Databasing of the herbarium of Mongolian plants at Herbarium Universitatis Halensis (HAL)

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Abstract: Ungethüm, K., Braun, U. & Röser, M. 2013: Databasing of the herbarium of Mongolian plants at Herbarium Universitatis Halensis (HAL). Schlechtendalia **27**: 5–6.

History and backgrounds of the herbarium of Mongolian plants deposited at HAL, one of the largest suchlike collections outside of Mongolia, is briefly outlined. A currently running project dealing with databasing of Mongolian herbarium collections preserved at HAL, granted by the German Research Foundation (DFG), is curtly introduced.

Zusammenfassung: Ungethüm, K., Braun, U. & Röser, M. 2013: Datenbank-Erfassung des Herbariums Mongolischer Pflanzen im Herbarium Universitatis Halensis (HAL). Schlechtendalia **27**: 5–6.

Geschichte und Hintergründe des Herbariums Mongolischer Pflanzen aufbewahrt in HAL, einer der größten derartigen Sammlungen außerhalb der Mongolei, werden kurz umrissen. Ein gegenwärtig laufendes Projekt zur datenbankmäßigen Erfassung Mongolischen Herbarmaterials in HAL, bewilligt durch die Deutsche Forschungsgemeinschaft (DFG), wird kurz vorgestellt.

Key words: Database, Mongolia, Pteridophyta, Spermatophyta.

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The herbarium of the Martin Luther University Halle-Wittenberg (HAL) is a medium-sized botanical collection currently comprising about 500.000 specimens (ca. 10.000 algae, 35.000 fungi, 35.000 lichens, 80.000 mosses and 335.000 higher plants). HAL is above all rich in type collections, mainly from the 19th century (about 10.000), which has to do with the history of the herbarium (Werner 1955, 1988; Braun 1995, 2012). The inventory of type collections at HAL is not yet completed and part of an ongoing project supported by the American Mellon Foundation. Data and high resolution scans of HAL type collections are available via the JSTOR portal and http://herbarium.univie.ac.at/database/search.php.

One of the largest and most important collections stored separately at HAL comprises Mongolian plant. The largest and most comprehensive herbarium of Mongolian plants outside of Mongolia is housed at LE, the Herbarium of the Komarov Botanical Institute in St. Petersburg, Russia, but immediately followed by HAL in second place. The oldest herbarium sheets of Mongolian plants at HAL go back to Alexander von Bunge (1803–1890). Bunge's Mongolian specimens were part of numerous herbarium collections originally deposited at B (Berlin), which had been transferred to Halle in 1833 when D.F.L. von Schlechtendal moved from Berlin to Halle where he was appointed as Professor of Botany and became the Director of the Botanical Garden. Hilbig (2013) published a detailed appraisal of Bunge's importance as explorer of the Mongolia flora. First Mongolian herbarium samples deposited at HAL in the 20th century were collected by H. Meusel in 1956 around the airport of Ulaanbaatar, the Mongolian capital, during a stop on the way from China to Germany. But most of the specimens have been collected during various Mongolian-German Expeditions between 1973 and 1983. Additional expeditions and other field trips have been made after 1990. The history of the Mongolian herbarium in Halle was surveyed in detail by Hilbig (1984). Later, the same author outlined the contribution of German botanists to the exploration of the Mongolian flora and vegetation (Hilbig 2006). Hilbig (1984) estimated that the collection of Mongolian plants at HAL comprised about 8.000 sheets. Currently we suppose a number of about 10.500 identified specimens, including collections made by D. Bumžaa, K. Helmecke, P. Hanelt, E. Jäger, H.D. Knapp, R. Piechocki, Z. Schamsran, K. Wesche and above all W. Hilbig who collected the majority of samples. Hence, Halle (HAL) is an important place for all kinds of researchers interested in the Mongolian flora and vegetation. There are close connections and collaborations with the Institute of Botany and Landscape Ecology of the University of Greifswald, which is engaged in a project of the German Research Foundation named "FloraGREIF – a virtual guide and plant database as practical approach to the flora of Mongolia" (Rilke & Najmi 2011). The

Mongolian collections deposited at HAL have continuously been used for this project, and they are an important basement for it. In October 2012, another project connected with the Mongolian flora, also granted by the German Research Foundation, started in Halle (Saale). Within the scope of this project, conceived for two years, the complete herbarium of Mongolian plants housed at HAL will be databased and geo-referenced. The FloraGREIF database is used as platform, which creates obvious synergy effects. Thus, complete data available on the labels of all Mongolian samples at HAL will be available in future via internet search under:

http://greif.uni-greifswald.de/floragreif/

Numerous herbarium sheets of Mongolian plant preserved at HAL have already been scanned in the course of activities within the FloraGREIF project, and they are already available via the database in Greifswald. The complete scanning of all not yet digitalized HAL sheets of Mongolian plants is planned as a supplementing project.

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