

Botanical GARDEN



Institute of Forest Genetics and Tree Breeding
(Indian Council of Forestry Research and Education)
RS Puram, Coimbatore - 641 002,
Tamil Nadu, India.

Origin and Evolution of Botanical Gardens

Botanical Garden is an institution organized to maintain plant collections, usually representing a large number of genera and species to serve educational, aesthetic, scientific or economic purposes. During ancient times, gardens were established in Egypt and Mesopotamia, for growing herbs, food plants, ornamentals or for pleasure and as status symbols. But, these gardens cannot be designated as "Botanical Gardens" in strict sense, as none of them had plants collected and maintained for scientific purposes. The first Botanical Garden "Lyceum" near Athens was established by Theophrastus, "The Father of Botany".

The Romans utilized small gardens as sources of medicines and aid to medical studies. The medieval monastic gardens originated in the late 8th century were maintained for imparting medical training to the monasteries. During 16th and 17th centuries Botanical Gardens were established in connection with the medical faculties of universities. Several Botanical Gardens were also established by other universities, which served as tools for teaching plant taxonomy, in this period. Subsequently, Botanical Gardens were started in many parts of the world, including the tropical regions and plant introductions from country to country or from continent to continent took place. Glass houses and conservatories built were sophisticated and modern facilities established to grow plants from varying ecological situations and for facilitating long term conservation of germplasm.



Theophrastus

Botanical Garden of IFGTB



Dr. K. N. Subramanian

The Botanical garden of IFGTB is situated in the Forest Campus, R. S. Puram, Coimbatore (Lat 11°0' N and Long 76°57' E). It is recognized by the Botanical Garden Conservation International based in Surrey (U.K.) and the Indian Botanical Garden Network, Lucknow. The extent of the garden is 3.40 ha. The garden was established in January 1971 by Dr. K. N. Subramanian, the then Research Officer of the erstwhile Botany Branch, Forest Research Centre, Coimbatore. The mean minimum and maximum summer temperature of the area is 22.1°C and 34.7°C respectively. The mean minimum and maximum winter temperature is 19.2°C and 32.2°C respectively. The mean annual rainfall is 64720 mm. The altitude of the area is 430 m ASL. The soil is black cotton, with an underlying canker pan.

Objectives of the Botanical Garden

- ◆ To serve as means for introducing plants for botanical, economic, forestry and horticultural interests.
- ◆ To function as a centre for dissemination of scientific, technical and popular information about plants and their culture.

- ◆ To act as a valuable adjunct or supplement to nature study and botanical work, particularly to students of Forest Colleges, serving forest officials, Scientists and students of Botany in Schools and colleges.

Lay out and species introduction

At present, the garden maintains 302 plant species of which trees constitute 166 species, shrubs and climbers 82 species and herbs including orchids 47 species. The bamboo collection consists of 7 species. A green house of size 40 x 20 ft with an arched weld-mesh roof for growing orchids and ferns and a shade house for keeping the nursery seedlings and shade loving plants are also available in the Botanical Garden. The orchid collections in the garden include, *Cymbidium aloifolium*, *Dendrobium aphyllum*, *Goodyera procera*, *Luisia tristis*, *Rhynchosyilis retusa*, *Spathoglottis plicata*, *Vanda tessellata*, *V. testacea*, *Vanilla planifolia* and *V. wightiana*.



Green House



Rhynchosyilis retusa

The area of the garden is divided into the following 7 sections viz.

1. Medicinal plants
2. Cactus and succulents
3. RET section
4. Pomology plot (fruit plants)
5. Bamboo
6. Arboretum
7. Palmatum



Satellite Imagery of Botanical Garden

Medicinal plants

There are several species of medicinal plants available in the Botanical Garden. A few important species are *Aegle marmelos*, *Alangium salvifolium*, ssp. *salvifolium*, *Andrographis paniculata*, *Aristolochia indica*, *Asparagus racemosus*, *Baliospermum montanum*, *Calophyllum inophyllum*, *Curculigo orchioides*, *Gymnema sylvestre*, *Hemidesmus indicus*, *Justicia adhatoda*,



Rauwolfia serpentina



Andrographis paniculata

J. gendarussa, *Rauwolfia serpentina*, *R. tetraphylla*, *Tinospora cordifolia*, *Tinospora sinensis*, *Tylophora indica*, *Acorus calamus*, *Costus pictus*, *C. speciosus*, *Plectranthus barbatus*, *Plumbago indica*, *P. zeylanica*, *Sansevieria roxburghiana*, *Saraca asoca*, *Strychnos nux-vomica*, *Vetiveria zizanioides* and *Vitex negundo*.

Cactus and succulents

Only a very few species of Cactus and succulents are present in the Botanical Garden. They are : *Aloe arborescens*, *Aloe vera*, *Euphorbia tirucalli* and *Opuntia* sp.



Opuntia sp

RET section

Arenga wightii, *Discospermum sphaerocarpum*, *Saraca asoca* and *Vanilla wightiana* are some of the RET plant species available in the garden.



Discospermum sphaerocarpum



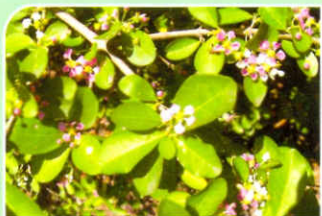
Vanilla wightiana

Pomology plot

The fruit plants available include *Annona squamosa*, *Malpighia puniceifolia*, *Manilkara hexandra*, *M. zapota*, *Mimusops elengi*, *Muntingia calabura*, *Punica granatum*, *Spondias pinnata* and *Syzygium cumini*.



Manilkara hexandra



Malpighia Punicifolia

Bamboo



Bambusa bambos



Bambusa vulgaris, var. *striata*

There are 7 species of Bamboos available in the Botanical Garden.

They are *Bambusa bambos*, *Bambusa multiplex*, *Bambusa polymorpha*, *Bambusa tulda*, *Bambusa vulgaris*, var. *striata*, *Bambusa vulgaris* var. *vamin* and *Dendrocalamus strictus*.

Arboretum

The arboretum has several species of trees and a few important ones are *Acacia auriculiformis*, *A. ferruginea*, *A. leucophloea*, *A. mellifera*, *A. nilotica*, *ssp. indica*, *A. planifrons*, *Albizia amara*, *A. lebeck*, *Azadirachta indica*, *Balanites aegyptiaca*, *Berrya cordifolia*, *Bolusanthus speciosus*, *Bursera penicillata*, *Chloroxylon swietenia*, *Crescentia cujete*, *Dalbergia lanceolaria*, *D. sissoo*, *Putranjiva roxburghii*, *Eucalyptus drepanophylla*, *E. microtheca*, *E. tereticornis*, *Gmelina arborea*, *Guaiacum officinale*, *Guazuma ulmifolia*, *Filicium decipiens*, *Hardwickia binata*, *Holoptelea integrifolia*, *Khaya senegalensis*, *Kigelia africana*, *Madhuca longifolia*, var. *longifolia*, *M. longifolia*, var. *latifolia*, *Melia dubia*, *Millingtonia hortensis*, *Morinda citrifolia*, *Oncoba spinosa*, *Parkia biglandulosa*, *Pithecellobium dulce*, *Pongamia pinnata*, *Santalum album*, *Swietenia macrophylla*, *S. mahagoni*, *Tamarindus indica*, *Terminalia arjuna*, *T. bellirica*, *T. catappa*, *Thespesia populnea* and *Zizyphus mauritiana*.

Palmatum

Arenga wightii, *Calamus rotang*, *Corypha macropoda* *C. umbraculifera*, *Dypsis lutescens* and *Roystonea regia* are the species of Palms grown in the Botanical Garden.

Wildlife

The Botanical Garden also serves as an abode of several resident and migrant birds. The common resident birds found are Common Myna, Indian Peafowl, Common Hoopoe, Grey Partridge, Eurasian-golden Oriole, Racket-tailed Drongo, Spotted Owllet, Shikra, White-headed Babbler, Black Drongo, Indian Treepie, Greater Coakal, Asian Koel, Barn Owl, Copper-smith Barbet, Common Crow, Jungle Crow, Purple Sunbird, Purple-rumped Sunbird, Rose-ringed Parakeet, Common Tailor bird and White-breasted Kingfisher. Some of the migrant birds like Asian Paradise flycatcher are also spotted here. Recently, the Peacock population has also been established in the Botanical Garden.

Other wildlife include Indian Hare (*Lepus nigricollis*), Grey Mongoose (*Herpestes edwardsi*), Three striped Squirrel (*Funambulus palmarum*) Garden Lizard (*Calotes versicolor*) and Chameleon (*Chamaeleo zeylanicus*)



Peacock



Grey Partridge



Indian Hare

Captain Temple's Tomb

It is a tomb of historical importance, located in the Botanical Garden. Captain Temple was a British Army Officer, who was assigned the task of combating Tipu Sultan. The British army had a concentration camp-cum-military base in Coimbatore area, presently located in the city. In a battle with Tipu Sultan, on December 13th 1783, Capt. Temple was killed while on his horse. According to his wish, he was buried along with his horse in this tomb.



Visitors

Students from schools, colleges and universities constitute the major chunk of visitors to the garden. The Forest Officer trainees from the Tamil Nadu Forest Academy (TNFA) and the Central Academy for State Forest Service (CASFOS) regularly visit the garden, as part of their field botanization programme. Other visitors include researchers, botanists, tree farmers, medicinal plant growers, nature lovers and environmentalists and the general public.



Students visiting the Botanical Garden

Services Available

The Botanical Garden is able to impart training programmes on environmental awareness to students. It can also supply seed and other planting materials on a limited scale to the need. It can provide plant materials to researchers and provide facilities for botanical research, as and when needed.

For further information, please contact

Director

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