

**EXPLORATION OF THE BALKAN BRYOPHYTE FLORA WITH A SPECIAL  
ATTENTION TO THE RARE AND THREATENED SPECIES**

A Balkán mohafióra kutatásának eredményei különös tekintettel a ritka,  
védendó fajokra

Beáta PAPP

Hungarian Natural History Museum, H-1431 Budapest, Pf. 137, Hungary;  
e-mail: [papp.beata@nhmus.hu](mailto:papp.beata@nhmus.hu)

In the last 15 years a network of bryologists from SE Europe has been developed, dealing intensively with the Balkan area, from where there is still relatively few data compared to other parts of Europe. Joint field trips were organised to fill the gap. Special attention was paid to the habitats of rare, threatened species by visiting suitable sites, making collections, listing the bryophyte flora and estimating population size of rare species. More than 15.000 specimens have been deposited in the Hungarian Natural History Museum collected during these joint field trips and 72 papers have been published on the basis of the material. Voucher specimens of 527 species can also be found in HHNM, which were reported for the first time from the various countries of Balkan.

From conservation aspects wetlands are the most important habitat types in SE Europe, threatened mainly due to climate warming. Their extension is decreasing, and they are continuously losing the sensitive bryophytes of their species pool. Although the suitable bogs are small and sporadic in the Balkans, they still maintain several populations of wetland species of European conservation interest, such as *Campyllum elodes*, *Drepanocladus polygamus*, *Hamatocaulis vernicosus*, *Scorpidium scorpioides*, *Tomentypnum nitens*. The alpine grasslands are also threatened due to climate warming. The Balkan high mountain areas still preserve very diverse bryoflora. Especially areas with acidic bedrock in high elevations have special conservation interest, because they are rare and scattered in the predominantly calcareous Balkan mountains. The bryophyte flora of acidic soil and siliceous outcrops contains many calcifuge species regarded as rare in this region and redlisted in many SE European countries, e.g. arctic, alpine leafy liverworts such as *Lophozia wenzelii*, *Marsupella sphacelata*, *Scapania praetervisa*, *Solenostoma confertissima* or saxicolous species like the members of Grimmiaceae family (*Grimmia caespiticia*, *G. reflexidens*, *Schistidium papillosum*). In shaded limestone rocky habitats the bryophyte assemblages also contain several species of European conservation interest, e.g. *Anomodon rostratus*, *Mannia triandra*, *Myurella sibirica*, *Taxiphyllum densifolium*.