

ACTIVITIES BRING UNDERTAKEN AT RESEARCH INSTITUTE ISM, JOGINDERNAGAR:

HERBARIUM SECTION

BROAD OBJECTIVES

- To preserve and store the specimen in systematic manner.
- Classification of herbal specimen w.r.t. useable parts.
- To provide useful information regarding the medicinal plants for Ayurvedic Doctors, NGO'S, Farmers, Pharmaceutical personnels, Research scholars, Research Institutions, General public.
- To exhibit relevant literature of Medicinal Plants.

1. Maintenance of existing Herbal Specimens:

525 herbal specimens exist in the Herbarium. All the specimens have been maintained cleaned and re-poisoned to kill the pathogens viz. bacteria, fungi, pests which destroy the specimens.

2. Maintenance of existing Herbarium Sheets :

5090 Herbarium sheets are existing in the Herbarium. All the sheets have been maintained, cleaned and re-poisoned.

3. Detail of families:

The literature of classification of existing all the 5090 Herbarium sheets of 84 families has been displayed outside the herbarium sheets boxes for the ready reference for the visitors of various fields.

4. Addition and replacement of specimens/ sheets:

The specimen/ sheets have to be replaced periodically wherever found necessary. The work on this aspects is continuous and is in progress. The sample of species are also replaced with new samples in trays viz. Brahmi, Madhupatri, Safed musli, Pudina, Tulsi, Babui Tulsi, Kapur Tulsi, Kalmegh, Amla, Harad, Bahera, Giloe, Ashwagandha, Mandookparni, Bhringraj, Chitrak, Vach, Rakhhal etc.

5. Addition of literature:

The literature of 20 herbal plants reprinted & displayed in the Herbarium in front of displayed samples showing the details of the sample along with its photographs etc.

6. Educating the visitors:

The visitors of various classes i.e. Students, farmers, N.G.O.s, Ayurvedic doctors, Scientists, Research scholars, Industry people etc. visiting the Herbarium have been given information regarding Identification & Utilization of Medicinal Plants. Visitors remarks taken in the Visitor Book maintained.

7. Status of Herbarium specimens being maintained is as under:-

A. Herbal Sepecimens	
A.1 Different drugs:	
Name of specimen	No.
Root Drugs	96
Bark Drugs	54
Leaf Drugs	68
Flower Drugs	25
Fruit/Seed Drugs	74
Whole Plant Drugs	52
Total	369

A.2 Herbal specimens of specialized types:	
Medicinal Plants used in MCH(Mother & child Health)	30
Medicinal Plants used as species	20
Medicinal Plants used in various disease	50
Specimen of mixed classification	31
Herbal specimens being grown in H. G. Jogindernagar	25
Total	156

Total specimens A1 +A2 = 525

B Herbarium Sheets	
No of families	84
No of genera	314
No of species	504

BOTANICAL SECTION

Following medicinal plants species are raised for conservation and multiplication in the herbal garden under different conditions. i.e. poly house and shade net house for eventual planting out in field.

S.No	Botanical names	Common Names
1.	<i>Acorus calamus</i>	Bach
2.	<i>Asparagus adscendens</i>	Safed musli
3.	<i>Asparagus racemosus</i>	Shatawar
4.	<i>Bacopa monnieri</i>	Brahmi
5.	<i>Celastrus paniculatus</i>	Malkangni
6.	<i>Centella asiatica</i>	Mandookparni
7.	<i>Cinnamomum camphora</i>	Karpoor
8.	<i>Cinnamomum tamala</i>	Tejpatra
9.	<i>Cymbopogon flexuosus</i>	Katrin
10.	<i>Embelica officinalis</i>	Aaonla
11.	<i>Ginkgo biloba</i>	Ginkgo
12.	<i>Murraya koenigii</i>	Kari patta
13.	<i>Ocimum basilicum</i>	Babui tulsi
14.	<i>Ocimum kilimandscharicum</i>	Kapoor Tulsi
15.	<i>Ocimum sanctum</i>	Tulsi
16.	<i>Ocimum tenuiflorum</i>	Kali tulsi
17.	<i>Pelargonium graveolens</i>	Scented Geranium
18.	<i>Piper longum</i>	Magpipali
19.	<i>Rauwolfia serpentina</i>	Sarpagandha
20.	<i>Stevia rebaudiana</i>	Stevia
21.	<i>Terminalia arjuna</i>	Arjun
22.	<i>Terminalia belerica</i>	Bahera
23.	<i>Terminalia chebula</i>	Harad
24.	<i>Valeriana jatamansi</i>	Sugandhbala
25.	<i>Withania somnifera</i>	Ashwagandha

Survey & Identification: - The work of proper identification & maintenance of label plates of medicinal plants growing in the garden being done. Approximately 250 species having different medicinal properties are surveyed through out the state, identified and are put for domestication for conservation, demonstration & cultivation in different herbal gardens. This process is a continuous process & is still going on.

Technical guidelines were imparted to the student of the Universities, Colleges, Vocational trainees & school on various aspects of medicinal plants.

Development of agro-techniques: Agro techniques of two medicinal plants viz., *Bacopa monnieri* & *Bergenia ciliata* has been developed by this Institute under centrally sponsored scheme.

Nursery agro practices: Nursery techniques & cultivation practices package of 30 medicinal plant species have been sourced & compiled by the Institute for the benefit of the farmers.

Supply of Crude Herbal Material :- Institute has reached at the stage of supplying some crude herbal material produced in state herbal gardens to the departmental Ayurvedic Pharmacies to manufacture the

drugs for free distribution to patients in far flung areas through the departmental Ayurvedic Health Centers/Hospitals.

Implementation of the Annual Action Plan under the Centrally Sponsored Scheme of National Mission on Medicinal Plants:

Execution of Project activities being under taken.

Technical consultancy: - Institute is providing technical help & germplasm of selected species to users/seekers/farmers for promoting cultivation of herbs.

TRAINING AND EXTENSION SECTION:

1. Training Camps :

Training programmes being undertaken for farmers awareness for cultivation, Conservation and multiplication of medicinal plants. Camps are arranged for 1 day, 3 day and 5 day period.

2. Exposures visits :

Farmers coming for exposure visits under various departments are given awareness regarding plants identification, cultivation through Herbarium and field visits. Information on low cost home remedies and various schemes of cultivation of medicinal plants given on the spot.

Students of BAMS, MD Research Scholars of various Ayurvedic Colleges visit for Dravyaguna purpose.

Academics, College Science students and NGO officers given the lectures on various aspects of medicinal plants.

3. Departmental Exhibitions:

Ayurvedic medicinal plants along with other informatory exhibit material are displayed for demonstrations during various Exhibitions.

4. **Awareness:** To aware the farmers six one day awareness training camps in each district are organized in various AHCs in H.P.

5. **Technical guidance:** To provide technical guidance for herbal plants and nurseries visits are paid as per the demand of the concerned institute.