

A New Species of the Genus *Xylodromus* (Coleoptera, Staphylinidae) from the Kuju Mountains in Kyushu, Japan

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Abstract A new staphylinid species belonging to the genus *Xylodromus* of the subfamily Omaliinae, *X. kjuensis* sp. nov., is described. It was found under moss covering rock in the Kuju Mountains Special Nature Protective Area in Oita Prefecture of Kyushu, Japan.

The staphylinid genus *Xylodromus* HEER is a relatively small group in the subfamily Omaliinae, and has so far been known thirteen species in the Northern Hemisphere (SMETANA, 2004). From Japan, one species, *X. daimio*, was described by SHARP (1889) based on a single specimen obtained from Yuyama in Kyushu. Since then, this species has been reported from several localities in central Honshu by Y. WATANABE (1990), ODA (1993) and T. WATANABE (1994, 2007).

The second author had an opportunity to investigate the insect fauna of the Kuju Mountains Special Nature Protective Area of Oita Prefecture in northern Kyushu. Through the investigation, an interesting species of the genus *Xylodromus* was found from under moss covering rocks in both mountains Naka-dake and Ohgigahana of the Kuju Mountains. After a close examination, it has become clear that this species is new to science for reason of difference in external feature and configuration of male genital organ from the previously known species of the genus. It will be described in the present paper.

Before going further, we wish to express our hearty thanks to Dr. Shun-Ichi UENO, Visiting Professor at Tokyo University of Agriculture, for his kind advice on the present study. Deep gratitude is also due to Dr. Munetoshi MARUYAMA, the Kyushu University Museum, and Mr. Kazuhito NITTA, Kuju Ranger for Nature Conservation, Ministry of the Environment, for their kind arrangement to the second author for the opportunity to make an investigation of insect fauna in the Special Nature Protection Area of the Kuju Mountains.

Xylodromus kjuensis sp. nov.

[Japanese name: Kuju-kikawa-yotsumehanakakushi]

(Figs. 1–4)

Body length: 3.3–3.6 mm (from front margin of head to anal end); 2.1–2.2 mm (from front margin of head to elytral apices).

Body parallel-sided and somewhat depressed above. Colour black and moderately shining, with mouth parts and antennae dark reddish brown, legs brownish yellow with the exception of yellow tarsi.

Male. Head subtrapezoidal, slightly narrowed anteriorly and somewhat depressed above, apparently wider across compound eyes than long (width/length=1.44), postocular part almost parallel-sided and somewhat shorter than longitudinal diameter of compound eye (postocular part/longitudinal diameter of compound eye=0.86), posterior angles nearly rectangular though blunt at corner;

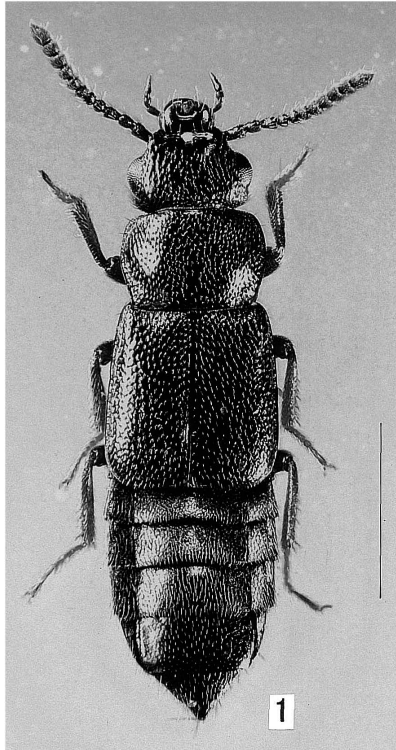
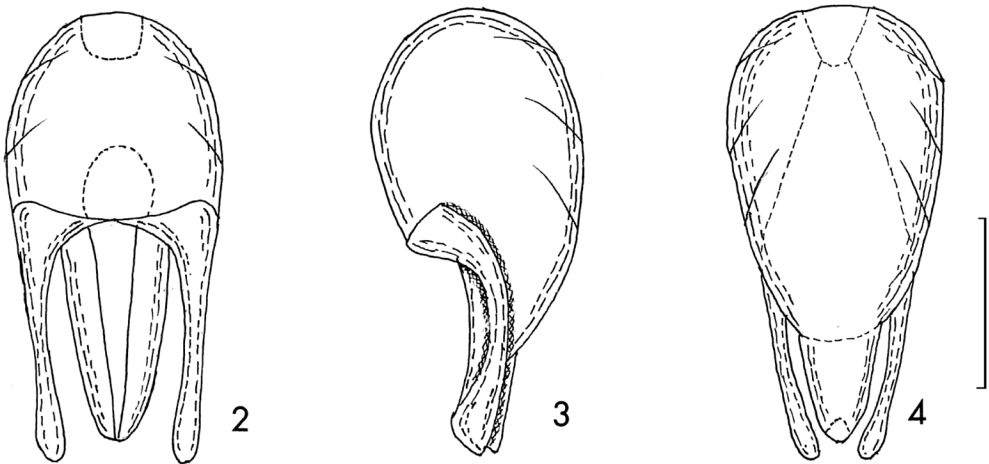


Fig. 1. *Xylodromus kujuensis* sp. nov., from Ohgigahana in the Kuju Mountains, Oita Prefecture, Kyushu, Japan. Scale: 1.0 mm.



Figs. 2-4. Male genital organ of *Xylodromus kujuensis* sp. nov. — 2, Dorsal view; 3, lateral view; 4, ventral view. Scale: 0.1 mm.

surface moderately closely, coarsely and setiferously punctured except for smooth T-shaped frontal area, the punctures becoming somewhat coarser in vertexal area than in the other area; ocelli minute, distance between them somewhat larger than that from outside of ocellus to the inner margin of each compound eye. Antennae somewhat stout and relatively short, not reaching posterior margin of pronotum, with five or six proximal segments polished and the remainings opaque, 1st segment robust and a little dilated apicad, distinctly longer than wide (length/width=1.33), 2nd a little longer than wide (length/width=1.17), distinctly shorter (2nd/1st=0.88) and somewhat narrower (2nd/1st=0.86) than 1st, 3rd constricted at the base, a little longer than wide (length/width=1.33) and somewhat longer (3rd/2nd=1.14) than though as wide as 2nd, 4th to 6th subequal in both length and width to one another, each 1.5 times as wide as long though a half length as long as 3rd, 7th to 10th subequal in both length and width to one another, each somewhat transverse (width/length=1.17), 1.5 times as long as and somewhat wider (each of 7th to 10th/6th=1.17) than 6th, 11th semioval, distinctly longer than wide (length/width=1.43), clearly longer (11th/10th=1.43) than though as wide as 10th, abruptly narrowed in apical third towards the pointed apex. Pronotum subtrapezoidal and gently elevated medially, apparently transverse (width/length=1.48), a little longer (pronotum/head=1.17) and wider (pronotum/head=1.19) than head, widest before the middle and more strongly narrowed posteriad than anteriorly; each lateral side bordered, the border continuing into almost straight posterior margin, gently arcuate in anterior two-thirds and more or less emarginate in posterior third, anterior angles nearly rectangular though not visible from dorsal side, posterior angles more angulate than anterior angles; surface more densely though less coarsely setiferously punctured than in pronotum, provided with a longitudinal smooth area at the middle in posterior two-thirds. Scutellum subtriangular, surface provided with a few minute punctures. Elytra subquadrate, slightly dilated posteriad, slightly longer than wide (length/width=1.08), distinctly longer (elytra/pronotum=1.95) and wider (elytra/pronotum=1.23) than pronotum; lateral sides straight, posterior margin truncate, posterior angles broadly rounded; surface more densely though less coarsely punctured than in pronotum. Legs moderately long, protarsus slightly widened in basal four segments, last segment of metatarsus shorter than the four proceeding segments together.

Abdomen nearly parallel-sided to 6th segment, and then abruptly narrowed towards the anal end; surface of each tergite moderately closely, finely punctured, covered with microscopic ground sculpture, and more closely pubescent than in elytra, the pubescence much longer than those of elytra, 4th tergite provided with a pair of small pruinose spots at the middle; 7th sternite gently circulate produced posteriad at the middle of posterior margin; 8th sternite deeply and semicircularly emarginate at the middle of posterior margin; 9th sternite linguiform, broadly rounded at the apex.

Genital organ trilobed and almost symmetrical. Median lobe gradually narrowed towards the rounded apex, surface provided with a pair of longitudinal keels at both sides of the middle, the keels met at the apex. Parameres elongate, slightly longer than median lobe, and strongly thickened at the apical part as seen from lateral side.

F e m a l e. Similar in general appearance to male, though differing from it in the 8th abdominal sternite strongly narrowed towards the apex which is minutely emarginate at the middle.

Type series. Holotype: ♂, allotype: ♀, Ohgigahana in Kuju Mountains, Kuju-machi, Takeda-shi, Oita Pref., Kyushu, Japan, 23–VI–2013, T. MIYAKE leg. Paratypes: 5 ♂♂, 4 ♀♀, same data as for the holotype; 1 ♂, 1 ♀, Nakadake in Kuju Mountains, Kuju-machi, Takeda-shi, Oita Pref., Kyushu, Japan, 21–VII–2014, T. HADA leg.

Type depositories. The type specimens are preserved in the collection of the Laboratory of Entomology, Tokyo University of Agriculture, with exception of three pairs of paratypes which are deposited in the private collection of the second author.

Distribution. Japan (northern Kyushu).

Remarks. The present new species is similar in general appearance to *X. affinis* (GERHARDT) from Europe, but can be distinguished from it in the following points: head and pronotum more closely and more coarsely punctured and covered with more marked pubescence; elytra more coarsely punctured, microscopic ground sculpture between punctures obscure; abdominal tergites covered with more strong coreaceous ground sculpture, and median lobe of male genital organ different in configuration.

Bionomics. All the type specimens were found from under moss covering on rocks of both mountains Nakadake at an altitude of 1,791 m and Ohgigahana at an altitude of 1,698 m in the Kuju Mountains.

Etymology. The specific epithet of this new species is derived from the Kuju Mountains, in which lies the type locality.

要 約

渡辺泰明・三宅 武：大分県九重山群から採集されたキカワヨツメハネカクシ属（コウチュウ目ハネカクシ科）の1新種。——キカワヨツメハネカクシ属は、これまで日本からはダイミョウキカワヨツメハネカクシただ1種が本州および九州に分布することが知られていた。筆者の一人、三宅は昨年の九重山群特別自然保護地区昆虫相調査の折に扇ヶ鼻山頂付近の岩に着生していた苔からこの属に含まれる1種を採集した。筆者らがこの種を検討した結果、ヨーロッパ各地およびチュニジアに分布している *X. affinis* (GERHARDT) に色彩・形態が類似しているが、体表の点刻および雄交尾器の形状が異なることによって未記載種と判定し *Xylodromus kujuensis* クジュウキカワヨツメハネカクシと命名・記載した。

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