#### **JACK FRUIT**

### (Artocarpus heterophyllus L.)

Jackfruit is also known as the poor man's food in the Eastern and Southern part of India. It is a rich source of vitamin' A', 'C' and minerals.

### **Cultivars**

Rudrakshi, Gulabi, Hazari, Champaka and local cultivars

#### **Soil and Climate**



Jackfruit can be grown on a wide variety of soils but, it is grown well in a rich, deep, alluvial and well-drained soil. It can grow on an open textured or lateritic soil provided sufficient nutrients are available. It grows well in a warm, humid climate up to an elevation of 1500 msl.

## **Propagation**

**Seed:** Jackfruit is commonly propagated by seeds. Seed should be sown immediately after extraction since they lose their viability during storage. Soaking seed in NAA (25 mg/L of water) for 24 hrs improve their germination and seedling growth.

**Air layering:** It is one of the best methods to obtain true to type plant. Air layering of one-year-old shoot of bearing plant gives higher success when treated with IBA (500 ppm).

**Epicotyls grafting:** Jackfruit seeds should be sown in poly bags (10cm x 20cm) in the 1<sup>st</sup> week of July. The seedlings when reached 12-14 cm heights should be used as rootstock for grafting. Scions from the terminal shoot of selected good variety of one season old, having well developed buds should be used. At the base of the individual scion a wedge of 4.0 cm should be prepared and inserted in the split epicotyls region of the stock and tied firmly by polythene strips.

# **Planting**

Seedlings are planted in square system with spacing of 10m x10m. June to August is ideal time for planting.

### Manure and Fertilizer

A bearing tree requires a fertilizer dose of 20-30 kg FYM, 200g N, 320g P<sub>2</sub>0<sub>5</sub>, 960 g K<sub>2</sub>0 and 5 kg ash. Tree should be irrigated immediately after manure and fertilizer application.

### **Intercropping**

It is advisable to utilize the inter-space by growing some intercrops during the gestation period of jackfruit, which gives some extra income to the grower. Vegetable like radish, brinjal, chilli, cabbage etc can be grown with assured irrigation facilities.

### Irrigation

Jackfruit is cultivated in northeast as a rainfed crops. The young trees are sensitive to drought. So for better growth of the seedlings, watering should be done during summer and winter months.

### **Insect/Pests**

**Shoot and trunk borer:** The caterpillar bore into the shoots bud and fruit and cause severe damage. The infected part should be cut and destroyed. Spraying of Carbaryl 50% @4grnIL of water in the flowering season controls the pest.

**Fruit rot:** The pathogen usually infects the male inflorescence and fruits. The rot starts near, the stalk end, which get covered with the mycelium. Spraying of Indofil M-45 at 0.2% and Bavistin (Carbendazim) at 0.05% three times at 14 days interval starting in March give good control of the disease.

# Harvesting and yield

First fruiting take place 6-8 years after planting. The fruits mature towards the end of summer in June. The yield of jackfruit varies widely with the type and climate condition. The trees produce a few fruits to as high as 250 to 300 fruits/tree/year.