

# The Fig<sup>1</sup>

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• **Scientific Name:** *Ficus carica* (Common, edible fig)

• Family: Moraceae

 Origin: Old World tropics, Asia Minor and Mediterranean region.

• **Distribution:** Tropical and warm subtropical areas of the world including Florida

### DESCRIPTION

Tree:--Broad, irregular, deciduous tree to 30 feet, commonly a shrub in cultivation. Figs seldom attain tree size in Florida. When frozen to the ground, they sucker from the base and form a bush. Lateral spread of roots is quite extensive and, in certain soils, roots are quite deep. Profuse fibrous roots make deep cultivation undesirable. Shoot growth is vigorous, producing soft wood that is susceptible to cold damage.

Leaves:-- Thick, 3-5 lobed, bright dark green, rough above, light green with pubescence below that is irritating to the skin.

Flowers:-- Minute, unisexual (bearing stamens or pistils depending on type), producing a cluster borne in leaf axils.

Fruit:-- Unique, being derived from a hollow peduncle, or fruit stem that becomes fleshy (botanically a syconium), so-called seeds are undeveloped, unfertilized ovaries imparting the resin-like flavor associated with figs. An opening or "eye" located at the fruit apex allows water and insect penetrations which may result in rotting.

Fruit types:-- Four categories based on flowering characteristics -- Caprifig, Smyrna, common, and San Pedro. Caprifigs are inedible, producing only staminate (male) flowers, useful for pollen. Smyrna bear only pistillate (female) flowers that require caprifig pollen for development. Common types, singly recommended for Florida, produce parthenocarpic, pistillate flowers (do not require pollination to develop and mature fruit). San Pedro produces pistillate flowers, bearing 2 fig crops, 1

<sup>1.</sup> This document is HS27, one of a series of the Horticultural Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Original publication date March 1994. Reviewed May 2003. Visit the EDIS Web Site at http://edis.ifas.ufl.edu.

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borne on leafless wood requiring no pollination, the other requiring pollination, borne on new wood.

Unfruitfulness:-- Smyrna or San Pedro types will not bear in Florida because of the absence of caprifigs and a special fig wasp (*Blastophaga psenes*) both needed for pollination. Common types are recommended for Floria. Common type varieties often shed fruit prior to maturity due to excessive heat or drought or heavy nematode infestation.

Comments:-- Special cells in the plant produce a latex that contains ficin, a protein-decomposing enzyme similar to papain. Contact with skin causes dermatitis, making use of gloves advisable when working with or harvesting figs.

Varieties:-- Desirable characteristics include a closed eye to prevent insect and water entry, a long peduncle (fruit stem) allowing fruit droop that prevents moisture entrance through eye, green skin color resulting in less bird damage and nematode-resistant rootstocks. Common varieties adapted to Florida are sold under several names. Names commonly used in Florida are listed with synonyms in parenthesis.

'Celeste' (Celestial, Blue Celeste, Little Brown, Sugar). Widely grown in the South. Fruit small, purplish-bronze to light brown with closed eye, ripening from mid-July to mid-August. Does not bear fruit in season following severe freeze damage.

'Brown Turkey' (Everbearing, Harrison, Ramsey, Lee's Perpetual, Eastern Brown Turkey, Brunswick). Rivals 'Celeste' in popularity. Moderate size fruit of bronze color with medium eye opening. Ripens in late July until late fall and will fruit following severe freeze damage.

'Green Ischia' (Ischia Green, White Ischia, Ischia Verte). Not widely grown but green color and closed eye make it desirable. Fruit ripens late July to early August and does not fruit during season following severe freeze.

'San Piero' (Thomson, California Brown Turkey). No common name in Florida. Fruit very large, purplish-black to purplish-bronze color, does not droop and is subject to souring and splitting.

'Magnolia' (Brunswick, Madonna). Uncommon in Florida, but found throughout the South and canned commercially in Texas. Fruit lopsided, large, bronze colored with open eye. 'Magnolia' ripens from mid-July to late August, fruit tends toward sourness and splitting. Will bear after severe freeze damage.

#### **PROPAGATION**

Reproduced by cuttings using dormant wood in 6 to 12 inch lengths, up to 3/4 inch diameter, avoiding weak, slender growth. Make basal cut directly beneath nodes or joints. Plant cuttings during late winter in well-drained soil, leaving 1 inch of stock above soil level. Keep soil moist, not wet. Root leafy shoots under intermittent mist, as marcotts, or air layers.

Propagate on rootstocks using chip bud, patch bud, side graft or inlay graft. Chip bud and side graft preferred when wood is 1/2 inch or less, patch bud for stocks from 1/2 to 1 1/2 inches and inlay graft for larger stocks. Latex flow from cuts does not hinder graft union.

#### CULTURAL PRACTICES

Planting:-- Bare-rooted figs can be planted anytime during the dormant season, late winter is preferred. Container-grown plants should be set in early spring.

Pruning:-- Prune only to maintain desired bush size, heading back to promote branching. Keep 3 - 5 leaders, removing suckers. Prune freeze-damaged wood after regrowth commences.

Moisture:-- Figs will not tolerate excessively wet soil, but need large quantities of water in the fruiting

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season. A well-drained soil is required. Shallow cultivation of weeds and weekly irrigation is recommended for optimum fruiting. Heavy mulches will aid soil moisture retention.

Fertilizers:-- Little is known about specific needs, but figs respond well to small amounts of mixed fertilizer applied once a month during growing season.

nematode damage. Preplanting treatments with nematicides are helpful. Graft figs onto nematode-resistant rootstocks such as *Ficus racemosa*, *F. cocculifolia* and *F. gnaphalacarpa*. *F. racemosa* is sold as *F. glomerata* in Florida. Trees on these rootstocks cannot grow successfully in areas colder than warm areas in the citrus regions in Florida.

## **PESTS**

Birds:-- A primary fig pest in Florida, they are fond of darker colored fruits. Harvest ripe figs in early morning to avoid feeding birds.

Insects:-- Sour bug or dried fruit beetle (*Carpophilus* spp.) carries souring organisms through eye into fruit cavity. Plant closed eye varieties, harvest ripe fruit immediately, or pick open eye varieties before maturity and use as preserves. Limbs damaged by beetles should be removed.

Diseases:-- Fig rust (*Cerotelium fici*) attacks leaves causing rusty brown appearance, distortion, defoliation, premature ripening and decreased cold tolerance. Control with 5-5-50 Bordeaux (copper sulfate, lime and water) spray applied every 2-3 weeks from June through August to leaf undersides.

Anthracnose (*Glomerella cingulata*) sometimes causes black spots on fruit, but usually not serious. Control fungus infections on twigs such as web blight, thread blight and pink blight by removing adjacent shrubbery to increase air circulation and avoid excess irrigation.

Nematodes:-- Deep sands of central Florida harbor severe infestations while clay subsoils offer some protection. Grown next to buildings, roots penetrate the soil beneath where nematode populations are lower. Heavy organic mulches lessen