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Kurbatoviella antennata, a new peculiar genus and species of the Clavigeritae from Borneo (Coleoptera: Staphylinidae: Pselaphinae)

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Abstract. *Kurbatoviella antennata* gen. nov., sp. nov. is described based on the material collected in Sabah, Borneo. The genus is a member of the supertribe Clavigeritae (Coleoptera: Staphylinidae: Pselaphinae), and has very special and isolated position. Tentatively it is placed to the subtribe Disarthricerina.

Key words. Staphylinidae, Pselaphinae, Clavigeritae, Disarthricerina, *Kurbatoviella*, new genus, new species, Sabah, Borneo, Malaysia

Introduction

Bornean fauna of the Clavigeritae is very poorly studied (Nomura & Mohamed 2008, Hlaváč in press). Four genera (*Disarthricerus* Raffray, 1895, *Tasmiger* Besuchet, 2008, *Colilodion* Besuchet, 1991 and *Pseudacerus* Raffray, 1895) with six described species are known from this third largest island in the world, with two additional undescribed genera and more undescribed species known to me. The aim of this paper is to describe one of the new genera that is very peculiar and is tentatively placed to the subtribe Disarthricerina.

Material and methods

Holotype and paratypes are deposited in the following collections:

CPH Peter Hlaváč collection, Košice, Slovakia; CSK Serguei Kurbatov collection, Moscow, Russia;

ZMUM Zoological Museum, Moscow State University, Moscow, Russia.

Taxonomy

Kurbatoviella gen. nov.

(Figs. 1–8)

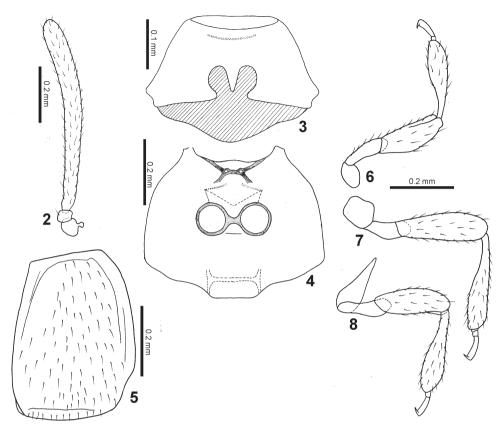
Type species: *Kurbatoviella antennata* sp. nov., present designation.

Diagnosis. Small but stout clavigerine with three segmented antennae; last antennal segment considerably longer than pedicel, with simple rounded unmodified apex. Head very long, not separated from neck, expanded posteriorly (a unique feature of the Clavigeritae). Trichomes totally absent; sexual dimorphism not apparent.

Description. Whole body (Fig. 1) light yellowish-brown, regularly pubescent. Head rectangular, very slightly narrowed from frons to mid-length; thereafter slightly expanded to basal margin. Neck not separated from head, disc in middle with deep, elongate depression. Anterior part and sides of head pubescent, temples very long, rostrum wide, slightly convex in middle. Eyes large, clearly visible from dorsal as well as from ventral side. Antennae (Fig. 2) three-segmented; antennomeres I and II small, about the same size, scape partly hidden by antennal



Fig. 1. *Kurbatoviella antennata* gen. et sp. nov., photo of habitus.



Figs. 2–8. *Kurbatoviella antennata* gen. et sp. nov. 2 – antenna; 3 – prosternum; 4 – meso- and metaventrite; 5 – right elytron; 6 – fore leg; 7 – midleg; 8 – hind leg.

cavity, barely visible dorsally. Terminal antennomere very long, more than 15 times as long as pedicel, clavate and evenly curved outwards, round in cross section at apex; ventrally with two well-defined parallel carinae, median fovea located between them.

Pronotum pentagonal, clearly wider than long and much wider than head, longest in middle. Its base with median prominent triangular projection and with well-defined anterior groove and large depression on posterior part, slightly recessed into elytra. Posterior part widest and with sharp angles, lacking any fovea; scutellum not visible. Venter with proventrite (Fig. 3) shiny, with sparse and fine pubescence; procoxae at anterior part separated by sharp proventral process. Mesoventrite and metaventrite (Fig. 4) confluent, shiny, with regular pubescence; mesoventrite in middle slightly shorter than metaventrite. Basal mesoventral and apical metaventral process similar in shape and size, not meeting; mesocoxae separated, metacoxae separated by large truncate basal metaventral process. First visible sternite (III) about half-length of second (IV); second visible sternite about as long as sternites V–VII combined.

Elytra large (Fig. 5), with fine microstructure and dense short pubescence, at suture more than twice as long as pronotum. Humeri well-defined, round but prominent.

Legs (Figs.6–8) short, tibiae pedunculate, femora clavate, lacking any spines.

Abdomen shiny, sparsely pubescent. Composite tergite (IV–VI) concave, more than twice as long as tergites VII–VIII combined, with deep and large lateral foveae, lacking trichomes. Paratergites of composite tergite elongate, slender but well-defined.

Sexual dimorphism. Not apparent. This is the first clavigerine known to the author where males have simple tibiae lacking spines as found in females.

Differential diagnosis. *Kurbatoviella* gen. nov. resembles *Disarthricerus* in the general appearance but it can be readily separated from the latter by very long head, not separated from the neck and expanded posteriorly. *Disarthricerus* has neck well-separated from the short head.

Etymology. The new genus is named in honour of my friend Serguei Kurbatov, well-known specialist on Pselaphinae and Scydmaeninae, and the collector of the type series. Gender is feminine.

Kurbatoviella antennata sp. nov.

(Figs. 1-8)

Type material. HOLOTYPE: \c , 'MALAYSIA: E Malaysia, Sabah, rd Kota-Kinabalu – Tambunan, km 52, 1600 m, rotten wood, 4.07.2002, Kurbatov & Zimina' (ZMUM). Paratypes: $2 \c$, same data as holotype (CPH, CSK); $2 \c$, same data as holotype but 1700 m, under stone with ants (ZMUM, CSK); $1 \c$? (disarticulated specimen in Euparal, aedeagus lost): same data as holotype but 1700 m, litter (CPH).

Description. The whole body light yellowish-brown, regularly pubescent. Body length 1.23–1.25 mm, maximum width 0.58 mm. Head very long, 2.5–2.7 times longer than wide, with rostrum sparsely punctured and with dense pubescense. Antennomere III very long, 15 times as long as pedicel, densely pubescent. Head about 1.5 times as long as pronotum; pronotum with fine microstructure and sparse pubescence, about 1.5 times as wide as long. **Sexual dimorphism.** Not apparent.

Host ant. Unknown.

Distribution. Borneo (Sabah).

Discussion

The subtribal placement of the genus *Kurbatoviella* gen. nov. is very problematic. Due to the terminal antennal segment with simple rounded unmodified apex and the total absence of trichomes, there is no doubt that *Kurbatoviella* gen. nov. belongs to the most basal lineage of all Clavigeritae. All Clavigeritae, except for the most primitive Disarthricerina Jeannel, 1949, have more or less developed trichomes that can be located on the apical part of elytra or on the dorsal part of the first visible tergites or paratergites. Thus, the placement of *Kurbatoviella* gen. nov. into the Disarthricerina is supported by the absence of trichomes and by the same unmodified apex of the terminal antennal segment, but the structure of the head of *Kurbatoviella* gen. nov. and that of *Disarthricerus* are very different. The shape of the head and its separation from the neck is one of the most important characters used to separate subtribes in the current classification of the Clavigeritae (Jeannel 1954: 290). Jeannel recognized two main types of head and neck. The first type is common in the majority of clavigerines (here

also including Disarthricerina): the head is separated from the neck by an occipital carina, and the neck is abruptly narrower posterior to the carina. The second type separates off the subtribes Miroclavigerina and Thysdariina, both known only from Madagascar: the head and the neck are of the same width or the occiput is convergent and smoothly merging with the neck while lacking the occipital carina. *Kurbatoviella* gen. nov. does not fit in either definition as the head is not separated from the neck. It also lacks the occipital carina, but the head is evenly expanded posteriorly and is widest at its posterior margin. The most convenient solution would be to erect a new subtribe for *Kurbatoviella* gen. nov. Unfortunately, the higher taxonomy of the tribe Clavigerini is confused. The tribe is certainly polyphyletic, and erection of another subtribe without phylogenetic analysis of the whole tribe Clavigerini would not improve the situation. Consequently, the genus *Kurbatoviella* gen. nov. is tentatively placed into the subtribe Disarthricerina.

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