

**ROHINI** COLLEGE OF ENGINEERING AND TECHNOLOGY

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# DEPARTMENT OF AGRICULTURAL ENGINEERING

## 24AG201-CROP PRODUCTION TECHNOLOGY

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ROHINI COLLEGE OF ENGINEERING AND TECHNOLOGY

#### IMPORTANT GROUPS OF HORTICULTURE CROPS IN TAMILNADU

In Tamil Nadu, horticultural crops encompass a diverse range including vegetable crops, fruit crops, and flower crops, each with specific cultivation practices tailored to local agro-climatic conditions. Here's a brief overview of cultivation practices for representatives of each group:

### **Vegetable Crops:**

- 1. Tomato (Solanum lycopersicum):
  - Site Selection: Well-drained soil with good sunlight.
  - **Planting:** Transplanting seedlings at appropriate spacing.
  - Irrigation: Regular watering to maintain soil moisture.
  - **Nutrient Management:** Balanced fertilization with emphasis on potassium and phosphorus.
  - **Pest Management:** Integrated pest management (IPM) for diseases like blight and pests like aphids.
  - **Harvesting:** Picking when fruits are ripe, avoiding over-ripening on plants.

#### 2. Brinjal (Solanum melongena):

- Soil Preparation: Deep tilling to improve soil structure.
- **Planting:** Direct seeding or transplanting in well-prepared beds.
- Water Management: Moderate irrigation to prevent waterlogging.
- **Fertilization:** Organic mulching and balanced fertilization.
- **Pest and Disease Control:** Monitoring for pests like fruit borers and diseases like leaf spot.
- **Harvesting:** Harvesting fruits at glossy stage before seeds mature.

### **Fruit Crops:**

- 1. Mango (Mangifera indica):
  - Site Selection: Sunny locations with good air circulation.
  - **Planting:** Grafted saplings or seedlings in well-drained soil.
  - **Pruning:** Structural pruning to improve yield and shape.
  - Water Management: Regular irrigation during flowering and fruit development.
  - **Nutrient Requirements:** Balanced fertilization with emphasis on potassium during fruiting.
  - **Pest and Disease Management:** IPM for pests like fruit flies and diseases like anthracnose.
  - **Harvesting:** Picking fruits when mature, based on variety and ripening characteristics.
- 2. Banana (Musa spp.):
  - Land Preparation: Deep plowing and leveling for drainage.
  - **Propagation:** Suckers or tissue-cultured plants for uniformity.
  - **Spacing:** Wide spacing for airflow and light penetration.
  - Irrigation: Regular watering to maintain soil moisture.
  - Fertilization: Organic manure application and balanced nutrient supply.
  - **Pest Control:** IPM for pests like nematodes and diseases like Panama wilt.
  - **Harvesting:** Cutting bunches when fingers are full, followed by ripening in controlled conditions.

#### **Flower Crops:**

- 1. Rose (Rosa spp.):
  - Site Selection: Well-drained soil with pH around 6.5.
  - **Planting:** Grafted plants or cuttings in raised beds.
  - Water Management: Regular watering without waterlogging.
  - Nutrient Management: Balanced fertilization with emphasis on phosphorus.
  - **Pest and Disease Control:** IPM for pests like aphids and diseases like powdery mildew.
  - **Pruning:** Regular pruning to stimulate new growth and flowering.
  - Harvesting: Picking flowers when buds are tight, early in the morning.
- 2. Marigold (Tagetes spp.):
  - Soil Preparation: Loamy soil with good drainage.
  - **Propagation:** Direct seeding or transplanting in rows.
  - Watering: Moderate irrigation to keep soil moist but not waterlogged.
  - **Fertilization:** Balanced fertilization with emphasis on nitrogen.
  - **Pest Management:** IPM for pests like spider mites and aphids.
  - Harvesting: Cutting flowers when fully open, during cool parts of the day.