

A new genus of Oxypodina from Kyrgyzstan (Coleoptera, Staphylinidae, Aleocharinae, Oxypodini)

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A b s t r a c t : *Typhlotectusa* nov.gen. *frischi* nov.sp. (East Kyrgyzstan: Issyk-Kul) of the subtribe Oxypodina is described and illustrated. The new species was discovered in a high-altitude habitat and is characterized by a slender habitus, its mouthparts, strongly incrassate antennae, a short metatarsomere I, the shapes of the male sternite VIII and the apical lobe of the paramere, as well as additionally by the complete absence of eyes, reduced wings, and reduced pigmentation.

K e y w o r d s : Coleoptera, Staphylinidae, Aleocharinae, Oxypodini, *Typhlotectusa*, Kyrgyzstan, taxonomy, new genus, new species.

Introduction

The megadiverse tribe Oxypodini of the Aleocharinae is represented in the Palaearctic region by five subtribes. The Oxypodina is, by far, the most speciose of them and previously included 42 genera in the Palaearctic region, eleven of which are confined to the East Palaearctic. While some of these genera include a large number of species, with *Oxypoda* MANNERHEIM, 1830 alone accounting for nearly 500 species in the Palaearctic region (ASSING 2018a), there are others with only one or few species. Among the 42 genera represented in the Palaearctic region, as many as ten genera are monotypical and additional eight genera only include two species each. In general, there is a trend for less speciose genera to have more restricted distributions than larger taxa (ASSING 2018b).

Among material collected by Johannes Frisch (Museum für Naturkunde, Berlin) during a field trip to Kyrgyzstan in 2011, an anophthalmous specimen of an undescribed species of Oxypodina was discovered. A thorough examination of various body parts revealed no evident affinities to any of the described genera of Oxypodina. It is concluded, therefore, that it represents a distinct genus that shares ecological and some morphological similarities with *Tectusa* BERNHAUER, 1899.

Material and methods

The material treated in this study is deposited in the author's private collection (cAss).

The morphological studies were conducted using a Stemi SV 11 microscope (Zeiss), a Discovery V12 microscope (Zeiss), and a Jenalab compound microscope (Carl Zeiss Jena). The images were created using digital cameras (Nikon Coolpix 995, Axiocam ERc 5s), as well as Labscope and Picolay stacking software. The map was created using Map-Creator 2.0 (primap) software.

Body length was measured from the anterior margin of the labrum to the posterior margin of the abdominal tergite VIII, the length of the forebody from the anterior margin of the labrum to the posterior margin of the elytra, head length from the anterior margin of the clypeus (without ante-clypeus) to the posterior constriction of the head, elytral length at the suture from the apex of the scutellum to the posterior margin of the elytra, and the length of the aedeagus from the apex of the ventral process to the base of the aedeagal capsule. The "parameral" side (i.e., the side where the sperm duct enters) is referred to as the ventral, the opposite side as the dorsal aspect.

Description

Genus *Typhlotectusa* nov.gen. (Figs 1-10)

T y p e s p e c i e s : *Typhlotectusa frischi* nov.sp.

E t y m o l o g y : The new name (gender: feminine) alludes to the complete absence of eyes and the superficial resemblance to species of the oxypodine genus *Tectusa*.

D e s c r i p t i o n : Species of small body size and slender habitus (Fig. 1).

Head (Figs 2-3) large in relation to pronotum, of orbicular shape, strongly convex in cross-section; postgenal carinae visible only posteriorly in lateral view; gular sutures broadly separated. Antenna (Fig. 4) moderately long, strongly incrassate apically, and with strongly transverse antennomeres IV-X. Eyes completely absent (Fig. 3). Labrum strongly transverse. Right mandible with pronounced molar tooth. Maxillary palpus (Fig. 7) with relatively short palpomeres. Labium (Fig. 4) with 3-jointed palpi, palpomeres moderately slender; ligula short, but slender, apically bilobed.

Pronotum (Fig. 2) slender, broadest anteriorly, only slightly broader than head. Elytra slender, of reduced length. Legs relatively short; all tarsi five-jointed; metatarsomere I shorter than combined length of metatarsomeres II and III. Ventral aspect of thorax not distinctive.

Abdomen slender, broadest at segments VI-VII; tergites III and IV with moderately deep, tergite V with shallow, and tergite VI without anterior impressions.

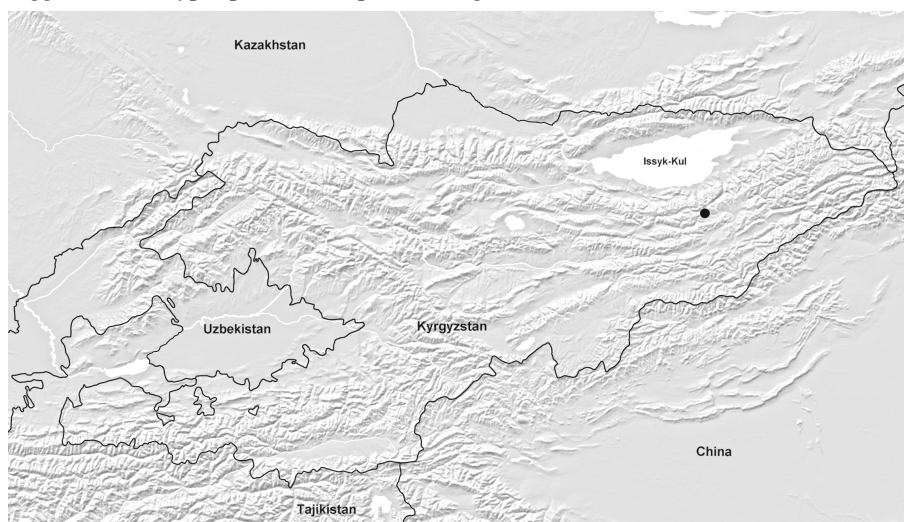
♂: sternite VIII (Fig. 6) with weakly convex posterior margin, not produced in the middle; morphology of the median lobe of aedeagus (Figs 8-9) of the *Oxyroda* type; paramere (Fig. 10) with relatively short and broad apical lobe.

♀: unknown.

C o m p a r a t i v e n o t e s : Based on external characters and particularly the morphology of the aedeagus (shape and internal structures of median lobe; shape of apical lobe of paramere), the new genus belongs to the Oxyrodina. Among the genera of this subtribe, it is characterized particularly by a slender habitus, a strongly convex head (cross-section) with strongly incrassate antennae, relatively short maxillary palpomeres, and a slender bilobed ligula, by a short metatarsomere I, and by the shape of the male sternite VIII (posteriorly not produced). In external appearance, the genus somewhat resembles *Tectusa*, from which it is additionally distinguished by a shorter and basally or medially undilated apical lobe of the paramere.

D i s t r i b u t i o n a n d n a t u r a l h i s t o r y : The distribution of this genus

is currently confined to East Kyrgyzstan, Middle Asia (Map 1). The adaptive reductions of the eyes, hind wings, and pigmentation, as well as the available ecological data suggest that the type species is adapted to a high-altitude habitat.



Map 1: Geographic position of the type locality *Typhlotectusa frischi* in Middle Asia.

***Typhlotectusa frischi* nov.sp. (Figs 1-10)**

Type material: Holotype ♂: "Kyrgyzstan: Issyk-Kul, Kyzyl-Tuu - Kyzyl-Suu: S Barskoon, Barskaun Pass, 3770 m, N41°53'30" E077°41'59", 24.06.2011, leg. J. Frisch / Holotypus ♂ *Typhlotectusa frischi* sp. n., det. V. Assing 2019" (cAss).

Etymology: This remarkable species is dedicated to Johannes Frisch, who collected the holotype.

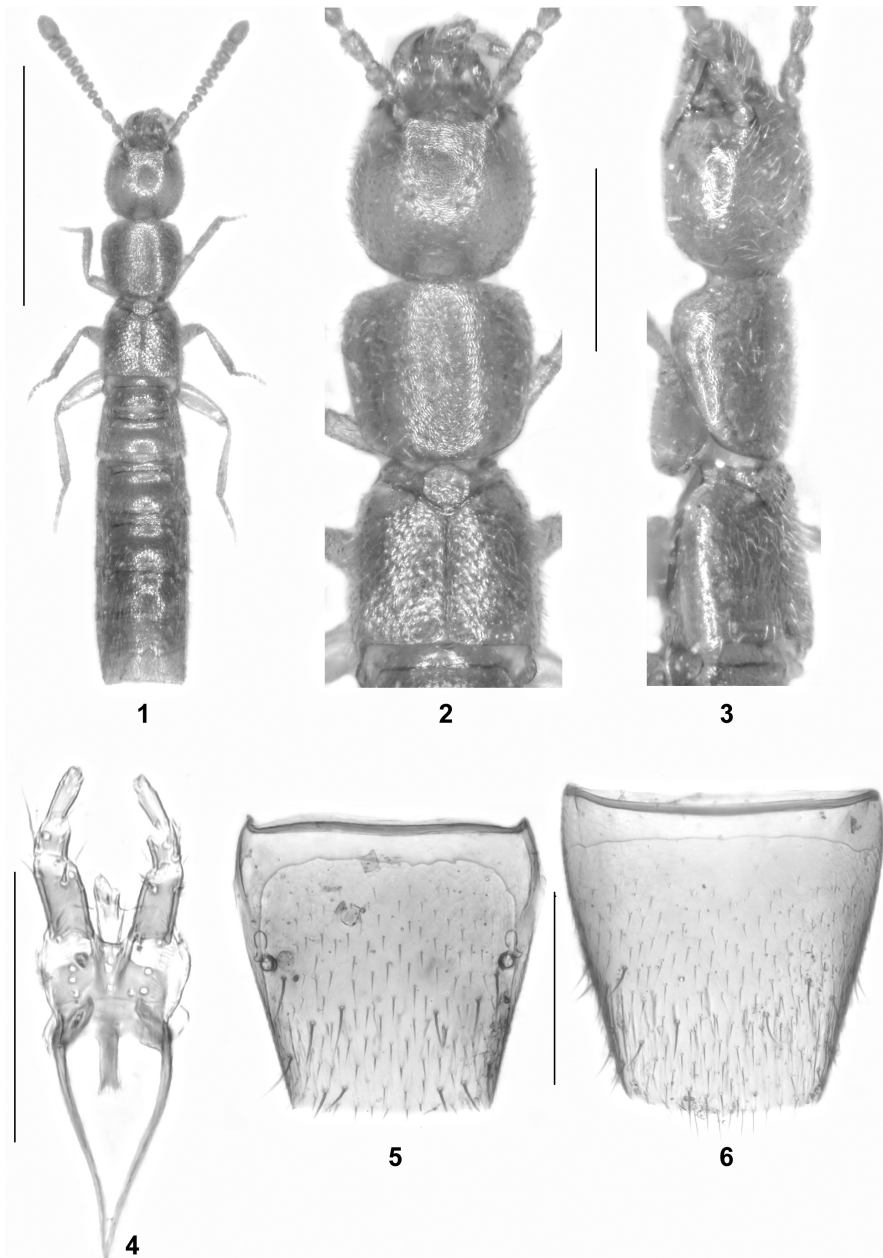
Description: Body length 2.5 mm; length of forebody 1.05 mm. Habitus as in Fig. 1. Coloration: body yellowish-red with dark-yellow legs and antennae.

Head (Figs 2-3) weakly oblong; punctuation very fine and rather dense, barely visible in the pronounced microreticulation. Eyes completely reduced, not even rudiments visible (Fig. 3). Antenna 0.6 mm long; antennomere III of conical shape and weakly oblong; antennomeres IV-X strongly transverse, more than twice as broad as long, and of gradually increasing width, XI slightly longer than the combined length of IX and X.

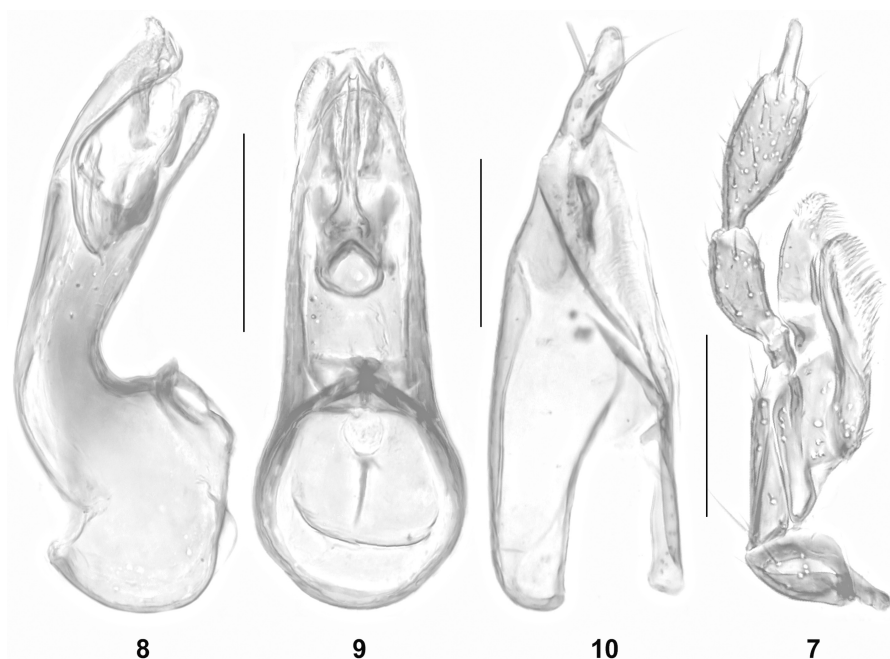
Pronotum (Fig. 2) very weakly transverse, only 1.05 times as broad as long and 1.05 times as broad as head, with weakly marked posterior angles; punctuation dense and extremely fine, nearly invisible in the pronounced microreticulation even at high magnification.

Elytra (Fig. 2) short and slender, as broad as, and 0.7 times as long as pronotum; punctuation dense and fine, but more distinct than that of head and pronotum; interstices with shallow microsculpture and glossy. Hind wings completely reduced.

Abdomen 1.1 times as broad as elytra at segment VI; punctuation fine and moderately dense; interstices with microsculpture; posterior margin of tergite VII without palisade fringe; posterior margin of tergite VIII truncate (Fig. 5).



Figs 1-6: *Typhlotectusa frischi*: habitus (1); forebody in dorsal view (2); forebody in lateral view (3); labium (4); male tergite VIII (5); male sternite VIII (6). Scale bars: 1: 1.0 mm; 2-3: 0.5 mm; 5-6: 0.2 mm; 4: 0.1 mm.



Figs 7-10: *Typhlotectusa frischeri*: maxilla (7); median lobe of aedeagus in lateral and in ventral view (8-9); paramere (10). Scale bars: 0.1 mm.

♂: sternite VIII (Fig. 6) approximately as long as broad, with weakly convex posterior margin; median lobe of aedeagus 0.27 mm long and shaped as in Figs 8-9; paramere (Fig. 10) 0.36 mm long.

♀: unknown.

Distribution and natural history: The type locality is situated in East Kyrgyzstan to the south of Issyk-Kul lake. The holotype was collected at an altitude of nearly 3800 m.

Acknowledgement

Johannes Frisch (Museum für Naturkunde, Berlin) kindly granted permission to retain the holotype in exchange for a holotype of *Erichsonius* FAUVEL, 1874.

Zusammenfassung

Typhlotectusa nov.gen. *frischeri* nov.sp. (Ost-Kirgisistan: Issyk-Kul) aus der Subtribus Oxypodina wird beschrieben und abgebildet. Die neue Art wurde in einem hochalpinen Habitat entdeckt und ist u.a. durch auffällig schlanke Gestalt, die Mundteile, apikal deutlich verdickte Fühler, kurze Metatarsomeren I, die Form des männlichen Sternits VIII, die Gestalt des Apikallobus der Paramere sowie darüber hinaus durch völlig reduzierte Augen, reduzierte Flügel und reduzierte Pigmentierung charakterisiert.

References

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