

Xerothermic Collembola from the Bükk – Mts NE – Hungary

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ABSTRACT: 7 new record of xerothermic Collembola from the Bükk–Mts in NE – Hungary, from which one is new for the country.

The Collembola of the Bükk–Mountains is mostly known by the records of I. Loksa. He collected in the 1950's in several forests and xerothermic rocky grasslands and found at least 56 species in this area. (LOKSA 1956; 1966)

On 08–09. 06. 2000, during a 2 day – excursion in the Bükk–Mts, in Tarkő, Köpüs and Kemesnye, 154 Collembola specimens, belonging to 11 species, were collected. Among them 7 species are new for the Bükk–Mts, and 1 for the country.

The records were made on rocky grassland habitats in *Seslerietum heuflerianae–hungaricae* plant association where the most typical plants are the followings: *Sesleria heufleriana*, *Sesleria hungarica*, *Sesleria varia*, *Anthericum ramosum*, *Hieracium bupleuroides*, *Viola tricolor*, *Saxifraga paniculata*.

All collembola specimens were collected by Gy. Traser, due to extractions of soilcorns, with a modified Berlese tunnel, without electrical light. The soilcorns were collected in three areas (Tarkő, Köpüs, Kemesnye) each time by the elevation of 10 samples, containing 50 cm³ soil quantity, but in Kemesnye all the 10 soilcorns were empty, without any collembola. At the time of the collection and in the previous period the weather was very dry.

The collembola specimens are conserved in alcohol or on slides in Marc André II. in Sopron.

List of the collected species:

HYPOGASTRURIDAE BÖRNER, 1906

Xenylla boernerii Axelson, 1905 – Material: 52 ex. in the Bükk–Mts, Tarkő, 08.06.2000; 23 ex. in Köpüs, 09.06.2000. Occurrence: a european species, in Hungary it is known from the Börzsöny- and Bakony-Mts, also from the Hortobágy, Bátorliget and Barcs. (DUNGER 1985, LOKSA 1966, 1978, 1983) This is a new record for the Bükk–Mts.

NEANURIDAE CASSAGNAU, 1955

Pseudochorutes subcrassus Tullberg, 1871 – Material: 1 ex. in Köpüs, 09.06.2000. Occurrence: known as a european, widely distributed, but never in mass – occurrence existing species. In Hungary it is a rare species which was found in Ásványráró (23.08.1996. leg. Gy. Traser) New record for the Bükk–Mts.

ONYCHIURIDAE BÖRNER, 1901

Protaphorura sp. – Material: 3 ex. in Tarkő, 1 ex. in Köpüs. All specimens were juv. With the PsO. form: 33/023/33342

TULLBERGIIIDAE BAGNALL, 1935

Mesaphorura critica Ellis, 1976 – Material: 21 ex. in Tarkő, 08.06.2000, and 2 ex. in Köpüs, 09.06.2000. Occurrence: a European species, in Hungary it was found in Bugac (CHRISTIAN & THIBAUD 1990), in Sopron and Bócsa also. New record for the Bükk-Mts.

Doutnacia mols Fjellberg, 1998 – Material: 3 ex. in Köpüs, 09.06.2000. Two specimens were also identified by A. Fjellberg. Occurrence: this species is only known from Denmark. This is the first record from Hungary.

ISOTOMIDAE BÖRNER, 1913

Isotomodes sexsetosus Da Gama, 1963 – Material: 1 ex. in Tarkő, 08.06.2000. Occurrence: A central–european, rare collin species. Known as xerothermophil in the rocky grassland in the Alps. (Christian 1987; Gama 1963) In Hungary this species is only known from the Börzsöny–Mts. (Dunger, 1975).

Isotomiella minor (Schäffer, 1896) – Material: 31 ex. in Köpüs, 09.06.2000. Occurrence: widely distributed cosmopolitan, parthenogenetic species. Also known worldwide as the “flower pot collembola”. It is not a typical xerothermic species, but as an euryök species it may be found in mesophil and xerophil habitats too.

ENTOMOBRYIDAE SCHÖTT, 1891

Entomobrya multifasciata (Tullberg, 1871) – Material: 1 ex. in Tarkő, 08.06.2000; 4 in Köpüs, 08.06.2000. Occurrence: cosmopolitan, xerothermophilous species. In Hungary it is known from many places, as from the Kiskunság, Hortobágy, Nyírség, Barcs and from the Bakony Mts. (Loksa 1966, 1978, 1980, 1983)

Pseudosinella sp. – Material: 1 juv. ex. in Köpüs 09.06.2000. It belongs to the group with 4+4 eyes.

Lepidocyrtus lignorum (Fabricius, 1775) – Material: 9 ex. in Köpüs, 09.06.2000. Occurrence: widely distributed in the holarctic, mostly in forests. In Hungary it is also a common species but for the Bükk–Mts it is a new record.

BOURLETIELLIDAE BÖRNER, 1913

Fasciosminthurus strigatus strigatus (Stach, 1922) sensu Bretfeld, 1992 – Material: 1 ex. in Tarkő, 08.06.2000. Occurrence: european, south – Russian species. Mostly found in xerothermic grasslands on sunny, rocky habitats. In Hungary it was found in the Börzsöny–Mts. (Dunger 1985) New record for the Bükk–Mts.

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