A new species of the genus *Microcleonus* Faust, 1904 (Coleoptera: Curculionidae) from Tuva

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Abstract

A new species, *Microcleonus meregallii* Legalov, sp. nov. from Tuva is described and illustrated. It is similar to *M. panderi* from which it differs in the coarsely punctuate pronotum, without distinct tubercles, and slightly curved aedeagus. Key and distribution map for all species of this genus are given.

Key words: Biodiversity, Curculionoidea, Cleонini, Russia, Siberia, species richness.

Introduction

The genus *Microcleonus* Faust, 1904 is distributed in Central Asia (Alonso-Zarazaga et al. 2017) and includes three species. *Microcleonus panderi* (Fischer von Waldheim, 1835) from “Tataria Magna” was the first described species of this genus (Fischer von Waldheim 1835). Kazakhstan was considered the typical locality by Ter-Minassian (1968, 1988). However, this species is absent in Kazakhstan. Bajtenov (1974) suggested the finding of this species in East Kazakhstan. “Tataria Magna” included the territory of Kazakhstan, Middle Asia, Siberia, Mongolia, Tibet and Far East. I assume that the species was described from Siberia or Eastern Mongolia. The specimens determined by J. Faust as *M. panderi* from the Natural History Museum, London (Meregalli 2017a) is fully consistent with the species from Buryatia and Zabaikal’skii Krai. *M. sedakoffi* (Boheman, 1842) was described (Boheman 1842) from Dauria (south of Zabaikal’skii Krai). Ter-Minassian (1972) described *M. secundus* Ter-Minassian, 1972 from southern Mongolia. Legalov (1999) discovered that two species of the genus *Microcleonus* live in Southern Siberia. The East Siberian species was named as *M. sedakoffi*, and the Tuvinian species as *M. panderi*. Meregalli (2017b) confirmed that *M. sedakoffi* is a synonym of *M. panderi*, as originally proposed by Csiki (1834). The specimens from Tuva belong thus to a still unnamed species, which is described in this paper.
Material and methods

Type specimens are kept in the ISEA – Institute of Systematics and Ecology of Animals (Russia: Novosibirsk).

Descriptions, photographs and body measuring were performed using a Zeiss Stemi 2000-C dissecting stereomicroscope.

The materials of the ISEA and literature data (Ter-Minassian 1972, 1988, 1989; Egorov 1989; Abaturov et al. 2018) were used to compile the distribution of species (Fig. 3).

The terminology of the weevil body is according to Lawrence et al. (2010).

Systematics

*Microcleonus meregallii* Legalov, sp. nov.
https://zoobank.org/urn:lsid:zoobank.org:act:13A68AF4-3B11-4180-BAD8-96BC7BDFB49C
(Figs. 1, 2)

**Type material:** Holotype, male (ISEA), RUSSIA, Tuva, env. Erzin, 1100-1200 m, 14-15.VIII.1989, D. Logunov. Paratypes: 1 male (ISEA), idem; 2 females (ISEA), env. Kyzyl, 20-25.VI.1989, D. Logunov; 1 male (ISEA), env. Kyzyl, 11.V.1990, V. Zinchenko; 1 female (ISEA), 5 km E of Khol-Oozhu, Valley of Aryacoooy-Chen River, 1300m, 15-16.VII.1993, D. Logunov; 2 females (ISEA), Tandinsky District, env. Uspenka, Berezovka, 14.VI.1976, A. Cherepanov; 1 female (ISEA), Kaa-Khemsky District, 1964; 1 female, (ISEA) Tuva, Akademika Obrucheva Mts., 15 km N of Kyzyl, Malyi Shivilig River, 650-850 m, steppe, 24.VI.2001, R. & A. Dudko, I. Ljubechansky; 1 female, (ISEA) Mongun-Tayginsky District, Kargy River, 1700m, 15.VI.1989, D. Logunov.

**Description.**

Body black, covered with densely yellowish-gray scales. Scales suboval, apically bifid, absent on head, wide longitudinal stripes on pronotal disc, base of 3rd-7th elytral interstriae, oblique spots behind middle of elytra. Antennae, tarsi and apices of tibiae, or tibiae completely red-brown.

![Figure 1. Microcleonus spp., dorsal view: a – M. meregallii sp. nov., holotype, male, b – M. meregallii sp. nov., paratype, female, c – M. panderi, neotype, male, Zabaikalskii Krai. Scale bar: 1.0 mm.](image)
NEW SPECIES OF THE GENUS MICROCLEONUS FROM TUVA

Male: Rostrum almost straight, without middle carina or with weak one, sparsely punctate in basal and middle thirds, finely punctate at apex, 1.9 times as long as wide at apex, 1.7-1.8 times as long as wide in middle, 1.4-1.6 times as long as wide at base, 0.6-0.7 times as long as pronotum. Antennal scrobes lateral, directed to base of rostrum, not reaching eyes. Forehead subequal in width to width of rostrum base, flattened, punctate. Eyes large, about 0.4 times as short as wide, transversely oval, not protruding from contour of head. Temples very short. Antennae inserted before apex of rostrum. Scapus long, about 2.8 times as long as wide at apex, not reaching eyes. Antennomeres 2 and 3 conical. Antennomere 2 subequal in length and width, 0.3 times as long as and equal in width to scape. Antennomere 3 subequal in length and width, 0.6 times as long as and as narrow as antennomere 2. Antennomeres 4-7 wide-subconical. Antennomere 4 about 0.6 times as long as wide, shorter and distinctly wider than antennomere 3. Antennomere 5 almost two times wider than long, distinctly shorter and slightly narrower than antennomere 4. Antennomere 6 about 1.6 times wider than long, longer and slightly wider than antennomere 5. Antennomere 7 almost two times wider than long, slightly shorter and distinctly wider than antennomere 6. Antennomere 8 about 0.6 times as long as wide, distinctly longer and wider than antennomere 7. Club compact, 2.3 times as long as wide in middle, about 0.6 times shorter than antennomeres 2-8 combined. Pronotum 1.3 times as long as wide at apex, 0.9 times as long as wide in middle, 0.9 times as long as wide at base. Greatest width before middle and at base. Disk coarsely punctuate, without distinct tubercles, with deep middle groove. Base of pronotum convex to elytra. Scutellum absent. Elytra oval, 2.0 times as long as wide at base, 1.5 times as long as wide in middle, 2.7 times as long as wide at apex, 2.3 times as long as pronotum. Humeri smoothed. Greatest width in middle. Interstriae wide, flat, finely punctate. Base of interstriae 3 and 5 granulate. Striae deep. Prosternum with postocular lobe. Procoxal cavities rounded and contiguous. Precoxal portion of prosternum slightly shorter than postcoxal portion. Mesocoxal cavities separated. Metaventrite about 1.3-1.5 times shorter than length of metacoxal cavity. Metanepisterna about 4.3 times as long as wide in middle. Abdomen weakly convex. Ventrites 1, 3-5 with black spot before middle of apical edge and small spots on sides. Ventrites 1 and 2 quite long, subequal in length, fused, with slight depression in middle. Suture between ventrites 1 and 2 angularly curved to metaventrite. Ventrite 1 1.4-1.5 times as long as metacoxal cavity. Ventrite 2 with four small black spots. Ventrites 3 and 4 quite short. Ventrite 3 about two times shorter than ventrite 2. Ventrite 4 equal in length or slightly shorter than ventrite 3. Ventrite 5 long, 1.6-2.4 times as long as ventrite 4. Pygidium covered by elytra. Legs long. Femora not widened. Tibiae with decumbent long setae on inner edge, apical comb of small denticles and large uncus. Pro- and mesotibiae almost straight. Metatibiae weakly biconcave on inner margin. Tarsi long. Tarsomeres 1-3 with reduced pulvilli on lower surface. Tarsomeres 1 and 2 long-conical, flattened. Tarsomere 2 shorter than tarsomere 1. Tarsomere 3 bilobed. Tarsomere 5

Figure 2. Microcleonus spp., aedeagus: a – M. meregallii sp. nov., holotype, dorsal view, b – M. panderi, neotype, dorsal view, c – M. meregallii sp. nov., holotype, lateral view, d – M. meregallii sp. nov., paratype, lateral view, e – M. panderi, neotype, lateral view. Scale bar: 0.5 mm.
elongated, slightly longer than tarsomeres 2 and 3 combined. Claws long and free. Aedeagus slightly curved (Fig. 1c-d). Length of body: 6.6-10.3 mm. Length of rostrum: 1.0-1.7 mm.

Female: Rostrum about 1.6 times as long as wide at apex and in middle, 1.5 times as long as wide at base, 0.6 times as long as pronotum. Pronotum 1.4 times as long as wide at apex, equal to width in middle, almost 0.9 times as long as wide at base. Elytra 1.9 times as long as wide at base, 1.4 times as long as wide in middle, 2.6 times as long as wide at apex, 2.1 times as long as pronotum. Ventrites 1 and 2 flattened in middle. Metaventrite about two times shorter than length of metacoxal cavity. Ventrite 1 1.4 times as long as metacoxal cavity. Ventrite 2 subequal in length to ventrite 1. Ventrite 3 2.3-2.8 times shorter than ventrite 2. Ventrite 4 equal in length to ventrite 3. Ventrite 5 1.6-1.7 times as long as ventrite 4. Length of body: 9.2-10.3 mm. Length of rostrum: 1.8-1.9 mm.

**Differential diagnosis.** The new species is similar to *M. panderi* from Eastern Siberia and Mongolia but differs in the coarsely punctuate pronotum, without distinct tubercles, with deep middle groove, and slightly curved aedeagus.

**Etymology.** The species is named in honor of Dr. Massimo Meregalli (University of Torino).

**Distribution.** Southern Siberia: Tuva (Fig. 3 octagon).

![Figure 3. Distribution of Microcleonus spp.: octagon – *M. meregallii* sp. nov., star – *M. panderi*, square – *M. secundus.*](image)

**Microcleonus panderi** (Fischer von Waldheim, 1835)

**Remarks.** The type of this species is not present in the collections of the Zoological Museum of Moscow University and Zoological Institute of the Russian Academy of Sciences. Neotype is designated here. It is the specimen – male (ISEA) with labels “SE Zabaical’e, Onon River, 5 km of Verkhnie Tsasuchei vill, steppe, thickets of elm, 29-30.6.1995, O. Berezina, O. Kosterin”, “Neotype, *Cleonus panderi* Fischer von Waldheim, 1835, A. Legalov des.”

**Key to species of genus Microcleonus**

1. Black spots behind middle of elytra located perpendicular to suture. South Mongolia (Fig. 3).........

- Black spots behind middle of elytra located obliquely to suture ......................................................... *M. secundus* 2
NEW SPECIES OF THE GENUS MICROCLEONUS FROM TUVA

Pronotum very weakly punctate, with 4-6 large tubercles and weak middle groove. Dark spots on elytra smaller (Fig. 1b). Aedeagus very curved (Fig 1e). Eastern Siberia and Mongolia (Fig. 3) ...........................................................................................................M. panderi

- Pronotum coarsely punctate, without distinct tubercles, with deep middle groove (Fig. 1a). Aedeagus slightly curved (Fig. 1c-d). Tuva (Fig. 3) ...........................................................................................................M. meregallii sp. nov.

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