



PEACH

GENERAL INFORMATION

Peach is an important stone fruit crop of the temperate zone. High quality peaches are produced in higher hills e.g. J.H. Hale, Alberta and Matchless peaches. In the plains during nineteen sixties only inferior quality peach 'Chakali' was grown. With the introduction of low chilling requiring peaches from Florida it has become the most important fruit of plains. The harvest time period of peach rang from April-July. Peach is usually taken as garden-fresh, though, delightful squash can also be prepared from its varieties. The peach kernels essential oil can be used in producing of plenty of cosmetic products as well as medicinal products. They are rich in several essential minerals like potassium, fluoride as well as iron.

This area has a subtropical climate. Areas in Punjab where peach cultivation is high in Ludhiana, Amritsar, Hoshiarpur, Jalandhar, Ferozepur, Muktsar sahib, Patiala, Sangrur, Bathinda, Ropar, SAS nagar, SBS nagar, Fatehgarh.

CLIMATE

Rainfall

200-300mm

Sowing Temperature

25-30°C

Harvesting Temperature

20-25°C

SOIL

Peach requires deep sandy loam soil rich in organic matter with good drainage. The pH of the soil should be between 5.8 and 6.8. Acidic and saline soils are unfit for peach cultivation. The land with gentle slope is ideal for peach cultivation. The fruit thrives best in foothills, high hills and mid hills situation.

POPULAR VARIETIES WITH THEIR YIELD

Different varieties of peach available in all over India are **Prabhat, Pratap, Floridasun, Shan-e-Punjab, Florida red sun, Red (Nectarine), Khurmani, Sharbati, Floridaprince.**

Shan-e- Punjab: - It ripens in the 1st week of May. Fresh fruits are quite big, yellow-colored with raddish blush, succulent, superb in flavour, as well as free stone. As fruit are rigid in quality, it can tolerate transportation. They are suited to canning, the regular fruit yield is 70 kg/tree.

Pratap: - In third week of april this variety matures and is yellowed colored with red blush. This variety has better firmness compared to other. The average yield is 70 kg/plant.

Khurmani: - Fruits are large, attractive with red coloration, cling stone with white soft juicy flesh.

Florida Red: - An excellent, mid-season fruits, it matures in the early of June. Fruits are large, almost red at maturity, juicy, with free stone. Its average yield is 100 kg/tree.

Sharbati: - Fruits are large, greenish-yellow colored having rosy patches, very juicy nice flavored. Fruits ripen during June-end to first week of July; the average yield is 100-120 kg/tree.

Shan-e-Prince: The fruit matures in first week of May. It gives an average yield of 70kg per tree.

Florida Prince: The fruit matures in fourth week of April. It gives an average yield of 100kg per tree.

Prabhat: The fruit matures in third week of April. It gives an average yield of 64kg per tree.

Punjab Nectarine: The fruit matures in second week of May. It gives an average yield of 40kg per tree.

LAND PREPARATION

Land must be prepared by proper dig at 5m X 5m apart and the beds are fully filled with 20 kg of FYM, 125 g of urea and 25ml of chlorpyrifos. These are mixed with 30 cm soil and filled above 10 cm of ground level.

SOWING

Time of sowing

T- budding is done in the first week of May. T -budded seedlings are ready for transplantation in field in the month of December-January.

Spacing

For planting square system is used with spacing of 6.5 m x 6.5 m.

Sowing Depth

The seeds of peach tree must be sown in beds which are 5 cm in depth with 12-16 cm apart from each other.

Method of sowing

In the starting budding /grafting is done and then transplanting method is used for growing the plants in the main field.

SEED

Seed Rate

Propagation process is used.

PROPAGATION

For propagation, grafting or budding method is used. For raising rootstock Sharbati, Khurmani are used. Peach tree needs heavy and regular pruning. Pruning must be done in last week of October. Water sprouts and other shoots must be eradicated. The newly peach tree should be planted about 35 inches height.

FERTILIZER

Fertilizer Requirement (kg/tree):

Tree age (in years)	FYM (kg/tree)	UREA (gm/tree)	SSP (gm/tree)	MOP (gm/tree)
1-2	10-15	150-200	200-300	150-300
3-4	15-20	500-700	500-700	400-600
5 and above	25-30	1000	1000	800

When the tree is 1-2 years old, apply FYM@10-15 kg/tree, UREA@150-200gm/tree, SSP@200-300gm/tree and MOP@150-300gm/tree. When the tree is 3-4 years old, apply FYM@15-20kg/tree, UREA@500-700gm/tree, SSP@500-700gm/tree and MOP@400-600gm/tree. When the trees is 5 years and above, apply FYM@25-30 kg/tree, UREA@1000gm/tree, SSP@1000gm/tree and MOP@800gm/tree.

WEED CONTROL

These are regulated by manual weeding however it is tiring as well as expensive. As peach roots are irregular, they can be often damaged by continual ploughing. Thus, usage of herbicides is excellent substitute. A pre-emergence applying Diuron @ 800 gm-1 kg/acre or even post-emergence use of Glyphosate @ 6 ml/acre in 200 liters of water throughout February-March efficiently manages broad-leave weeds as well as usual grasses in new orchards.

IRRIGATION

After planting the trees, irrigation should be given immediately. In rainy season, these plants may not require watering. Drip irrigation is the best method for effective use of water. Irrigation should be given at some critical stages, in case of dry spell. Watering is important at flowering/budding stage and fruit development stage.

PLANT PROTECTION

- **Pest and their control:**

Shot hole: The symptoms are dark brown color lesions on leaves.

Treatment: Spraying with Captan or Ziram or Thiram@0.2% should be done at the time of leaf fall or bud swelling stage.

Bacterial canker and gummosis: It attacks on main trunk, shoots, branches, spurs, blossoms, dormant buds, leaves and even fruits.

Treatment: Ensure that a suitable peach variety and rootstock is chosen based on geographic location and environmental conditions to prevent stress to tree which predisposes tree to canker disease, apply protective copper spray to trees before flowering, prune trees in early summer to decrease likelihood of infection.

Brown rot: It causes wilting of plant and killing of petals and young twigs.

Treatment: Spraying with Captan@0.2% before 3 weeks of harvesting.

- **Pest and their control:**

Peach leaf curl aphid: The pest is active in March to May month. The pest results in curling and yellowing of leaves.

Treatment: Spraying of Rogor 30 EC@800ml/acre in 500ltr water should be done. Do spraying after 15 days if required.

Peach black aphid: The pest is active in April-June month.

Treatment: Spraying of Malathion 50EC @800ml/acre in 500ltr water.

Flat headed borer: It is a serious pest which is active in mid-March month. They feed on foliage.

Treatment: Drenching with Durmet 20 EC@1000ml/acre in 500ltr should be done in June month after harvesting for the prevention of this pest.

Beetles: The beetles feed on leaves during night time.

Treatment: Spraying of Hexavin 50 WP@1kg/acre in 500ltr water is done at the evening time. If damage continues repeat the spray after 5-6 days.

HARVESTING

April to May is the peak month of harvesting peach crop. They reach good color and hard flesh that shows they are ready to harvest. Harvesting of peach crop is carried by twisting the fruit.

POST-HARVEST

After harvesting they are stored in moderate temperature and can be used in processing squash.

REFERENCES

- 1.Punjab Agricultural University Ludhiana
- 2.Department of Agriculture
- 3.Indian Agricultural Research Institute, New Delhi
- 4.Indian Institute of Wheat and Barley Research
- 5.Ministry of Agriculture & Farmers Welfare