

AI-3201 PRINCIPLES AND PRACTICES OF CROP PRODUCTION

UNIT 5.2



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.