

## Got the Winter Blues? Try Growing a Citrus Indoors

*By Ann M. Mason, Fairfax Master Gardener Intern*

Winter in our Virginia zone 7 gardens, with its periodic freezing temperatures, limits all but the hardiest of plants. At this time of year, I recall fondly visiting my Florida relatives with their bountiful, heavily laden citrus trees. Morning strolls in their postage size yard often found me plucking a ripe, juicy orange, lemon or grapefruit for immediate eating. How might we enjoy similar joys?

In the chill of winter, we look to add and cultivate plants that flower and fruit indoors. Citrus plants expand our choices beyond typical house plants. Not only sporting shiny, evergreen leaves, a citrus offers aromatic, edible blossoms and colorful, striking long-lasting fruit. Fruit should be harvested only when ripe and needed. Citrus fruit matures only on the tree.



photo: Texas A&M University

So, how do we successfully grow citrus indoors? The experts are all clear. There are five key elements:

1. Lots of light. A citrus tree does not go dormant. Thus, it needs at least five to six hours of direct sunlight in a south or southwest window. More light hours are better. Eight to 12 hours are ideal. A grow light can supplement and extend light hours. With lower light, the leaves will adapt but a citrus plant will not flower or fruit.
2. Slightly acidic well-drained soil (pH 6 to 7). A citrus tree does not like wet damp roots; regular potting medium retains too much water. Use a cactus mix or an amended potting medium with 1/3 small pea gravel, pumice, turkey grit or inorganic materials (vermiculite, coir) to improve drainage. Deep infrequent watering every five to seven days is better than frequent, shallow watering. Better for the soil to stay on the dry side since a citrus will quickly die if it has soggy roots. Pots without drainage holes or pots in a tray of standing water will cause root rot and plant death. Cupped or yellowed leaves are a symptom of too much water. The ideal pot for a citrus is a deep pot with sufficient drainage holes. Sufficient drainage is more important than whether the pot is plastic, clay or of some other material. Shallow pots will not balance the plant or tree as its gets larger. A large tree on casters or a wheeled plant caddy will allow better movement in the home and between the indoors to the outdoors for the summer months. Water the citrus more frequently outdoors.
3. Humidity. Citrus trees like about 50 percent humidity. Such a level is not wise for an entire house. To locally increase the humidity, experts suggest placing the pot containing your citrus on a brick above a tray of wet pebbles to allow for airflow. A daily misting using rainwater or aged tap water can help increase humidity as can locating the tree in or near a steamy bathroom while the shower is in use.
4. Air exchange and temperature. Citrus trees do not like drafts from heating and air conditioning vents but do need air movement. Ideal temperatures will average 65 F (18 C) and range between 55 F and 85 F (13 C to 30 C). For flowering, a temperature variation of 5 to 10 degrees is needed between day

and night. Abrupt wide temperature changes will shock the plant. A citrus can tolerate outdoor environments once the temperature is consistently 50 F (10 C) or higher. It needs a gradual, week-long approach when moving from the indoors to the outdoors or vice versa. Start with placing the tree in similar light conditions and then gradually increase/decrease the light hours. Moving the tree from outdoors to indoors might result in some leaf drop.

5. High nitrogen fertilizers. Citrus trees are heavy feeders. They need more nitrogen than phosphorus or potassium. Therefore, use a 2-1-1 or 3-1-1 fertilizer ratio. Experts advise using a granular, slow release formulation every three weeks during the warm growing season and every six weeks over the winter. Some experts suggest frequent dilute soluble fertilizer when the plants are actively growing (April through September). Yellow leaves indicate a lack of chlorophyll and signal the citrus is not getting enough nutrition.

When looking for an indoor citrus plant, look for one grafted onto dwarfing rootstock which enables the citrus to produce regular sized fruit on dwarf 5 to 8 foot trees. Some citrus can be trained into a bonsai form. A citrus will start to flower and produce fruit on a three-year-old plant. Older plants will yield more fruit.

There are lots of citrus to choose from, and each expert has their own list of 'favorites.' Some research will help narrow your choices to meet your goals — ornamental or edible. Acid citrus — lemons and limes — are easier to grow indoors than are the sweet citrus — oranges and tangerines. Acid citrus plants ripen their fruit faster and tend to flower over a longer season. Here's a starting list for your consideration



*Kaffir lime*

photo: University of California

#### **Kaffir lime (*Citrus hystrix*)**

grown for striking, fragrant leaves; used in Thai and Asian cooking; has small bumpy fruit

#### **Calamondin or Calamansi (*Citrofortunella microcarpa* or *C. mitis*)**

grown as an ornamental and is among the most common in garden centers; small, sour orange fruits are used for marmalade or as a garnish in summer drinks

#### **Improved Meyer lemon (*Citrus x meyeri* 'Improved')**

has dark shiny leaves; is a virus-free citrus with juicy, medium-sized, seedless fruits with thin skin and sweet pulp

#### **Citron (*Citrus medica*)**

has yellow fruit with rough, bumpy surface, thick fleshy rind, little juice and sweet flavor

#### **Tangerine or Mandarin orange (*Citrus reticulata*)**

has frequent flowers; requires less heat to ripen sweet fruit than true oranges

**Trovita sweet orange (*Citrus sinensis* (L.) Osbeck)**

has fast-ripening, medium-small juicy fruit with few seeds; tends toward alternate bearing

**Tahitian orange (*Citrus x limonia* 'Otaheite')**

a dwarf, spineless cross between a lemon and a tangerine

**Kumquat (*Fortunella* spp.)**

flowers with a sandalwood-like scent and small, elongate, tart orange fruits for marmalade; *F. crassifolia* has round, sweet fruits

**Limequat (*Citrus aurantiifolia* x *Fortunella crassifolia*)**

is a hybrid of a Mexican lime and kumquat with a shrub-like habit and yellow, egg-sized fruit with edible skin



*Kumquat*

photo: University of Florida

Citrus pests include scale, whitefly and spider mites.

Gardeners can deter pests by periodically washing leaves, paying attention to the underside as well as the tops of leaves. If pests are seen, one can apply insecticidal soap for whitefly and spider mites and physically wipe scales off leaves and branches. Light horticultural oil may limit scales. Consult experts at the garden center or the VA Tech Pest Management Guide prior to using insecticides. Follow directions that are given on the container.

**Resources**

- [Indoor Citrus](#), Susan Mahr, University of Wisconsin — Madison Master Gardener Program
- [Growing Citrus Indoors](#), University of Minnesota Extension
- [November Plant of the Month: Indoor Citrus Enjoy Growing Citrus](#), Even in Tennessee, Margeaux Emery, University of Tennessee
- [Growing Citrus Indoors](#), Susan Christine Jones, Colorado Master Gardeners, Colorado State University Extension
- [Citrus Problems in the Home Landscape](#), Mongi Zekri and Robert E. Rouse, University of Florida IFAS Extension
- [Citrus Diseases – Texas Plant Disease Handbook](#), Texas A&M University