

Organic Citrus Care

Basic Care and Fertilization

- Citrus needs plenty of water* once the flowers appear in early winter. This is because the extra water goes into the fruit production. However, it is crucial that the soil is well-draining. Therefore, if you plan to plant the tree in the ground, and you have clay soil (as most of us do), then you should dig a shallow but wide hole and amend the soil with either compost or The Ground Up Rose and Azalea Soil.
- If you plan on keeping the citrus in a container, The Ground Up Raised Bed and Square Foot Garden Mix is an excellent potting soil for this purpose.
- Citrus requires full sun for best production, which usually means a Southwest exposure in your yard.
- If this tree is to be planted out in the garden, it will benefit the tree to pick any fruit off of it so that all its energy can go into root production the first year.
- All the citrus sold at Buchanan's is grafted onto one of the three major root stocks known to do well in our zone: Trifoliate Orange, Flying Dragon Trifoliate Orange (for dwarf varieties), and Swingle Citrumelo (a Trifoliate hybrid). All suckers (growth) coming from below the graft union should be cut off immediately or the top graft will die and the rootstock plant will take over. None of the rootstock citrus are considered flavorful or edible citrus.
- When the tree is still young, fertilize it up to four times a year between February and October. The normal program is February, May, August, October. Use a good granular fertilizer such as MicroLife Citrus, Lady Bug 8-2-4, or Cottonseed Meal. If you choose to use a liquid fish/seaweed product, you will need to fertilize once a week for maximum effect, as liquid fertilizer dissipates much more quickly than granular fertilizer.
- In winter, the tree's roots should be watered in deeply the night before a freeze in order to protect them from frost. When the tree is still small, it will be best to cover it with frost cloth as well. If you are growing the citrus in a pot, move the pot away from the North wind, water the roots and cover the tree with frost cloth. Small trees are especially susceptible to freeze damage.

*Make sure your citrus tree gets a minimum of 1" of precipitation each week, whether by hand or by nature. When it is producing, it is possible that it will need more than that, depending on how much fruit the tree is bearing. The key is to make sure you water the tree enough so that it will not abort its fruit, while making sure that the soil has drained enough before you water it again. The rule of thumb is that when the first inch of soil is dry, it's time to water the plant again. Water deeply each time you water, not in short spurts in which the water only goes down an inch or two each time. This is the WRONG way to water trees.

Common Pests and Diseases

• Leaf Miner. This is the larval stage of a flying insect which lays its eggs inside the leaf of the tree. When the egg hatches, the leaf miner feeds on the leaf as it mines its way out before going into its next stage of development.

This insect is NOT detrimental to the health or production of fruit for this plant.

Treatment: The best way to deal with this pest is to leave the citrus alone... if you are concerned about the appearance, simply pick the leaves off the citrus as you see the problem occurring and spray with Spinosad or Neem on a weekly basis once you see new growth.

- Whitefly, Scale, Mealybug, Aphids If you see any of these pests on your citrus, it is most likely due the plant having been stressed for some reason. Most common reasons for stress:
 - 1. The plant has not been watered as often as is needed. The plant itself dried out before water was applied to the roots. The top inch of soil should be dry before watering the plant; however, if the plant is drooping before you water it AND the soil is dry (very important that both of these situations are happening simultaneously), then the plant itself has dried out too much between watering.
 - 2. The plant is in the wrong place-too little sun or poor drainage
 - 3. The soil has been depleted of organic matter and nutrients.
 - 4. Weather event.

Treatment: First, determine why the plant is stressed and do what is needed to make the plant less stressed. Second, spray with Neem, Safer Soap, or All-Seasons Oil, if necessary. Third, top-dress with compost and, on a separate spray schedule (different days, at least three days apart) spray with a seaweed or fish/seaweed product such as John's Recipe. This will boost the plant's immune system by stimulating beneficial microbial activity at the root zone and on the stems and leaves.

• **Black Sooty Mold** This fungus occurs in concert with the pests listed directly above, as these pests release a sticky honey-dew that attracts the mold.

Treatment: Serenade or Neem.

Not a Pest

Citrus trees are host plants to Giant Swallowtail Butterfly larvae. The larva is a caterpillar which looks like a giant bird dropping. The butterfly lays its eggs on the citrus leaf and when the egg hatches, the larva emerges, and it immediately begins feeding on the citrus leaves. This will not kill your tree (unless, possibly, you have hundreds on a small tree—which is very unlikely), and will not diminish fruit production.