

# I. Biological Sciences

## Article. 4

### **Cairo University Herbarium**

H. A. Hosni\*

*Department of Botany and Microbiology, Faculty of Science, Cairo University, Egypt*

\*Correspondence: h.hosni@yahoo.com

Herbarium is a collection of plant specimens that usually have been dried and pressed, some kind of plants may be preserved in liquid instead of pressed and dried or in special boxes, in the sequence of an accepted classification for scientific study. Each specimen contains actual plant material as well as label information such as the scientific name, the collector/s, date of collection collection site details, and any additional remarks.

Cairo University Herbarium (CAI) was established in 1927 by the Swedish botanists Gunnar and Vivi Täckholm together with some Egyptian colleagues. It occupies a position among Egyptian and Middle East Herbaria for it covers the flora of almost all the phytogeographical territories of Egypt; floras of some neighboring countries namely Sudan, Libya, Arabia, Jordan and T Africa, as well as Specimens from all over the world mainly America, Australia Europe and Asia.

The Herbarium contains more than 400.000 specimens of wild and cultivated vascular plants from all over the worlds, the specimens arranged according to Engler's system in two separate halls: the largest (Vivi Täckholm's Hall 1) with 80 wooden cases and the second (Vivi Täckholm's Hall 2) with 40 metallic cases. Another minor annex includes about 10,000 specimens of Thallophyta, Cryptogams, Gymnosperms, Fungi and Lichens kept in 20 metallic cases. CAI also holds about 240 type specimens from Egypt, N Africa, Arabian Peninsula and Europe; as well as 50 endemic taxa which represent the most valuable collection in this Herbarium.

The Archaeobotany Laboratory –ABL (Now M.N.El Hadidi Lab and Library) established in 1976, it comprises archaeobotanical samples dated back to culture periods from Palaeolithic (8500-5000 BP) till the early Byzantine (300-700 AD), relevant studies were conducted in order to identify such collections. El Hadidi 1996; El Hadidi et al. 1997).

The virtual Egyptian Herbarium is a huge advancement in herbarium use and coupling the collection of physical specimens directly with the WWW, user are provided with a comprehensive online resource (Abd El-Ghani, 2008). This virtual Herbarium will be accessible to all free of charge and attractive source of botanical information (Hedberg, 2008)

The efficient exchange program carried out with the leading herbaria of the world, enriched the Herbarium in valuable collections from all over the world. Such collections have been serving as a reference material for candidates conducting taxonomical research.



The main hall (Vivi Täckholm Hall 1)

Wooden case

### History of the Herbarium

In 1925, Egypt established its first Faculty of science as a part of the Egyptian University (now Cairo University). Gunnar Täckholm ( was invited to be the first professor of Botany in this new Faculty. In summer, he married Vivi Laurent, who joined him to Egypt in 1926. The Täckholms spent the following academic years (1927-29) working together with some Egyptian colleagues with the aim of establishing the Department of Botany and its Herbarium. Together they made several expeditions to various parts of the country. Their collections during that period served as the nucleus of this Herbarium. (Kassas, 1977).

Vivi Täckholm (1889-1978) spent several years surveying Egyptian Plant collections in European herbaria. Her life in Cairo University throughout the main part of 1926-1978 was teaching and training students in plant taxonomy, and various botanical studies (palynology, cytology, ecology, phytochemistry, horticulture....etc.); leading excursions to various parts of Egypt; building up the Cairo University Herbarium and its library.



Vivi Täckholm

Our herbarium hold an historical record of over two hundred years among the valuable historical records, the following can be mentioned: Collections of Hérbarium G. Maire (1907-1908); collections of G. Täckholm (1929-1930); collections of pioneer Egyptian botanists (1930-1948) to many localities; notable collections from places visited by V. Täckholm (1952,1954,1962); valuable collections of the UNESCO project (1959-64) carried out by M. Kassas; important historical plant collections by Loutfy Boulos,(1966-1982); Collections of the pioneer work on the weed flora by Nabil El Hadidi(1966-1976); enormous collection of cultivated plants by Mohamed El Mahdi and Soliman El Sisi are well preserved in the Herbarium; about 1000 specimens from George Schweinfurth Herbarium, Berlin ( 1857-1914).



Example of preserved specimens



Vivi - Kassas memorial library

### The Herbarium library

Vivi Täckholm's Hall (1) houses standard works, monographs and world floras; in addition to an almost complete set of the monumental work "Description de l'Egypte". The periodical library is attached to the Vivi Täckholm's Hall (2); the library comprises a selection of specialized publications received as exchange with some institutions abroad. Our collection of maps, geography and travel works are partly housed in this hall as well. The library section of the second hall annex comprises literature in Medicinal Plants, Cryptogamic Botany, Economic Botany, Cytology, Genetics, Palynology, Phytochemistry... etc. The ABL includes literature in Ethnobotany, Archeology, Anatomy, and palaeobotany.

Vivi Täckholm - Kassas Memorial Library: This hall was inaugurated under the name of "Vivi Täckholm's Hall" on the occasion of the visit of Her Majesty Queen Sylvia of Sweden to the Herbarium on November 1988. In addition 10.000 books and periodicals in the field of Environmental Science and ecology most of these donated by Prof. M.Kassas.



Vivi Täckholm's Hall 2



Archaeobotany lab

### Publication of Cairo University Herbarium:

Publications from Cairo University Herbarium (1968 -1978) continued under the name "Taeckholmia" commemorating the memory of V. Täckholm (from 1978 up to the present)- Taeckholmia Additional Series (Flora of Egypt) (1980-1998)- Egyptian Studies Association - A Key to Egyptian Grasses (1991)- The Plant Red Data Book of Egypt, 1, Woody Perennials (1992)- Flora Aegyptiaca (2000)

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