



THE BRYOPHYTE COLLECTION OF ESZTERHÁZY KÁROLY CATHOLIC UNIVERSITY (EGR): A DIGITAL DATABASE OF CALYMPERACEAE SPECIMENS

Az Eszterházy Károly Katolikus Egyetem mohagyűjteménye (EGR):
a Calymperaceae-példányok digitális adatbázisa

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The Bryophyte Herbarium of Eszterházy Károly Catholic University (EGR) is considered one of the most important bryophyte collections in Central Europe. The EGR bryophyte collection comprises approximately 200,000 specimens, of which about 2,000 belong to the family Calymperaceae. Within the tropical bryophyte holdings, the Calymperaceae material represents a particularly valuable component because of its considerable taxonomic diversity and broad geographical coverage. The primary objective of the present project was to establish a digital database of Calymperaceae specimens preserved in the EGR herbarium. The digitization workflow included high-resolution photography of herbarium specimens, transcription of label information, taxonomic verification, and the creation of a searchable database. The recorded data fields comprised the taxon name, collector, collection date, country, locality, geographical coordinates, elevation, substrate, habitat, and type status, where available. As of July 2026, the database contains approximately 1,250 Calymperaceae specimens, representing 0.62% of the entire bryophyte collection. The EGR collection includes material from several historically important exsiccata series, such as *Musci Philippinenses Exsiccati*, *Musci Australiae Exsiccati*, *Musci Frondosi Archipelagi Indici* and *Cryptogamae Exsiccatae editae a Museo Historiae Naturalis Vindobonensi*. The specimens originate from more than 45 countries, with particularly strong representation from tropical Africa, Southeast Asia, Madagascar, and the Pacific region. The most species-rich genera are *Calymperes*, *Syrrhopodon*, *Mitthyridium*, *Leucophanes* and *Calymperidium*. The collection contains several type specimens as well as numerous historical collections made by internationally recognized bryologists, botanists, and collectors, including V. Schiffner, P. Dusén, S. Lisowski, D. Balázs, T. Pócs, and S. Orbán. Preliminary analysis of the database revealed distinct geographical and taxonomic patterns. Approximately 38% of the specimens originate from Africa, 29% from Asia, 18% from the Pacific islands, and 15% from the Neotropics. Epiphytic taxa constitute the majority of the collection, reflecting the ecological preferences of tropical members of the Calymperaceae. The development of this digital database substantially improves access to the collection and facilitates taxonomic, floristic, biogeographical, historical, and conservation-oriented research. The database is expected to provide an important resource for future studies of tropical moss diversity and the historical development of bryological collections.