

# FIRST RECORD OF *COLOBURELLA LINNANIEMII* (DENIS, 1926) (HEXAPODA: COLLEMBOLA) IN ROMANIA

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*Abstract.* The author presents a new record for the Romanian fauna of the springtail *Coloburella linnaniemii* (Denis, 1926). Notes on the taxonomic status, morphology and distribution of the species are given.

*Key words:* Collembola, *Coloburella linnaniemii*, first record, Romania.

## 1. INTRODUCTION

The collembolan fauna of Romania is rather poorly studied. In 2007, FIERA published a checklist of the springtails of Romania (388 species). Since then, 16 species were added to this list by DANYI and TRASER (2008), FIERA (2008, 2009), FIERA *et al.* (2013), NITZU *et al.* (2009) and POPA (2010, 2011, 2012). Therefore, the number of the collembolan species in Romania has been increased to 404 species. Taking into account the great diversity of biogeographical regions in Romania, many areas are still unexplored.

*Coloburella linnaniemii* (Denis, 1926), a new species for the fauna of Romania, was collected in a beech-spruce mixed forest in the Buila-Vanturarita National Park.

## 2. MATERIAL AND METHODS

Our researches were carried out in May 2011, in a *Fagus sylvatica* and *Picea abies* mixed forest, located in the Buila-Vanturarita Massif (Buila-Vanturarita National Park). The individuals were captured using a pitfall trap (with olfactory attractant and ethyl alcohol). The trap was emptied after 4 days (13 – 16.05.2011) and the specimens were transferred in 70% ethyl alcohol. The sorting of the biological material was done at binoculars. The specimens were cleared in a lacto-phenol solution and mounted on a slide with Marc Andre II medium. For identification at species level we used the works of STACH, 1947 and GISIN, 1960.

## 3. RESULTS AND DISCUSSION

The genus *Coloburella* Latzel, 1918 is a small genus in the family Isotomidae with only eight species described all over the world. Of these, five species are recorded in Europe (ULRICH and FIERA, 2010): *C. cassagnai* Rusek, 1972, *C. linnaniemii*

(Denis, 1926), *C. zangherii* (Denis, 1924), *C. reticulata* Latzel, 1918 and *C. vandeli* Cassagnau & Delamare, 1951. Until now, only *C. zangherii* was recorded in the Romanian fauna (FIERA, 2007).

We report here the first record of *Coloburella linnaniemii* (Denis, 1926) for the Romanian fauna. Two specimens (13 – 16.05.2011, pitfall trap, mixed forest of beech and spruce, 1173 m altitude, Buila-Vanturarita Massif, leg. I. Popa, preserved in the ISER collection) were identified. This bluish coloured species by 0.64–0.68 mm in length (without the head) (Fig.1) is characterized by 6 + 6 ommatidia, on a dark, strong pigmented eye patch; antennae pigmented, 1.2 longer than the diameter the head (Fig.1); postantennal organ about 1.5 longer than the diagonal of one ommatidia; claws without inner tooth, empodial appendage present, about ½ as long as the ventral side of the claw; furca well developed, mucro only indistinctly separated from the dens (Fig. 2).

*C. linnaniemii* is a very rare species in the European fauna. The species is known only from Crete, Italy and Austria (JANETSCHKEK, 1993).

Fig. 1. *Coloburella linnaniemii* (Denis, 1926):  
Habitus dorso-lateral (Photo by V. Sustr).

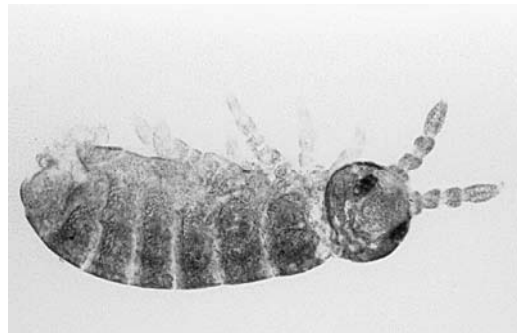


Fig. 2. *Coloburella linnaniemii* (Denis,  
1926): – furca (Photo by V. Sustr).

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