



PAPAYA

GENERAL INFORMATION

It is a tropical fruit which is native to Mexico. It belongs to “Caricaceae” family and “Carica” genus. It is a fast growth plant which has long fruiting period and contains high nutritional value. India is known as the largest producer of papaya. It can be grown in pots, greenhouse, polyhouse and containers. It also has health benefits such as it helps to relieve constipation, cancer, helps in lowering cholesterol, and helps in fighting with cancer cells. It is a rich source of Vitamin A and C. In India, Maharashtra, Karnataka, west Bengal, Orissa, Jammu and Kashmir, Bihar, Gujarat, Himachal Pradesh, U.K, Tamil Nadu and Andhra Pradesh are major states doing papaya farming.

SOIL

It is grown in wide range of soils. Hilly soil having well drainage system is suited best for papaya farming. Avoid cultivation in sandy or heavy soil. The pH soil ranging from 6.5-7.0 is best for papaya farming.

POPULAR VARIETIES WITH THEIR YIELD

Red Lady: Released in 2013. Plants show vigorous growth and are self-fruitful. It attains the height of 238cm and the plants start bearing fruit when it attains the height of 86cm. Fruits are medium in size, oblong to oval in shape and has reddish orange color flesh having excellent flavor and taste. The plant matures after 10 months and gives an average yield of 50kg. The variety is resistant to pests and diseases.

Punjab Sweet: Released in 1993. Dioecious variety which attains the height of 190cm and the plants start bearing fruit when it attains the height of 100cm. Fruits are large in size, oblong in shape and has deep yellowish color flesh. It contains 9.0-10.5% T.S.S. content and gives an average yield of 50kg/plant. The plant is less susceptible to citrus mites.

Pusa Delicious: Released in 1992. Hermaphrodite variety which attains the height of 210cm and the plants start bearing fruit when it attains the height of 110cm. Fruits are medium to large in size, oblong to oval in shape and has deep orange color flesh having excellent flavor and taste. It contains 8-10% T.S.S. content and gives an average yield of 46kg/plant.

Pusa Dwarf: Released in 1992. Dioecious and dwarf variety which attains the height of 165cm and the plants start bearing fruit when it attains the height of 100cm. Fruits are medium in size, oval in shape and has orange color flesh. It contains 8-10% T.S.S. content and gives an average yield of 35kg/plant.

Honey Dew: Released in 1975. It is also known as Madhu Bindu. The plant is of medium height. Fruits are large in size, elongated in shape and contain few seeds. Fruits have extra fine flesh which is sweet and contains pleasant flavor.

Other state varieties:

Washington: less seeds, big size fruits, yellow color flesh, sweet in taste, male plants are smaller than female plants, plant is comparatively smaller in size.

Coorg Honey: Very less seeds, big size fruit, less sweet than honey dew variety and plants are having high height, male and female flowers bear on same tree.

CO.2: Large size fruits and plant has medium height.

CO.1, CO.3, Solo, Pusa Nanha, Ranchi Selection, Coorg Green Sunrise Solo, Taiwan and Coorg Green are suitable varieties grown in different states.

LAND PREPARATION

For papaya farming, well prepared land is required. To bring the soil to fine tilth leveling is required. At the time of last ploughing, apply FYM (Farm Yard Manure).

SEED

Seed rate:

Use 150-200gm seeds for per acre land.

Seed treatment:

Before seed sowing, treat the seeds with Captan@3gm to protect the plant from soil borne diseases.

SOWING

Time of sowing:

Seeds are sown in second week of July to third week of September and transplanting is done from first week of September to mid-October.

Spacing:

Use plant to plant spacing of 1.5 X 1.5m.

Sowing depth:

1cm deep seeds are sown.

Method of sowing:

Propagation method is used.

NURSERY MANAGEMENT AND TRANSPLANTING

The seedlings are prepared in the polythene bags having dimensions of 25 X 10cm. In these polythene's, 8-10 holes are done having 1mm diameter on lower part for proper drainage of

water. Polythene bags are filled with equal proportions of FYM, soil and sand. Mainly seeds are sown in polythene bags in 2nd week of July to 3rd week for September. Before sowing treat the seeds with Captan@3gm per kg seeds. Drenching is done with Captan@0.2% when seedlings emerge out to protect them from damping off disease. Transplanting of seedlings is done in September-October month.

FERTILIZER

Do not add any fertilizer at the time of plant transplanting. Afterwards N:P:K(19:19:19)@1kg is added two times in February month.

WEED CONTROL

Weed can be controlled by hand-hoeing and also controlled by chemically, use glyphosate@1.6litre per 150 litre of water. Use glyphosate only on weeds not on crop plants.

IRRIGATION

Irrigation will depend upon season, crop growth and soil type.

PLANT PROTECTION



- **Disease and their control:**

Stem rot: Water like wet spots are seen on plant stem. The symptoms get spread on all sides of the plant. Plant leaves fall apart before it is fully developed.

Treatment: To control this disease spray with M-45@300gm in 150ltr water.



Powdery mildew: Patchy, white powdery growth appears on upper surface of leaves also on main stem of infected plant. It parasitizes the plant using it as a food source. In severe infestation it causes defoliation and premature fruit ripening.

Treatment: Spraying of Thiophanate methyl 70% WP@300gm in 150-160ltr water/acre is done.



Root rot or wilt: The disease causes rotting of roots which ultimately result in plant wilting.

Treatment: To control this disease drenching with Saaf@400gm in 150ltr water.



Papaya mosaic: The symptoms appear on top young leaves of the plants.

Treatment: To control this pest spraying with Malathion@300ml in 150ltr water is done.



- **Pest and their control:**

Aphid: They suck the sap of the plant. Aphids help in spreading disease in plants.

Treatment: To control this pest spraying with Malathion@300ml in 150ltr water is done.



Fruit fly: The female lays eggs in the mesocarp, after hatching the maggots feed themselves on fruit pulp which will destroy the fruit.

Treatment: To control this pest spraying with Malathion@300ml in 150ltr water is done.

HARVESTING

Harvesting is mainly done when fruit attains the full size and is light green in color with a tinge of yellow at apical end. First picking can be done after 14-15 months of planting. 4-5 harvestings can be done per season.