



Explanation of the European *Lepidocyrtus pallidus-serbicus* group (Collembola, Entomobryidae), with description of new species from Hungary

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Abstract

The *Lepidocyrtus pallidus-serbicus* group has been created for the two eponymic species only, but at the present time the group is composed by a total of 6 species: *L. pallidus* Reuter, 1890; *L. serbicus* Denis, 1933; *L. pseudosinelloides* Gisin, 1967; *L. weidneri* Hüther, 1971; *L. arrabonicus* Traser 2000 and *L. tomosvaryi* **sp. nov.** The main characteristic shared by every species in this group is the dorsal body macrochaetotaxy: 00/0101+2 and the presence of M₁M₂ on the labial triangle. The new species is close to *L. serbicus* but clearly differs from it in the presence of a small dental tubercle at the basal part of the dens on the dorsal surface. An identification key is given for differentiating all species of this group.

Key words: taxonomy, chaetotaxy, *Lepidocyrtus*, subgeneric division, *Ascoocyrtus*, *Cinctocyrtus*, dental tubercle

Introduction

The number of the European *Lepidocyrtus* species has increased up to 30 during the last decade (Mateos 2008a, 2008b, 2011, Mateos & Petersen 2012, Traser & Dányi 2008). *L. tomosvaryi* **sp. nov.**, presented here, appears to be the 31st species of this genus. The new species belongs to the *L. pallidus-serbicus* group created by Gisin (1965) for the two eponymic species, *L. pallidus* Reuter, 1890 and *L. serbicus* Denis, 1933, as a third group beyond *L. lanuginosus* and *L. curvicollis* groups (Gisin 1964a, 1964b). More recently, Mateos defined the *L. lusitanicus* Gama, 1964 species-complex (Mateos 2008b) as well as the *L. lignorum* group (Mateos 2011) and *L. curvicollis* group (Mateos & Petersen 2012), which inclined us to give a definition and key for the European *L. pallidus-serbicus* group too.

Material and methods

In the course of the soil fauna survey in the region of Mt. Somló, Mid-West Hungary, a total of 9 soil samples of approximately 1000 cm³ (maximum depth 10 cm and also including soil surface material) were taken from a lowland hornbeam-pedunculate-oak forest. Collembola were extracted using a Berlese-Tullgren apparatus. We found several specimens of a particular *Lepidocyrtus* species that were examined with Gisin's solution (Gisin 1960). For the description we used terms and codes based on the comprehensive work of Mateos (2008a) who followed and modified Gisin (1963, 1964a, 1964b) and Szeptycki (1979).

Abbreviations used: the following general morphological abbreviations are used: ant.—antennal segment, th.—thoracic segment, abd.—abdominal segment, I–VI—segment numbers, psp—pseudoporus.