CAES
The Connecticut Agricultural Experiment Station
Putting Science to Work for Society since 1875

FACT SHEET

OVERWINTERING AND PROPAGATION OF FIGS IN CONNECTICUT

Dr. Charles R. Vossbrinck
Department of Environmental Sciences
The Connecticut Agricultural Experiment Station

There is a good deal of interest among home gardeners in growing figs in Connecticut, but commercial production is feasible as well. Good tasting, fresh figs are difficult to find in the grocery store, as figs are not ripe until they are soft and will not ripen after they are picked. In response to this interest, a fig research program was initiated at the Experiment Station. We are examining the production of six varieties of figs in plastic greenhouses. In this fact sheet we will discuss growing and overwintering figs in Connecticut, possible methods of overwintering, methods for propagating your own figs, and fig diseases. Once overwintered, figs can grow quit well in Connecticut (Figure 1).

Figure 1. Figs produce fruit as they grow even in their first year; larger plants produce more figs.

Overwintering Figs in Connecticut

Because figs are not cold-hardy in our climate, five methods can be used to protect them during Connecticut winters.

1. Wrapping the tree

In the fall after the leaves have dropped, the branches of the tree are tied together and the tree is wrapped in burlap, canvas, or cardboard, the wrapping held together if necessary with chicken wire. Leaves or other types of insulation materials may be included. This method can be used for trees as high as 10 feet tall. Suggestions for overwintering a tree can be found on the internet on pages such as: Http://www.treesofjoy.com/content/wrapping-fig-tree-winter or https://www.youtube.com/watch?v=71NlBkOvUxs or http://www.nytimes.com/2010/02/16/nyregion/16figtrees.html?_r=0.

2. Laying the fig tree down and burying

The tree is first wrapped for protection and then a trench is dug next to the tree. The roots of the tree are cut on the side opposite the trench, and the tree is then laid over and covered with soil. Limited severing the roots will not hurt the tree. Detailed information about this technique can be found on websites such as: http://www.conngardener.com/figs.html.

3. Growing figs in pots and storing in a protected place

This is the initial strategy we used for overwintering our figs. Trees are stored in a barn during the cold season and brought outside two weeks before the last frost date. It is important to prevent the trees from leafing out while being stored. Figure 2 shows trees in June after they have been brought outside.

Figure 2. Trees in self-watering planters in June after being stored in a barn for the winter.

Things to consider if using this method are the size of the pot you are willing to work with and movement to a storage area. We are using a system worked out by Bill Muzychko of Bill's Figs in Flemington NJ. He uses very large pots and has developed a pot carrier to move the plants indoors in the winter.

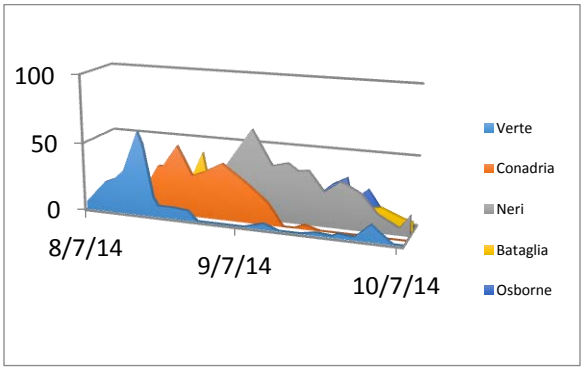

Figure 3. Data on yield and date of ripening for different varieties.

We will be testing fig yield in 7 gallon pots because they are more manageable. Another option is to keep the potted trees on a dolly all year round and roll the trees in and out of a protected place such as a garage. Based on our observations, it appears that fig trees are safe when overwintered above 25°F.

4. Growing figs permanently in trenches

Based on the idea of overwintering the fig tree by laying it down in a trench, and the fact that farmers in other parts of the world actually grow fig trees horizontally, we have initiated a project growing figs in trenches (Figure 4). The trees will be protected in winter by insulating them with straw and an agricultural blanket. We are in our first year of this project, which idea will take several years to evaluate.

Figure 4. Training figs to grow horizontally in a trench. The shoots then will grow vertically and bear fruit.

5. Growing figs in greenhouses

We are beginning our third year of growing figs in 25 gallon, self-watering pots in a plastic double-layer greenhouse (Figure 5). Of all the options for overwintering figs presented in this fact sheet, this method represents the most feasible for commercial production of figs.

Figure 5. The lush growth of figs in a plastic greenhouse.

Figure 6. Scions rooting in (PP) using 14 oz cups with holes in the bottom.

Fig Propagation

Figs have been propagated for more than five thousand years. It is most common to use dormant cuttings made in late winter, but we have also had success with live cuttings and with air layering. We have not been using rooting hormone, but it would not hurt to use it. We have been experimenting with two different rooting media: 1:1:1 sand:perlite:vermiculite (SPV), and 1:1 peat moss:perlite (PP). Pelletized lime is added to both mixes: 1/4 cup per cubic foot for SPV and 1 cup per cubic foot for PP. The method involves placing a finger-width, four inch-long scion into a plastic cup with holes in the bottom (Figure 6). The rooting media should be kept moist by watering twice a week. We have also tried other methods, including bottom heating with a cover over the tops (Figure 7), rooting in inert media such as oasis cubes (Figure 8), and using a hydroponic-type device that spays the bottom of the scion with water (Figures 9 and 10).

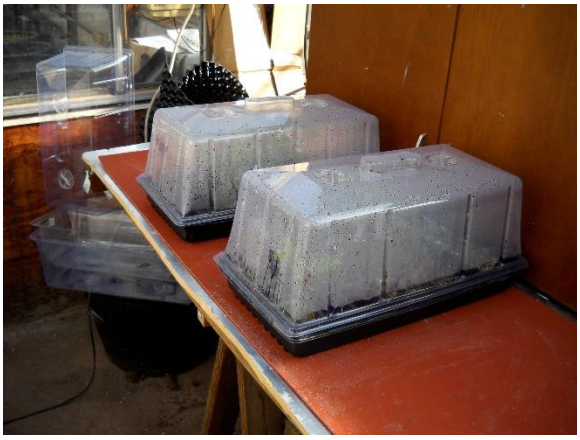

Figure 7. A 10" by 20" tray with a high dome covering. Heating pads allow for higher root temperatures if necessary. A plastic bag loosely draped around a pot would also work.

Figure 8. Rooting in a 10" X 20" tray with oasis cubes.

Figure 9. A hydroponic-type device that splashes the stem with a spray of water.

Figure 10. From beneath, root development with the hydroponic-type device

Fig Diseases

The two diseases that we have detected since the initiation of the fig program are fig mosaic virus and fig rust, caused by the fungus *Cerotelium fici* (formerly *Physopella fici*). Under good growing conditions the figs seem to be able to outgrow the virus and remain productive. Pruning for air circulation and keeping the ground dry under the figs will help prevent fig rust. Fungicidal sprays containing copper can be used to control this disease http://www.gardeningknowhow.com/edible/fruits/figs/figs-disease-rust.htm.

Figure 11. Fig Mosaic Virus.

Figure 12. Rust (*Cerotelium fici*) fungus on a fig leaf.

May 2015

Dr. Charles R. Vossbrinck
The Connecticut Agricultural Experiment Station
Department of Environmental Science
123 Huntington Street, P.O. Box 1106
New Haven, CT, 06504

E-mail: Charles.Vossbrinck@ct.gov
Phone: (203) 974-8522
Website: www.ct.gov/caes

CAES
The Connecticut Agricultural Experiment Station
Putting Science to Work for Society since 1875