

# Citrus Plants

Tropical fruit trees/plants can be grown outdoors during the summer months but must be kept indoors through the winter. They do best in large, deep containers with a soil mix which allows excellent drainage.

Their taste and delightful floral fragrances or “neroli”, call to mind faraway places. Aside from their striking beauty, the interest in citrus as houseplants is in their wonderful fruits. If it tastes good from your local grocer, it will taste even better home grown. Experience for yourself the zesty flavors of these vitamin rich fruits and enliven a sunny room.

When you visit your local supermarkets and see the assorted colors and sizes of citrus fruits, you can't help but wonder: “How can I grow my own?” Below are a few hardy citrus to try in your home:

## Grapefruit

### Citrus x paradise

Originated in the West Indies. Hardy to about 20 degrees. Protect in all zones in winter, unless you are in zone 9.

## Kumquats (Nagami)

Kumquats are a species of Fortunella, a close relative to Citrus.

Nagami is the kumquat most often found in grocery stores, having a very attractive oval fruit about an inch wide and long. Each fruit usually had about four seeds.

Even though it is the most commonly grown commercial kumquat, Nagami can be sour. However, it pickles exceptionally well and makes an excellent marmalade.

## Lemons

### Citrus limon

- ♦ Most vigorous citrus plant (can grow up to 20' tall)
- ♦ New growth is light pink, maturing to light green, glossy evergreen foliage.
- ♦ Prefer cool temperature and are very easy to care for.
- ♦ Cut back plants regularly to keep them compact.
- ♦ Lemons bear abundantly— often more lemons than you'll need at a time.
- ♦ Harvest them whenever they're an acceptable size  
Simply squeeze the juice into ice cubes for later use.

## Lemons (Meyers)

### Citrus limon hybrid or citrus meyeri

- ♦ Popular favorite with lemon scented foliage, reddish new growth and purple tinged blossoms.
- ♦ Fruits has a hint of orange flavor.
- ♦ Fruit initially turns yellow but continues turning a deep yellow and sometimes a rich orange color.
- ♦ Meyers lemons are sweeter than a typical lemon.

## Limes

### Citrus aurantiifolia

- ♦ Small thorny trees or shrubs with dark evergreen leaves.
- ♦ Some plants originated in Mexico (small fruits) other from Persia (large fruits).
- ♦ Harvest fruits when it's acceptable in size (green) - but fully mature fruits are yellow!
- ♦ Limes prefer hot and humid conditions.

## Oranges

- ♦ Oranges are found growing either in hot humid or intermediate climates (Southwest vs. Southeast).
- ♦ These different climates are responsible for different varieties which will develop specific rind colors when ripening.
- ♦ Most popular are the sweet Naval oranges— 'Washington' is the most popular variety and can grow 16' tall.
- ♦ 'Valencia' oranges are a common type of orange that grows under any warm conditions and is quite successful indoors.
- ♦ 'Calamondin' orange is the most beautiful with its lush glossy, dark evergreen foliage on a compact shrub with profuse, fragrant blossoms most of the year. The wonderful display of flowers sport tiny green and orange colored fruit with a sour flavor (suited for marmalades).

Continued on back

## **Citrus cont.**

### **Cultural Needs:**

Harvest season in the South is usually from October - April and some can be year round.

*Acclimatize your new citrus plant to prevent undue stress.*

Try to make smooth transitions especially when moving your plants from inside to outside and back.

### **Temperature & Humidity**

- ◆ Temperature affects the developing fruit... the hotter the temperature the quicker the fruit development.
- ◆ The rind color is a factor of humidity and temperature. The pigment of orange is anthocyanin and it is dependent on warm climates, not overly hot or humid ones.
- ◆ The pigment of grapefruit, lycoprene and it is dependent upon a hot climate.
- ◆ The best way to increase humidity around citrus plants is to set the pot on a tray with pebbles and keep water just below the top level of gravel. Another way is to mist the plants 2-3 times a week.
- ◆ The acid-citrus: lemons and limes, which are the most popular citrus grown indoors, do not require heat to ripen the fruit.

### **Soil**

pH 5.5 - 7.5

- ◆ Plant starvation will occur above or below this range.
- ◆ Use a well draining loamy soil tolerating light sands with ample fertilizer.
- ◆ Mix your own soil using composted/shredded fir or pine bark, perlite and peatmoss.
- ◆ Can succeed in heavier clay if they are well drained.

### **Light**

- ◆ If windows are not a possible location for your new citrus, supply bright, artificial light from 8am to 6pm. Requires 5 hours or more direct sun.

### **Water**

- ◆ Citrus requires regular, deep watering.
- ◆ Water especially when the top 2" of soil is dry.
- ◆ Avoid keeping the area around the trunk wet.
- ◆ Never allow plant roots to sit in water.

### **Fertilizer**

- ◆ Citrus are heavy feeders and require high nitrogen fertilizer, like Fertilome Fruit & Citrus Fertilizer. (19-10-5)
- ◆ Regular foliar sprays or Liquid iron and other micronutrients are beneficial.
- ◆ A healthy plant is the first step to pest prevention.

### **Pollination**

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

### **Pruning**

- ◆ Little pruning is required for most citrus.
- ◆ Lemons produce abundant upright suckers which must be removed.
- ◆ Remove suckers, dead twigs and extra long growth.
- ◆ Prune only to shape the plant and keep it relatively compact for the space it has in your home.
- ◆ Clip off any fruit as it ripens, DO NOT PULL.
- ◆ A freshly pruned plant is susceptible to sunburn, avoid placing it in full sun.
- ◆ Remove excess fruit so as not to stress the plant.

# **Citrus cont.**

## **Troubleshooting:**

Some common problems that you may encounter and their remedies:

<b>Problem:</b>	<b>Cause:</b>	<b>Solution:</b>
<ul style="list-style-type: none"> <li>◆ New leaves turn pale green or yellow, new leaves can turn completely white.</li> <li>◆ Older leaves turn yellow with veins remaining green.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Iron deficiency</li> <li>◆ Micronutrients may be deficient</li> </ul>	<ul style="list-style-type: none"> <li>◆ Check soil pH (iron cannot be absorbed at pH above 7.5)</li> <li>◆ Apply Liquid Iron every 2 weeks during the growing season (but not in high temps of 90 degrees F)</li> <li>◆ Improve soil drainage</li> <li>◆ Use 30-10-10 monthly to avoid pH problems.</li> </ul>
<ul style="list-style-type: none"> <li>◆ New foliage turns pale green.</li> <li>◆ Older leaves turn yellow and may drop</li> <li>◆ Stunted growth overall.</li> <li>◆ Plant has abundant flowers but produces no fruit.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Nitrogen deficiency</li> </ul>	<ul style="list-style-type: none"> <li>◆ Spray and water with fertilizer high in nitrogen such as 30-10-10</li> <li>◆ Make certain the soil is not too wet.</li> </ul>
<ul style="list-style-type: none"> <li>◆ Leaf buds shrivel and turn brown.</li> <li>◆ Young leaves are curled, distorted, silvery streaks appear on fruit.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Thrips (minute brown insects especially invasive in hot, dry climates)</li> </ul>	<ul style="list-style-type: none"> <li>◆ Spray leaves thoroughly with insecticide.</li> <li>◆ Repeat in 7 days</li> <li>◆ DO NOT apply sprays within 7 days of harvest.</li> <li>◆ Do not spray while in bloom</li> </ul>
<ul style="list-style-type: none"> <li>◆ New leaves are curled and twisted</li> </ul>	<ul style="list-style-type: none"> <li>◆ Aphids (tiny green, brown or black sucking insects usually found clustered on growing shoots)</li> </ul>	<ul style="list-style-type: none"> <li>◆ Use an insecticide.</li> <li>◆ Horticultural oil or insecticidal soap.</li> <li>◆ Ladybugs (put out in evening)</li> </ul>
<ul style="list-style-type: none"> <li>◆ Leaves are stippled, yellowing, webbing appears over flower buds and between leaves and branches</li> </ul>	<ul style="list-style-type: none"> <li>◆ Spider mites (minute brown, red, and black spiders)</li> <li>◆ Invasive in hot dry conditions.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Use miticide containing dicotol. (use cold water when mixing solution to shock mites).</li> <li>◆ Horticultural oil</li> <li>◆ Insecticidal soap</li> <li>◆ Dormant Oil in Fall to control eggs “wash” plant w/ a water spray to knock spidermites off</li> </ul>
<ul style="list-style-type: none"> <li>◆ White, cottony masses on leaves stems &amp; branches</li> </ul>	<ul style="list-style-type: none"> <li>◆ Mealy bugs</li> <li>◆ Invasive in hot dry conditions.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Spray with Horticultural</li> </ul>
<ul style="list-style-type: none"> <li>◆ Foliage withers, turns yellow and drops; fruit may drop.</li> <li>◆ Sticky substance (honeydew) coats leaves and may develop sooty (black) mold. Tree declines in health</li> </ul>	<ul style="list-style-type: none"> <li>◆ Cottony Scale Scale insects excrete honeydew.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Use Horticultural Oil and a non-systemic insecticide.</li> <li>◆ Insecticidal Soap</li> </ul>
<ul style="list-style-type: none"> <li>◆ A squiggly, shiny residue on the underside of new leaves, resembling Elmer’s glue. Often causing new leaves to curl under.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Leaf Miners (Small caterpillar)</li> </ul>	<ul style="list-style-type: none"> <li>◆ Pinch off new leaves if caught soon.</li> <li>◆ Horticultural Oil, apply to underside of leaves.</li> </ul>
<ul style="list-style-type: none"> <li>◆ Tiny white insects, will eventually cause sooty mold on leaves (may not appear until Fall)</li> </ul>	<ul style="list-style-type: none"> <li>◆ Whiteflies</li> </ul>	<ul style="list-style-type: none"> <li>◆ Hummingbirds!</li> <li>◆ Insecticidal Soap (2 applications of Horticultural Oil in late Fall will remove sooty mold)</li> </ul>