# COOPERATIVE EXTENSION SERVICE UNIVERSITY OF HAWAII AT MANOA COLLEGE OF TROPICAL AGRICULTURE AND HUMAN RESOURCES UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING 1420 Lower Campus Road Honolulu, HI 96822

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# PAPAYAS FOR THE HOME GARDEN

The papaya, a popular breakfast fruit noted for its special flavor, is often grown by many people as a back yard fruit tree. The plant is herbaceous and grows rapidly and produces ripe fruits in 8-12 months.

### Varieties

For home gardeners, the solo type such as "Waimanalo," "Sunset," "Kapoho Solo," and "Sunrise" can be planted in the home garden. Other cultivars which may also be grown in home gardens include "Higgins," "Wilder," and "Line 8."

### Soil and Soil Management

Papayas should be grown in well drained soil and in an area which receives full sunlight throughout the day. They will also grow even in "aa" lava rocks. The soil pH should be between 5.5 and 7.0. The planting hole should be properly prepared by adding 2-3 pounds of organic compost along with 1-2 pounds of treble superphosphate placed at bottom of planting hole. Dig a hole about 2-3 feet wide and at least 6-8 inches deep.

# Planting

Five to ten papaya seeds should be planted in the planting hole. Cover about  $\frac{1}{4}$  inch of loose soil over the seeds. Papaya seeds should germinate within 10-14 days. If seedlings are used for transplanting, plant seeds in community pots and then transplant seedlings when they are 4-8 inches tall. Planting holes should be spaced at least 6-10 feet apart.

### Fertilizing

Fertilize trees with a fertilizer such as 10-10-10 or 16-16-16 at the rate of  $\frac{1}{4}$  pound per tree every month prior to flowering. As the tree begins to bear fruit, apply 3/4 pound of fertilizer every 8 weeks. Apply fertilizer around a drip line area and water thoroughly.

# Irrigation

In young orchards, watering three times a week may be sufficient. As the orchard begins to bear, irrigating twice a week should suffice since the root systems are more extensive. Avoid drought conditions since flowers may become sterile female and the lower leaves may turn yellow and drop.

# Thinning

After 6-8 weeks of growth from direct seedlings, the plants should be thinnned and all seedlings are removed at the base except 2 or 3 of the strongest. Select seedlings so they are spaced far enough from the other. The final thinning occurs as soon as the papaya flowers become visible and large enough to determine whether it is a hermaphrodite or a female tree. Papaya trees are normally 5-6 months old at this stage. Only one hermaphrodite papaya tree is selected and allowed to grow in one spot.

# Pest and Pest Management

Mites are one of the most common pest of papaya which can be easily controlled by wettable sulfur. Aphids and thrips also cause damage and can be controlled by malathion spray.

Anthracnose, phytophthora, stem end rot, and black spot are the common fungal diseases attacking papayas especially during the rainy season. Fungicides such as mancozeb, benomyl, and chlorothalonil can be applied with no waiting period till harvesting. Powdery mildew also is a problem under tropical weather conditions but can be controlled by wettable sulfur.

The most destructive disease of papaya is the papaya ring spot virus. At present, the only satisfactory way of controlling this virus is by destroying the source of the virus, mainly by roguing the infected tree or infected cucurbitaceous plants growing in the area.

### Harvesting

Fruits that show a slight tinge of yellow at the apical (blossom or bottom) end of the fruit are harvested. Leaving the fruit longer to ripen on the tree may attract fruit flies or birds. As the tree gets taller, the use of the plumber's helper may become useful.

H. DALE SATO County Extension Agent Urban Horticulture Program

"Use pesticide safely. Read and follow the label. Consult Cooperative Extension Service or Department of Agriculture personnel for authorized special local need registrations or additional information. The user is responsible for proper use and application of pesticides as well as storage and disposal

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