Harvesting

Forty to forty-five days (40-45 days) after fruit set, the mature fruit turns a full red or yellow colour. Pitaya fruits are due for harvesting when a hole appears inside the cavity of the fruit and the wings turn red. Some species are thorny and wearing a pair of leather gloves at harvesting is recommended. The fruits are to be carefully removed from the plants taking care not to damage the skin. In St.Vincent and the Grenadines, harvesting lasts from June to November with approximately 5-6 cycles of harvests per year.

Pitaya fruits can be kept at room temperature for more than 7 days, and in plastic bags in the refrigerator for about 24 days.



◄ improper harvesting of the fruit



 Pitaya fruit that was harvested in the correct way

Crop Yields

At the Taiwan Mission Orange Hill demonstration farm where concrete posts are used, about 20-30 lbs of fruits per year is produced. Fruit size range from about $\frac{1}{2}$ - $\frac{3}{4}$ lbs. (what is acreage at the farm?) Production potential in Taiwan was estimated at 14 700 - 24 500 pounds per acre.



 Varied size of fruits harvested at the Taiwan Mission Farm at Orange Hill

▲ damaaed stem

showing improper

harvesting of fruit.

Site Selection

Pitaya plants should be planted in an open well-lit sunny area for best growth and fruit production.

Soil

Pitaya can be grown in a wide range of soils. Soils that are well drained and high in organic matter are recommended.

Wind

Avoid windy areas as strong consistent winds can damage the trellises or other types of support provided for the stems.

Spacing



Plants are spaced: With the concrete posts -WR 8ft X 10ft BR With fence or wall -WR 4ft X 4ft BR

◀ Plants lined at 8 X 10 ft. Posts are 8 X 9 ft. apart

Planting

Plant the cured cuttings directly into the soil at a depth of at least $1\frac{1}{2}$ - 2 inches. Provide a stake as support for the new plants, e.g. wooden or concrete posts, a wall or a fence.

Support Structures

Pitaya plants grow quite large, spreading outward from the main stem. A strong support structure should be established to avoid snapping of the matured plant parts.

In St. Vincent, the type of support structures used are concrete posts, bamboo or wooden sticks, old tyres, coconut trees, fence and rock or wall.





Old coconut tree trunk ►

Fertilizing

Well composted manure 1-2 lbs/plant at planting, (beginning in April) and every four months after. Do not apply more than 3 ½ -5 oz NPK fertilizer per plant per year.

Irrigation

Pitaya belong to the Cactus family and tolerate dry conditions. A dry period is necessary for the plant to flower, however as the fruit matures, water is needed to increase the fruit set and fruit weight.

Weeding

Weeds close to the plant should be removed manually. Use a herbicide with a shield for weeds along the inter row space.

Training

The main stem has to be trained for it to be able to use the support structure. Tie the stem to the support structure as it grows. Once this stem reaches the top of the support, cut the tips to induce branching and tie again to the support.

8

Pruning

Pruning may induce flowering and stem branching. Pruning is done to remove all damaged, diseased or dead stem and any stem that touches the soil. Pruning is also done after harvesting is completed or it can be done 1 - 3 times per year.

Pests and Diseases

Birds, thrips and mealybugs present some damage for pitaya. Anthracnose is the major disease that is of concern.



◀ damage caused by Bird peckina



 Damage
Dam caused by the disease Anthracnose

▲ Thrips cause damage to the fruit rendering it inedible and can seriously reduce yields.

Physiological Problems

- 1. During the rainy season, particularly so in areas with sandy soil, the mature pitaya fruits must be harvested on time to prevent the fruits from absorbing excess water which causes them to split open.
- 2. Always use a shield when applying gramoxone or any herbicide to avoid damaging the plant.



 Excess water absorbed by fruit gives distortion in shape.

plant 🕨

