

Occurrence of a New Endogean Trechine Beetle in the Shimokita Peninsula, Northern Japan

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The Shimokita Peninsula is a flag-shaped land projecting northwards from the northern end of Honshu. Its head is triangularly dilated and mountainous, but the isthmus is so low and narrow that the peninsular mountains, called the Osoré-zans, are perfectly isolated from all the other hilly areas in northern Japan. What kind of flightless trechine beetles occur there remained unclarified until recently, in spite of repeated collectings made in that peninsula. From the zoogeographic point of view, however, it was very important to solve the problem, since the isolated mountains are situated between the mainland of Honshu and the Oshima Peninsula of the Island of Hokkaido, whose trechine faunas are considerably different from each other.

Early in the autumn of 1974, the present writer had an opportunity to revisit the peninsula and at last succeeded in obtaining a specimen of an endogean trechine near the highest point of the Osoré-zan Mountains. It looked very similar to *Oroblemus caecus* S. UÉNO et A. YOSHIDA, an endogean species known from Mt. Iwaki-san situated on the Japan Sea side of northern Honshu about 100 km to the southwest from Osoré-zan across Mutsu Bay. After a careful examination, it became evident that the Shimokita species is markedly different from *O. caecus* in the mode of pubescence on the body surface, though very close to the latter in other respects. Unfortunately, the single specimen examined is a female. Having seen no males, the writer cannot decide at present if the difference between them is merely specific or of a higher category. In the present paper, he will record the occurrence of the new trechine in the Shimokita Peninsula only to show that it is definitely related to the species distributed in northern Honshu, leaving the taxonomic problem for future investigations.

Before going further, the writer wishes to express his indebtedness to Dr. Tsukané YAMASAKI for his kind collaboration in the field.

Oroblemus sparsepilifer S. UÉNO, sp. nov.

Length: 3.50 mm (from apical margin of clypeus to apices of elytra).

Very similar in habitus to *O. caecus* S. UÉNO et A. YOSHIDA (1966, p. 80, figs. 1-2) of Mt. Iwaki-san, but the head is a little narrower and has more rudimentary eyes, the pronotum has evidently narrower apex, a little wider base and more widely arcuate sides, and the elytral striae are obviously deeper and much more distinctly punctate.

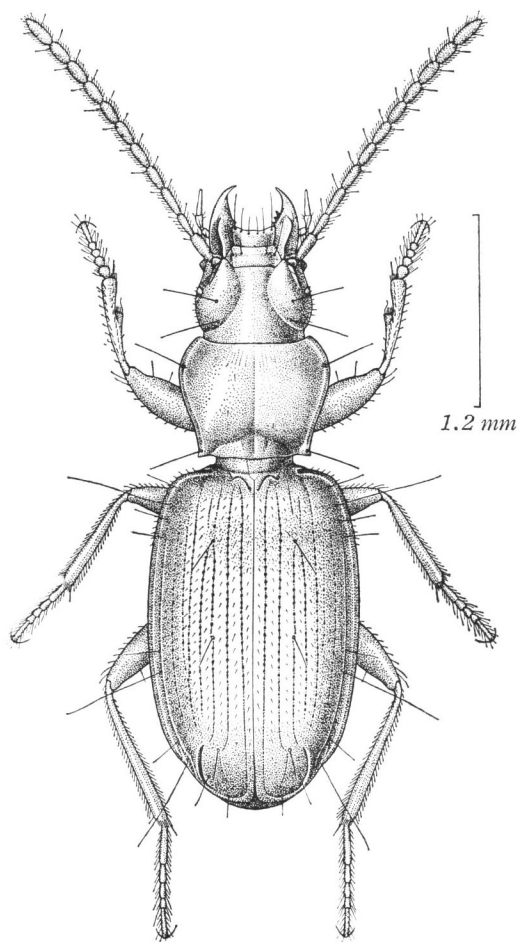


Fig. 1. *Oroblemus sparsepilifer* S. UÉNO, sp. nov., ♀, of Kitaguni-yama of the Osoré-zan Mountains in the Shimokita Peninsula.

Decidedly different from *O. caecus* in the mode of pubescence, which is reduced to a row of short hairs on each elytral interval and almost disappears on the head, pronotum and sternites.

Colour somewhat more reddish than in *O. caecus*, with antennal segments 2 and 3 darker. Head less transverse than in *O. caecus* and glabrous on the surface; trace of eyes obviously smaller than in the type-species, less than two-sevenths as long as genae, though being structurally the same as in the latter; right mandible sharply tridentate, while the left is bidentate. Mouth parts very similar to those of *Daiconotrechus iwatai* (cf. UÉNO, 1970, p. 612, fig. 6); mentum free, not fused with submentum, with the tooth broad and distinctly emarginate at the tip; submentum with a transverse row of eight setae; ligula subquadrate, with gently produced apex which is truncated at middle and

octosetose; paraglossae long and thin; labial palpus fairly thick, penultimate segment quadrisetose and surmounted by thin apical segment; maxillae rather thick and well arcuate; maxillary palpus thick, penultimate segment widely dilated towards apex and with a whorl of short hairs at the apex, ante-penultimate segment also with a few short hairs at the apex, both sparsely bearing minute pubescence, apical segment subconical. Antennae somewhat slenderer than those in *O. caecus*, reaching basal three-tenths of elytra, with segment 3 slightly longer and segments 6–10 less oval than in the latter.

Pronotum more strongly contracted in front and less so behind than in *O. caecus*, widest at about two-thirds from base; PW/HW 1.33, PW/PL 1.29, PW/PA 1.40, PW/PB 1.34;¹⁾ sides more widely and evenly arcuate in front, only feebly sinuate at about one-sixth from base; apex a little narrower than base, PA/PB 0.96, with front angles gently advanced though rounded at the tip; base with a small emargination on each side just inside hind angle, which is denticulate and somewhat sharp; surface nearly glabrous, though several microscopic hairs exist on the disk; other features as in the type-species.

Elytra distinctly depressed on the disk, though very similar in shape to those in *O. caecus*; EW/PW 1.37, EL/EW 1.57; side border distinctly ciliate and somewhat uneven at the humeral part, but the fringing hairs become extremely minute and almost disappear behind basal one-fourth; striae entire, distinctly punctate, deeply impressed on the disk but becoming shallower at the side, stria 5 deepening near base, 8 deeply impressed throughout, almost sulciform; scutellar striole distinct though short; apical striole short but deep and moderately curved, bending inwards at the anterior end and nearly joining stria 3; apical carina short but prominent; intervals gently convex near suture but flat at the side, each bearing an irregular row of short erect pubescence; stria 3 with two long dorsal setae at basal one-fifth and about middle; preapical seta situated at the apical anastomosis of striae 2 and 3, distinctly more apart from apex than from suture, and closer to apical striole than to suture; marginal umbilicate pores and microsculpture as in *O. caecus*.

Prosternum with a few, fairly long hairs; sternites almost glabrous, each with a pair of ordinary setae; anal sternite provided with two pair of setae in ♀. Legs as in *O. caecus*, though each protibia is longitudinally depressed on the external face.

Male unknown.

Type-specimen. Holotype: ♀, 30-IX-1974, collected by S. UÉNO and preserved in the collection of the National Science Museum (Nat. Hist.), Tokyo.

Type-locality. Kitaguni-yama, 670 m alt., Osoré-zan Mountains in the Shimokita Peninsula, northern Honshu, Japan.

Notes. It is doubtless that the present new species belongs to the *Trechoblemus* complex and is closest to *O. caecus* of all the species hitherto described. In *O. caecus*, the body surface is densely pubescent throughout, a condition which has not been known in any of the other anophthalmic forms of the genus-complex. In *O. sparsepilifer*, on the contrary, the pubescence is ranged in longitudinal rows on the elytra and ex-

1) For abbreviations, see UÉNO, 1970, p. 604.

tremely reduced on the other parts of body. In this respect, the Shimokita species is much closer to *Kurasawatrechus* and its direct relatives, and is widely different from *O. caecus*. Perhaps a new genus or at least a new subgenus should be recognized for the new species on the basis of this character. However, the writer prefers to refrain from erecting a new higher taxon for the time being, as he has been unable to examine its aedeagal characters. Incidentally, no representative of the *Trechoblemus* complex, with the exception of *Trechoblemus* itself, has been known in the Island of Hokkaido, where the high mountains harbour other groups of trechine beetles (cf. UÉNO, 1971, pp. 24–26).

The single known specimen of *O. sparsepilifer* was found in a small gully on the northern slope of Kitaguni-yama, one of the highest peaks of the Osoré-zan Mountains. The gully was situated in a deciduous broad-leaved forest and was very wet though it contained no running water. The beetle was turned up from beneath a large stone embedded in the soil, and was rather inactive when exposed.

References

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