

# Papaya

## Harvesting

Papaya fruits will be ready for harvest by about 9-10 months after planting depending on cultivar and prevailing temperature during the course of fruit development. The change of colour from green to yellow and the consistency of the latex from milky to watery indicate that the fruit is ready for harvest. The ripe fruit is harvested individually by hand picking taking care to avoid all possible injuries. The mature fruit easily gets detached from stem either by turning it upwards or by twisting. The fruit should be harvested early in the morning and kept in shade for grading.

### Papain Extraction

The immature papaya fruit contains a milky latex containing papain. It has several uses in the industry viz., food processing, tanning and textile industry. In India **CO.2** and **CO.6** varieties of papaya are recommended for papain production. Considering the export potential of papain large areas are being brought under cultivation of papaya for papain production.

For the purpose of papain tapping, partially mature fruits about 90-100 days old is selected. Incision is made with bamboo splinters or ivory knives about 0.3 cm deep on four sides of fruit from stalk end to tip early in the morning before 9.00 a.m. Latex is collected in glass vessels or aluminium trays. Similar incision is repeated on untapped surface of the same fruit three times at 3-4 days interval. Potassium Metabisulphite @0.05% is added to the liquid latex to extend the storage life of the papain. The liquid latex is then dried in sun or spray dried at a temperature of 50-55°C. Powder is prepared from dry flakes and sieved in a 10 mesh sieve. The papain in the powdered form is stored in polythene bags or in airtight glass containers and stored for six months at 9°C.

### Yield

A tree with good management produces 25 to 40 fruits weighing 40 to 60 kg in the first 15 to 18 months.

The yield of papain is as follows -

Year	Approximate yield (kg/ha)
1 <sup>st</sup>	250
2 <sup>nd</sup>	150-200
3 <sup>rd</sup>	75-100

Approximately 25g of latex is obtained per fruit.

5 kg of latex on drying yield 1kg of papain.