Manatee County Garden Educator Training Series

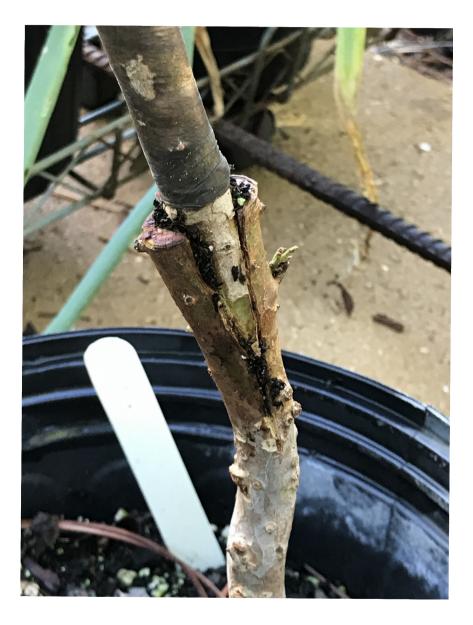
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The Bad News About Citrus

- These days citrus is one of the most difficult kinds of fruit to grow these days, due to so many pests and diseases.
- If you have an established citrus tree, it's worth keeping it going as long as it will give good fruit. Use both soil fertilizer and foliar spray fertilizer (e.g. liquid kelp).
- Lemons and limes seem to be more disease resistant and sometimes do fairly well. Perhaps still worth a try.

Grafted Trees





Advantages of Grafted Trees

For most species, it is well worth spending the \$30 or \$40 to obtain a grafted tree of a named variety:

1. As an exact genetic copy of the scion tree, it has been selected to have desirable characteristics, such as high-quality fruit, small tree size, disease resistance, or adaptability to our climate.

2. Hormonally it is a mature tree, and will produce fruit as soon as the tree is physically large enough. With a seedling tree, you might have a ten-year wait for some species. And the fruit may turn out to be mediocre.

3. It's easier to prevent a grafted tree from growing upward--- it's actually a big branch that wants to spread, not a tree that wants to rush upward to compete for light.

Fruit Tree Horticulture In Six Words

Prune aggressively, mulch heavily,

fertilize conservatively.

Prune Aggressively

1. Control tree size--- work to keep trees at 12 feet height or less.

2. Strengthen the tree against wind, climbing animals.

3. Open up the interior to light and air.

4. Increase the root-to-foliage ratio to promote new growth and provide energy for fruiting.

Prune Aggressively To Limit Size









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Tip Pruning to Promote Shrubby Branching







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Mulch Heavily and Fertilize Conservatively

1. The best fertilizer is MULCH. It breaks down slowly, adding nutrients while building the **soil ecology** to improve plant health and disease resistance.

2. It stabilizes soil temperature and moisture, prevents erosion, suppresses weeds, and interrupts the life cycles of some insect pests such as Sri Lankan weevils and Diaprepes.

3. Minimize or even avoid nitrogen-containing fertilizers except perhaps on immature trees, and on bananas.

4. Favor organic fertilizers with emphasis on minor elements (especially minerals such as azomite, magic sand) that break down slowly over time.

5. An occasional foliar application of liquid kelp seems to work wonders.

Free mulch from the local tree pruners



Other Advice

1. Unless you are a very devoted grower, avoid species that have drawbacks: temperamental fruiters (lychees, annonas), poorly-adapted temperate-climate or dry-climate fruits (stone fruits, pomegranates, pears, apples), pest and disease-prone species (citrus, guava, peaches), freeze-intolerant species (jakfruit, coconuts, soursop, ...). Grow the easy fruits!

2. Remove fruit from young grafted trees, so they can spend their energy growing, not making a few fruit.

- 3. Plant on mounds -----
- 4. Free and perhaps prune the roots when you plant.

5. Invest in automatic irrigation if you possibly can.







- Wonderful, productive fruit trees for west of I-75
- Beautiful evergreen tree, hardy but subject to fungal diseases (generally controllable with non-toxic sprays)
- Mix varieties to stretch fruiting season from April to October or even beyond
- Select semi-dwarf or dwarf varieties



Avocados



- West of I-75, or east if a cold-tolerant variety
- Vigorous evergreen tree, easy to grow but famously flood intolerant
- Can choose varieties to fruit most times of year except spring
- Take a few years to reach fruiting size
- Very aggressive pruning needed to control size



Sapodilla



- Tastes like pears with brown sugar, long fruiting season, extremely productive
- Easy to grow
- Get a good variety

 Alano, Silas
 Wood, Tikal, or the dwarf variety
 Makok

Carambola (Starfruit)



- Fruits throughout the second half of the year, very productive
- Beautiful medium-sized tree, small pink flower, evergreen
- More shade tolerant than most fruit trees --- in fact some afternoon shade may be better than full sun



It is important to obtain a highquality variety such as Kary, Fwang Tung, Sri Kembangen



Canistel

- Long season, rich, excellent-tasting fruit if you obtain a named variety (Trompo, Ross, Fairchild #2)
- Attractive evergreen tree, easy to grow
- Damaged by hard freezes, not a good choice east of I-75



Loquat





- Fruits December to February, depending on variety
- Evergreen, highly ornamental, small white flower
- Very cold tolerant, but **not** flood tolerant
- Fruit should be thinned and may require bagging to protect from fruit flies



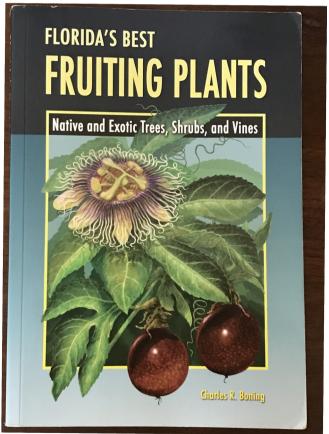
Longan

- Similar to lychee, but fruits every season
- Fruits in August, September
- Evergreen, attractive tree
- Best varieties: Biew Kiew, Big Jim
- Thin the fruit for larger size, and to prevent branches from breaking under weight



The Best First Book

Florida's Best Fruiting Plants, by Charles Boning. Excellent, but be aware that the information on varieties is generally out of date.



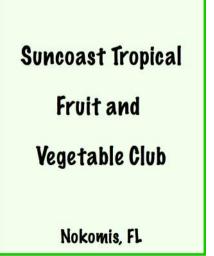
Learn From Experienced Growers

Our area has excellent local fruit tree clubs:

- Tampa Bay Rare Fruit Council
- Tropical Fruit Society of Sarasota
- Manatee Rare Fruit Council
- Suncoast Tropical Fruit and Vegetable Club







Take A Class At An Urban Organic Tropical Fruit Farm

My 3-hour introductory class, the Fruit Tree Paradise Workshop, is taught in spring and in fall – handouts and info on the class are on my website:

sweetsonggroves.com



Online Information Sources

- YouTube videos some are excellent
- growables.org lots of good information specific to our region
- For info on mango varieties, see Alex Salazar's website, Tropical Acres Farms
- UF/IFAS publications can be informative, but generally are oriented toward commercial growers
- Tropical Fruit Forum a discussion board
- *Fruits of Warm Climates*, by Julia Morton, freely available online an older reference but an excellent source for rare, tropical species
- it's a good idea to include the word "Florida" when you do a web search



Wildlife

1. There are some fruits such as sapodilla and canistel that don't seem to be bothered by wildlife. But for most fruits, you will eventually have raccoons, possums, squirrels, and/or birds, perhaps even deer, taking fruit from your trees.

2. There are hundreds of online ideas and products for deterring them--- repellents, hanging old DVD's on strings ,firecrackers, flashing lights, ultrasound, etc. If you can find something like this that works for you, wonderful.

3. If not, the choices are protection or population control.

Bagging

1. Protects against insects, birds, squirrels, possums and raccoons.

2. Not as tedious to do as it sounds.

3. Organza bags are light and very easy to use. Also there are other brands that are more durable.







Raccoons and Possums

1. One option is a 10 or 12-foot solid wall around your property.

 Raccoons and possums can be stopped by poultry netting, charged by a solar-cell battery (Intellishock). It is reasonably portable.
 Effective, although expensive. It does not stop squirrels, at least not completely.

3. The other main alternative is humane trapping and shooting (NOT relocating).



Squirrels and Birds

1. Squirrels are extremely destructive, often spoiling much more fruit than they actually eat.

2. They are difficult to trap, quickly becoming "trap smart".

3. In my experience, after five or ten squirrels have been taken out by a pellet gun, the entire population will clear out from the property. Of course scouts will periodically enter to test. I have been able to maintain reasonable control with only an occasional reminder example needed.

4. Birds can be very damaging to certain fruit, such as figs, jaboticabas, stone fruit, and berries. Besides bagging, bird netting can be used. It is very cumbersome to put on and take off, and picks up pieces of debris like a magnet. Also, you should have a pellet gun available to euthanize birds that get hopelessly entangled (you will not be able to remove them without serious injury to the bird and possibly to yourself as well).