Citrus Growing

When to plant
Generally, citrus trees can be planted any time of year, depending on the specific climate, but should be planted so that the roots have a chance to acclimatize before extreme temperatures are expected.

Where to plant
Citrus can be planted in containers indoors or outdoors, or in the ground. Soil pH should be slightly acidic to about neutral (6.0 to 7.5) and soil depth should be a minimum of 18 inches deep. Sandy to clay loam soils are best, with good drainage a must.

A site in full sun protected from severe wind is best. Be aware that some types, such as grapefruit, require more heat to produce sweet, tasty fruit. Planting higher on a slope can provide some protection from cold air.

Transplanting from a container to the ground
Handle the tree gently and protect the roots from damage. Dig a hole about twice as wide as the rootball of the tree and about the same depth as the rootball. Save the soil for backfill; break up large clumps. Soil amendments are not recommended unless the soil is extremely sandy or is heavy clay.

Trees should be planted at the same depth as they were in the container. If planted too deep, soil and water tend to stand against the trunk, which promotes root and crown rots such as Phytophthora. If planted too high, the roots will dry out too quickly.

Planting in a Container
To create the ideal growing medium for citrus, start with a commercially available soil mix that does not contain chemical wetting agents. **Evenly combine a 1/4 – 1/3 volume of redwood or cedar shavings with the commercial soil mix, cedar hamster bedding** is widely available and inexpensive.

Use a container that allows for good drainage and has at least five drainage holes. When planted at the correct height the thicker woody “crown” roots will show just at or above the soil line and the fine feeder roots below will be covered with soil. Do not cover the trunk with soil. Putting gravel on the bottom of the pot can impede drainage, so is not recommended.

Watering
Citrus trees require consistently moist but not soggy soil and they do not like standing water. The root system should not be allowed to dry out, which stresses the tree. Note however, that overwatering and/or poor drainage are also problems, and equally stressful. Citrus trees are evergreen, and should be irrigated year-round, especially during active growth periods, usually late winter or early spring through summer. Young trees with a trunk diameter of less than an inch are especially vulnerable to irrigation issues. Irrigation should be at the root zone area away
from the trunk and the bud union to avoid fungal diseases. Newly planted trees should be irrigated well immediately after planting to ensure surface roots stay moist.

**Irrigation Frequency**

Irrigation frequency is influenced by weather, so the irrigation schedule should be adjusted throughout the year. Irrigation efficiency is also influenced by soil type. Generally, irrigate when the top few inches of the soil are dry and the rest of the root zone is slightly moist. Young trees should be irrigated at least every 5 to 10 days during the summer months, or more frequently if the root system dries out, and more frequently in hot, dry and windy conditions. Mature trees require less frequent irrigation. Irrigation should also be less frequent when the weather is cool or overcast.

**Irrigation Amount**

In general, 2 to 5 gallons of water should be applied to a newly planted tree at each watering, as long as there is no standing water and the soil is not soggy. Established trees should be watered so that the entire root zone is moist. A soil probe is a useful tool to determine the depth of irrigation. The soil should be sampled to a depth of about 12 inches to determine soil moisture content.

A mature tree with an extensive root system requires more water to wet its larger root zone than a young tree with a smaller root mass. However, the root system of a young tree dries out more quickly.

**Fertilizing**

To ensure good crops, the tree needs adequate nutrition. Nutrient deficiencies reduce yield and adversely affect size, color, sweetness and peel texture of fruit. Typically, nitrogen is the nutrient most often required. In some soils, other minerals may be deficient. A soil analysis can be helpful. A complete organic citrus fertilizer with adequate nitrogen will generally supply the other required nutrients such as iron, zinc, magnesium, phosphorus, potassium.

**Trees in Containers**

Since trees in containers need to be irrigated more frequently than trees in the ground, they also require more frequent applications of fertilizer. A complete (nitrogen plus other nutrients), slow-release fertilizer is recommended; apply per the label instructions. Chelated iron is also more often required for container grown trees and should be applied per the label instructions.

**Protect from sun**

In very hot, sunny areas, protect the trunk and large limbs from sunburn, particularly after pruning that exposes limbs to the sun. Lemons are especially susceptible. Wrap the trunk of a newly planted tree with newspapers or tree wraps and tie loosely. Paint the trunks and exposed limbs of older trees with white, water-based latex paint diluted 1:1 with water.

**Protect from frost**

Young citrus trees are susceptible to frost damage. For short-term protection of the trunk, options include an insulating wrap of corrugated cardboard, several layers of newspapers, corn stalks, or thermal wraps. Wrap to a point above the bud union. If the tree suffers frost damage, do not cut
away damaged parts until new growth is established in the spring. Do not use plastic to cover tree trunks or foliage.