

**Bryophyte communities of the loess cliffs of the Pannonian basin and adjacent areas, with the description of *Hilpertio velenovskyi*-*Pterygoneuretum compacti* ass. nov.**

**Studies on the cryptogamic vegetation of loess cliffs, VI**

by

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With 2 figures, 6 tables and 4 fotos

*Dedicated to Prof. Dr. Wolfgang Frey on the occasion of his 60<sup>th</sup> anniversary*

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**Abstract:** A phytosociological analysis of the loess cliff bryophyte communities of the Pannonian basin revealed four different communities: the newly described *Hilpertio velenovskyi*-*Pterygoneuretum compacti* ass. nov., with its subassociation *typicum* (abundant in central, eastern Hungary and Slovakia) and its subassociation *crossidietosum crassinervis* (typical for the warm and dry cliffs of southern Hungary, Northern Serbia and Western Romania along the lower Danube under Submediterranean climatic influence); the *Didymodon cordatus*-*Grimaldion fragrantis* base community, a floristically impoverished ensemble on cliffs in contact to a cooler climate; and the already known *Aloinetum rigidae*, typical for the more humid cliffs of western Hungary. All can be classified within the *Grimaldion fragrantis* alliance (*Barbuletea unguiculatae* class). They consist of xerotolerant acrocarpous mosses, forming greyish, hardly visible cryptobiotic crusts during summer. These communities harbour some of the phytogeographical most interesting, rare and endangered bryophytes of Hungary, displaying disjunctions with southeastern Spain and the Near and Middle East.

**Zusammenfassung:** Die pflanzensoziologische Bearbeitung der Bryophytengesellschaften der Lösskliffe des Pannonischen Beckens erbrachte vier Gesellschaften: das hier neu beschriebene

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