

3. Functions of Herbarium:

A modern herbarium serves numerous valuable functions. Some of the important functions of herbaria are as follows:

(a) A herbarium serves as an invaluable conservatory of plant material of flora. collected from different parts of the world. Thus, they provide at one place, basic material for study of flora and vegetation of different places or regions.

Since it serves as a permanent record of flora of those regions, collections in the herbarium provide evidence of the vegetation of a region, which may be destroyed due to some natural catastrophes.

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(b) The specimens in the herbarium carry valuable data on their labels. These include data on habitat, habit, local names, colour of flowers or other characters of the plant, native uses of the plant, abundance or frequency of the species, associated plants, etc.

Such data provides valuable material for proper morphological description and range of variation of a similar plant collected from a different region, range of distribution and variation in its uses in different places. Thus, a herbaria provide data for botanical, ethno-botanical and phytogeographical studies.

(c) The herbarium serves as an aid in teaching botany to students in institutions where a herbarium is present, as it helps a teacher to show his students a plant specimen which may not be available fresh at the time of giving the course. It also helps students to identify local plants collected by them.

(d) Preserved specimens of herbaria are used in almost all types of taxonomic research. It is believed to be an essential requirement for biosystematics research today, for correct identification and nomenclature of the plant under study.

Since in biosystematics studies, a work may need material of a taxon from far and wide in studies involving '**all world species**', it may not be always possible for a researcher to visit different areas of occurrence. In such cases one has to largely rely on the resources of herbaria.

(e) The specimens in the herbaria are very often used as a source of material for anatomical, palynological and chemo-taxonomical studies.

(f) The herbaria provide important data on actual places of occurrence, time of flowering and fruiting, associated species and other data for researches in embryology, cytology and ecology.

(g) The herbaria have proved to be very valuable source of information for ethno-botanical researches as many native uses of plants are recorded on the herbarium sheets.

The following tables (Tables 1-3) gives the name of the institution, location, approximate number of sheets, year of founding and the standard abbreviation of some important herbaria in different parts of the world :

Table 4.1 : Some important herbaria of the world

Sl. No.	Name of Herbarium	Place	Year of founding	Abbreviation	Total number of sheets (Approx.)
1.	Royal Botanic Garden, Kew	London, UK	1853	K	6,500,000
2.	V.L. Komarov Botanical Institute Meseum National d' Histoire	Leningrad, USSR	1823	LE	5,000,000
3.	Naturelle Laboratoire de Phanerogramme	Paris, France	1635	P	5,000,000
4.	Coservatoire Et Jardin Botaniques	Geneva, Switzerland	1817	G	4,000,000
5.	New York Botanic Garden	New York, USA	1891	NY	3,000,000
6.	U.S. National Museum	Washington, USA	1868	US	3,000,000
7.	Vienna Botanischer Gaertn	Vienna, Austria	1748	W	2,500,000
8.	National History Museum	Chicago, USA	1893	F	2,350,000
9.	Royal Botanic Garden	Edinburgh, UK	1893	E	2,500,000
10.	Missouri Botanic Garden	St. Louis, USA	1859	MO	1,700,000
11.	National Herbarium	Melbourne, Australia	1857	MEL	1,500,000
12.	Zurich Botanischer, Gaertn	Zurich, Germany	1834	Z	1,500,000
13.	Gray Herbarium, Harvard University	Cambridge, USA	1807	GH	1,485,000
14.	Philadelphia Academy of Sciences	Philadelphia, USA	1812	PH	1,000,000
15.	Arnold Arboretum	Boston, USA	1872	A	700,000
16.	Department of Agriculture	Peradeniya, Ceylon	1817	PDA	85,000
17.	Gordon College	Rawalpindi	1893	RAW	60,000
18.	Herbarium of the Rangoon University	Rangoon, Burma	1947	RANG	15,000
19.	Botanical Research Institute of Texas	Texas	1985	BRIT	500,000
20.	Fowler Herbarium – Queen's University, Canada	Canada	1987	—	—
21.	G.F. Leningham Herbarium – University	Regina	1989	—	50,000
22.	New Mexico State Range Science Herbarium	New Mexico	—	—	20,000
23.	University of Florida Herbarium (FLAS)	Florida	1990	FLAS	25,000
24.	University of Minnesota Herbarium	Venezuela	1992	—	830,000
25.	Washington State University — Marion Ownbey Herbarium	Marion	1995	—	350,000

Table 4.3 : Some other minor herbaria of India

Sl. No.	Name of Herbarium	Abbreviation	Year of founding	Total number of sheets (Approx.)
1.	Andaman & Nicobar Circle, Botanical Survey of India, Haddo, Port Blair	PBL	1972	20,000 (all groups worldwide specially vascular plants)
2.	Arid Zone Circle, Botanical Survey of India, 775/80, Subhash Nagar, Khema ka Kuan, Pal-Basni Canal Link Road, Jodhpur, Rajasthan	BSJO	1972	16,500 (all groups worldwide specially vascular plants of Arid and Semi-arid zones)
3.	Arunachal Field Station, Botanical Survey of India, Sankie View, Itanagar, Arunachal Pradesh	ARUN	1977	10,000 (all groups)
4.	Sikkim Himalayan Circle, Botanical Survey of India, P.O. Rajbhawan, Below Rajbhawan Campus, Gangtok, Sikkim	BSHC	1979	10,000 (all groups)
5.	Deccan Circle at Hyderabad	—	1984	—
6.	High Altitude Circle at Solan, Himachal Pradesh	—	1984	—
7.	Delhi University Herbarium, Delhi	—	—	15,000
8.	Rajasthan University Herbarium, Jaipur	—	—	30,000
9.	Herbarium of Jiwaji University, Gwalior	—	—	15,000
10.	School of Plant Morphology, Meerut College Herbarium	—	—	25,000
11.	Llyod Botanic Garden, Darjeeling	—	1878	12,000