V.INFRASTRUCTURE AND LEARNING RESOURCES

1.PHYSICAL FACILITIES

BUILDING BUILT-UP AREA

Total area of the department : 26935 Sq. ft.

Total Laboratory area of the department : 12,775 Sq. ft.

UG Laboratory **PG Laboratory**


UG Lecture Hall **PG Lecture Hall**


Library


2.LIBRARY

At present, the departmental library is having near about 2000 Books which are made available to the members of the botanical society for a limited period. Society is publishing its own Journal named as **"Journal of the Botanical**

Society"(Formerly known as Bulletin of Botanical Society) Dr. Hari Singh Gour V. V., Sagar.In exchange of this Journal, society used to get more than twenty foreign Journals. (To name few "Brittonia", "Novon", Annals of the Missouri Botanic Garden "Pollen et spores", "Transactions of the Royal Society of South Australia" etc.).

BOTANIC GARDEN

Botanic Gardens are living museums, *ex-situ* treasures of plant diversity concentrated in very limited space. They are considered as important institutions for the research, conservation and use of bio-diversity combined with the task of teaching and raising awareness among the general public. Botanic Garden are also treated as public amenity and important centers for education due to rich and diverse plant collection and can play a very vital role to encourage and to educate the people about the vast and varied heritage of plant life in complete harmony with nature.

The developing roles of botanic gardens in respect of biodiversity conservation, environmental education and sustainable development provide great opportunities and responsibilities for institutions throughout the world. There has never been a better time for botanic gardens, when their importance and multiple roles are being increasingly recognized by government and international agencies. Strengthening the global network of botanic gardens and linking it closely to others working to safeguard the biodiversity of our planer must be our most important and needful task. Since, the publication of Botanic Garden conservation strategy by BGCI and when Convention on Biological Diversity (CBD) has come into force, the Botanic Garden of the University has already started framing new institutional national and international guidelines and policies for harmonizing their various activities and in following the global mission of botanic garden worldwide in Conservation & Education and to develop a networking for its future planning.

Inception: Ever since the inception of the Department of Botany at this University in 1946, the necessity for a botanic garden was immensely felt in order to cater to the needs of teachings and research. Firstly, a nursery was established in order to serve as a nucleus for the development of the botanic garden. The living plants or their seeds were collected during various collection trips to the Himalayas and other parts of the country.

Lay out: The present well laid new site of botanic garden, spread road over an area of 10 acres of land with sound underground irrigation facilities, concrete/flag stone roads. In 1964, the plantation of *Ginkgo biloba* a sacred Buddhist Living Fossil tree of Japan commonly known as ‘Maiden Hair Tree' and a proprootless species of *Ficus mysorensis* was done in University Botanic Garden by Prof. S.B. Saksena.

Broadly, the garden is divided into two main parts 'A' & 'B'. Part 'A' is a main portion of the garden attached to the administrative building. It consists of 10 plots including the front part. Part 'B' is attached to the teaching block of the department. It consists of 9 plots including the Forest Arboretum. All the important perennial species growing in garden are allotted their location number, which are mentioned in every plot of garden. This facilitates the easy location of each and every plant species. About half the area of the garden is covered by ‘Arboretum’ which have indigenous and exotic trees with broad leaves, flowering trees of aesthetic and recreational values along with timber trees.

The Department of Botany is maintaining the Botanical Gardens in an area of more than 10 acres. Some additional land on the slopes of hill is also used for the extension and cultivation of local wild plants. During the last 40 years, with the financial support of U.G.C. and University, we have been able to grow and cultivate a variety of important medicinal & aromatic plants required for the purpose of teaching and research. The climate of Sagar is quite suitable for the plants of coastal, subtropical as well as temperate regions. A large number of teachers and students from different universities often come and visit this place for Botanical excursion and collection of class- work plant materials, as our Botanical gardens happen to be one of the best University Botanical garden in the country. Many national and international scientists have made comments and suggestions to develop it into a big national/regional Botanical Garden of Central India due to its favorable climatic conditions.

Plant Wealth of Botanic Garden

Species of different groups of plant growing in garden are mentioned below:

PTERIDOPHYTES: Species of *Marsilea, Equisetum, Regnellidium* etc.

GYMNOSPERMS:*Cycas revoluta, Cycas rumphii, C. circinalis, Agathis robusta, Araucaria cookii, A. bidwilli, A. cunnighamai, Ginkgo biloba,* and species of *Taxodium, Cephalotaxus, Podocarpus, Zamia, Juniperus* etc.

ANGIOSPERMS: *Ficus elastica, Pterospermum acaerifolium, Sapindus emarginatus, Albizia lucida, Malaleuca leucodendron, Strychnos nux-vomica, Oroxylum indicum, Sapium insigne, Ulmus integrifolia, Caryota urens, Barberis sp. Pterocarpus marsupium, Saraca asoca Holmskloidea sangunea, Ravenala madagascariensis, Rauvolfia serpentina, R. tetraphylla, Ficus krishnii, F. mysorensis, Tylophora indica, Tinospora cordifolia, Cissus quardrangularis, Utricularia sp.,*etc.

Recognition: The garden is recognized nationally as one of the best University Botanic Gardens of India by Botanical Survey of India and also internationally by Botanic Garden Conservation International (BGCI) Kew U.K., and "International Association of Botanic Garden" (IABG). U.S.A. Included it in International Directory of Botanical Garden compiled by C.A. Heywood and V. H. Heywood published by Koetlz Scientific Books, 6240. Koenigstern/Germany on behalf of WWF, BGCI, IABG and brief summary of this Garden is mentioned on page 339-340.Recently this garden has been selected as a member for implementation of International Agenda of IUCN for conservation.

There is a growing recognition of the Biodiversity in a global asset or vital importance and value for present and future generation. Nevertheless the threat to species and ecosystems has never been as great as it is today with human beings. The importance of conservation of plants in natural environment has long been recognized. A through survey of the forest having rich diversity of important medicinal plants is needed and to locate the plant species and their population in the area.

The present extinction of natural plant wealth is due to habitat destruction by man such as clear cutting of forests, over grazing, draining wetlands, polluting the ecosystems and over harvesting of vegetation under modern technology. In order to conserve the fast vanishing flora of adjoining area of Sagar, plant conservatory is to be established in Botanic Garden so that many rare plants of the area will be conserved under ex-situ conservational strategies.

Place of Prominence: It is proposed to develop a place of prominence within a Botanical Garden, where prominent dignitaries and Botanists will plant time to time some rare plants on their visit to the garden.

Recognition

- Ranked as **one of the best** University Botanic gardens of India by **BSI.**
- **Member of BGCI** (Botanical Garden Conservation International, Kew, UK)
- **Listed in IABG** (International Association of Botanical Garden, USA).
- Included in **International Directory of Botanic Garden** compiled by C.A. Heywood and V.H. Heywood with a brief summary.