

HRT208:PRODUCTION TECHNOLOGY OF FRUIT AND PLANTATION CROPS

L:2 T:0 P:2 Credits:3

Course Outcomes: Through this course students should be able to

CO1 :: classify fruit and plantation crops based on climatic, botanical and morphological characteristics

CO2 :: describe the importance, scope and current scenario of fruit and plantation crops in India

CO3 :: demonstrate nursery, propagation and orchard management techniques for selected fruit and plantation crops

CO4 :: analyze the production practices of fruits and plantation crops

CO5 :: evaluate the impact of nutrient, pest and physiological disorder management on crop productivity

Unit I

Introduction and Production status of fruit and plantation crops : importance and scope of fruits and plantation crops industry in India; nutritional value of fruit crops, classification of fruit crops (climatic requirement, botanical and morphology), area, production, productivity and export potential of fruit and plantation crops.

Unit II

Production technology of tropical fruits : mango, banana, papaya and citrus

Unit III

Production technology of sub-tropical and minor fruits : guava, sapota, grape, litchi, pineapple, pomegranate, jackfruit, date and ber

Unit IV

Production technology of temperate and nut crops : apple, pear, peach, strawberry, almond and walnut

Unit V

Production technology of palm crops : coconut, arecanut, oil palm and palmyrah

Unit VI

Production technology of plantation crops : tea, coffee, cocoa, cashewnut and rubber.

List of Practicals / Experiments:

Plant Propagation techniques

- to study sexual propagation for enhanced germination and raising rootstocks in fruit and plantation crops
- to study propagation methods for fruit and plantation crops through cutting and layering
- to study propagation methods for fruit and plantation crops through budding and grafting
- to describe the role and preparation method of different formulations of plant bio-regulators in propagation
- to study and develop protocol for mass multiplication and hardening of fruit crops and plantation crop

Nursery and Planting Management

- to study selection of planting materials and varieties of major fruit and plantation crops
- to study nursery management practices for healthy seedlings

Crop Management Practices

- to perform training and pruning techniques in fruit crops
- to study nutritional disorders and fertilizer application for improved crop growth

Disease/Insect/Pest Management

- to study important pests and diseases of fruit and plantation crops

Physiological disorders

- to study the physiological disorders of fruit and plantation crops

Visit

- visit to commercial orchard and plantation industries

Text Books:

1. PRODUCTION TECHNOLOGY OF FRUITS NUTS AND PLANTATION CROPS by SHAILESH KUMAR SINGH, ANKUR SHARMA AND ANMOL, JAVA PUBLICATION
2. COMMERCIAL FRUITS by S. P. SINGH, KALYANI PUBLISHERS

References:

1. FRUIT GROWING by J.S.BAL, KALYANI PUBLISHERS