Plant Portraits

Figs at the Arboretum

By EDWARD MURRAY



A OST OF THE ROUGHLY 800 trees, shrubs and vines in the tropical fig genus could be grown in Southern California. E. J. H. Corner reported some 470 species in the Australasian-Asian region alone with the rest found in Africa and tropical America. Milky sap is found in most species. The unusual fruit, a fleshy, pear-shaped receptacle or fig, is most often fertilized by only one species of wasp. This fact is of great interest to the scientists who study insects, especially wasps. The wasp enters through the small hole at the top of the fig, unknowingly bringing along pollen from another fig, and incidentally pollinating the stigmas while finding a place to deposit eggs for the next generation. This mutually beneficial relationship between the fig and the wasp has intrigued scientists and amateurs for decades.

The most familiar of the Ficus vines is the climbing fig (F. pumila) which readily clings to buildings, walls and fences as well as tree trunks. This fig makes a fine groundcover except that it tends to climb any shrub, tree or wall within reach. As a vine it is unsurpassed on the north-facing side of a building. The delicate tracery of the small, rounded leaves of its juvenile foliage is in contrast with the much coarser, larger and thicker adult foliage on flowering and fruiting branches. Apparently the plant needs to gain only a very few feet of altitude to permit the adult growth to appear. At the Arboretum the creeping fig is used both inside and outside the west wall of the tropical greenhouse. Here one may observe both the adult

and the juvenile growth.

The tree form is the most common within the genus. One of the most popular weeping trees is the Benjamin fig (*F. benjamina*). Actually it is the cultivar 'Exotica' that is most often noticed in Los Angeles County. There is another, more handsome



The asymmetrical leaves of Roxburgh's fig (Ficus auriculata) are about one and one-half feet long by a foot wide.



The stout branches of the sycamore fig (Ficus sycomorus) on Tallac Knoll are feathered with immature fruits that will never develop further because the wasp that pollinates them does not live in Southern California.

cultivar, *F. benjamina* 'Variegata,' which should be more widely grown because most of the leaves are cream with some green variegation or mottling. This makes for a very striking color contrast against the background of preponderant greens in the land-scape.

Another beautifully variegated fig is the clown fig (F. aspera 'Parcellii'), that is often mistakenly called F.*parcellii*. Its leaves are handsomely marbled cream and green; in fact there are two shades of green, a pale, gray-green and a deeper, medium matte green. There is also a soft, felty-hairy feel to the obliquely based leaves. In the shade on Tallac Knoll it has developed into a beautiful small tree quite well-suited to the small suburban garden. Some shade and protection are recommended for it to succeed in our climate.

Roxburgh's fig (F. auriculata) is a small to medium-sized tree whose immense leaves have a few small teeth along the leaf margin. These evergreen leaves create a bold, tropical look. There is no confusing this large-leaved fig with the other trees in the fig collection.



As the climbing fig (Ficus pumila) clambers upward, coarse adult foliage replaces the smaller, round juvenile leaves.

Of the shrubs, the most commonly cultivated worldwide is the common edible fig (F. carica) which may be used as a tub plant or as a large, deciduous shrub or small tree for the home orchard. In California there are usually two crops: the first comes in June from last season's growth; the second crop comes from August to November on the current season's growth. One may find it necessary to cover the shrub or small tree with mosquito netting to keep the birds from devouring the figs. Plant young figs in wire baskets to protect the roots from pocket gophers. Three of the better cultivars for the home garden are 'Blue Celeste' whose fruit resists spoilage, 'Genoa' which performs well in the home garden and 'Mission' whose black-purple figs are borne on large trees.

The Indian laurel fig (F. microcarpa), native to the Indo-Malavan region of southern and southeastern Asia, is used as a heavily sheared street tree in Glendora, Pasadena and Hollywood. If allowed to grow on its own it can become a large, tall tree. The common cultivar is 'Nitida' with dense foliage and a more upright growth habit. Its leaves are a shiny green and the leaf-tips are bluntly pointed. It was once called F. retusa 'Nitida.' Fortunately the name 'microcarpa' (meaning smallfruited) aptly describes the decidedly small figs of the Indian laurel fig.

The Peepul or Bo tree (F. religiosa) is the sacred Indian tree beneath which Gautama Buddha is said to have received divine inspiration. This species may live to be 2,000 to 3,000 years old. A Bo tree planted at Anuradhapura, Sri Lanka is known to have been planted in the year 288 B.C. An almost continuous record has been kept of this particular tree and the steps that have been taken to preserve it through the successive centuries. In the village of Dean-Pitya in Sri Lanka over 100 huts stand in the shade of one Bo tree. The tree is hardy in Southern California but it grows better in the higher humidity of Florida and Hawaii. At the Arboretum there is a nice specimen in the bowl on top of Tallac Knoll. Look for the fig with very long, slender leaf tips.

The sycamore fig (F. sycomorus)not only has its own wasp for pollination but was known in Biblical days as one of the few broad-leaved evergreen trees that could be cultivated in Palestine. In both the Old Testament of the Jews and the New Testament of the Christians there is mention of the sycamore fig. In fact, a rather short man named Zaccheus purportedly climbed a sycamore fig in order to catch a glimpse of Jesus. The best tree of this species at the Arboretum is in the circle atop Tallac Knoll.

In the Virginia Robinson Gardens in Beverly Hills there are several trees that appear to be Watkin's fig (F. watkinsiana) displaying aerial roots which eventually reach the ground to help support the heavy limbs. The medium-sized leaves of this Australian native are a handsome dark green and the smooth trunk is gray. The combination of higher humidity and temperatures that are warmer in winter and cooler in summer near the Pacific Ocean probably accounts for the aerial roots in Beverly Hills. In Arcadia it is drier and few aerial roots form.

The Arboretum has a very fine collection of figs primarily due to the efforts and generosity of Dr. Ira J. Condit who was a professor of horticulture at the Citrus Experiment Station of the University of California at Riverside. Dr. Condit is wellknown for his study of the cultivated figs and his numerous articles and books on the subject. His book *Ficus*; the exotic species (1969) is considered the "Bible" for horticulturists who grow figs. Dr. Condit also wrote about the common cultivated fig (*F.* carica) and its numerous cultivars.



Above: Leaves of the Bo tree (Ficus religiosa).

Below: Aerial roots of a fig that is probably Ficus watkinsiana.



A visit to Tallac Knoll to see the variety of fig trees would be very rewarding. The figs are located along the tram road west of the grove of native oak trees.

Dr. Murray, who obtained his PhD at the Pennsylvania State University, is a staff biologist at the Los Angeles State and County Arboretum. (Photos by LuAnn Munns)



Murray, Edward. 1985. "Figs at the Arboretum." Garden 9(3), 5–7.

View This Item Online: <u>https://www.biodiversitylibrary.org/item/154867</u> Permalink: <u>https://www.biodiversitylibrary.org/partpdf/125201</u>

Holding Institution Missouri Botanical Garden, Peter H. Raven Library

Sponsored by Los Angeles Arboretum

Copyright & Reuse Copyright Status: In copyright. Digitized with the permission of the rights holder. License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://www.biodiversitylibrary.org/permissions</u>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.