

COURSE MANUAL

Course Title: Fundamentals of Horticulture

Course Code: HOR-101

Credit Hours: 2(1+1)

Department of Agriculture

School of Agriculture & Development

Central University of South Bihar, Gaya

Lecture 1: DEFINITION, DIVISION OF HORTICULTURE

The term **Horticulture** is derived from two **Latin** words i.e. **Hortus** meaning **garden** or enclosure and **Colere** meaning to **cultivate**. So, horticulture literally means garden culture or culture of garden.

Thus, Horticulture is a parts of plants agriculture which is concerned with cultivation of “garden crops”

Modern horticulture may be defined as **a part of agricultural science, which deals with the production, utilization, and improvement of fruits, vegetables, flowers, ornamentals, plantation crops, medicinal and aromatic plants etc.**

“Horticulture is the art and science of producing edible fruits, vegetables, flowers, herbs and ornamental plants, improving and commercializing them”.

JOURNEY OF HORTICULTURE

Horticulture – first appeared in written language in the **seventeenth century**.

It is found **mentioned** in **Peter Lauremberg's** treatise written in **1631**.

In **English**, Horticulture **first mentioned** by **Edword Phillips** in “The New World of English Words” London **1678**. About 1100 entries of words in comes to 1969 and total entries 17000. In 1678 mentoned as Horticulture words in book.

DIVISIONS or BRANCHES OF HORTICULTURE

Horticulture crops include fruits, vegetables, flowers, plantation crops, spices, condiments, medicinal and aromatic crops etc. In addition to these, Horticulture also deals with **raising of trees for shade, ornamental and avenue purposes, planning and raising of ornamental gardens, parks and raising of seed and planting material**. Further, horticulture also deals with utilising horticulture produce and improving horticulture crops.

Hence, based upon the crops dealt and also their purpose and utilization, the branch of horticulture is sub-divided in to the following divisions for convenience.

- **Pomology:** It is derived from two words i.e. **Pomum** meaning **fruit** and **logos** meaning **discourse** or **study** or science. So, pomology is **study or cultivation of fruit crops**. Ex. **Mango, Sapota, Guava, Grape, Banana etc.**

- **Fruit:** It is a developed and matured ovary with or without accessory parts and which is generally eaten as raw.
- **Olericulture:** It is derived from two words i.e. **oleris** meaning **pot-herb** and **culture** (English word) meaning **cultivation or rising of plants**. So, Olericulture literally means potherb cultivation. In the present days it is broadly used to indicate the cultivation of vegetables. Ex. **Brinjal, Okra, Tomato, Pumpkin** etc.
- **Vegetable:** It is any part of the **herbaceous plant** that is generally **used after cooking** as **a principal part of the meal**.

Vegetable has been developed from Latin word **vegetabilis** means animated from **vegetare** which means **enliven**.

- **Floriculture:** It is derived from two words i.e. **Florus** meaning **flower** and **Cultra** meaning **cultivation**. So floriculture means study of flower crops. In this there are again two sub-divisions. (1) **Commercial Floriculture** (2) **Ornamental Floriculture**.

✓ **Commercial floriculture:** Deals with the cultivation of flower crops grown on commercial scale for profit (Income). E.g.: **Rose, Jasmine, Carnation, Aster, and Marigold** etc.

✓ **Ornamental floriculture:** It deals with the raising of flower crops for ornamental, pleasure and fashion purposes. E.g.: **Dahlia, Zinnia, Cosmos, Hibiscus, Balsam, Nerium, Poinsettia, Hollyhock, Gerbera, and Gaillardia** etc.

- **Plantation crops:** Are those crops, which are cultivated in an **extensive scale** in **large contiguous areas, owned and managed by an individual or a company** and whose **produce is utilized only after processing**. Ex. **Coffee, Tea, Rubber, Coconut, Cocoa** etc.
- **Medicinal and aromatic plants:** It deals with the **cultivation of medicinal plants, which provide drugs and aromatic crops which yield aromatic (essential) oils**.
- **Medicinal plants-** are those plants, which are **rich in secondary metabolites** and are **potential sources of drugs**. The **secondary metabolites include alkaloids, glycosides, coumarins, flavonoids and steroids** etc.
Eg. **Periwinkle, Opium, Menthi, Cinchona, Dioscorea Yam, Belladonna, Senna, Sarpagandha, Aswagandha, Tulasi** etc.

- **Aromatic plants-** are those plants, which possesses essential oils in them. The essential oils are the odoriferous steam volatile constituents of aromatic plants. Eg. Lemon grass, Citronella, Palmrosa, Vetiver, Geranium, Davanam, Lavendor etc.
- **Post-Harvest Technology:** It is the study of methods and techniques for post-harvest handling and preservation of horticulture products for consumption.

Note:

Father of American Horticulture: **Liberty Hyde Bailey**

Dr. M. H. Marigowda, also known as the **Father of Horticulture in India**, was a horticultural expert born into a Vokkaliga family. He dedicated his life to the development of horticulture in Karnataka. When Dr. Marigowda took charge as the Superintendent of Horticulture in Mysore in 1951, the developmental works in the state began at an unprecedented pace. Dr. Marigowda was born on August 8, 1916, in T Narsipur taluk, Mysore, and National Horticulture Day is celebrated on August 8th in his Honor.