

Papaya



Papaya – Overview

- Native to Central America
- Grown in tropical and warmer subtropical areas worldwide
- Plant can reach 30 feet tall
- Because of tropical appearance and abundant fruit, considerable demand for use in protected Texas landscapes throughout coastal and southern Texas

Papaya – Climate

- Thrives best under warm, humid conditions
- Intolerant of strong winds and cold weather
- Temperatures just below freezing will kill it to the ground
- Limited commercial plantings in the lower Rio Grande Valley rarely survive more than a few years

Papaya – Soil and Site Selection

- Well drained soil
- Plant is shallow rooted and will not tolerate excessive wetness or standing water
- Thrive best in full sun
- Protection from cold and wind can be helpful

Papaya - Varieties

- Generally grown from seed so there are few true varieties
- Polygamous – three types of flowers – male, female, bisexual
- Bisexual preferred for home planting, but most types available in Texas are male or female
- Sex determination prior to flowering cannot be determined
- Plant 2-4 seedling plants to assure both male and female plants
- Fruit types range from small to medium round and medium to large oblong
- Flesh color is mostly yellow, although there are some orange to red types

Papaya - Varieties

- Female flowers – along trunk and have miniature fruit inside base of flower petals
- Male flowers – long sprays that originate along the trunk with trumpet-shaped flowers about an inch long
- Bisexual flowers – practically identical to female flowers but have male stamen surrounding miniature fruit inside flower petals



Female Flowers



Male Flowers

Papaya – Propagation and Planting

- Most grown from seed because of impracticality of vegetative propagation
- Germination accomplished in about 2 weeks under full sunlight
- When plants are about 1 foot tall, set out
- Pots of plants should be spaced 8-10 feet apart
- Should begin flowering in 5-6 months
- Thin to a single female or bisexual plant on each site
- If no bisexual plants, one male plant is needed for every 8-10 females

Papaya – Propagation and Planting

- If fruit is from Hawaii, chances are good of obtaining seedlings that are mostly bisexual
- Pollination is accomplished by covering unopen flower (female or bisexual) with small paper bag until it opens then transfer pollen from bisexual or male flower onto protected stigma and recover pollinated flower for several days

Papaya - Culture

- Weed and grass control within 3-4 feet of plant is essential
- Use of mulch is highly recommended
- A quarter pound of 21-0-0 fertilizer per plant per month until plant established, then increase to half pound at 6 months

Papaya – Production, Maturity, Use

- Should produce fruit within a year of planting
- Mature plants capable of producing 100 to 200 pounds of fruit per year
- Fruit can be ripened off plant after appearance of a yellow tinge at the tip
- Best quality if harvested when fruit is completely yellow
- Can be eaten in slices, chunks, or juiced
- Green papaya can be cooked and eaten like squash
- Papain enzyme (found in green fruit and leaves) used as a meat tenderizer

Papaya – Disease and Insect Pests

- Root rot can cause rapid death – make sure good drainage
- Virus diseases are common and uncontrollable – yellow mottling of leaves, stunting, poor fruit set – remove and destroy plant
- Anthracnose – appears on fruit as water-soaked spots that later enlarge, darken, and become sunken in the rind
- Common whitefly and sweetpotato fly– only insect pest which has affected Texas papaya – leads to sooty mold on foliage and fruit – spray with soapy water
- Browning of leaves cause by saline soil and water conditions