observed in a longicorn beetle *Mesechthistatus furciferus meridionalis* (HAYASHI, 1951) in the same area (e.g. TAKAKUWA, 1975). This longicorn beetle is crossing the Hime-gawa River from the left bank, and is likely to invade the original territory of *Mesechthistatus binodosus* (WATERHOUSE, 1881). It is interesting that the same distributional pattern can be seen between quite different taxonomic groups.

SATÔ (1976) recorded several specimens as “*Yukikoa wittmeri*” from Kamikôchi, Nagano Prefecture. All of them have been identified as *Y. masatakai*, and designated as a part of its type series in TAKAHASHI (2003).

Yukikoa kamezawai TAKAHASHI, 2003

Yukikoa kamezawai TAKAHASHI, 2003, Jpn. J. syst. Ent., Matsuyama, 9: 92.

Remarks. HAGA (1984) recorded one female from Mt. Amakazari, Nagano Prefecture, as “*Yukikoa wittmeri*”. This material has been designated as one of the paratypes of *Y. kamezawai*.

Yukikoa kanekoi TAKAHASHI, 2003

Yukikoa kanekoi TAKAHASHI, 2003, Jpn. J. syst. Ent., Matsuyama, 9: 94.

Additional specimen examined. 1♀, “YAMANASI ken / Kita dake, Miike / goya hugin, 2200 m / 1982-VII-4 / KUSAKARI-Kôiti”, “ISHIDA-Masaaki / collection / no. 2338”, “*Yukikoa* ♀ / *wittmeri* (NAKANE) / キイロシリブト / ジョウカイ / do. ISIDA-Ma. 1986” (TKPM).

Distribution. Japan: central Honshû (northern Japanese Alps, Fagetea crenatae to Vaccinio-Piceetea Region).

Remarks. One female from Mt. Kita-dake of Yamanashi Prefecture was recorded as “*Yukikoa wittmeri*” by ISHIDA and KUSAKARI (1986). However, it has become clear after our examination that the material should be identified as *Y. kanekoi*, though the median lobe of the 8th abdominal ventrite in the above specimen seems to be a little larger than in a specimen obtained from the type locality.

Yukikoa watanabei TAKAHASHI, 2003

Yukikoa watanabei TAKAHASHI, 2003, Jpn. J. syst. Ent., Matsuyama, 9: 96.

Additional specimens examined. 1♀, Ôyamabuchi, 1,200 m alt., Nakatsugawa-keikoku, Ôtaki-mura, Saitama-ken, 30-VI-1999, K. TOYODA leg. (KA); 1♂, Koakazawa, 1,100 m alt., Iri-kawa, Hakutai-san, Ôtaki-chiku, Chichibu-shi, Saitama-ken, 7-

VI-2008, K. ARAI leg. (KA); 1♀, near Sanjō-no-yu, alt. 1,000 m, Tabayama-mura, Yamanashi-ken, 7-VI-1997, K. TOYODA leg. (KURA).

Distribution. Japan: eastern Honshū (Kantō Mountains, Fagetea crenatae Region).

Remarks. Two females from Ôyamabuchi of Saitama Prefecture and Tabayama-mura of Yamanashi Prefecture were recorded by TOYODA (2000) as “*Yukikoa wittmeri*”. However, it has become clear after our examination that both of the materials should be identified as *Y. watanabei*. The collecting date of the specimen from Tabayama-mura was reported as “15. VI. 1997” in TOYODA (2000), but the exact date is shown as above from ARAI (= TOYODA)’s information.

Biology. The male from Koakazawa of Saitama Prefecture was collected by a light trap.

Unidentified Records and Materials

The following collecting data were recorded as “*Yukikoa wittmeri*” before TAKAHASHI’s revision (TAKAHASHI, 2003). However, we have been unable to confirm these records as yet.

Uncertain records. Honshū: 1ex., Funamata-rindō, Hinoemata-mura, Minamiaizugun, Fukushima-ken, 19-VI-1980, H. YAMAZAKI leg. (YAMAZAKI, 1980); 1ex., Ojiko-keikoku, Mikata-chō, Mikata-gun, Hyōgo-ken, 5-VI-1994, Y. NAGAHATA leg. (NAGAHATA, 1995); 1♂, Takahachi-yama, Yazu-gun, Tottori-ken, 27-V-1979, M. TÔYAMA leg. (TÔYAMA, 1984).

We also examined some female materials from Gumma, Tokyo and Toyama Prefectures, but we were unable to identify them correctly by their morphological characters. Of these, one female from Toyama was recorded as “*Themus wittmeri*” by NOMURA (1987). For the time being, we would like to regard these records and materials as unidentified *Yukikoa* species.

List of the Genus *Yukikoa* M. SATÔ, 1976

- Y. watanabei* TAKAHASHI, 2003 [Japanese name: Watanabe-shiributo-jōkai]
Known distributional area: Gumma-ken, Saitama-ken, Tokyo-to.
- Y. kamezawai* TAKAHASHI, 2003 [Japanese name: Kamezawa-shiributo-jōkai]
Known distributional area: Nagano-ken.
- Y. masatakai* TAKAHASHI, 2003 [Japanese name: Masataka-shiributo-jōkai]
Known distributional area: Nagano-ken.
- Y. kanekoi* TAKAHASHI, 2003 [Japanese name: Kaneko-shiributo-jōkai]
Known distributional area: Yamanashi-ken.
- Y. akitai* TAKAHASHI, 2003 [Japanese name: Akita-shiributo-jōkai]
Known distributional area: Mie-ken.
- Y. mizunoi* TAKAHASHI, 2003 [Japanese name: Mizuno-shiributo-jōkai]
Known distributional area: Shiga-ken.

- Y. wittmeri* (NAKANE, 1963) [Japanese name: Kihiro-shiributo-jôkai]
Known distributional area: Kyoto-fu, Osaka-fu.
- Y. onzuiensis* TAKAHASHI, 2003 [Japanese name: Onzui-shiributo-jôkai]
Known distributional area: Hyôgo-ken, Okayama-ken.
- Y. maniwana* OKUSHIMA et TAKAHASHI, sp. nov. [Japanese name: Maniwa-shiributo-jôkai]
Known distributional area: Okayama-ken.

要 約

奥島雄一・高橋和弘：日本産シリプトジョウカイ属の1新種と追加記録。——岡山県の中国山地からFIT（フライト・インターセプション・トラップ）によって1雄のみが得られたシリプトジョウカイ属の種を検討した結果、明らかな新種であることが判明したので、マニワシリプトジョウカイ *Yukikoa maniwana* OKUSHIMA et TAKAHASHI, sp. nov. と命名して記載した。シリプトジョウカイ属の種はこれまでに本新種を含めて9種が知られることになったが、それらのすべての種が本州に分布し、マニワシリプトジョウカイは、そのうちでもっとも西方に分布域を持っている。

本種は、いずれも西日本から知られるオンズイシリプトジョウカイ *Y. onzuiensis* TAKAHASHI, 2003, キイロシリプトジョウカイ *Y. wittmeri* (NAKANE, 1963), アキタシリプトジョウカイ *Y. akita-tai* TAKAHASHI, 2003, ミズノシリプトジョウカイ *Y. mizunoi* TAKAHASHI, 2003 などによく似ているが、雄交尾器の形態、とくに背板に深い切れ込みを持たないことによって容易に区別できる。

また、今回、TAKAHASHI (2003) による本属の再検討以前に「キイロシリプトジョウカイ」として記録された標本を可能な限り、再調査したところ、そのうちのいくつかはTAKAHASHI (2003) で記載された別種に同定された。あわせて、実見することのできた未記録標本のデータを公表した。それらのうち、長野県小谷村から追加記録されたマサタカシリプトジョウカイ *Y. masatakai* は、隣接する分布域をもつカメザワシリプトジョウカイ *Y. kamezawai* とのもとの分布境界と考えられるフォッサ・マグナ西縁の境界線を越えて東側で発見されたものであるが、同様の越境例はカミキリムシ科のチュウブマヤサンコブヤハズカミキリ *Mesecithistatus furciferus meridionalis* でも知られている。

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Octavius flavescens (KISTNER) (Coleoptera, Staphylinidae) from Japan and Taiwan

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The genus *Octavius* FAUVEL, 1873 belongs to the subfamily Euaesthetinae of the family Staphylinidae, and at present comprises 244 species from the Palaearctic, Ethiopian, Madagascan, Oriental, Oceanic and Neotropical Regions (PUTHZ, 1977). However, until now this genus has been unknown from Japan. In this report, we would like to report the first species of the genus *Octavius*, namely *O. flavescens* (KISTNER, 1961) from Japan. In addition, we also report additional records of this species from Taiwan.

* 106th contribution to the knowledge of Euaesthetinae.