



Ficus: Trees and Vine of Florida

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Introduction

Ficus is a genus of evergreen and deciduous trees, shrubs, and occasional woody vines with over 700 species. Only 18 species will be covered in this publication. They are those that this author has encountered growing in Florida. Some of the tallest and most massive tropical trees are members of this genus. They often begin life as epiphytes (a plant growing on another plant) by climbing and embedding themselves upon other trees and palms. The Ficus often overtops and outlives their host plants.

The vegetative characteristics of Ficus are extremely variable. Stipules, leaves, and fruits are the most identifiable organs that distinguish one species or cultivar from another. Flowers are not apparent and are not useful for identification by the average observer. To a lesser extent, the trunks and formation of prop roots can be used for identification. The white milky sap that flows from broken parts of the plants is common to all Ficus and can be used to associate a plant with this genus.

Stipules

A certain type of stipule is universally present in Ficus. Usually a pair of stipules encloses the end of each twig providing a sheath for the new leaf and another set of stipules. *F. elastica* is unique in having a single sheathing stipule. Some stipules of some species are in convoluted bundles. In most cases, stipules on Ficus are very early deciduous.

Leaves

In all Ficus species, the leaves are alternate and simple. In most species they are entire, some with wavy margins, and others with some serration. The common fig (*F. carica*) have leaves that are deeply lobed.

Leaf Fall

The time and amount of leaf fall of Ficus species varies considerably. Cool weather and sometimes fruit production can cause defoliation. Typically *F. carica* and *F. lacor* are deciduous. Some trees of *F. religiosa* are leafless for a brief period. In Florida, the Ficus whitefly (*Singhiella simplex*) can cause leaf defoliation. This whitefly has been most commonly found infesting *F. benjamina*, but it has also been reported on *F. altissma*, *F. aurea*, *F. bengalensis*, *F. lyrata*, and *F. microcarpa*.

Fruits (Syconia)

The fruits are commonly called figs. They are hollow and flowers form on the interior walls of the immature fruits. Thus, flowers are not visible and pollinating insects must enter the fruits for pollination to occur.

Sizes: Some fruits are small even when mature and others are as large as 3.0 inches in diameter.

<u>Shapes:</u> Fruits vary widely in shape. The following terms are used to describe their shapes: globose, globular, spherical, subglobose, ovoid, obovate, oblong, oblate, oblate-spherical, and pyriform .

<u>Colors:</u> The color of most immature fruit is green. Maturation colors include pink, yellow, dark red or purplish black.

<u>Surfaces:</u> Surface characteristics of fruit vary considerably. Some are ribbed or roughened, especially towards the apex. Others are smooth while some are densely covered with silky hairs. The surface of some figs may be bristly to the touch. Others are puberulent, tomentose, or slightly pubescent.

Fruiting Habits

<u>Axillary Fruits:</u> The majority of Ficus species produce their fruits in the axils of leaves of the current season or in the leaf axils or leaf scars of the previous season's growth. Some species have fruits that are sessile (without stalks) while other species have stalked fruits.

<u>Cauliflory Fruits</u>: Some Ficus trees are cauliflorus producing dense clusters of small or large figs on the trunk or larger branches. The word "cauliflory" refers to the production of flowers directly on the main branches or trunk of a plant.

Growth Habits

The natural size and appearance of a Ficus tree depends largely upon climate, soil, moisture, proximity to other trees, terrain and other environmental features. In cultivation, trees are often pruned and there is often a wide variety of appearance even within species.

<u>Epiphytes:</u> Many Ficus species commonly begin life as epiphytes. They develop aerial roots embedded on, and then rooting from, their host to become "stranglers." The most familiar examples of strangler Figs in Florida are *F. aurea*, *F. benghalensis*, and *F. benjamina*.

<u>Aerial and Prop Roots</u>: Another feature of Ficus trees is prominent aerial and prop roots. Aerial roots develop as a tangled mass from branches and even from twigs. They dangle in the air, gradually grow downward and take root if they touch the soil. The tangled mass then stiffens and form the so-called "prop" roots characteristic of those Ficus known as banyan or strangler figs. If not removed, aerial roots will become prop roots and continuously extend the boundary of the tree. If left unencumbered, some species of Ficus trees can grow so large because of their prop roots that it can appear as though one tree is many. The development of aerial roots is not uniform even within species and is often dependent on climate. In wet and humid Florida, aerial and prop roots are prominent on certain species. In the dry atmosphere of California, aerial roots are seldom found. If formed, they usually dry out before they touch the ground to become prop roots. In Florida, prop roots as well as branches are often removed to keep the tree in bound. This could create an imbalance of canopy to prop roots which often leads to the top-pling of large trees during strong winds and storms.

<u>Trunks</u>: Ficus trees may have one or several trunks. Trees starting life as epiphytes usually have several trunks often covered and surrounded by aerial and prop roots.

<u>Buttresses and Surface Roots</u>: Many introduced Ficus trees have massive buttresses at the base of their trunks accompanied by conspicuous surface roots which spread over the ground in all directions. This is sufficient reason for not using such trees near septic tanks, sidewalks, driveways, buildings, or even on some lawns and in small public parks.

Neighborly Considerations

Large Ficus trees are not suitable for the average garden or street landscape. Some species also produce a large amount of figs that can cause hard surfaces to become slippery. Furthermore, massive leaf fall and potential root invasion and damage to valuable properties are other reasons for not planting Ficus trees.

Ficus trees, especially *F. benjamina* and *F. microcarpa*, are sometimes used as boundary or privacy hedges on property lines between houses. These hedges require considerably attention and expense to maintain their size and shape. This can be an unwelcome burden on those neighbors not wanting or expecting such an upkeep. Set hedges away from property lines where the owner can maintain both sides.

Species and Cultivars

F. altissima F. aurea F. auriculata F. benghalensis F. benjamina F. carica F. citrifolia F. drupacea F. elastica F. lutea

Glossary References Tree Links Ficus Podcast

Species and Cultivars

F. lyrata F. macrophylla F. microcarpa 'Green Gem' 'Green Island' F. pumila F. racemosa F. religiosa F. rubigniosa F. virens



Ficus benjamina 'Variegata,' mid July

Ficus altissima

Common Names: Council Tree, False Banyan, Lofty Fig

Synonyms: Ficus kerkhovenii, F. laccifera

Origin: Asiatic Tropics, from Himalayas in India to Burma and Malaysia

Growth Habit: Rapid and vigorous grower. A large tree with potential trunk (or supporting trunks) diameter of 60 feet in circumference and the crown over 100 feet wide. Often with multiple trunks. The bark is green or light silvery-gray. Aerial roots not numerous. Coarse textured canopy.

Stipules: Plump, paired, prominent, tawny to reddish brown, 1.5 inch long and 0.5 inch at the base.

Leaves: <u>Blade:</u> Entire, oval, prominent veination, glossy above. Large usually 6.0-9.0 inches long and 3.5-5.0 inches wide. <u>Base:</u> Broadly rounded, not subcordate. <u>Apex:</u> Rounded or bluntly acuminate. <u>Petiole:</u> Puberulent when young, green or pink, mostly 1.5-3.0 inches long.

Fruits: Axillary, sessile, and mostly in pairs. Pubescent at first, becoming smooth, commonly scarlet at maturity, and almost devoid of exterior markings. Spherical, up to 0.6 inch in diameter.

Additional Remarks: Sometimes seen as a street tree in residential neighborhoods of Miami-Dade County. Not so resistant to winter cold as *F. macrophylla* or *F. rubiginosa*.



Fort Myers, early July



Dormant stipules covering leaf bud, late June



Opening stipules, early July

Ficus altissima



Large trunks without aerial roots



Typically oval shaped leaves



Sessile, spherical shaped fruits at leaf axils, late September



Figs clustered at terminal growth, mid April



Late September

Ficus aurea

Common Names: Strangler Fig, Golden Fig

Synonyms: *Ficus aurea* var. *latifolia; F. ciliolosa; F. isophlebia; F. jimenezii* **Origin:** Florida, Southern Mexico to Panama, Western Caribbean islands

Growth Habit: Large, fast growing, often starting as an epiphyte being vine-like while young, eventually becoming self-supporting. Sturdy branches often near the ground. Non-epiphytic trees mostly with long bole and high branches. Trunks become buttressed with age. With or without slim prop roots and some trees with significant horizontal surface roots. Bark usually gray and smooth. Rapidly semideciduous in late winter or early spring. Irregular coarse-textured crown.

Stipules: Deciduous, paired, usually 1.5-2.0 inches long, and 0.25 inch wide, one longer than the other. **Leaves:** <u>Blade:</u> Entire, dark green, glossy and smooth, somewhat leathery, elliptical to oblong. Petiole and midrib pale yellow contrasting noticeably with the green of the blade. Typically 4.0-6.0 inches long

and midrib pale yellow contrasting noticeably with the green of the blade. Typically 4.0-6.0 inches long and 2.0-3.0 inches wide. <u>Base:</u> Rounded to subacute. <u>Apex:</u> Obtuse or slightly acuminate. <u>Petiole:</u> Stout and short, usually 1.0 inch long and 0.1 inch wide.

Fruits: Axillary, sessile or almost sessile, single or paired. From green to red, burgundy or purple at maturity with conspicuous white flecks scattered over the surface. Globose, about 0.75 inch in diameter.

Additional Remarks: Not recommended for small landscapes. Dropped fruits create mess under the tree. *Ficus aurea is* often confused with *F. citrifolia*. Differs from *F. citrifolia* by stalkless fruits. Also, folded leaf ends of *F. citrifolia* usually not aligned, *F. aurea* often aligned.



Mid November



Lightly colored deciduous stipule and the new leaf, mid March



A pair of shedding stipules and the new green stipules, early July

Ficus aurea



A large tree with a buttressed trunk and no prop roots.



Prop and aerial roots



Foliage, mid February



Leaf example



Folded leaf alignment



Semi-deciduous tree with immature fruits, early February



Different stages of fruit maturity, mid August

Ficus auriculata

Common Names: Roxburgh Fig

Synonyms: Ficus oligodon, F. roxburghii

Origin: From Southern China to Indian, Pakistan, Vietnam and Malaysia

Growth Habit: Spreading tree or shrub. Evergreen but in some areas deciduous for a brief period in the winter. Symmetrical, coarse-textured canopy.

Terminal Dormant Buds: Thick, 1.0 or more inches long and 0.4 inch at the base, pubescent and purplish brown or both brown and green at the same time.

Leaves: New expanding leaves maroon or mahogany in color. <u>Blade:</u> Margin broadly crenate to almost entire. Smooth, hairless, above, but pubescent on the veins below. Conspicuous venation. Ovate, mostly 9.0-15 inches long and 8.0-12 inches wide. <u>Base:</u> Broadly cordate. <u>Apex:</u> Rounded and obtuse, but often acute or acuminate. <u>Petiole</u>: Smooth, and green. Usually 4.0-7.0 inches long and up to 0.3 inch at the base where it is widest.

Fruit: Cauliflorus with dense clusters on trunk and often dangling on lower side of large branches. Densely publicated publication of brown. Large fruits up to 3.0 inches in diameter and 2.0 inches from base to apex, pyriform to oblate shapes. Stout stalks are 1.0 or more inches long and 0.3 inch thick at the base.

Additional Remarks: Ornamental tree, striking because of its large leaves. Cold tolerant to 26°F. Conspicuous leaf scars. Edible figs.



Late January

Ficus auriculata



Ovate shaped leaf, late March



Foliage, late January



Fruit cluster on lower trunk, late January



Oblate shaped fruits, early March

Jane Morse, Pinellas County Extension

Ficus benghalensis

Common Names: Banyan, Banyan Fig, Banyan Tree **Synonyms:** *Ficus indica, F. umbrosa*

Origin: Indian, Pakistan

Growth Habit: Grows to about 70 feet tall or more with abundant aerial roots that produce many massive prop roots that significantly extend the width of the tree. Abundant surface roots. Dense, coarse-textured canopy.

Stipules: Deciduous, paired, soft pubescent, stout. When dormant, approximately 0.6-1.0 inch long.

Leaves: Bronze colored new foliage. <u>Blade:</u> Entire, stiff, leathery, upper surface dark green, dull or somewhat glossy. Ovate, 6.0-8.5 inches long and 4.0-6.0 inches wide. <u>Base:</u> Rounded, truncate, or sub-cordate. <u>Apex:</u> Blunt or very obtusely acuminate. <u>Petiole:</u> Approximately 2.0 inches long, 0.25 inch wide.

Fruits: Axillary, sessile, paired, oblate-spherical, 0.7 inch in diameter, scarlet when mature. The interior is strawberry.

Additional Remarks: This is the "Banyan" tree from India especially noted for its abundance of aerial roots forming massive prop roots. It is said that the army of Alexander the Great in the Punjab of India, 330 B.C., came across a great Banyan tree and used it to sheltered his army. *Ficus bengalensis* may be confused with *F. altissima*.



Early July



Alternate leaf arrangement, late July



Dormant stipules, late July

Ficus benghalensis



Prop roots from a single tree. Edison-Ford Winter Estates, Fort-Myers, early March



Man walks under the tree pictured on page 10, early July

Ficus benghalensis



Ovate shaped leaves



Shaded leaves, late February



Alternate leaf arrangement, late July



Maturing oblate fruits, early July



Mature and almost mature fruits, mid July



Late July

Ficus benjamina

Common Names: Weeping Fig, Benjamin Fig

Synonyms: Ficus schlechteeri

Origin: Southern China, Southeast Asia, Papua New Guinea, Australia

Growth Habit: Evergreen, epiphytic, fast growing; dense symmetrical spreading crown of shiny green foliage, more than twice as wide as high and branches drooping to the ground; smooth gray bark; medium-fine textured crown.

Stipules: Deciduous, inconspicuous, slender, and sharp-pointed, 1.0 inch long and 0.1 inch at the base.

Leaves: <u>Blade:</u> Ovate-elliptical, thin leathery texture, obscure venation, glossy green surface. Mostly 2.5 -4.0 inches long and 1.25-1.8 inches wide. New leaves are distinctly yellow, turning dark green. <u>Base:</u> Slightly narrowed. <u>Apex:</u> Gradually (sometimes abruptly) acuminate, the tip about 0.5-0.8 inch long, often somewhat bent or twisted. <u>Petiole:</u> Slender, smooth, and slightly channeled above. Commonly 0.5 inch long.

Fruit: Axillary, sessile, mostly paired, globular to slightly oblong, about 0.3 inch in diameter. Green at first, becomes bright scarlet to almost black at maturity.

Additional Remarks: Numerous varieties and cultivars. Also, F. *benjamina* is sometimes confused with F. *microcarpa*. The leaves of the latter have a blunter tip and thicker texture. F. *benjamina* is frequently seen as a hedge. There has been heavy leaf loss caused by Ficus whitefly feeding. The problem is now less pronounced. Invasive roots and fallen leaves and fruits can be problematic.



Early July



New leaves, late May



Mature leaves, late July

Ficus benjamina





Drooping branches, late August

Late May



Props roots

A tree without prop roots



Severe damage caused by Ficus whitefly, mid February, 2014

Ficus benjamina



Examples of leaf variations. Many leaves have twisted apex.



Symptoms of Ficus whitefly damage on the underside of a leaf.



Prolific fruit formation, early August



Immature green and mature scarlet colored fruits, late August



Paired, slightly oblong fruits, late August

Ficus Carica

Common Names: Fig, Common Fig, Higo, Figue, Fige **Synonyms:** *Ficus latifolia, Caprificus insectifera, F. leucocarpa, F. macrocarpa* **Origin:** Northern Africa, Western Asia

Growth Habit: Deciduous. Typically 10-15 feet tall. Branches are stout and twisting, spreading wider than they are tall. The trunk often bears large nodal tumors, where the branches have been shed or removed. Coarse texture canopy.

Terminal Growth: Twigs smooth or only slightly puberulent when young. Pithy rather than woody. **Leaves:** Alternate, large to 12 inches in length. Pubescent, three to five deep lobes or with numerous

notches, serrated margins.

Fruit: Axillary, variable in size and shape with tough peel. Green, yellow, or purplish when mature, often cracking when ripe, and exposing the edible pulp beneath.

Additional Remarks: Produces the best quality fruit in Mediterranean and dryer warm-temperate climates. Ripe and cracked fruit during the rainy season can lead to disease and insect problems. Best trees seen in Central and Northern Florida.



Central Florida, early June





Leaf with three lobes, front and back, early June



Foliage, early June

Ficus Carica





Central Florida, early June

Large nodal tumers on the trunk



Central Florida, early June

Ficus citrifolia

Common Names: Shortleaf Fig, Wild Banyan

Synonyms: *Ficus brevifolia, F. citrifolia var. brevifolia, F. eximia, F. gigantean, F. hemsleyana, F. laevigata, F. laevigata var. brevifolia, F. pendunculata, F. populnea, F. populoides, F. pyrifolia* **Origin:** Florida, Bahamas, Caribbean, Central America, Colombia to Paraguay

Growth Habit: Fast growing epiphyte, 40-50 feet tall. Aerial roots occasionally formed but not likely to become prop roots. Deciduous to varying degrees in winter or spring. Light gray, mostly smooth bark. Irregular coarse-textured crown.

Stipules: Deciduous, paired, inconspicuous, green to reddish brown. Slightly hooked, and approximately 0.4 inch long, when dormant due to bud formation. About 1.5 inch long when opening.

Leaves: <u>Blade:</u> Entire, ovate-elliptic, smooth above and below, thin and leathery, mostly 3.0-5.0 inches long and 2.5 inches wide. <u>Base:</u> Rounded or slightly cordate. <u>Apex:</u> Obtuse or bluntly acuminate.

Petioles: Slender, 1.0-2.0 inches long and slightly less than 0.1 inch wide.

Fruits: Axillary, spherical or turbinate, and smooth, reddish-brown or purple and with brownish patches at maturity, 0.4 inch in diameter. Produced on slender stalks up to 0.6 inch long.

Additional Remarks: One of two Florida native Fig trees. *F. citrifolia* is far less numerous than *F. aurea* and the two species are often confused one with another. It differs from *F. aurea* by having fruits on elongated stalks rather than sessil. Also, folded leaf ends of *F. citrifolia* usually not aligned, while those of *F. aurea* are often aligned.



Mid July



Dormant and hooked stipules, early March



An old (1) and a new (2) stipule with emerging leaf, late March

Ficus citrifolia



Newly formed leaves, mid July



Leaves from the same tree, mid July



Unaligned folded leaf



Axillary fruits with prominent stalks



Immature and mature fruits, mid August



Immature and mature fruits, early August

Ficus drupacea

Common Names: Brown-Woolly Fig, Drupe Fig, Hairy Fig, Red Fig, Mysore Fig

Synonyms: Ficus drupacea var. pubescens, F. Mysorensis, F. Mysorensis var. pubescens, F. Mysorensis var. subrepanda, F. payapa, F. pilosa

Origin: Southern China, Tropical Asia, Australia, Solomon Islands

Growth Habit: 40 feet or taller, upward branching. Mostly with numerous buttressed trunks and large horizontal surface roots. Prop roots not numerous or present in most cases. Short bristly red-brown hairs on young stout twigs. Old twigs become gray and nearly hairless.

Stipules: Deciduous, paired, convolute. Dark pubescent when dormant. Rustic colored when opening then mostly 3.0-5.0 inches long.

Leaves: <u>Blade:</u> Entire, slightly obovate to elliptical. Large, usually 6.0-12 inches long and 5.0-6.0 inches wide, the surface is puberulent when young, but glossy, glabrous and dark green when mature. <u>Apex:</u> Gradually acute, abruptly long-pointed. <u>Base:</u> Slightly notched or rounded. <u>Petiole:</u> Stout, 0.25 inch thick, and mostly 1.0-3.0 inches long, pubescent when young, puberulent when mature.

Fruits: Axillary, sessile, large oblong, paired or single. Covered by bristly red, or orange-red hairs, or smooth and hairless. About 2.0 inches long and 1.25 inch in diameter.

Additional Remarks: The fruits are bitter in taste and not edible. Fruits present much of the year but abundant in the summer when they litter the ground beneath a tree.



No aerial nor prop roots, early July



Dormant stipules, early July

Four numbered pairs of stipules raveled and unraveling, mid March

Ficus drupacea



Buttressed trunk, large exposed surface roots, but no aerial or prop roots.



Foliage and opening stipules, early May



Early July

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Ficus drupacea



Leaf examples



Hairy fruits, early July



Smooth Fruits, late June



Interior of hairy fruits, late July



Picking up fallen (smooth) fruits, late June

Ficus elastica

Common Names: Rubber Tree, Indian Rubber Plant, Indian Rubber Tree **Synonyms:** *Ficus decora*

Origin: India, Nepal, Myanmar, Indonesia, Malaysia

Growth Habit: A large evergreen or semi-deciduous tree with a dense rounded or irregular canopy typically growing to 60 feet tall. The crown of the long branches provide dense shade. The bark is light gray and mostly smooth. Some aerial roots but having few prop roots. An occasional tree with prop roots fused to the trunk. Potentially large and aggressive surface roots.

Stipules: Deciduous, single, reddish, showy, large, mostly 8.0-12 inches long, up to 14 inches long.

Leaves: <u>Blade:</u> Entire, oblong or elliptic, smooth and shiny with slight bend upward at the midrib. Thick and stiff, usually 10-12 inches long and 6.0-7.0 inches wide. <u>Apex:</u> Short, pointed at the apex. <u>Base:</u> Rounded. <u>Petiole</u>: Stout, up to 3.25 inches long and 0.3 inch wide.

Fruits: Axillary, sessile, oblong, 0.5 inch in diameter. Smooth and light green to maroon, prominently spotted. The fruits are rarely if ever seen and usually occur with loss of some foliage.

Additional Remarks: Some trees partly and briefly deciduous sometime during mid-winter to midspring. Probably no other *Ficus* has ever been so widely propagated and distributed for pot culture as *F*. *elastica*.



Rounded canopy, early October



F. elastica is unique in having a single sheathing stipule. Late December.

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Ficus elastica



Foliage, late February



Alternating leaves, late February



A variegated cultivar, mid September

Leaf example



Oblong fruits, late August

Ficus Lutea

Common Names: African Rubber Tree, Giant-leaved Fig, Zulu Fig

Synonyms: *Ficus baronii, F. nekbudu, F. senegalensis, F. utilis, F. vogelii, Urostigma vogelii* **Origin:** Ethiopia to Senegal south to Namibia and South Africa, Madagascar

Growth Habit: A large, fast growing, strangler fig, briefly deciduous tree to 70 feet tall. Wide spreading with a broad top and short gray trunk. The foliage of low branches may hide the trunk.

Stipules: Deciduous, paired, obtuse, membranous and convolute. Emerge from a bundle of several overlapping stipules that simultaneously unravel along with the new leaves.

Leaves: <u>Blade:</u> Entire, ovate to elliptic or obovate, leathery, shiny green with pale yellow veins. Very large, crowded at the ends of the branches, mostly 8.0-11 inches long and 3.0-6.0 inches wide. <u>Apex:</u> Rounded, or abruptly, and bluntly short pointed. <u>Base:</u> Rounded to lobed. <u>Petiole:</u> Thick, up to 6.0 inches long.

Fruits: Axillary, sessile, singly or paried in leaf axils or in tight clusters near the ends of stems. Oblate to globular or short-turbinate, approximately 0.75 inch in diameter. Densely hairy to smooth. Yellow, red or brown when mature.

Additional Remarks: Some leaf defoliation when fruiting.



Newer, lighter green leaves are mostly at the top of the tree, mid May



Two bundled (convolute) groups of stipules, late March



Unbundling of stipules and leaves, late March

Ficus lutea





Foliage, mid July

Example of leaves



Clustered fruits, mid May

Ficus lyrata

Common Names: Fiddle-leaf Fig, Banjo Fig **Synonyms:** *Ficus pandurata*

Origin: Tropical West Africa

Growth Habit: Round to oval shaped, upwards-spreading, evergreen tree, upward to 40 feet tall with an equal spread, but is usually much smaller. Having neither buttresses nor aerial roots. The bark is gray, sometimes shredded, or broadly fissured with longitudinal cracks.

Stipules: Long-pointed, paired, convolute, dark brown and about 2.0 inches long. The stipules are persistent and hide the rings for several nodes.

Leaves: Variable leaves even on the same branch, about 2.0 inches apart. <u>Blade:</u> Entire, slightly undulate, obovate, oblanceolate or fiddle-shaped. The top half is largest, prominent venation, stiff, leathery, dark green, glossy and very finely puberulent when young. Usually between 8.0-12 inches long and 6.0-10 inches wide. <u>Apex</u>: Rounded. <u>Base</u>: Cordate and overlapping. <u>Petiole</u>: Very stout 1.5-2.5 inches long, green at first becoming rusty.

Fruits: Axillary, sessile, single or paired, spherical sometimes slightly oblique, 0.6-1.0 inch in diameter. Green when mature with slightly roughened or pebbled surface and large conspicuous spots.

Additional Remarks: Most trees in the landscape are 15-25 feet tall. Makes a striking specimen and shade tree. Large messy leaves. Highly effective as an indoor potted plant.



Emerging leaves on the right side of the tree, late August





Large, closely spaced leaves, late August

late May

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Ficus lyrata





Trees without aerial roots

Convolute stipules and emerging leaf, late May

Emerging leaves with persistent brown stipules, late May



Foliage and new growth, late May



Stipules, and spotted immature fruits, late May

Ficus macrophylla

Common Names: Moreton Bay Fig, Australian Banyan **Synonyms:** *Ficus magnolioides* **Origin:** Australia

Growth Habit: Very large and massive evergreen tree, upward branching, to 70 feet tall. Older trees have massive buttressed trunks and surface roots extending far beyond the canopy. Aerial roots, if produced, grow mainly from large branches near the ground. Bark is a gray, dark gray or nearly black on the older trees.

Stipules: Deciduous and paired. Up to 6.0 inches long and 2.0 inches wide at the base when shed, and rusty-pubescent outside.

Leaves: <u>Blade</u>: Entire, oblong-oval, midrib is very light green. On young trees, the leaves are green but lighter below. On older trees, the undersurface has a rust-colored scurf which is conspicuous when viewed from below. Usually between 6.0-7.0 inches long and 3.0-4.0 inches wide. <u>Apex</u>: Obtuse or broadly acuminate. <u>Base</u>: Broad and rounded. <u>Petiole</u>: Very light green, mostly 2.5-3.5 inches long.

Fruits: Axillary, sessile, and commonly paired, oval to oblong-spherical in shape, about 1.0 inch in diameter, commonly somewhat greater in length. The stalk is thick club-shaped and about 1.0 inch long. Greenish or purple-tinted when mature with prominent yellowish-green spots. Smooth surface or very sparsely puberulent. Fruits, along with the new leaf, emerge from the stipules either singly or in pairs.

Additional Remarks: Normally starts as an epiphyte. Litter of fallen leaves and enormous spread of roots make it undesirable in all but the largest landscape.



Trees up to 70 feet tall, mid May



Upward branching tree with gray bark

Ficus macrophylla



Buttressed trunks and expansive surface roots



Unfolding stipules had enclosed paired figs and new leaf, mid March



Stipules and alternating leaves, mid May



Green upper and rust-colored undersurface of leaves.

Ficus macrophylla



Maturing fruits, late February



Maturing fruits, late February



Mature fruits on club-shaped stalks, late February

Common Names: Indian Laurel, Cuban Laurel, Laurel Tree, Chinese Banyan

Synonyms: Ficus microcarpa var. latifolia, F. nitida, F. retusa, Urostigma accedens var. latifolia Origin: India, Sri Lanka, Southeast Asia, Malaysia, Philippines

Growth Habit: A rapid growing evergreen tree with a stout trunk and many spreading densely foliated branches. Typically 65 feet tall, 110 feet wide. Smooth light gray trunk can be quite striking. Symmetrical, rounded, medium textured canopy. Some with profuse aerial roots others less so.

Stipules: Deciduous, paired, inconspicuous, long pointed, 1.0 inch or less in length.

Leaves: <u>Blade:</u> Entire, broad ovate or elliptic (often nearly diamond shaped), leathery, glossy, stiff, medium green, usually 2.0-4.0 inches long and 1.2-2.0 inches wide. <u>Apex:</u> Obtuse or broadly elongated. <u>Base:</u> Basal lateral veins long. <u>Petiole</u>: Mostly 0.25-0.5 inch long and 0.1 inch wide.

Fruits: Axillary, paired, sessile. Depressed globose, to 0.5 inch in diameter. On leafy branches or on older leafless branches. Green or white when immature, turning yellow but mostly purplish black when mature. Probably with some fruits through much of the year.

Additional Remarks: *F. microcarpa* has become naturalized in south Florida. It is not recommended for planting because of its ability to invade natural areas. *F. microcarpa* is sometimes identified as *F. benjamina*. The leaves of the latter have a longer tip and thinner texture. The leaves of *F. microcarpa* are frequently deformed by thrips and gall wasps. Damage caused by thrips and gall wasps can help in the identification of *F. microcarpa*.

There are many varieties and cultivars of *F. microcarpa*. Leaf shape and texture of the common cultivars differ from the leaves of the typical *F. microcarpa*. They are rounder and thicker than those of *F. microcarpa*. Most often the cultivars are used as ground covers or low to medium height hedges. However, only 'Green Island' remains a notable and sustaining cultivar in the trade. 'Green Gem' was once frequently sold. It has rounder, and less pointed leaves than 'Green Island.' Both cultivars are apparently not bothered by either the thrips or the wasps.



A big tree more than 60 feet tall, mid April



Surface roots and three dangaling aerial roots to the right.





A F. microcarpa epiphyte on the roof and wall of an abandon building.

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Typical leaves of F. microcarpa



Thrips damaged leaves



Galls caused by wasp damage



'Green Gem'



'Green Island'



'Green Island' hedge on the left, cocoplum (Chrysobalanus icaco) hedge on the right, early September



'Green Gem' hedge about 8 feet at its tallest, early February



Immature and mature fruits, late August



Mature fruits, late May



Mass of maturing fruits. F. microcarpa, mid January

Ficus pumila

Common Names: Creeping Fig, Climbing Fig, Fig Vine

Synonyms: Ficus hispida, F. heterophylla, F. repens

Origin: China, Japan, Taiwan, Southeast Asia

Growth Habit: Creeping or climbing woody evergreen vine. Grows at a fast rate over large area if allowed. Aggressively attaches to masonry, wood, metal and other structures by means of tenacious aerial roots on the stems.

Stipules: Short, paired, pubescent, persistent for several nodes.

Leaves: Simple, alternate, having foliar dimorphism (two forms); small and large leaves. <u>Small leaves:</u> Grow against or slightly away from their support structures on stems with aerial roots that are attached to the support. They are oblique, pustulate, cordate-ovate, blades mostly 1.0-1.8 inches long, 0.5-1.0 inch wide, and nearly sessile. <u>Large leaves:</u> Grow away from support structures and are formed on fruiting stems lacking aerial roots. They are leathery, not pustulate, oblong to oval, blades usually 3.0-4.0 inches long, and about 2.0 inches wide, on petioles of approximately 1.0 inch long.

Fruits: Axillary, mostly single, somewhat pear-shaped, with a broad apex. Yellowish, about 2.5 inches long, 1.5 inch diameter. Fleshy, commonly roughened by puffy skin, densely pubescent. Not edible.

Additional Remarks: Will grow on almost any soil under most light conditions. Grown mainly to cover sides of buildings, walls and fences. Also used in hanging baskets, topiaries and interior scapes. 'Variegata' has variegated foliage. The stems that were attached to the small leaves and the aerial roots become affixed to support structure and increase considerably in size. See bottom right photo.

Large leaves protruding from a royal palm (*Roystonea regia*), early March

Enlarged stems, some more than 3 inches across, are seen affixed to the palm on the left.

Ficus pumila

Creeping fig on wall. Planted 10 years ago, the vines are pruned close to the wall every other month with a hedge trimmer. This way, the leaves are kept small and no large woody stems are formed. Mid March.

Large leaves on fruiting stem, early June

Immature fruits, early September

Net work of small leaves on the structure to the left

Comparison of matured small and large sized leaves

Fruits in hand and on fruiting stems, early September

Ficus racemosa

Common Names: Cluster Fig

Synonyms: Ficus glomerata, F. lucesscens, F. racemosa var. elongata, F. semicostata, F. trichocarpa Origin: Indian subcontinent, Southern China, Southeast Asia, Indonesia, Australia

Growth Habit: A large deciduous, upward branching cauliflorus tree. 60-70 feet tall, with irregular crown. It has an extensive buttressed trunk but no aerial, strangling or prop roots.

Stipules: Lanceolate, early deciduous, or may be persistent for several nodes, about 1.25 inch long.

Leaves: <u>Blade:</u> Avocado like in appearance. Entire, or slightly undulate, thin, glossy and smooth, or very sparsely pubescent, especially on the veinlets when young. Elliptical-ovate. Size of leaf blades varies considerably from tree to tree. On some trees usually 4.0-6.0 inches long and 1.0-2.5 inches wide. On other trees often 8.0-11.5 inches long and 3-5 inches wide. <u>Apex:</u> Acuminate. <u>Base:</u> Rounded. <u>Petiole:</u> Slender, about 1.5-4.0 inches long and 0.1 inch wide.

Fruits: Cauliflorus, borne in heavy clusters with individual fruits on lateral spurs or on leafless twigs coming from the trunk or on larger limbs. The figs are spherical to short–pyriform. Up to 1.4 inch in diameter and with a stalk of up to 0.7 inch long. Green at first, turning scarlet at maturity. White flecks are densely scattered over the finely puberulent surface.

Additional Remarks: Trees becomes briefly deciduous primarily in March or April.

Immature califlorus fruits on trunks, mid March

Creamy green stipules are about 1.25 inches long when opening, late March

Immature califlorus fruits on leafless twigs growing directly from the trunk, mid March

Ficus racemosa

Elliptical-ovate leaves

Mature fruits, late March

Buttressed trunk. Notice figs just above the buttresses, late March

Foliage, late March

Immature fruits on leafless twig, mid March

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Ficus religiosa

Common Names: Bo Tree, Sacred Fig, Peepul Tree

Synonyms: *Ficus affinor, F. caudate, F. peepul, F. superstitiosa, Urostigma religiosum* **Origin:** Indian subcontinent, Myanmar, Thailand, Vietnam

Growth Habit: Large, semi-deciduous or deciduous tree to 60 feet in height and width, with one or more trunks. Bark gray and smooth. Densely clothed with drooping dark green foliage. Foliage drops in February or March and new leaves quickly appear. In Florida, these trees have few if any aerial roots and no prominent buttresses at the base of the trunk.

Stipules: Deciduous and minute

Leaves: <u>Blade</u>: Entire, dark green, somewhat undulate, broadly conical or triangular, glabrous, and rather thin. Usually between 5.0-9.0 inches long, including the long apex, and 4.0-6.0 inches wide. <u>Apex</u>: Abruptly narrowed into a conspicuous long, linear-lanceolate tail-like appendage, mostly from 2.0 -3.5 inches long. <u>Base</u>: Broad, rounded or truncate. <u>Petiole</u>: Slender, greenish yellow to almost white, thin mostly 3.5-5.0 inches long and 0.1 inch wide.

Fruits: Axillary, sessile, commonly paired, or in small clusters. Oblate, glabrous, with scarlet flecks on a green to purplish background. Small, usually no more than 0.5 inch in diameter.

Additional Remarks: This is the tree under whose shade the Buddha is said to had achieved perfect knowledge.

Late September

Long and slender petioles, mid February

Trunk example

Ficus religiosa

Leaf with long tail-like apex

Recently emerged yellowish foliage, mid August

Mature fruits, late June

Paired fruits along leaf axils, mid March

Mature fruits with scarlet flecks, early April

Ficus rubigniosa

Common Names: Rusty Fig, Rusty-leaf Fig, Small-leaf Fig **Synonyms:** *Ficus ferruginea, F. oblique* var. *petiolaris, F. platypoda* var. *petiolaria* **Origin:** Australia

Growth Habit: Medium to large sized evergreen green, densely foliated, 30-50 feet tall. The trunk is sometimes buttressed, but not conspicuously so, and aerial roots are sometimes produced. The young twigs are scruffy-pubescent, short-jointed, and often angular or somewhat flattened.

Stipules: Deciduous, paired, lanceolate. When fully expanded, 2.5-3.0 inches long and 1.0 inch wide, one longer than the other.

Leaves: <u>Blade</u>: Entire, oval, silvery pubescent immediately after exposure from stipules, the upper surface becoming medium to dark green and more or less smooth and hairless, the lower surface brown and hairy. Usually 3.0-4.5 inches long and up to 2.5 inches wide. <u>Apex</u>, Bluntly obtuse. <u>Base</u>: Broad and rounded. <u>Petiole</u>: Approximately 1.0 inch long and 0.1 inch wide, sparsely pubescent at first, rust-colored at maturity.

Fruits: Axillary, sessile, and mostly paired, globular to oblate-spherical or slightly oblong in shape, to 0.5 inch in diameter. Rust-colored to yellowish when mature with prominent loosely scattered greenish or white flecks that are somewhat pebbly. Surface rusty-pubescent or scurffy to almost smooth. The stalks are 0.08-0.3 inch long, thick, and club-like.

Additional Remarks: Rusty Fig's dense growth habit and moderate growth rate makes it better suited for smaller landscapes than most other Ficus trees. It grows about 35 feet in 30 years. It is well suited as a shade or street tree and should require little maintenance once initial pruning creates a good structural habit.

Late January

Ficus rubigniosa

Densely foliated rounded crown, early September

Much branched trunk

Closed stipules, mid April

Two shedding stipules, a new silvery pubescent leaf, and the tip of newly emerged but tightly closed stipules, late March

Ficus rubigniosa

Dark green upper (left) surface and brown hairy lower (right) surface

Foliage and fruits, mid January

Prodigious fruit producer, mid April

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Ficus virens

Common Names: Spotted Fig

Synonyms: *Ficus carolinensis. F. glabella, F. infectoria, F. lacor, F. wightiana* **Origin:** India to Southern China, Taiwan, Southeast Asia, Malaysia, Australia

Growth Habit: A large evergreen tree to about 50 feet tall, with large branches, and a broad crown. Perhaps slightly buttressed trunk. It has spreading surface roots and with or without prop roots.

Stipules: Deciduous, obtuse, and convolute with several expanded leaves being visible at the same time. **Leaves:** <u>Blade:</u> Entire, elliptical to ovate, thin, more or less translucent, to thinly leathery, usually 4.0-6.5 inches long and 2.0-2.5 inches wide. <u>Apex:</u> Commonly sharply acuminate, the point 0.3-0.5 inch long. <u>Base:</u> Broad, rounded or truncated. <u>Petiole:</u> Slightly grooved above, smooth, mostly 2.0-2.5 inches long.

Fruits: Axillary, almost sessile, produce on stem tips and along twigs of old leaf axils, usually with a very short, thick stalk. Oblate to globular or short-turbinate, approximately 0.5 inch in diameter, with a smooth or finely puberulent surface when young. Almost white at maturity, with conspicuously scarlet spots. Abundantly produced.

Additional Remarks: A briefly deciduous strangler often starts life as an epiphyte. Cultivated plants, however, are more often singled-trunked and low branching.

Mid June

Stem tip with immature fruits, mid June

Ficus virens

Low-branching tree with a slightly buttressed trunk

Mid June

Mature fruits along old leaf axils of stems. Some fruits are on a well developed stem indicating that this species might be mildly cauliflorus, mid June

Mature spotted fruit, late February

Mature fruits, late February

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Glossary

Acuminate. Gradually tapering to a sharp point and forming concave sides along the tip. Acute. Tapering to a pointed apex with more or less straight sides. Apex (pl. apices). The tip; the point farthest from the point of attachment Axillary. Positioned in or arising in an axil. Blade. The broad part of a leaf. Buttressed. With props or supports, as in the flared trunks of some trees. Cauliforus. Bearing flowers on the stem or trunk. **Convolute:** Rolled up longitudinally, with parts in an overlapping arrangement like shingles on a roof. Cordate. Heart-shaped, with the notches at the base of the leaf. Elliptic/Elliptical. A narrow oval; broadest at the middle and narrower at the two equal ends. Epiphyte. A plant which grows upon another plant but does not draw food or water from it. Globose. Globe-shaped; spherical. Globular. See globose. **Oblate.** Spheroidal and flattened at the poles. **Oblique.** With unequal sides, especially a leaf base. **Oblong.** Two to four times longer than broad with nearly parallel sides. Obtuse. Blunt or rounded at the apex. **Oval.** Broadly elliptic, the width over one-half the length. **Ovate.** Broadest below the middle, and roughly 2x as long as it is wide. **Petiole.** A leaf stalk. Pustulate. With small blisters or pustules, often at the base of a hair. Puberulent. Minutely pubescent; with fine short hairs. Pubescence. Hairness; short, soft hairs. Pubescent. Covered with short, soft hairs. Bearing any kind of hairs. Pyriform. Pear-shaped. Sessile. Attached directly, without a supporting stalk, as a leaf without a petiole. Spherical. A three-dimensional, isodiametrical structure, round in outline. Stalk. The supporting structure of an organ, usually narrower in diameter then the organ. Subacute: Slightly acute. Subcordate. Almost cordate. Tomentose. With a covering of short, matted or tangled, soft, wooly hairs.

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Tree Links

Barbados Cherry Big Native Trees (Part 4) Differences between Laurel and Live Oaks Eucalyptus Trees Flowering Trees Fact Sheets Intense Blooming Days Jaboticaba Sea Grape (*Coccoloba uvifera*) Shade Trees for South Florida Small Trees for South Florida Yellow Tabebuia Trees for Florida

Ficus Podcast

All pictures taken by Stephen H. Brown except where indicated. brownsh@ufl.edu Brown's Lawn and Garden webpage.

Send me an email to request **<u>Brown's Plant File</u>**. Include your first and last names and your general location. The plant file is emailed to you at no cost about every six weeks.

This fact sheet was reviewed by Peggy Cruz, Lee County Extension; Pat Rooney, Janet Church, Linda Hill, and Connie Likes, Lee County Master Gardeners.

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