IndExs – an Online Thesaurus for Standard Bibliographic Data on Exsiccatae in Botany and Mycology

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So-called exsiccatae (singular exsiccata) are series of published, uniform and numbered sets of preserved specimens distributed together with printed labels. These series have informative titles and are usually accompanied by printed booklets with labels ('schedae'). The nomenclatural status of these printed matters with regard to the effective publication of names is treated by the *International Code of Botanical Nomenclature* (Art. 30.4). Over 2,000 plant and fungus exsiccatae have been issued since the end of the 18th century, with more than 20 million specimens distributed in varying numbers of duplicates to institutions worldwide.

Typically, exsiccatae are devoted to thematic subjects, such as medicinal plants, or material from 'exotic' countries, for example WIRTGEN, Herb. Deutsch. Arzneipfl. or KALB, Lich. Neotrop., SMITH, Pl. Guatem. Others are restricted to particular taxonomic or ecological groups, e.g., LINTON & LINTON, Brit. Willows; SMITH, Diatom. Spec. Typ.; LUNDQVIST, Fungi Fimicoli Exs. During the 19th century, well-known series, such as SCHIMPER, Iter Abyssin., were managed and sold by trade companies. Some 1,000+ exsiccatae contain vascular plants, c. 700 fungi and lichens, c. 500 bryophytes, and c. 250 algae. More than 50 exsiccatae projects are currently active, usually as part of the regular exchange programs of the publishing institutions (e.g., ALLEN & PURSELL, Maine Mosses; TRIEBEL, Microf. Exs.).

Often, the specimens of exsiccatae sent out to herbaria are not preserved in the original context, but instead divided and inserted in the receiving institution's main collection. To support the digitalization of exsiccata material, the Botanische Staatssammlung München has established an online thesaurus database called IndExs. It aims at a complete catalogue of all series worldwide, offering standard abbreviations and bibliographic details as well as additional data and images for recognizing exsiccatae and facilitating their databasing. With the help of IndExs, data capture during retro-digitalization becomes more efficient because exsiccatae specimens can be assigned to known series, with all accompanying information already including in IndExs. Since 2001, we have provided search and download options via an internet (http://indexs.botanischestaatssammlung.de). A SOAP web service is running. IndExs is powered Diversity Workbench bv (http://www.diversityworkbench.net/Portal/DiversityExsiccatae Information Models).

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