



INVESTIGATION OF LIVERWORT TAXA ON THE HUNGARIAN PART OF THE KŐSZEG MOUNTAINS

Májmoha taxonok vizsgálata a Kőszegi-hegység magyarországi oldalán

Kornél Baráth^{1*}, Adrienn Hajba¹, Péter Molnár¹ & Peter Erzberger²

¹Eötvös Loránd University, Berzsenyi Dániel Teacher Training Centre, 9700 Szombathely, Károlyi Gáspár tér 4, Hungary; ²Belziger Str. 37, D-10823 Berlin, Germany; *E-mail: barath.kornel@sek.elte.hu

Although the bryoflora of the Kőszeg Mountains has a very rich research history, systematic field surveys conducted since 2016 have resulted in the identification of numerous new taxa. In the present study, we summarize the results obtained so far from surveys of liverworts (*Marchantiophyta*). Literature records published before the 2000s mention a total of 87 liverwort taxa from the Kőszeg Mountains, a considerable proportion of which were reported without specific locality data and, in some cases, without collected voucher specimens. To address these deficiencies, the authors have so far recorded 52 liverwort taxa from the Hungarian side of the mountains, documenting their localities in detail and, in the case of rarer species, also assigning GPS coordinates to the records. Based on the currently available literature and our own data, a total of 96 liverwort taxa are known from the Kőszeg Mountains, 90 of which have also been recorded from the Hungarian side of the mountains. Among the liverworts recorded, *Riccardia multifida* and *Trichocolea tomentella* are of particular national importance, as both are known from only five grid squares in Hungary. *Riccardia latifrons* is known from six grid squares, while *Calypogeia muelleriana*, *Diplophyllum albicans* and *Mesoptychia badensis* are each known from only seven grid squares in the country. Voucher specimens of the collected liverwort taxa have been deposited in the herbaria of Peter Erzberger and Kornél Baráth.

The specimens were photographed using Sony Alpha and Canon EOS 100D cameras equipped with various macro lenses and were subsequently documented under a stereomicroscope. To date, we have taken more than 1,087 macro photographs and 874 stereomicroscopic images of exactly 50 species. To achieve an adequate depth of field, series of photographs taken at different focal planes were combined using Zerene Stacker software.

In addition to the photographic documentation of liverwort taxa occurring in the Kőszeg Mountains, we have begun developing an identification key. Our aim is to prepare a Hungarian-language identification key and a photographic atlas covering the liverwort taxa of the Kőszeg Mountains. The identification key and illustrated atlas are expected to facilitate the recognition, differentiation and monitoring of rare and threatened taxa, thereby contributing to more effective conservation management of the habitats of the bryophyte-rich Kőszeg Mountains.