

Department of Plant Sciences

FIGS FOR TENNESSEE GARDENS AND LANDSCAPES

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Figs have been in cultivation as a fruit crop for thousands of years. Additionally, figs can fit well in a range of landscape situations due to their shrub-like habit and large attractively lobed leaves. The main species that is grown for fruit is *Ficus carica*, but there can be some hybrids of the many other *Ficus* species. The cultivated species of fig is native to the Mediterranean or Asian region, but there are some native fig species in the very southern United States.



Figure 1. Nearly mature fig fruit showing both the unique fruit and leaf shape.

The fruit and flowering mechanism of figs is unique because there are no flowers that are actually visible. The fig flower is inside the stem where a small opening enables very specific wasp pollinators to enter. Although this biological relationship with the wasp is quite interesting, it can be a challenge in home fruit production in the US, since the wasp is only present in some parts of California. Therefore, most of the figs grown in Tennessee can fruit without pollination. They are called common or persistent figs. The fig we eat is called a syconium, which contains many tiny fruits inside- the small crunchy things on the interior are actually the fruit and seeds.

Crop Description and Selection

In Tennessee gardens and landscapes, figs are most commonly a small tree or a large shrub. The plant form depends on management but can also vary by climate region. Figs are not reliably winter hardy in many of the eastern and northern parts of Tennessee. Therefore, tree forms are rather challenging to maintain over the long term.

Some cultivars are listed as zone 6 or 7 while others are listed as zone 8. This interaction with cold temperatures generally limits the size of fig trees to 10 to 20 feet. Typically damage to the above ground structure occurs between 5 and 20°F, but the plant can grow back from its below ground biomass. Therefore, plant habits can vary by season and region. It is not uncommon for figs to grow large for a few years to become a small tree but to be killed back to the ground by a cold winter and appear more shrub-like for the next year or two.

Figs are from climatic regions providing cool and moist winters with hot and dry summers (Mediterranean climate), so selection of well-adapted cultivars is important. Site selection and plant management are also critical and discussed below. Some of the cultivar traits that are most selected for in mid-south regions are the ability to fruit without pollination, cold hardiness, compact or more shrub-like growth habits, and earliness of yield to increase the chances of fruit harvest before cold weather in marginal climates. While these common figs do not require another cultivar for cross pollination, selecting a few cultivars to try for cold hardiness, fruit timing, and preference is still suggested.

There are dozens and dozens of fig cultivars, but some of the cultivars that are reported to be hardiest (zones 7 and potentially 6) include:

- ‘Chicago Hardy’- compact form, dark fruit that is produced early
- ‘Celeste’- compact form, brown to purple fruit, early producing, reported to be hardy to 0°F
- ‘Brown Turkey’- yellow to brown fruit, late producing, winter hardy to around 10°F
- ‘Ronde de Bordeaux’ – early fruit, heavy producer with good flavor and cold hardy
- ‘Brooklyn White’ – yellow fruit, early, honey fig, cold hardy
- ‘Green Ischia’- small dark green fruit with reddish pulp, late maturing
- ‘Marseilles’- early fruit, yellow
- ‘O’Rourke’- early purple fruit
- ‘Petite Negri’- compact form, large fruit, dark colored
- ‘Little Ruby’- compact form, red fruit

There also are some cultivars bred by Louisiana State University, ‘LSU purple’ and ‘LSU gold’ that may be of interest but the hardiness for mid-south regions is a bit uncertain. ‘Violette de Bordeaux’ is a deep purple colored fig with a unique flavor that can be well adapted in the south. ‘Mission’ is a well-known cultivar grown in California and western climates that is not recommended in this region due to its poor hardiness. There are many cultivars known by more than one name, so it’s important to order from reputable nurseries and ones that serve southern or southeastern clients as they will be able to provide the best information on hardiness.

Planting and Growing

Figs require full sun for good production and should not be planted under other trees. Additionally, planting in the warmest microclimate region in the yard or landscape is best. Sites that are close to walls for heat retention or south facing are best to increase survivability in cold periods. Make sure to provide at least 3-4 feet of distance from walls for adequate future growth.

The soil type is not of critical importance if there is good soil drainage and no nematode issues. Avoid planting in sites near drain fields or water lines as the roots can clog these pipes. Suggested pH ranges are between 6.0 and 8.0 with a narrower ideal range likely between 6.0 and 6.5.

Figs are generally available as container grown or bare root plants. Container grown can be planted any time of year but are typically planted during the growing season. Bare root plants are typically planted while still dormant in the late spring. Root pruning is more likely to be needed on container plants that may be root bound. Conversely, shoot pruning is more likely to be needed on bare root plants while container grown plants with sound root systems may need little shoot pruning at planting.

Unlike pawpaws and some other edible landscape plants, figs typically have a wide and shallow rooting habit without a strong taproot. This root area often extends far beyond the leaf canopy and can be a support in drought resilience.

Fertilize when plants are 1 or 2 years old and manage according to soil tests. Another useful indicator of likely low nutrient levels is if shoot growth less than 18 inches per year. Use caution with late summer fertilization because it can push late season growth that runs counter to plants transitioning into dormancy. Vigorous plants that are growing rapidly are generally more susceptible to winter injury.

In the first year of growth, allow figs to grow without pruning. Then, in the second year, the most vigorous 4 to 8 shoots are selected as the main leaders. In addition to selecting main stems, the plant is also headed back each spring by pruning about 1/3 to 2/3 of the shoots to manage plant size. This dormant pruning should remove dead or damaged stems and those crossing or rubbing.

Figs are one of the easiest fruits to propagate. Propagation can be completed using these removed stem pieces as they can be saved in several inch long pieces in a sealed bag in the refrigerator and rooted in sand or potting mix as the temperature warms. Layering is also a means of propagation for figs.

Because of the marginal hardiness and rooting characteristics (shallow rather than a taproot), container growing is very commonly practiced for figs. Many of the cultivars preferred by gardeners maintain a compact habit and perform well in organic matter-rich growing substrates used in containers. While young figs can be grown in smaller containers, more mature and productive plants are generally best suited to large containers (i.e. 20 or more gallons). While this can be a very productive method of growing, transporting these containers and having a place to protect them in the winter can become a chore. When temperatures dip below 15°F or 20°F, it is best to have a garage or other protected space to bring them into, as roots in containers are more susceptible to cold damage than those with a larger soil body around them for insulation. Container grown fig trees will require root pruning every 3 to 4 years, since they will become root bound over that time. Just remove the tree from the pot, remove about 1/3 of the root ball, and then repot with additional potting mix.

Whether in-ground or in a container, irrigation may be useful for dry periods in the summer even though figs are fairly resilient in lower moisture conditions. Container grown plants are much more susceptible to drying out, so irrigation during dry periods is essential. Be as consistent as possible and avoid over-watering to prevent fruit splitting and reduce watering as the plant begins to transition to dormancy in the fall.

Pests and diseases are typically not a serious issue for figs. Light soils with a high level of sand can have higher incidences of nematodes, which are problematic for figs. There are also some sap-feeding insects, such as mealy bugs or scale that may require treatment. Spotted wing drosophila, a fruit fly that lays eggs in soft skinned fruit in the summer, has become an issue on blueberries, blackberries, and other fruits and may impact figs. Rust is a common fungal disease that can often develop on the leaves later in the growing season and can detract from the plant's appearance, but unless it becomes severe, it is usually not a cause for concern.

Harvesting and Storing

Mature fig fruit are typically only 2 or so inches long and begin as unique droplet shaped green fruit that matures to yellow, green, light brown, or a dark brown/purple color. Fruit harvest may occur when the plant has been growing for two years but is more likely after three years of development. While there can sometimes be an early crop produced on overwintered stems, it is more common for the crop to be in late summer and early fall and produced on first year wood.



For fresh eating, pick when fully ripe. The necks wilt a bit, and fruit also droop as an indicator. When fruit are ripe, they can be picked without seeing the white latex/sap ooze from the picking site. If using in preserves, fruit could be picked a bit before maturity to reduce the potential for damage. Also, be aware that birds, squirrels, and raccoons can be an issue in eating or damaging ripe fruit, so netting may be needed.

If left at room temperature, figs have a short shelf life once harvested. However, if refrigerated, the fruit can last for up to a week or possibly two. Fruit can also be used for drying, baking, in smoothies and many types of preserves.

Resources Used and Additional Information

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