

## **PEACH**

**(*Prunuspersica* Batsch.)**

Peach is an important fruit crop of Meghalaya. It is also grown in almost all states of the NEH region because of introduction of low chilling peach varieties. Fruits are rich in protein, sugar, minerals and vitamins. It has various uses as fresh fruit as well as processed product.



### **Soil and Climate**

It is cultivated on varied type of soils but deep sandy loam soil rich in organic matter is best for its successful cultivation. It is highly susceptible to water logging and prefer perfect drainage. Low chilling peaches can be grown successfully in subtropical climate. It requires humid climate with cold weather and dry summer.

### **Cultivars**

Low chilling varieties like TA-170 (Partap), Flordasun, Shan-e-Punjab and Sharbati are suitable for cultivation in NEH region.

### **Propagation**

Peach is propagated through seeds and vegetative means. However, vegetative propagation is commercially followed.

**Raising of rootstock:** For raising rootstock for grafting, wild peach is propagated through seeds. For producing rootstocks, seeds are kept in moist sand at 4-10 DC for 10-12 weeks for stratification. The germination and vigour of the seedling can be improved by pre-sowing treatment of seeds with Thiourea (5g/litre water) or GA<sub>3</sub> (200mg/litre water). The sowing of seeds in nursery is done during the month of October-November. The seeds are sown in well-prepared beds about 5 cm deep and 15 cm apart in a row spacing of 20 cm. Seedbeds are mulched with dry grass and light irrigation is given after sowing to avoid desiccation of seeds.

**Grafting:** Tongue and cleft/wedge grafting in the month of November-December is very good method for commercial multiplication.

**Preparation of land and pits**

Pits are dug at 4.5 x 4.5 m apart on half moon terraces. The size of the pit is kept 0.75 x 0.75 x 0.75 m and filled with upper 30 cm soil along with 15-20 kg FYM, 100g Urea, 100g MOP, 300g SSP and 50g Chloropyrphos dust or granule. The pits are filled about 10 cm above the ground level.

### **Planting**

The best time for planting of low chilling peach is June to August (rainy season). If there is no rain after transplanting, light irrigation is given. Planting can also be done during January, if irrigation facility is available.

### **Training and pruning**

Peaches are usually trained to an open centre system. Cut back newly planted trees to about 30 inches high, just above a lateral branch; select 3-4 laterals with wide-angle crotches spaced evenly.

Peach require heavy and regular pruning because fruiting occurs laterally only on previous season's growth. During early bearing, 20-30 % linear growth of the shoots should be removed. The best time of pruning is last week of October. Water sprouts that come below the graft union is removed periodically.

### Manure and Fertilizer

Depending upon the age of tree, the following manure and fertilizer schedule is given.

| Age of tree (Year) | Quantity |          |         |         |
|--------------------|----------|----------|---------|---------|
|                    | FYM (Kg) | Urea (g) | SSP (g) | MOP (g) |
| 1                  | 5        | 200      | 250     | 150     |
| 2                  | 10       | 400      | 500     | 250     |
| 3                  | 20       | 650      | 750     | 300     |
| 4                  | 20       | 1000     | 1000    | 400     |
| 5 and above        | 25       | 1200     | 1250    | 500     |

The whole quantity of FYM along with SSP and MOP is given during December-January and urea is applied 15 days before bud break.

### Insect/Pests

**Peach aphid:** This insect suck the sap from growing buds. Leaf buds become weak and result in poor setting and fruits fall-off prematurely. It can be controlled by spraying with Dimethoate (Rogor) @ 1.5 ml/litre of water or Monocrotophos (Nuvacron) @ 2.5 ml/litre of water at 7-10 days before flowering (pink bud stage).

### Diseases

Diseases least affect peach. However, powdery mildew and shot hole cause damage to the crop.

**Powdery mildew:** It causes white powdery substances on the leaves, buds and flowers. This disease is controlled by spraying with Sulfex@ 2.5g/litre of water.

**Shot hole:** It is caused by fungus; in which dark brown scattered lesion on leaves appear. This disease is controlled by spraying with Cap tan@ 2g/litre of water.

### Harvesting and yield

For distant market, fruits are harvested when they attain good colour with hard skin. For local consumption, ripe peaches are harvested by twisting with hand. The peak harvesting period of peach at Meghalaya condition is 2<sup>nd</sup> week of April to 1<sup>st</sup> week of May. On an average, 20-30 kg fruits/tree can be harvested from 3 years old tree.