



## Citrus

Citrus have a rich history; they are beautiful evergreen plants; and they produce deliciously fragrant spring flowers. But the most important reason why gardeners want a citrus tree is the wonderful fruit.

All citrus need fertile soil, at least 6 hours of full sun, and regular but not excessive water. The dwarf varieties can be grown almost indefinitely in a container. Non-dwarf types will eventually need to be transplanted into the ground or a very large container or planter, depending on the variety. For containers up to a 20-gallon size, use our **Lady Bug Vortex** potting soil. In containers 20-gallon or larger, use **Lady Bug Hill Country Garden Soil** or **Rose Magic Garden Soil**.

Give a citrus tree planted in the ground enough space to accommodate its mature size. To prepare the soil, amend with **Lady Bug Revitalizer, Farm Style, or All-American Turkey Compost**. Mix in enough compost so that the resulting blend is 1/3 to 1/2 compost. The soil should be amended in an area no deeper than the original rootball. If the native soil is rich and well-draining, amend the soil at least twice as wide as the rootball. If the soil is poorly draining, amend in an area at least 6 feet wide. Where there is no soil or very poor soil, a raised bed is needed. Make the raised bed at least 6 feet wide and at least 1 foot deep.

Citrus, whether in the ground or in a container, need additional fertilizer. They need plenty of nitrogen, but it is helpful to have ample phosphorus too. You may use a dry, slow-release fertilizer, a liquid fertilizer, or a combination of both. Especially in containers, citrus can be fertilized once every week or two with the organic liquid fertilizer **Lady Bug John's Recipe**. If you prefer, **Lady Bug All-Purpose 8-2-4** or **Garden Pep Cottonseed Meal** may be applied to the soil and mixed in every 4 – 6 weeks. For an extra boost when using the dry fertilizers, **John's Recipe** may be used once a month. About once or twice a year, add **Lady Bug Glittering Greensand** to supply iron. Micronutrient deficiencies may show up as yellowing of the leaves between green veins. This can be caused by iron, magnesium, or zinc deficiency. Apply Epsom Salts or **Magnesium Sulfate** for magnesium deficiency first. New leaves should emerge fully green. If not, add **greensand** second. If *new* leaves do not respond to either of these amendments, add **Zinc Sulfate**.

Water citrus deeply. Allow the top two inches of the soil to dry before watering again. Trees in containers, and especially blooming and fruiting trees, must have evenly moist soil, not too dry or too saturated.

The most limiting characteristic of all citrus is their susceptibility to freeze damage. "Most citrus are native to tropical and semitropical climates," says Lance Walheim in *Citrus*. Different varieties are more cold-hardy than others. According to Walheim, "Citrons, Tahiti, and Mexican limes (a.k.a. West Indian or Key Limes) are most sensitive. Their leaves will be damaged if temperatures fall much below 30°F. True lemons are slightly more cold hardy, followed by grapefruit, pummelo and pummelo hybrids, tangelo and tangor, limequat, sweet orange, most mandarins, Meyer lemon, sour orange, orangequat and kumquat. Leaves of most kumquats are hardy to at least 20°F. ... The majority of sweet oranges are hardy to 26 - 27°F. Meyer lemons will tolerate temperatures as low as 24°F to 25°F. Citrus fruits are often less hardy than leaves." Bring containerized citrus indoors or into a garage when temperatures threaten. If a greenhouse or a bright, south-facing window is available, they may be kept indoors all winter. However, take care when bringing citrus back outside, especially if they are flowering or producing small fruit. Water citrus with **Maxicrop Seaweed** or **John's Recipe** several times in advance of the move. Move the tree to a partially-shaded, protected area first, and gradually over 3 – 4 weeks move it to its ultimate full sun location. Reverse this process in the fall when moving citrus back indoors.

If you want to plant your citrus in the ground, here are some steps to take to help protect it from freeze damage. First, choose the right planting site. Planting on the south side of your house protects the citrus from the freezing north winds, and can provide the brightest sunlight. Avoid valleys or low areas where cold air collects and where soil may remain too wet during rainy spells. Outdoor citrus must be covered with **heavyweight row cover** (frost cloth) during mild freezes. For further protection during harder freezes, adorn the citrus with outdoor Christmas lights before wrapping thoroughly with row cover or covering it with a makeshift greenhouse. Water the tree before a freeze. Mulch the root zone at least 3 inches deep.

If your citrus gets eaten by a strange caterpillar that looks like bird poop – don't kill it! It's a Swallowtail butterfly! If there are any other pest issues, put a sample in a plastic bag and bring it to our diagnosticians. Call first for availability.

Finally, one of the hardest parts about growing citrus is waiting for the fruit to ripen. Ripening times vary among varieties and from year to year, but expect citrus fruit to ripen in the fall through winter. "Tasting fruit is the best way to test ripeness," says Walheim. "The color of the rind is usually a poor indication of when to harvest."

### Enjoy your citrus!

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