

III Semester /Horticulture Core Course - 3
Basics of Vegetable Science (Olericulture)
 (Total hours of teaching – 60 @ 04 Hrs./Week)

Theory :

Learning Outcomes: On successful completion of this course, the students will be able to:

- Distinguish the growing of vegetables according to season and climate
- Get detailed knowledge on cultivation aspects of different vegetables
- Understand and explain the special intercultural operations done in vegetable crops
- Study of morphology and taxonomy of different vegetable crops
- Study of different varieties of vegetable crops
- Identify the diseases and pests of vegetable crops and their management

Unit – 1 : Introduction to Vegetable crops

12 Hrs.

1. Importance of vegetable cultivation in India and Andhra Pradesh.
2. Classification and Nutritive value of vegetables.
3. Area and production of vegetables in India and Andhra Pradesh.
4. Export and import potential of vegetables in India. Constraints in vegetable production and remedies to overcome them.

Unit – 2 : Solanaceous and Leafy vegetables

12 Hrs.

Importance, morphology and taxonomy, varieties, climate and soil, seeds and sowing, manuring, irrigation, intercultural operations, diseases and their control, harvesting and yield of following crops:

Cultivation of (a) Brinjal (b) Tomato (c) *Capsicum* (d) Spinach (e) Coriander and (f) *Mentha*

Unit – 3 : Root and Tuber crops

16 Hrs.

Importance, morphology and taxonomy, varieties, climate and soil, seeds and sowing, manuring, irrigation, intercultural operations, diseases and their control, harvesting and yield of following crops:

Cultivation of (a) Carrot (b) Beet root (c) Tapioca and (d) *Colocasia*

Unit – 4 : Cole crops**08 Hrs.**

Importance, morphology and taxonomy, varieties, climate and soil, seeds and sowing, manuring, irrigation, intercultural operations, diseases and their control, harvesting and yield of following crops:

Cultivation of (a) Cabbage and (b) Cauliflower

Unit – 5 : Leguminous vegetables**12 Hrs.**

Importance, morphology and taxonomy, varieties, climate and soil, seeds and sowing, manuring, irrigation, intercultural operations, diseases and their control, harvesting and yield of following crops:

Cultivation of (a) Cluster bean (b) Cow pea and (d) *Dolichos*

Practical syllabus of Horticulture Core Course – 3/Semester-III**Basics of Vegetable Science (Olericulture)**

(Total hours of teaching – 30 @ 02 Hrs./Week)

1. Demonstration of seed germination test for a vegetable seed.
2. Demonstration of seed viability test.
3. Identification of vegetable seeds and vegetable crops at different growth stages
4. Preparing vegetable nursery beds
5. Raising vegetable seedlings in nursery bed and portrays
6. Identification of major diseases and insect pests of vegetables
7. Land preparation for sowing/ transplanting of vegetable crops
8. Sowing/ transplanting of vegetables in main field
9. Fertilizer application for vegetable growing
10. Visit to vegetable field to study methods of vegetable cultivation.