

# Myriapoda (Chilopoda, Diplopoda) of the South Ossetia

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## Abstract

Myriapoda of the South Ossetia comprises not less than 13 species: 8 Chilopoda species (belong to 6 genera, 5 families, and 3 orders) and 5 Diplopoda species (belong to 4 genera, 2 families, and 2 orders). Class Chilopoda and 1 species of Diplopoda are new to the regional list.

## Keywords

Biodiversity, centipedes, faunistics, millipedes, new records, Transcaucasia

## Introduction

The myriapod fauna of Georgia is well studied (Sseliwanoff 1884; Muralewicz 1907, 1926, 1927, 1929; Lohmander 1932, 1936; Dobroruka 1958; Kobakhidze 1965; Zaleskaja 1973a, 1973b, 1978; Zaleskaja & Schileyko 1991, 1992; Kokhia & Golovatch 2018). Four species of Diplopoda are known from the territory presently known as South Ossetia (Read 1992; Golovatch et al. 2016; Evsyukov et al. 2020; Vagalinski & Golovatch 2021), while data on Chilopoda is still absent. We provide the data on myriapods as part of the study of arthropod fauna confined to the region (Streltsov et al. 2022a, b).

## Materials and methods

Specimens were collected by A.A. Fomichev and V.V. Rudoi in 2021–2022; the material is deposited in ASU (see abbreviations below) and in ZMUS.

The terminology follows Bonato et al. (2010).

The material was examined with stereo microscopes: an Olympus SZX16, a LOMO Micmed-5, and an Olympus BX51 light microscope.

Abbreviations: ad. – adult, AF – A.A. Fomichev, ASU – Altai State University (Barnaul), coll. – collector, LBS – leg-bearing segments, VR – V.V. Rudoi, ZMUS – Zoological Museum of the North Caucasian Federal University (Stavropol). Taxa new to the fauna of the South Ossetia are marked by “\*”.

## Result

### Chilopoda\*

#### Order Geophilomorpha\*

#### Family Dignathodontidae Cook, 1896\*

##### *Henia* Koch, 1847\*

##### *Henia bicarinata* (Meinert, 1870)\*

**Material.** 1♂ (ASU No. 391), South Ossetia, Leningorskiy District, 3 km ENE Leningor (Akhalgori), Ksanskoye Ravine, Fagus forest, N42°8'43", E44°31'2", 1200 m, 26 June 2021, coll. AF.

**Distribution.** A Mediterranean species (Iorio et al. 2020; Zarei et al. 2020), known from Caucasus (Sseliwanoff 1884; Attems 1907, 1929; Muralewicz 1907; Titova 1969; Zuev 2016; Zuev & Evsyukov 2016; Dyachkov et al. 2022).

**Remarks.** Specimen has 67 LBS.

#### Family Geophilidae Leach, 1816\*

##### *Clinopodes* C.L. Koch, 1847\*

##### *Clinopodes caucasicus* (Sseliwanoff, 1884)\*

**Material.** 2♂♂, 1♀ (ASU No. 396), South Ossetia, Dzauskiy District, 4 km NNW Kvays City (Kvaisi), near Kvedi Lake (Koz), stony mixed forest, N42°33'38", E43°37'48", 1600 m, 28–30 June 2021, coll. AF; 1♂ (ASU No. 520), 2 km NW Tli, N42°30'19", E43°50'12", 2200 m, 24 July 2022, coll. VR; 1♂ (ASU No. 526), Lenin-

gorskiy District, 4 km E Leningor, N42°08'45", E44°30'55", 1200 m, 13–14 July 2022, coll. VR.

**Distribution.** Eastern Anatolia (Turkey) and Caucasus (Sseliwanoff 1884; Muralewicz 1907; Bonato et al. 2011; Volkova 2016; Zuev 2016; Zuev & Evsyukov 2016; Dyachkov et al. 2022).

## Family Linotaeniidae Cook, 1899\*

### *Strigamia* Gray, 1843\*

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

**Material.** 1♂ (ASU No. 394), South Ossetia, Dzauskiy District, 2 km S Nizhniy Erman (Kvemo-Ermani), Ermani Mt. Range, stony alpine meadow and scree, N42°29'32", E44°14'27", 2700–3000 m, 08 July 2021, coll. AF.

**Distribution.** *S. transsilvanica* is an east-southern European species (Iorio 2005; Reip & Voigtländer 2009). Another records (as *S. cf. transsilvanica*): SW Russia (Zuev & Evsyukov 2016), N Caucasus (Dyachkov et al. 2022), Altai Mts (Nefediev et al. 2018; Dyachkov 2018), and Sakhalin Isl., Japan, and Taiwan (Bonato et al. 2012).

**Remarks.** Specimen has 45 LBS, ultimate pleuropretergite entire, and 5–7 coxopleural pores.

## Order Lithobiomorpha\*

### Family Lithobiidae Newport, 1844\*

#### *Lithobius* Leach, 1814\*

#### *Lithobius* (*L.*) *peregrinus* Latzel, 1880\*

**Material.** 1♀ (ASU No. 524), South Ossetia, Leningorskiy District, 4 km E Leningor, N42°08'45", E44°30'55", 1200 m, 13–14 July 2022, coll. VR.

**Distribution.** An eastern Mediterranean species, spread in Caucasus (Zalesskaja 1978; Zuev 2016).

#### *Lithobius* (*L.*) *viriatuus* Sseliwanoff, 1878 \*

**Material.** 1♀ (ASU No. 414), South Ossetia, Tskhinvali District, 2 km WNW Grom Village (Didi-Gromi), Adzula River Valley, cliff on a river bank, N42°10'16", E44°11'50", 950 m, 21–24 June 2021, coll. AF; 1♂ (ASU No. 415), Dzauskiy District, 4 km NNW Kvays City (Kvaisi), near Kvedi Lake (Koz), cliff along a river, N42°33'30", E43°38'4", 1600 m, 28–30 June 2021, coll. AF; 1♀ (ASU No. 521), 2 km NW Tli, N42°30'19", E43°50'12", 2200 m, 24.VII.2022, coll. VR.

**Distribution.** An eastern Mediterranean species (Stoev 2000, 2001), spread in Caucasus (Sselivanoff 1878, 1880; Muralewicz 1926, 1929; Zalesskaja 1978; Dyachkov et al. 2022).

*Lithobius (Monotarsobius) sselivanoffi* Garbowski, 1897\*

**Material.** 6♂♂, 3♀♀ (ASU No. 412), South Ossetia, Dzauskiy District, 2 km S Nizhniy Erman (Kvemo-Ermani), Ermani Mt. Range, stony alpine meadow and scree, N42°29'32", E44°14'27", 2700–3000 m, 08 July 2021, coll. AF; 8♂♂, 4♀♀ (ASU No. 523), Mtiulet Range, near Erman, N42°29'12", E44°13'33", 2300 m, 26–27 July 2022, coll. VR; 2♂♂ (ASU No. 413), Khyeuselt (Kevselta), vicinity of Khalatsa Mt., stony alpine meadow and scree, N42°34'20", E43°48'51", 2500–2800 m, 05 July 2021, coll. AF.

**Distribution.** Southern European species (Zalesskaja & Golovatch 1996), widespread in Caucasus (Muralewicz 1926, 1929; Zalesskaja 1978).

*Harpolithobius Verhoeff, 1904\**

*Harpolithobius sp.\**

**Material.** 1♀ (ASU No. 417), South Ossetia, Dzauskiy District, 4 km NNW Kvays City (Kvaisi), near Kvedi Lake (Koz), mixed forest, N42°33'31", E43°37'59", 1580 m, 28–30 June 2021, coll. AF.

**Remarks.** Female is aberrant (1+1 gonopodal spurs). This specimen is close to variable *H. perplexus* Zalesskaja, 1972, but differs in the absence of a pair of dorsal spines on 3rd gonopodal article, and to *H. spinipes* Folkmanová, 1958, but differs in the number of ocelli (9 vs. 15–20 in *H. spinipes*) (Zalesskaja 1978).

**Order Scolopendromorpha\***

**Family Cryptopidae Kohlrausch, 1881\***

*Cryptops* Leach, 1815\*

*Cryptops (C.) caucasius* Verhoeff, 1934\*

**Material.** 1 ad. (ASU No. 392), South Ossetia, Tskhinvali District, 2 km WNW Grom Village (Didi-Gromi), Adzula River Valley, pebble-bed on a river bank, N42°10'17", E44°11'50", 950 m, 21–25 June 2021, coll. AF.

**Distribution.** A Caucasian species, known from Crimea (Verhoeff 1934; Zalesskaja & Schileyko 1991, 1992; Zuev 2016; Zuev & Evsyukov 2016; Dyachkov et al. 2022), and Turkmenistan (Zalesskaja & Schileyko 1992).

**Diplopoda**

**Order Polydesmida**

**Family Polydesmidae Leach, 1815**

**Genus *Brachydesmus* Heller, 1858**

***Brachydesmus kalischewskyi* Lignau, 1915**

**Distribution.** A Caucasian species: Russia (N Caucasus), Georgia, Azerbaijan, Armenia, Iran (Golovatch et al. 2016).

**Previous records.** Vicinity of Kvaisi and S of Pass Rokskii (Golovatch et al. 2016).

**Order Julida**

**Family Julidae Leach, 1814**

**Genus *Chaetoleptophyllum* Verhoeff, 1898**

***Chaetoleptophyllum flexum* Golovatch, 1979**

**Distribution.** Georgia (Evsyukov et al. 2020).

**Previous records.** Lower Roki, S of Roksky Pass (Evsyukov et al. 2020).

**Remarks.** *C. flexum* was listed incorrectly for the Stavropol Territory (Russia) (Zuev 2014; Evsyukov et al. 2020). In fact, these specimens belong to *Kubaniulus lativelatus* Evsyukov, Golovatch, Reip & Vandenspiegel, 2020.

**Genus *Cylindroiulus* Verhoeff, 1894**

***Cylindroiulus pterophylacum* Read, 1992**

**Distribution.** Georgia, Russia: N Caucasus (Read 1992; Zuev 2014; Golovatch 2021).

**Previous records.** Vicinity of Kvaisi and Ertso Pass (Read 1992).

**Genus *Omobrachiulus* Lohmander, 1936**

***Omobrachiulus caucasicus* (Karsch, 1881)\***

**Material.** 1♂ (ZMUS), South Ossetia, Tskhinvali District, 2 km WNW Grom Village (Didi-Gromi), Adzula River Valley, pebble-bed on a river bank, N42°10'17", E44°11'50", 950 m, 21–25 June 2021, coll. AF; 1♂ (ZMUS), Dzauskiy District, 4

km NNW Kvays City (Kvaisi), near Kvedi Lake (Koz), mixed forest, N42°33'31", E43°37'59", 1600 m, 28–30 June 2021, coll. AF.

**Distribution.** Northwestern Iran, northeastern Turkey, the island of Thassos, Greece, Caucasus (Golovatch & Matyukhin 2011; Zuev 2014; Vagalinski & Golovatch 2021).

### ***Omobrachiulus divaricatus* (Lohmander, 1936)**

**Distribution.** Transcaucasia: Armenia and Georgia (Vagalinski & Golovatch 2021).

**Previous records.** Vicinity of Kvaisi and Ertso Pass (Vagalinski & Golovatch 2021).

## **Conclusions**

At present, 13 Myriapoda species are known from South Ossetia: 8 species of Chilopoda (belong to 6 genera, 5 families, and 3 orders) and 5 species of Diplopoda (belong to 4 genera, 2 families, and 2 orders).

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