

## Linotaeniidae Coock, 1899 (Chilopoda: Geophilomorpha), a new family to the fauna of Kazakhstan

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Geophilomorph centipedes of the family Linotaeniidae are reported for the fauna of Kazakhstan for the first time: *Strigamia* cf. *transsilvanica* (Verhoeff, 1928) was recorded in SW Altai.

**Key words:** centipedes, Linotaeniidae, Strigamia, faunistics, Kazakhstan

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To date, four families of geophilomorph centipedes are recorded from Kazakhstan: Geophilidae (Lignau, 1929a, b; Vsevolodova-Perel, 2009; Bragina, 2012, 2016), Himantariidae (Titova, 1978; Lignau, 1929a, b; Dobroruka, 1979), Mecistocephalidae (Titova, 1969, 1975b) and Schendylidae (Lignau, 1929a, b; Titova, 1972a, b; Tuf, 2007). During the expedition to the Kazakh part of the Altai Mts (2018), a small series of *Strigamia* Gray, 1843 specimens has been collected (Fig. 1). Formally, it is the first record of Linotaeniidae in Kazakhstan.

### Materials and methods

All specimens were collected by hand and preserved in 70% ethanol. Material is deposited in the collection of the Altai State University, Barnaul (ASU No 89). The standardized terminology proposed by Bonato et al. (2010) is followed.

### Results

Order Geophilomorpha

Family Linotaeniidae Coock, 1899

*Strigamia* cf. *transsilvanica* (Verhoeff, 1928)

**Material examined:** 2 male, 3 female, Kazakhstan, East Kazakhstan Region, Altai Mts, Listvyaga Mt. Range, near Aksharbak Village, N49°31'59.66", E085°31'59.74", 1400 m, 03–05.VII.2018, leg. A.E. Naydenov, V.V. Rudoi, R.V. Yakovlev.

**Distribution.** *S. transsilvanica* is spread in central-eastern Europe. There are also some doubtful records: Sakhalin Isl. (Russia), Japan and Taiwan (Bonato et al., 2012; Nefediev et al., 2018). Three specimens similar to *S. transsilvanica* are recorded in the Rostov-on-Don Region (Zuev, Evsyukov, 2016) and two specimens are recorded in lowlands of the Altai Province (Russia) (Nefediev et al., 2018).

**Remarks.** Males have 45 leg-bearing segments, females have 47 ones; ultimate legs of male swollen; ultimate pleurotergite entire; ultimate metasternite trapeziform, as long as wide. Anal pores present.

These specimens are mostly close to *S. transsilvanica* (Verhoeff, 1928), basing on the number of leg-bearing segments and features of the ultimate pleurotergite, ultimate metasternite and coxal pores. According to Nefediev et al. (2018), this population from Altai possible to be a different species, morphologically similar to *S. transsilvanica*.

### Conclusions

The geophilomorph centipedes fauna of Altai Mts comprises 7 species, most of them are known from the Russian part. To date the undetermined specimens of *Escaryus* (Tuf, 2007) and *S. cf. transsilvanica* (Verhoeff, 1928) are known from Kazakh part of Altai. It is obvious that the geophilomorph species composition of the Kazakh part of Altai is apparently richer. It is expected that new interesting taxa will be discovered in future.



**Figure 1.** Map. Distribution of *Strigamia* cf. *transsilvanica* (Verhoeff, 1928) in the Altai Mts (circle). Black coloration indicates literature data, white coloration concerns new data.

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