



HOW TO GROW CITRUS IN PHILADELPHIA

Sooner or later the gardener has to try growing a citrus tree inside. There's something so winter-defying about it — the notion of growing tropical fruits when outside the driveway has been iced over for days.

Citrus plants will provide glossy foliage and a sweet aroma, even when they're not in bloom. The flowers will arrive in late winter, right when you need them the most, and perfume the air with a dose of springtime. And you can get fruit on your dwarf citrus plants — how exciting is that?

Here are some tips from master gardener and host of HGTV's *Gardening by the Yard* Paul James on how to keep your tropical plant happy all year-round.

Plant deep. A wide and deep container, either terra cotta or plastic. Citrus roots are fairly deep, so you'll need a fairly tall pot.

Use an all-purpose potting mix. It's nice if it's slightly acidic, and you can sometimes find potting mixes especially made for citrus.

Give your tree chilly nights. "The temperature during the day is not a big deal," says Paul. "However, at night, citrus likes to be chilly, kind of like me and you." A temperature between 50 to 55 degrees is ideal.

Provide as much light as possible. Moving a tree from a patio into or out-of an indoor climate should be done gradually. To bring it in in the fall, begin by placing the tree in partial shade. This helps it transition to less light. Even indoors, your tree will need at least 6-8 hours of sunlight a day. "This is a big problem for a lot of people," he says. "Place in a south or southeast-facing window. If you don't have enough light, you can always add fluorescent or spotlights with full-spectrum lights." With modern insulated windows, put the plant pretty close to the window. If the window isn't insulated, back off a foot or two. Rotate your plant periodically, to expose all sides to the sunlight.

Maintain an evenly moist soil. Don't treat citrus like other plants — that is, letting it dry out between waterings. Instead, keep it moist. "During the winter, however, don't over water, or you'll get root rot, which is fairly common. When the soil is dry an inch below the surface, add water." Don't let water sit in the saucer below the container. And, during the winter, try using slightly warm water when it's time to water, it will help keep your soil temperature above 65 degrees, which keep your tropical plant happy.

Watering tips:

- A wilted tree means too little water
- A tree with yellow leaves or folded leaves can indicate too much water (or needs fertilizer)
- If the tree is outdoors for the warm months, check it once or twice a week and water when the soil is dry.
- When indoors, water your tree once a week - approx. 1/4 gallon of water.

Keep the humidity high. Citrus requires a humidity of 50 to 60 percent. Most households, however, measure only 20 percent during the winter. "Misting daily is very important, and few people do that. Try to get in the habit of it. Maybe if you're fixing dinner, take a break and give it a spray." Group plants together to make it easier to keep humidity elevated, and set saucers of water around the plants.



Watch for pests. The most likely are whiteflies and spider mites. "Insecticidal soap controls virtually all the pests for houseplants and it's non-toxic." Horticultural oils are good at smothering pests, too. You might see trails on the leaves left by leafminer insects. They don't harm the plant, and can be left alone.

Fertilize lightly. "You have to be careful when fertilizing in winter," he says. "The citrus will have a slow growth rate anyway, so I'd suggest maybe once a month with a weak liquid fertilizer, diluted from a quarter to a third of what the manufacturer recommends." Paul uses organic products such as seaweed extract.

Prune lightly when necessary. "If it's a little straggly or misshapen, you can cut all the way back to the main branch, or you can do just a little pinching to make it bushier."

Know where the graft union is on your tree. It can usually be seen as a diagonal scar between 4 and 8 inches from the soil. Remove all shoot growth below the graft. These so-called "suckers" take vitality from the top of the tree (the fruiting wood). Especially on young trees, they are very vigorous. Remove suckers as soon as they are observed.

Thorns are removed from rootstocks when they are grafted. Juvenile fruiting wood will sometimes have thorns; this is a young plant's way of defending against grazing animals. As the tree matures, thorns will not appear as often. Prune off thorns if desired. Check thorny branches to see if they are fruiting wood or rootstock.

Pretend you're a bee. When Mother Nature isn't close at hand, you have to step in. To set fruit indoors, you'll have to hand pollinate these plants, says Paul. "Take a paintbrush, push it into a flower and move it onto the next flower, and so on and so on and so on."

If your tree hasn't bloomed yet, don't panic. You have to wait four to five years before your citrus blooms, unless you already have a mature plant.