



TECHNICAL DATA SHEET

PAPAYA

Section A: Information About Papaya Crops

A.1	Main papaya producing areas in Costa Rica	Caribbean, Northern Zone, and the Pacific.	A.2	Main export destination	Canada
A.3	Crop cycle:	From the start of flowering to harvest: 2.5 - 3 months up to 8 months. Papaya has a continuous harvest from 8 months up to 18-20 months. The continuous production means that papaya overlaps the phases of flowering, fruit development, and ripening.			
A.4	Shelf life:	Once the harvest starts, the shelf life extends between 10 and 12 months.			
A.5	Sex of the plants:	Hermaphroditic, female, and male. The seed from hermaphroditic plants produces offspring with a ratio of hermaphroditic to female of 2:1 (66.6% hermaphroditic) while the female seeds have a 1:1 ratio. Male trees are not required in a commercial plantation.			
A.6	Edaphoclimatic requirements:				
A.6.1	Temperature	23 and 27 °C.	Precipitation	Good distribution throughout the year.	
A.6.2	Photoperiod	High luminosity	Altitude	0 - 600 msnm.	
A.6.3	Soils:	Light textures (loamy or sandy loam) with depths not less than 1.20 meters and excellent drainage. The crop does not tolerate waterlogging. The presence of stones can cause adult plants to tip over. It is recommended to plant on land with a slope of less than 5%.			
A.6.4	Papaya is negatively affected by wind causing mechanical damage to the fruits and tipping over of the plants.				
A.7	Principal Varieties	Lucia: heterogeneous, with a fruit weight that ranges between 1.5 and 2.5 Kg and relatively low productivity. Parriteña: heterogeneous, with a fruit weight that ranges between 2 and 3 Kg. Sunset and Sunrise: produce small fruits between 300 and 600 g.			
		Pococí Hybrid			
		Characteristics:	Homogeneous and high-yielding Fruit weight: 1 and 1.5 kg		
		Suerre variety: 95% hermaphroditic plants			
Characteristics:	Height of the first fruit 89 - 90 cm Number of fruits in the first harvest cycle 60 - 70 Weight of fruit ready for harvest 490-530 grams. Brix degrees 12 - 12.7				
A.8	Crop establishment	It is advisable to plant three seedlings per planting point.			
A.8.1	Planting density	A density ranging between 1600 and 2000 plants per hectare is recommended.			
A.8.2	Planting distance: 2.5 X 2.5 m (1600 plants per hectare) or 2.5 X 2 m (2000 plants per hectare)				
A.9	Due to high productivity, papaya cultivation is very intensive in terms of fertilization. It is recommended to carry out soil and foliar analyses to determine the amount of product required by the crop.				



Section B: **Harvest and post-harvest of papaya**

B.1	Harvest maturity	The main harvest criterion is the development of a yellow color between the ribs of the apical third of the fruit, which is called a streak, mark, or ripening stripe. This begins between 130 and 150 days after flowering.	
		A streak is the minimum ripening degree with which harvesting is carried out. If the harvest is carried out before the appearance of the first streak, there is a possibility that there will not be an adequate ripening process that generates the good taste of the fruit. On the other hand, if harvested very ripe, the fruit is very susceptible to bumps and rot.	
B.2	Harvesting is done twice a week manually. To detach the fruit, it should be rotated and gently pulled to pluck it.		
B.3	Post-harvest handling	Boxes for transport	They must be plastic. They must not have spikes or irregularities that damage the fruit. They must be washed constantly.
		Boxes for transport Fruit packaging in the field	They should be arranged in the box in a single layer, placing the peduncular base of the fruit against the bottom, avoid compressing the fruits. To avoid friction or mechanical damage, the fruit should be wrapped in clean bags.
		Transportation of the fruit to the collection center	Avoid exposing papaya boxes to the sun.

Section C: **Information on production costs**

Presented as an example are the production costs for one hectare of Pococí hybrid papaya with a planting system of 2.5 x 2.5 m; for a planting density of 1600 plants. Planting three plants per planting spot to achieve an approximate 87.5% of plants that produce hermaphroditic plants.

Expected yield (kg)	150 tons of fresh fruit.
Considered costs:	Costs of rentals and hiring of soil preparation tasks for planting
	Costs of seedlings and agrochemicals for planting
	Labor costs for planting and maintenance
	Costs of additional materials for hauling and collecting fruit, as well as the purchase of equipment for the application of pesticides.
Total production cost:	¢12.136.175,00