THE UNIVERSITY OF TENNESSEE
AGRICULTURAL EXTENSION SERVICE
SP307I

Fruits and Nuts

Figs in the Home Planting

David W. Lockwood, Professor, Plant and Soil Science

Figs make a welcome addition to most home fruit plantings. Even though they are adapted to the Gulf Coastal States, they may be grown in Tennessee in most years when some type of winter protection is provided.

Site Selection

The planting site is more important with figs than with many other fruits. Close to the south side of a building can be an excellent site because it offers protection from winter winds and has higher winter temperatures than an open site or one on the north side of a building. Figs planted next to buildings should be at least 3 to 4 feet away from the wall. Do not plant figs underneath existing trees. Although figs do best when planted in full sun, they may grow and fruit satisfactorily if they receive at least eight hours of sunlight daily during the growing season.

Figs grow well in almost any type of soil as long as it drains freely enough to keep water from standing around the roots. Do not plant figs in soil infested with nematodes. Also, avoid planting figs near clay sewer pipes or over septic tank drain fields, as the fibrous roots from the fig may block drain lines.

Cultivar Selection

When selecting the fig cultivar (variety) to plant, several things should be considered. First, the cultivar should have some cold tolerance to withstand Tennessee's winter temperatures. However, if the plant is to be grown in a container that can be moved indoors, this is not as great a concern.

Second, the cultivar should be able to set fruit without pollination. Many of the California cultivars require cross-pollination where the pollinator is a small imported Asiatic wasp. Without these small insects, cultivars needing cross-pollination will not set fruit in Tennessee.

Third, the intended use of the fruit will affect which cultivars are selected. Many cultivars may be used for jams, canning, drying or eating fresh; however, because of their seediness and texture, some are suitable only for drying and preserving.

Because Tennessee's climate is colder than that for which most figs are adapted, cold injury may occur to all cultivars. Therefore, winter protection should be provided. Frequently, radical shifts from warm to cold periods may cause plant injury at temperatures above those mentioned below. The following cultivars should be considered for planting in Tennessee, but with more than 60 cultivars to choose from, there may be others that will do as well if they do not need crosspollination to set a crop.

Brown Turkey - Winter hardy to 10F; long harvest season and will produce fruit even though frozen to the ground the winter before; multiple-use, high-quality fruit that are fine-grained, juicy and sweet.

Celeste - Winter hardy to 0F; short ripening season; fruit and plant are smaller than Brown Turkey; fruit of high quality and good for fresh use and preserving.

Green Ischia - Not as cold hardy as Celeste or Brown Turkey; small plants well suited for pot culture; high-

quality fruit with excellent flavor; small greenish-yellow fruit not damaged by birds as much as that of other varieties; fruit used fresh or dried.

Magnolia - Winter hardy to 5F; ripening season short; fruit of fair quality for fresh use or drying, but good for preserves.

Alma - Moderate cold hardiness; small plant; medium-size fruit with a sweet flavor and very small seed; suited for both fresh use and preserving.

Planting and Propagation

Since considerable confusion exists about fig cultivar names, order fig plants only from Southeastern nurseries. Figs purchased from nurseries may be bare-rooted or container-grown.

Figs may be propagated at home by hardwood cuttings or suckers. Make cuttings in early March from older bushes if shoots were not killed by winter temperatures. Cuttings may also be taken in the fall and covered with mulch after setting. The cuttings should be 8-10 inches long from 1-year-old wood. The upper end should be cut just above a bud and the lower end just below a bud. Set the cuttings 10 inches apart in well-drained and well-prepared soil. The cutting should be set so only one bud is exposed above the soil line (Figure 1). Young plants from cuttings are ready to move to a permanent location when 1 year old.

Another method of propagating figs called layering is done by covering a low shoot with soil in early fall leaving the shoot tip (up to several inches long) above the soil surface (Figure 2). Rooting will occur at nodes along the buried section. The new plant can be separated from the mother plant in the spring and moved to a permanent location.

Plant figs while they are dormant; early spring is the best time. Tops of bare-rooted plants should be cut back about one-half of their original length. Tops of container-grown plants with good root systems need not be cut back. Be sure to inspect the root system of container-grown plants to see if they are potbound. If roots have grown out to the container sides and have curled back, either straighten the roots carefully when planting or cut them back to the point where they turned. If root pruning is needed, be sure to prune the top of the plant back the same as for barerooted figs. Set plants 3 inches deeper than they were in the nursery. Fill the hole with soil and

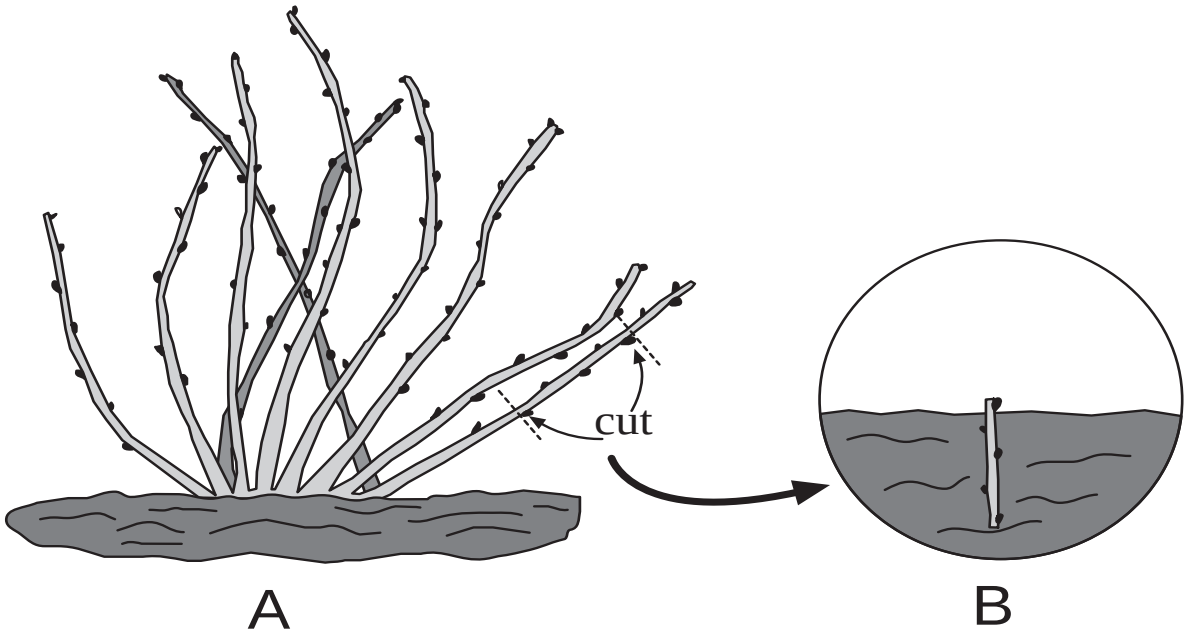

Figure 1. Fig propagation using dormant cuttings. (A) removing a cutting from the plant, (B) placing the cutting in the soil with one bud above the soil line.

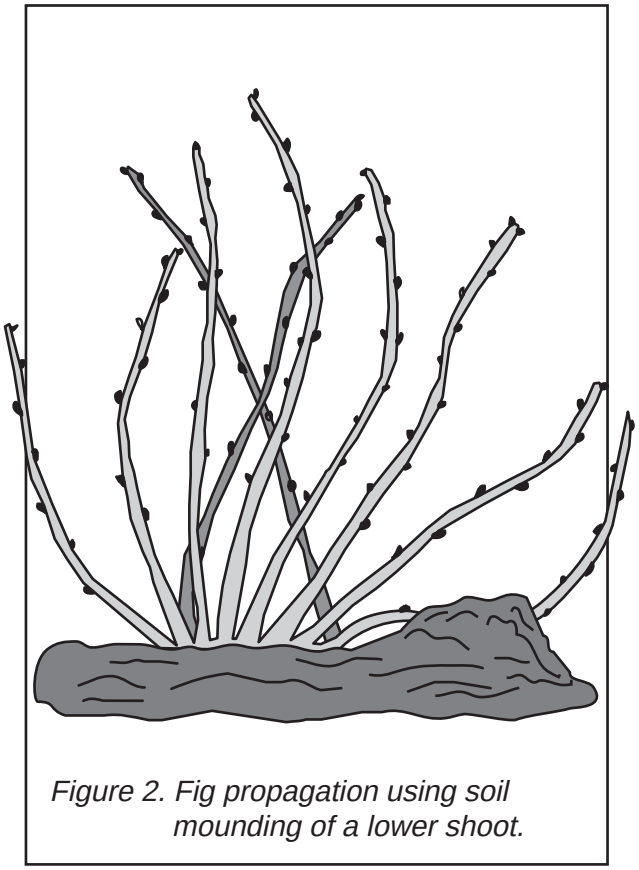

Figure 2. Fig propagation using soil mounding of a lower shoot.

water thoroughly. Do not put fertilizer or any other soil amendments in the hole at planting

Training and Pruning

Though figs can be trained to either tree or bush form, the tree form is not practical for Tennessee. Fig plants are often killed back to the ground during the winter in Tennessee, making the tree form difficult to maintain.

Training begins at planting by cutting off new plants as previously described before growth begins in spring. The plant should be allowed to grow unchecked the first season. In early March after the first growing season, select three to eight vigorous, widely-spaced shoots to serve as leaders. Remove all other shoots at ground level.

Beginning the second year after planting, head back the bush by removing one-third of the annual growth in the spring after the danger of frost is past but before growth has started. Also, prune out all dead wood and branches that interfere with the growth of the leaders. Make all pruning cuts back to a live bud or a branch.

Fruiting Habits

Fig cultivars recommended for the Southeast produce a main crop of fruit that ripens in mid to late summer. These fruits are borne at the base of leaves on current season's growth. Because of this fruiting habit, a crop can be harvested even when plants are killed back to ground level. These main-crop fruits mature beginning with those at the base of the current year's shoots and progressing toward the tip.

Some cultivars also produce a small crop, called the breba crop, that ripens in early summer. The brebas are borne on the previous year's growth and are poorer in quality than the main crop. This early crop may often be absent because of winter kill of the shoots.

Fertilization

Figs grow satisfactorily in moderately fertile soils without any additional fertilizer. Fertilizers may be used on plants in soils with low fertility. Apply a fertilizer such as 10-10-10 at a rate of about 1/2 pound per plant when growth begins in the spring. No other fertilizer should be used unless the bush shows little vegetative growth at all. If this occurs, the spring rate may be applied again in early June.

Winter injury of figs may be directly related to the vigor of the plant. A vigorous, fast- growing plant is more easily killed by winter temperatures. Therefore, any plant with adequate vegetative growth should not be fertilized.

Preventing Cold Injury

Many references have been made to the potential for cold injury to figs in Tennessee, which is probably the greatest limiting factor in growing them here. Several things can be used to protect fig plants from winter injury:

- Select a cultivar that is adapted to colder winter temperatures.
- When available, select planting sites on the south side of buildings.
- Do not over fertilize to prevent excessively vigorous growth.
- Apply a heavy mulch or mound up soil around the base of plants in late fall.
- Pull shoots to the ground, secure and cover with mulch.
- Plant in 30- to 50-gallon containers that may be moved into garages or basements during cold weather.

Harvesting

Harvest figs when their necks wilt and fruits droop. If they exude a milky latex, stop picking; they are not ready. When fully ripe they drop from the shoots.

For eating fresh, pick figs as soon as they ripen. They have the best flavor then. For preserving, pick figs a few days before fully ripe. This reduces damage from souring and splitting.

For drying, allow fruit to remain on plant until fully ripe, when it falls at your touch. Because of low water content at this point, very few days of drying are necessary after harvest.

In areas where bird damage is severe, pick fruit early in the morning or use bird netting to prevent damage.

SP307I-1M-11/97(Rev) E12-2015-00-045-98

A State Partner in the Cooperative Extension System

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS
The University of Tennessee Institute of Agriculture, U.S. Department of Agriculture,
and county governments cooperating in furtherance of Acts of May 8 and June 30, 1914.
Agricultural Extension Service
Billy G. Hicks, Dean