



Citrus trees grow well in the Bay Area when given proper care. Plant them in a site with plenty of sun (minimum 5-6 hours per day), give them good drainage, water and fertilize properly and protect them from frost. Citrus trees will reward you with years of fragrant flowers and delicious fruit.

Most of our citrus trees are semi-dwarf, meaning that they are grafted onto a dwarfing rootstock. This slows their growth so that they are easily maintained at around 6-8 feet in a container, or 10-12 feet in the ground. Dwarf citrus is very slow growing, and standard citrus can grow quite quickly to 20-25 feet. We don't have a source for true dwarf or standard citrus.

Planting

In ground: Choose an area with good drainage, as citrus won't tolerate soggy roots. Dig a hole twice the width of the pot, if possible, and slightly deeper than the root ball. Mix the soil you've removed with **Gold Rush** or **Bumper Crop**, so that the final mixture is one-third to one-half amendment. Add **E.B. Stone Sure Start**. Remove the plant from the container and loosen the roots slightly. Place the plant in the hole, making sure it's at the correct depth. The top of the root ball should be at ground level or slightly higher. The top of the root ball should be visible after the soil is filled in. Fill in the hole with the soil mixture, firming it around the root ball and leaving no voids. Use excess soil to build a watering basin around the plant. Water thoroughly after planting to settle the soil.

Containers: If you plan to keep citrus in a container for its entire life, use a container that is 24 inches or more wide and nearly as deep. Avoid very tall planters, as they tend to stay too wet on the bottom. Make sure there is at least one drainage hole. The soil we recommend is **Eureka Planting Mix**, since it provides excellent drainage. As when planting in the ground, the top of the root ball should be at the same level as the surrounding soil, or just a bit higher. Leave 2-3 inches of space at the top of the pot ("head space") for watering. It's best to let the container drain freely, rather than using a saucer that will hold water and keep the soil soggy.

Watering

With established citrus, it's important to water deeply, then allow the soil to dry out a bit before you water again. In the ground apply 3-5 gallons of water each time you irrigate. Mature citrus will usually thrive with irrigation once or twice a month spring-fall. You may need to water more frequently if weather is excessively hot or windy, but no more than weekly. In winter, irrigate monthly if rain isn't heavy.

Citrus in containers may need to be watered more frequently, but always allowed to dry out between waterings. A moisture meter is a great tool to help determine when to water. Use enough water so that water comes out of the drainage holes. Often when a plant has been in a container for a while, the soil will begin to resist water penetration. If this happens, use **EZ Wet Soil Penetrant** or **Liquid Gold Fertilizer plus Soil Penetrant**.

As with any other plant, newly planted citrus needs more frequent watering. Check plants daily for 2-4 weeks after planting, and water when needed.

Feeding

Fertilize citrus trees every other month from March to September, using **Master Nursery Citrus Food** or **E.B. Stone Organics Citrus & Fruit Tree Food**. Some gardeners report great success with fertilizing monthly at half the recommended rate on the label.

In fall and winter, fertilize with **Ultra Bloom** or **Master Bloom** to improve fruit yield and quality.

If you notice leaves that are yellow with green veins (iron deficiency chlorosis), supplement with **FST** or **Iron Plus**. This is more common when using organic fertilizer, which doesn't contain iron.

Yellowing of the outer edges of the oldest leaves, with a green V originating close to the stem indicates magnesium deficiency. Correct the problem with **Iron Plus** or **Magnesium Sulfate**.

Frost Protection

If you live in a frost-free area, you won't need any winter protection for your citrus trees. In Lamorinda and most other areas of Contra Costa County, you need to prepare for nights when the temperature is predicted to drop below 32°.

Frost Cloth – Specially designed to insulate while allowing air and water to penetrate, frost cloth is sold in pre-cut sheets or by the foot. Some gardeners drape the sheets directly on frost-sensitive plants, but the best insulation is provided when the cloth is tented with stakes or some other structure. Remove frost cloth during the day to allow soil to warm up.

Christmas lights – Outdoor incandescent light strings can raise the temperature several degrees. Don't use LED lights, which don't provide warmth.

Anti-transpirant spray – Wilt Stop forms a clear, protective film on frost-sensitive plants. One application lasts all season.

Irrigation – Dry plants are stressed plants. Water in-ground plants monthly and container-grown citrus every 2 weeks if rain doesn't provide adequate water.

Potential Problems

Citrus Leafminer – Citrus leafminers are moth larvae that feed within leaves, producing large patches or winding tunnels of dead tissue. The edges of leaves may be rolled up with the pupating insect inside. To prevent and control citrus leafminer, apply Captain Jack's Deadbug Brew when trees are flushing new growth (typically around April) and repeat in 2 weeks. Do not exceed 6 sprays per season.

Sooty Mold - Sooty mold appears as black deposits on leaves and stems when sticky honeydew accumulates from plant-sucking insects such as aphids, scales, and mealybugs. Treat sooty mold by controlling the responsible insects. Spray thoroughly with PestFighter Year-Round Spray Oil or Takedown Garden Spray. Repeat 2 more times at 7 day intervals.

Overwatering - Yellowing or dropping leaves, cupped leaves, and dropping immature fruit are common signs of overwatering. Invest in a moisture meter to make sure you water only when needed, and make sure your citrus has proper drainage.

No Fruit – Citrus trees tend to begin producing fruit when quite young. If a plant has never produced, or stopped producing we recommend the following:

- Make sure the tree has adequate sun, at least 5-6 hours per day
- Fertilize properly – Feed every month or two from March-September with a fertilizer specifically labeled for citrus, and from October-December with Master Bloom or Ultra Bloom.
- Don't overwater – Soil that is constantly wet is unhealthy for citrus and causes premature fruit drop.

Suckering – Growth coming from below the graft will not bear palatable fruit and should be pruned off as soon as you notice it.

Asian citrus psyllid/ citrus greening/ HLB - The Asian citrus psyllid is a vector of the bacterium associated with the fatal citrus disease HLB, also called citrus greening disease. HLB can kill a citrus tree in as little as 5 years, and there is no known cure or remedy. Gardeners can help combat the psyllid by inspecting their citrus trees and reporting infestations of the Asian citrus psyllid. For more information on how to inspect and report, visit the [California Citrus Threat website](#).