



CITRUS

Characteristics & Care

Growing citrus in the landscape has long been a challenge for gardeners in South Carolina due to winter temperatures dropping below freezing. Although the heat and humidity in the summer are similar to Florida, the winter is another story.



The best method of growing citrus in the Midlands of South Carolina is to plant in a container. This allows for movement to a sunroom, greenhouse, garage or other sheltered location during sub-freezing temperatures. Providing a warmer environment year-round supports a continuing growth cycle and a higher yield of fruit.

While it is not impossible to grow citrus in the ground here, it requires a diligent regimen of protecting the plant during sub-freezing weather for it to survive and remain healthy. There are many variables that make this difficult. To make life just a little bit easier, we recommend container planting citrus to give you the best chance of harvesting fruit.

SELECT A GOOD CONTAINER

Start with a small container when planting a young citrus tree so it will be easier to maintain proper soil moisture. If the soil stays too wet in a large container, a young tree with a small root system may rot and die. Eventually you will need a 16-20 gallon container for long term growth.

Make sure the container has adequate drainage holes and does not sit flat on the ground. Use "pot feet" to lift it up and allow for water to drip out.

When you take your citrus tree inside, make sure it gets 6 hours of direct sunlight. If this is not possible, 10 hours under bright, artificial light (grow light) will do. DO NOT place it near heat vents.

It just tastes better when you grow it yourself!

TEMPERATURE & HUMIDITY - In general, the hotter the temperature, the faster fruit will develop. The exceptions are lemons and limes. These acid-citrus do not require heat to ripen fruit. Rind color is a factor of humidity and temperature. The best way to increase humidity around container-grown citrus is to set the pot on a tray of pebbles and keep water just below the top level of the pebbles. Misting 2-3 times a week is another way.

SOIL - Recommended pH = 5.5 - 7.5
Use well-drained, nutrient rich soil. We recommend our *Premium Potting Mix*. DO NOT cover root ball any deeper than it was in its original container.

LIGHT - Minimum of 6 hours direct sunlight is required; all day full sun is best.

WATER - Regular, deep watering is required. Water when top 2 inches are dry. Avoid keeping the area around the trunk wet and NEVER allow plant roots to sit in water.

FERTILIZER - Citrus are heavy feeders. Use *Fertilome Fruit, Citrus and Pecan Tree Food* or *Espoma Citrus Tone* (3 applications/year).

POLLINATION - Most citrus are self-fertile, but hand-pollination with a small paint brush improves fruit production.

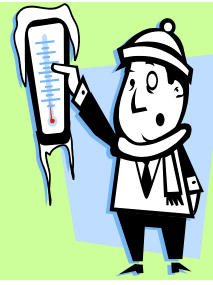
PRUNING - Little pruning is required, however, suckers, dead twigs and extra long growth should be removed. Clip off fruit as it ripens - DO NOT PULL.



COLD WEATHER TEMPERATURES

A hard freeze (20 degrees Fahrenheit and lower) will severely damage trees.

Temperatures below 26 degrees Fahrenheit will damage fruit.



PROBLEM	CAUSE	SOLUTION
New leaves turn pale green, yellow, or white. Old leaves turn yellow with veins remaining green.	Iron deficiency Micronutrient deficiency	Check pH; iron can't be absorbed when pH is above 7.5 Apply Liquid Iron every 2 weeks during the growing season (except when temps are 90 degrees or higher. Improve soil drainage.
New leaves turn pale green Older leaves turn yellow and drop Stunted growth Abundant flowers, no fruit	Nitrogen deficiency	Apply fertilizer high in nitrogen (19-10-5), blood meal (12-0-0) Make sure soil is not staying too wet.
Leaf buds shrivel and turn brown. New leaves are curled, distorted. Silver streaks appear on fruit.	Thrips (tiny brown insects especially invasive in hot, dry conditions)	Spray leaves with insecticide; repeat per label directions. Avoid spraying blooms.
New leaves are curled and twisted.	Aphids (tiny green, brown, or black insects usually found on growing shoots)	Spray with horticultural oil or insecticidal soap. Repeat per label directions.
Yellowing leaves, webbing on flower buds and between leaves and branches.	Spider mites (tiny brown, red, and black spiders usually invasive in hot, dry conditions)	Spray with miticide, insecticidal soap, or horticultural oil; repeat per label directions.
White, cottony masses on leaves, stems and branches.	Mealy bugs (invasive in hot, dry conditions)	Spray with horticultural oil or insecticide.
Leaves wither, turn yellow and drop; fruit drops. Sticky substance coats leaves (may develop black sooty mold.) Tree health declines.	Scale (scale insects excrete honeydew)	Spray with horticultural oil.
Squiggly, shiny residue on underside of new leaves, resembling Elmer's glue. New leaves curl under.	Leaf miners (small caterpillar)	Remove affected leaves if in early stage. Spray with horticultural oil or leaf miner spray. Avoid spraying blooms.
Tiny, white insects that fly when you touch leaves. Black sooty mold (black)	Whiteflies	Hang a hummingbird feeder. Spray insecticidal soap, insecticide, or horticultural oil. Avoid spraying blooms.



Suckering

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.