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Article



Lithobius (Monotarsobius) franciscorum sp. nov., a new lithobiid species from the Altai, with a key to the Central Asian species of the subgenus (Chilopoda: Lithobiomorpha)

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Abstract

Lithobius franciscorum **sp. nov.** is described and illustrated based on specimens from the Kazakh part of the Altai Mountains. The new species is characterized principally by the group of club-like setae situated on the males' last femora, a feature unique in the whole genus. According to this character, the species appears to be closely related to the group of species with similar setae on the males' last tibiae, while the female of the new species resembles *Lithobius nordenskioldii* Stuxberg, 1876, with which it is compared. Keys to the Central Asian *Monotarsobius* Verhoeff, 1905 species' males and females are presented as well. Three nomina nova are introduced, *Lithobius farzalievae* **nom. nov.** for *Lithobius minimus* Farzalieva, 2006, *Lithobius dobrorukai* **nom. nov.** for *Lithobius mongolicus* Dobroruka, 1960 and *Lithobius insolens* **nom. nov.** for *Lithobius farzalieva*, 2006.

Key words: taxonomy, centipedes, Kazakhstan, identification key, homonymy

Introduction

The Altai Mountains in Central Asia covers an area about twice as large as the Alps in Europe. Beside its huge extent, the region is also characterized by high geographical variance possessing peaks up to 4506 m a.s.l. between valleys of ~700-2500 m. In spite of these impressive traits, myriapodological investigations are very scarce from the region. The few works in this field concentrated mainly on Diplopoda (see in Mikhajlova *et al.* 2008, Mikhajlova 2009), while regarding Chilopoda the main part of the region has never been investigated. The only paper on the centipede fauna of this vast area has been published by Loksa (1978) based on a relatively small material from the eastern, somewhat offset part of the mountains, the Gobi Altai Mountains. In this work Loksa described *Schizotergitius altajicus* Loksa, 1978 and *Hessebius styliferus* (Loksa, 1978) as new to science, and reported on occurrences of *Lithobius giganteus* Sseliwanoff, 1881. Considering Central Asian Chilopoda, Farzalieva's recent works (Farzalieva & Zalesskaja 2002, Farzalieva *et al.* 2004, Farzalieva 2006) show highly promising perspectives towards exploring further uninvestigated territories. Among several others, Farzalieva, 2006 and *Lithobius insolitus* Farzalieva, 2006) from the Tarbagatay Mountains, a region neighboring the Altai Mountains.

In the years 2006 and 2007, two expeditions were carried out in the Altai Mountains' Kazakh part to collect terrestrial invertebrates. In the collected material, we discovered a new species of *Lithobius (Monotarsobius)*, which is described below.

Although the *Monotarsobius* lineage seems to be very diverse in the region, we have no identification key to the Central Asian representatives of this subgenus. The key by Zalesskaja (1978) on the earlier Soviet Union's species covers only partly the species of the Altai Mountains and is hard to use as it is written in Russian. It is also out