

A Heritage of Biodiversity in Heidelberg Botanic Garden: Werner Rauh's Collections from Brazil.

Schröder, C.N.¹; Koch, M.A.¹

1: Centre for Organismal Studies Heidelberg (COS Heidelberg), Department of Biodiversity and Plant Systematics, Heidelberg, Germany, marcus.koch@cos.uni-heidelberg.de

Heidelberg Botanic Garden built up important living collections with more than 10,000 taxa during the short time period between the 1950s and the 1990s. These living collections are focused on orchids and bromeliads as well as xerophytes from Madagascar, but also numerous other plant species primarily from Africa and South and Central America are cultivated, with Brazil being one of the “hot spots” of biodiversity. At Heidelberg Botanic Garden this is perceptible from the large number of accessions originating from Brazil: There are nearly 700 accessions cultivated in the living collections and thousands of specimens in the Herbarium HEID. The herbarium collection holds by its own more than 70 Holotypes from Brazil, either as dried plants or plants fixed in alcohol which were taken for describing a new species for the very first time.

This is mostly down to the tireless efforts of Professor Dr. Werner Rauh, who was the director of the garden from 1960 to 1982. Rauh collected approximately 43,000 living and dead plants, especially Bromeliaceae (~7,000), Orchidaceae (~1,600), Cactaceae (~1,500), Euphorbiaceae (~1,100) and succulent plants from Madagascar (~1,500). Within the years 1938 to 1994 Rauh undertook more than 60 expeditions in at least 44 countries. He travelled to Brazil five times and brought nearly 2,000 plants from there to Heidelberg. The collection resources comprise not only plants and specimens, but a lot of note-books with about 18,000 hand written pages.

Since 2009 this material has gradually been made accessible within the “Werner Rauh Heritage Project”, funded by the Klaus Tschira Foundation, available free for everyone and linked to international taxonomic databases (Koch et al. 2013). At the moment more than 33,000 datasets with original Rauh numbers are stored in the database, and an additional 27,000 accessions brought or sent to the Botanic Garden Heidelberg by others.

Currently more than 3,000 accessions nowadays found in other Botanical Gardens (e.g. Berlin, Torino, Utrecht, Zurich) are stored in the database, and recently the project focuses on Rauh's herbarium collections housed around the world, a lot of them in Herbarium Bradeanum Rio de Janeiro (and e.g. in B, DPU, HUH, K, M, MO, MPU, NY, P, PRE, SEL, TAN, USM, W, ZSS). A ‘Virtual Rauh Herbarium’ has technically been built up and filled with more than 7,700 datasets with the particular objective of completing datasets for type collections. The database is available at scriptorium.cos.uni-heidelberg.de

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