

# THE HERBARIUM OF THE BOTANICAL DEPARTMENT IN KÁROLY ESZTERHÁZY COLLEGE (EGR)

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## 1. Short history of the Herbarium

Certain collections as well as the herbarium as a whole, because of their uniqueness, are indispensable to scientific study, and have become a valued part of our national heritage. Some collections are irreproducible while others are treasured for their comprehensiveness – covering certain areas or complete taxonomic groups. The Eger herbarium also includes one of the largest cryptogamic collections in Central Europe.

The Botanical Department was founded in 1949, by Tibor Hortobágyi, a prominent Hungarian algae researcher. This course of development was followed under the direction of Tamás Pócs, appointed in 1961, who founded the herbarium with his fern, lichen, bryophyte and vascular plant collections. A year later János Suba joined the department, who obtained for the Herbarium the Márton Vrabélyi vascular collection, previously preserved at Dobó István Jesuitical Secondary School. This valuable collection includes 19<sup>th</sup> century source material of the flora of Bükk and Mátra mountains from Vrabélyi's own collections as well as exchange material from prominent botanists (Haynald, Holuby, Janka, Kerner, Vágner, etc...) of the time.

In 1963 and 1965-66, owing to its Vietnam partnership the College received tropical material in larger amounts for the first time, collected by Tamás Pócs. From the 60's a more rapid development of the collections can be observed. The herbarium now incorporated its staff's own collection of vascular and non-vascular material from Northern Hungary and the Carpathians. The college provided significant funds for the Department to purchase herbarium materials as well literature. This is how bryophyte collections of Árpád Károlyi and László Vajda and Ferenc Fóris's comprehensive lichen herbarium, as well as the majority of Adám Boros's professional library could be obtained. It also allowed for smaller contributions to the travels of Dénes Balázs geographer in exchange for valuable bryophyte collections from around the world. The herbarium also includes very rich bryophyte material from India, Vietnam and Argentina

collected by György Topál and from Papua New Guinea collected by János Balogh (both zoologists).

To date the herbarium includes contributions from 210 botanists and incorporates 10000 vascular, 8000 lichen and 200000 bryophyte specimens. It cultivates active partnership with many herbaria of the world. Specialists of various taxa from abroad and Hungary frequently visit the herbarium to study unrevised material. Maintaining the main profile the cryptogamic collection has become the largest within the herbarium. Specimens from all around the world can be found in the bryophyte collection with remarkable collections by the staff on expeditions in East Africa, Tunisia, the Indian Ocean islands, Australia, Cuba, Venezuela, Vietnam, the Fiji Islands and other territories.

From within the Carpathian basin the collection of the crypogamic vegetation of loess cliffs is unique in its comprehensiveness. Vascular and cryptogamic plants were both collected in different areas of Hungary: Órség, the Bükk and Mátra mountains; and from the Carpathians: the Lower Tatra, Bihar, Retezát, Hargita,, Tarcu, Parâng and Fogaras mountains. We also preserve material from outside the Carpathians: from the Julian Alps, the Spitzbergen, Greece and Bulgaria.

We aim to assemble comprehensive compilations of various taxa in our special collections like the *Calymperaceae* family, ordo *Hookeriales*, from the genera of *Fissidens*, *Colura*, *Cololejeunea*, *Lejeunea*, *Lopholejeunea* and *Frullania*. to make their revisions possible.

Lichen specimens have also been collected all over Hungary. We also have a considerable tropical collection from Kenya, Tanzania, Indian Ocean Islands, Ruanda, Argentina, Brasil, Vietnam, Australia, and the Fiji Islands.

A database of lichen collections (ISIS 2.3) and an update of bryophyte types has been developed.

## **2. International Relations**

Our Herbarium operates within the international network of herbaria. We exchange material with more than 60 herbaria worldwide. Numerous exsiccata series are preserved a list of which is appended below. Our type material of over 500 specimens is recognised and cited worldwide. We lay great emphasis on the development and maintenance of our academic library, assembling periodicals, biogeographical publications, flora works and coenological works among which rarities can also be found.

The Hungarian National Office of Cultural Heritage declared the Eger College Herbarium protected in 2007 (resolution no. 401/0055/004/2007). Since the declaration the most important development has been the relocation of the cryptogamic collection in one of the buildings of Eszterházy College Faculty of Science. The two spacious state-of-the-arts-halls are adjoined by two research rooms equipped with microscopes, computers and a cryptogamic library facilitating the study, revision and exchange of materials (formerly stored in five separate locations). The new facilities allow the labelling and integration of the large amounts of previously identified material making it possible to send them out to the specialists concerned for revision.



Fig.2. The European bryophyte collection



Fig. 2. One open cupboard in the overseas hepatic collection

### 3. List of Exsiccata or their parts preserved in the Herbarium of the Botanical Department of Eszterházy College, Eger (EGR):

- Bryophyta Africana Selecta*. Ed. R. Ochyra and T. Pócs  
*Bryophyta Arctica exsiccata*. Ed. W. C. Steere and Kjeld A. Holmen  
*Bryophyta Exsiccata Generis Plagiochilae*. Ed. J. Heinrichs & H. Anton  
*Bryophyta Exsiccata*. Z. Iwatsuki and M. Mizutani  
*Bryophyta Hawaiica Exsiccata*. Ed. W.J.Hoe  
*Bryophyta Neotropica Exsiccata*. Ed. S.R. Gradstein  
*Bryophyta Selecta Exsiccata*. Ed. H. Inoue  
*Bryophyta Vogesiaca Exsiccata*. Ed. J.-P. Frahm  
*Bryophytes of Asia*. Ed. H. Deguchi & T. Yamaguchi  
*Bryophytes of Asia*. Ed. Z. Iwatsuki & M. Higuchi  
*Bryophytes of South China*. Ed. B.J. Lin & L. Zhang  
*Bryophytorum Typorum Exsiccata*. Ed. W.R. Buck.  
*Bryotheca Brasiliensis*. Ed. E. Ule  
*Bryotheca Europaea*. Ed. Rabenhorst, Winter  
*Bryotheca Gottingensis*. Ed. I. Holz & J. Heinrichs.  
*Bryotheca Polonica*. Ed. S. Lisowski Kraków, 1954  
*Camylopodes Centrali-Africanæ*. Ed. J.-P. Frahm  
*Camylopodes Peruvianæ Exsiccatae*. Ed. J.-P. Frahm  
*Collection of Juncaceae, Cyperaceae, Typhaceae and Sparganiaceae*. Ed. Á. Dégen  
*Cryptogamas exsiccatas*. Ed. F. Petrak  
*Fontinalaceae Exsiccatae*. Ed. B. Allen  
*Hepaticae et Musci URSS exsiccati*. Ed. I. Abramov  
*Hepaticae et Musci URSS exsiccati*. Ed. L.I. Savicz-Ljubitzkaja  
*Hepaticae Europeae Exsiccatae*. Ed. V. Schiffner  
*Hepaticae Exsiccatae S.O.Lindbergii*. Ed. S. Piipo  
*Hepaticae Japonicae Exsiccatae*. Ed. S. Hattori  
*Hepaticae macroregioni meridionali Poloniae exsiccati*. Ed. K. Jędrzejko, H. Klama, A. Stebel, J. Arnowiec  
*Hepaticae macroregioni meridionali Poloniae exsiccati*. *Liverworts of Southern Poland*. Ed. K. Jędrzejko  
*Hepaticae macroregioni meridionali Poloniae exsiccati*. *Mosses of Southern Poland*. Ed. K. Jędrzejko  
*Herbier Bryologique*. Ed. J.L. De Sloover  
*Iter Indicum 1839/94*. Ed. V. Schiffner  
*Moss exsiccati*. Ed. T.C.Frye  
*Musci Australasiae Exsiccati*. Ed. H. Streimann  
*Musci et Hep. Novae Caledoniae Exsiccati*. Ed. I. Thériot  
*Musci Frondosi Archipelagici Indici et Polynesiaci*. Ed. M. Fleischer

*Musci Frondosi Archipelagici Indici. Ed. M. Fleischer*  
*Musci japonici Exsiccati. Ed. Z. Iwatsuki and A. Nouchi & S. Hattori*  
*Musci Turkestanici. Ed. V.F. Brotherus*  
*Société d'Échange des Muscinées (S.E.M.)*  
*Sphagotheca Boreali-Americana. Ed. R.E. Andrus and D.H. Vitt*  
*Svenska Pacific Expeditionen 1917-17. Ed. Carlo Inga Skottsberg*  
*Flora exsiccata Austro-Hungarica, a Museo universitatis Vindobonensis edita*  
*Flora Hungarica exsiccata, a sectione botanica Musei Nationalis Hungarici edita*  
*Lichenes Bükkenes Exsiccati. Ed. F. Főriss*  
*Lichenes Regni Hungarici Exsiccati. Ed. Ö. Szatala*  
*Lichenes saxonici exsiccati. Ed. Schade, Stolle & Riehmer*  
*Lichenes Selecti Exsiccati. Editi ab Instituto Botanico Academiae Scientiarum Cechoslovacae, Pruhonice prope Pragam. Ed. A. Vězda*  
*Lichenotheca Rossica Exsiccata. Ed. P. Savicz*  
*Plantae Exsiccatae Carpatorum. Ed. A. Margittai*  
*Plantae Hungariae Exsiccatae. Ed. Á. Boros*  
*Plantae Hungariae Exsiccatae. Ed. Dr. Á. Dégen*

#### 4. Publications on the Eger Herbarium:

- Kis G. (2004): Non European Bryophyta types and list of exsiccata in the Eger Cryptogamic Herbarium (EGR). *Folia Hist. nat. Mus. Matr.* 28: 5–52.
- Kis G., Pócs T. & Szabó A. (2000): Az Eszterházy Károly Főiskola Növénygyűjteményei. Magyar Tudomány Napja '99. Konferencia előadásainak összefoglalói. EKF Biológia és Környezettudományi Intézet, Eger. pp. 40–41.
- Molnár K. (2004): Lichen types and list of exsiccata in the Eger Cryptogamic Herbarium (EGR). *Folia Hist. nat. Mus. Matr.* 28: 53–55.
- Nagy I. & Papp S. (1965): Az Egri Tanárképző Főiskola herbáriuma – *Bot. Közlem.* 52: 157–159.
- Ochyra R. & Pócs T. (1992): *Bryophyta Africana Selecta. Series I-IV. Number 101-200. (Schaedae of Exsiccata) Kraków, 4 x 7 pp.*
- Ochyra R. & Pócs T. (1993): *Bryophyta Africana Selecta. A new exsiccata from Africa. Fragm. Flor. Geobot.* 37 (2): 379–388. Kraków.
- Ochyra R. & Pócs T. (1993): *Bryophyta Africana Selecta. Centuria II. Fragm. Flor. Geobot.* 39(1): 129–135. Kraków.
- Ochyra R. & Pócs T. (1993): *Bryophyta Africana Selecta. Series V–VIII. Number 1–100. (Schaedae of Exsiccata) Kraków, 4 x 7 pp.*
- Pócs T. (1976–1977): Type catalogue of the Bryophyte Herbarium of Ho Si Minh Teacher's College, Eger, Hungary. *Folia Hist. nat. Mus. Matr.* 4: 15–36.
- Pócs T. (2000): Botanikai kutatások 50 esztendeje az Egri Tanárképző Főiskola Növénytani Tanszékén. Magyar Tudomány Napja '99. Konferencia elő-

- adásainak összefoglalói. EKF Biológia és Környezettudományi Intézet, Eger. pp. 34–36.
- Pócs, T. (2005): Activities in tropical bryology at the Eszterházy College, Eger, Hungary (EGR) during 2004–2005. *Bryol. Times* 116: 6
- A. Sass-Gyarmati A., K. Molnár K, A. Vojtkó A. and S. Dulai S. (2010): Bryophyte and lichen species collected by Antal Margittai found in the Herbarium of Eger (EGR). A Kárpátok növényzetének vizsgálata az elmúlt kétszáz évben. *Proceedings*, 220–226 p. Mukacevo-Beregovo, Ukraine.
- Suba J. (1981): Emlékezés Vrabélyi Mártonra, Heves megye nagy flórákutatójára. *Folia Hist. nat. Mus. Matr.* 7: 11–14.
- Vojtkó A. (1996): Vrabélyi Márton bükk-hegységi gyűjtései az egri Növényzeti Tanszék herbáriumára alapján. – *Bot. Közl.* 83: 170.

