

Best Practices for Tropical Fruits in the SWFL Environment



Roy Beckford, Ph.D.
Ag/Natural Resources Agent III
UF/IFAS Extension, Lee County
3410 Palm Beach Boulevard
Fort Myers, FL 33916
239-533-7512
fbeck@ufl.edu

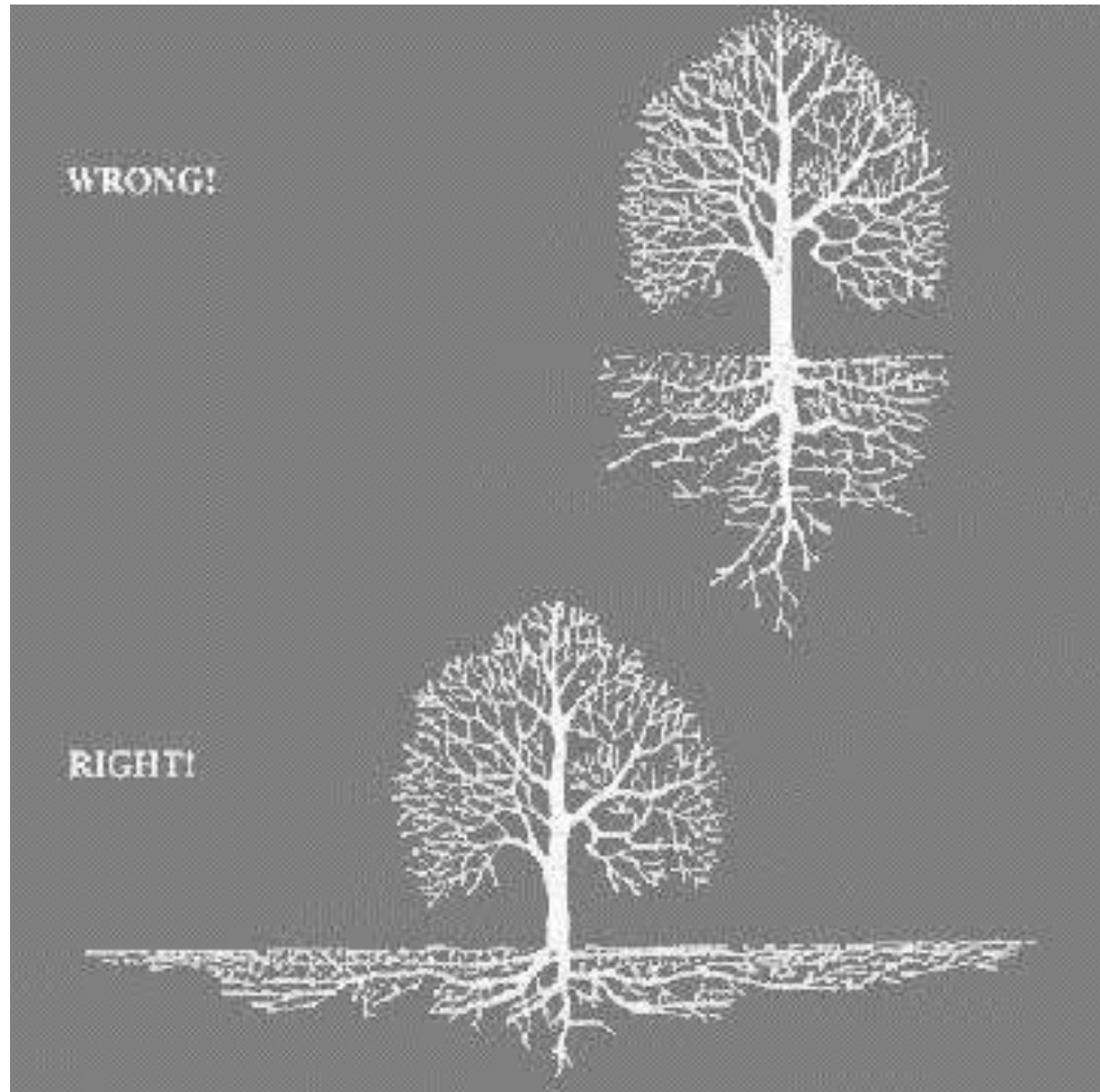
Growing Tropical Fruits

Important things to remember

- Most fruit trees require full sun for best flowering/fruiting
- Most fruit trees do not tolerate salt laden winds
- Not all land is suitable to growing. Low-lying areas and poor fill soils need to mound up with clean soil.
- Soils or soil mixes must be well drained with good aeration; don't plant in low areas where water collects and doesn't drain.
- Most fruit trees (except citrus) like to be mulched with organic matter that over time will gradually compost.
- Planting holes need to be twice the diameter of the root ball

Most tree roots are located in the first 18 inches of soil and spread out away from tree.

Protect the root system!



PURCHASING HEALTHY PLANTS

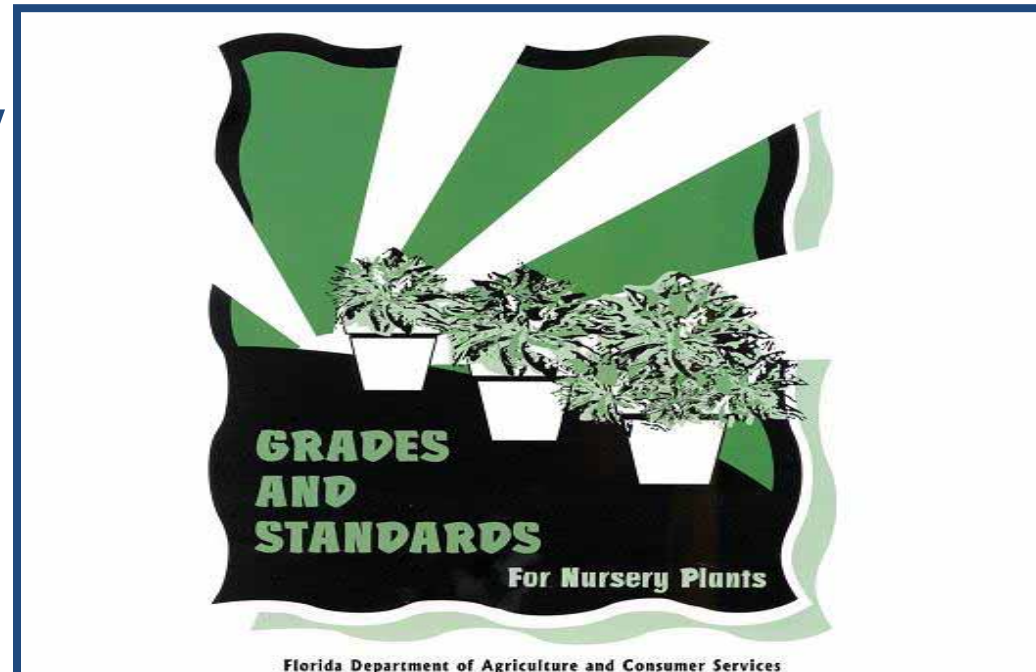
- Plant color and vigor
- Well-developed root system
- No weeds in soil
- Free of insects and diseases
- Trees with single trunks



Grades and Standards for Florida Nursery Trees

(Courtesy of ED Gilman, UF/IFAS)

- Four grades exist for nursery plants in Florida. These include:
 - 1. Florida Fancy
 - 2. Florida #1
 - 3. Florida #2
 - 4. Cull



Florida fancy (Courtesy of ED Gilman, UF/IFAS)

- Single trunk
- Branch diameter smaller than $\frac{2}{3}$
- No flush cuts/open injuries
- Crown full of foliage
- Root ball is appropriately sized



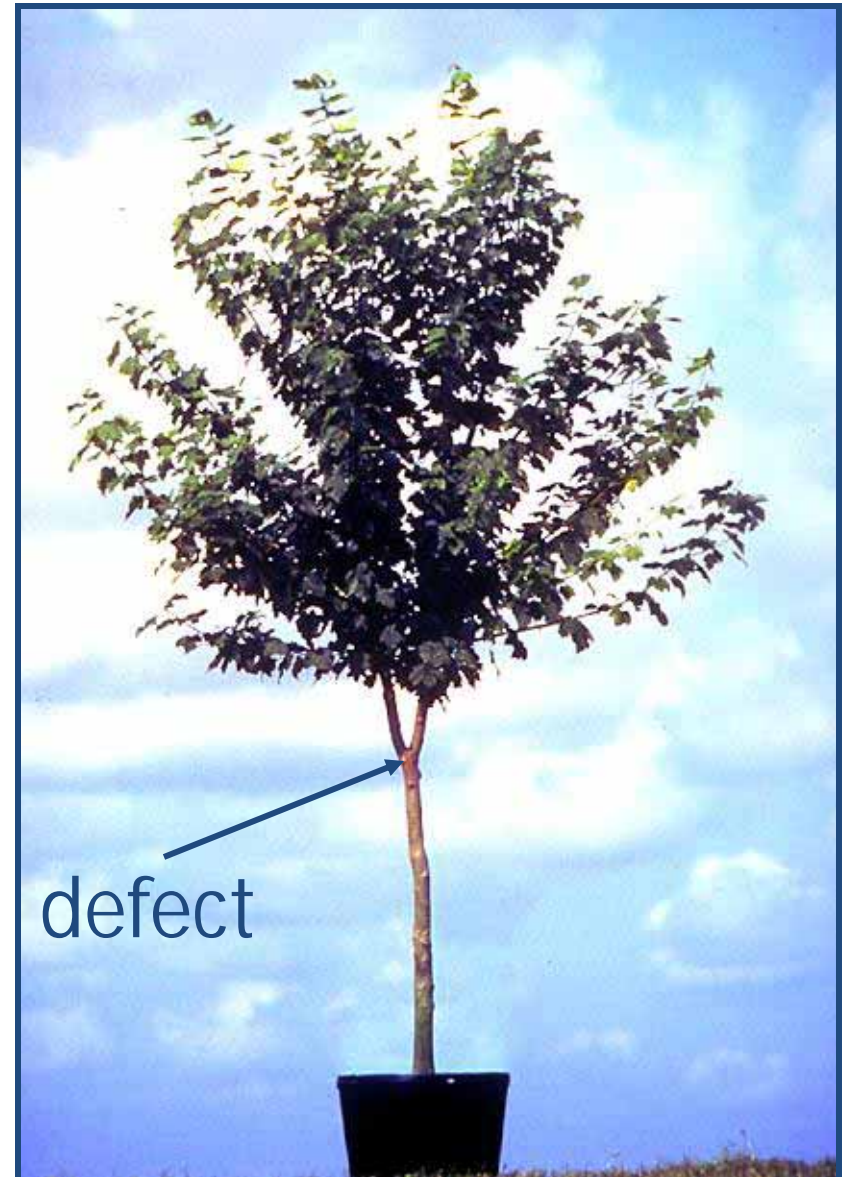
Florida #1 (Courtesy of ED Gilman, UF/IFAS)



- Requires some pruning to develop good structure
- Has minor trunk injuries
- Double leader in top half of tree

Florida #2 (Courtesy of ED Gilman, UF/IFAS)

- Trees are misshapen or require major corrective pruning
- Defects may take several years to correct
- Double leader on bottom half of the tree



Cull

(Courtesy of ED Gilman,
UF/IFAS)

- Defects are not correctable
- Lack vigor
- May have poor trunk and branch structure, circling roots, open wounds, flush cuts, or a loose root ball

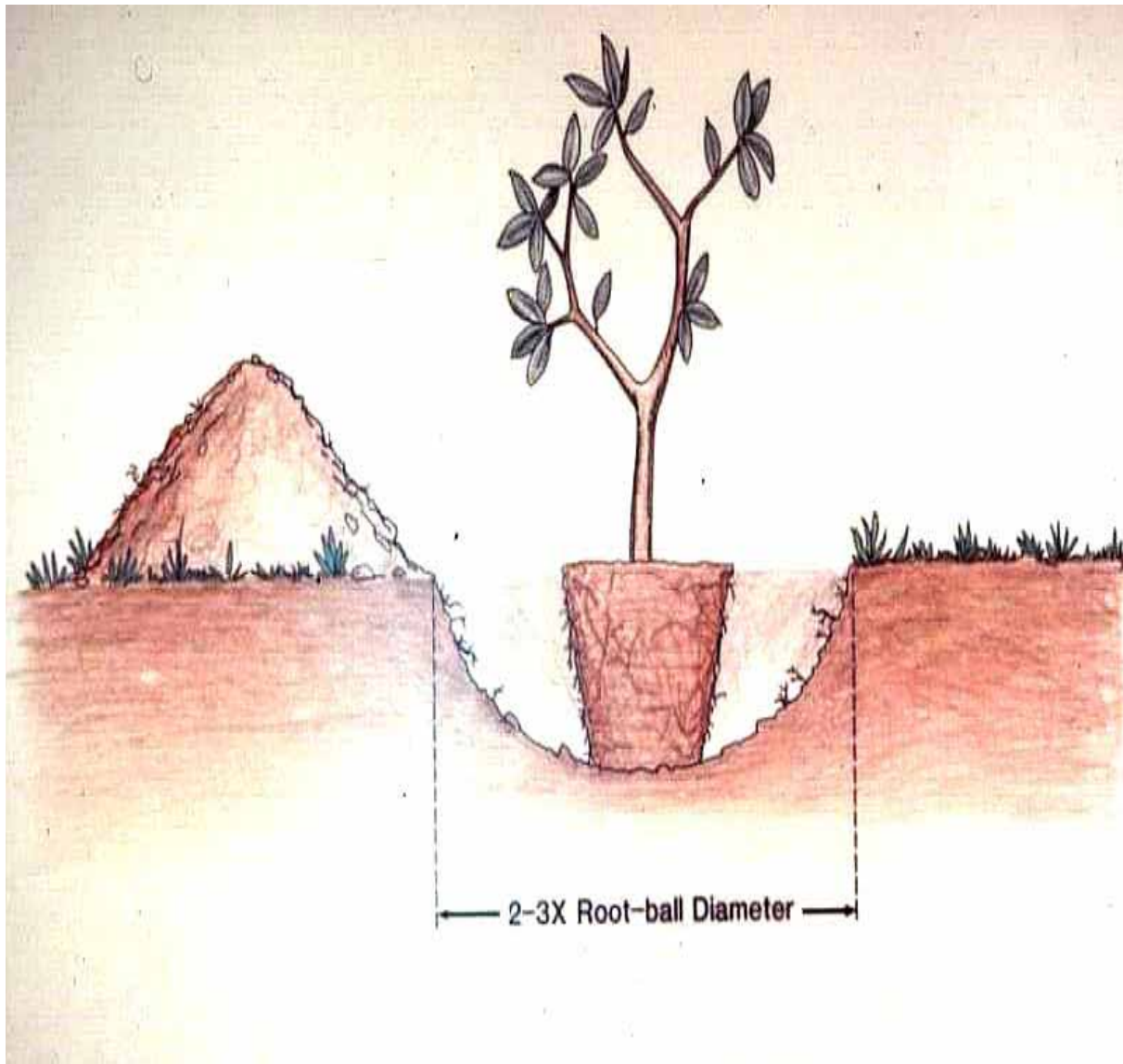


PLANTING & ESTABLISHMENT

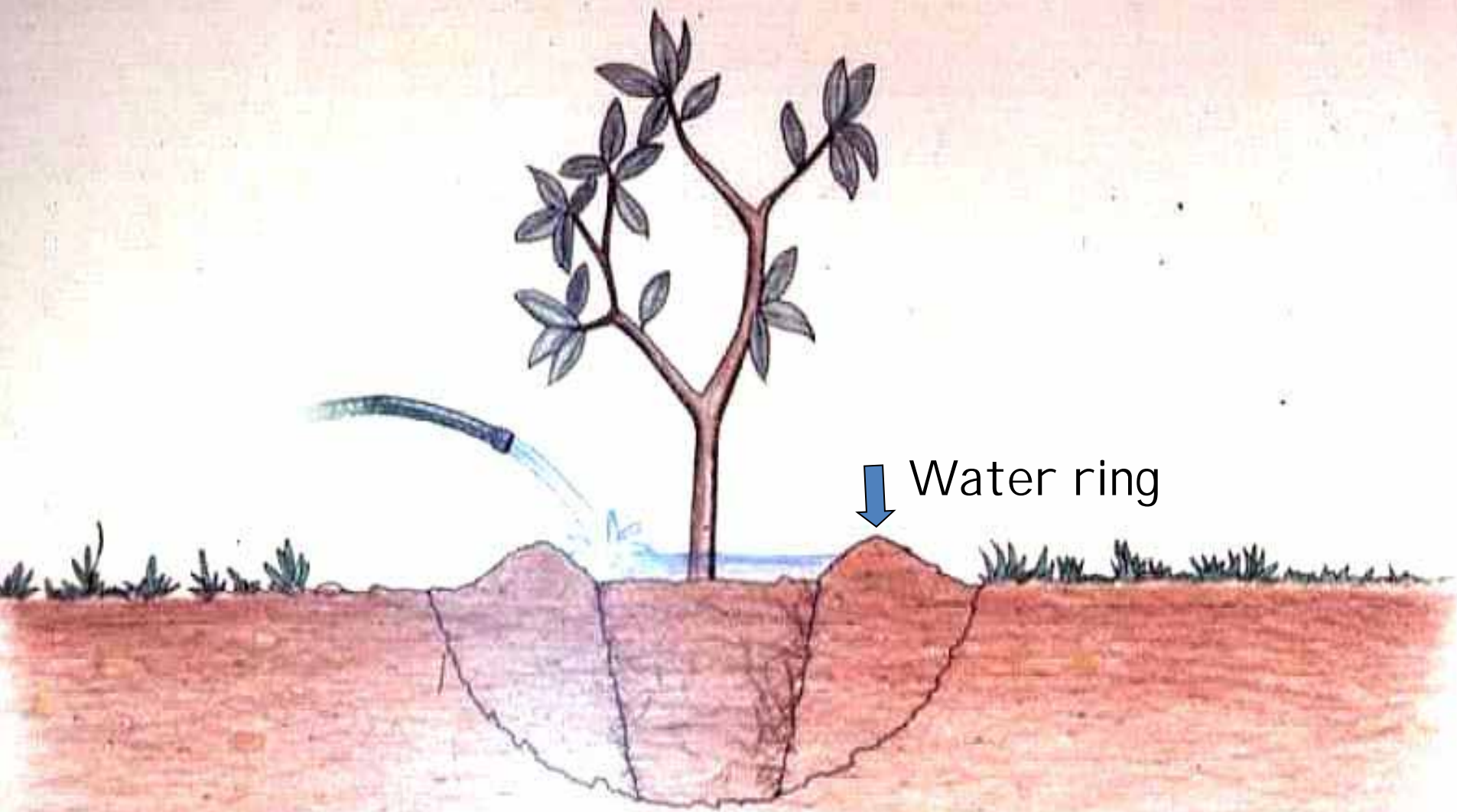
Buy small trees (3 gallon) because larger trees often have roots that have grown in circles along the bottom of the pot. Where this has occurred, cut roots where they have started to turn.

Try to contain planting of fruit trees to the rainy season (June to October). You can plant at anytime of the year, but if you plant in the winter or dry months, you'll often find that plant growth is set back because of inadequate watering coverage.

!High winds common to that time will also create problems.



Add a organic matter with sand to back fill.



Settle the soil around plant by applying water. Do not settle it by applying pressure with your foot. Add sand/soil mix where necessary.

Develop a green thumb



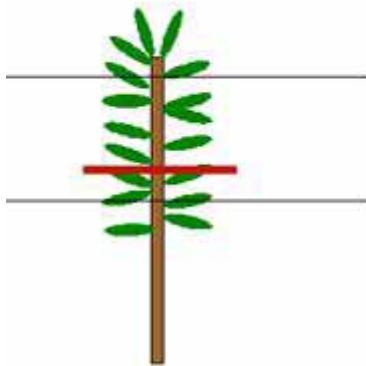
Edible Landscaping



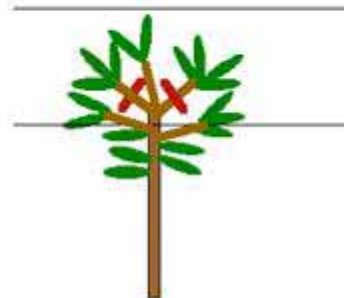
Ornamental vegetables



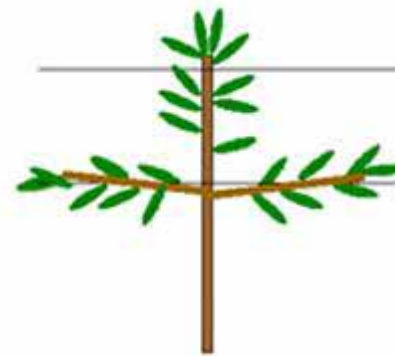
'Fruitscaping' (Espaliering)



Cut the bare root tree to the height of the first cordon wire just above two branch buds.



Wait for new shoots then trim all but 3; train two shoots to lowest cordon and third to grow up to next cordon.



Allow center cordon to continue; prune horizontal shoots except for desired cordons.

Pruning Tropical Fruit Trees



'Pruning'

The term "pruning" has come to mean everything from

- cutting,
- pinching,
- de-limbing,
- heading
- shaping
- trimming,
- disbudding,
- topping,
- shearing,
- thinning,
- Whatever the method or the term the aim is to keep people and property safe, and to keep plants healthy, productive, attractive, and in bounds.

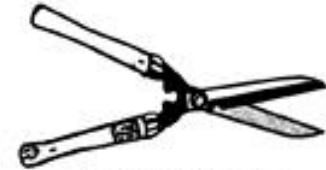


Pruning Tools and Gear

- Use the proper tools, wear safety gear, know where limbs will fall, count your fingers, and keep your ladder upright.



Bow Saw



Hedge Shears



Pruning Saw with D Grip



Lopping Shears



Pruning Saw with Crescent Grip



Combination Pole Saw-Pruner



Folding Saw



Draw Cut or Scissor-Action Pruners



Anvil or Snap Cut Pruners

1. Pruning for Safety

- Making sure woody plants don't injure people or structures
- Remove branches that threaten to fall and do damage.
- Trim limbs that may interfere with utility lines.
- Cut back growth that blocks the line of sight at driveway and street intersections
- Curb thorny plants that endanger passersby.
- Lighten vines that threaten to bring down trellises and other supports
- Tame plants that are growing into someone else's yard. (Avoid being sued).

2. Pruning for Good Health

For good health, begin with the two D's:

- Prune wood that is (1) damaged or (2) dead; it always needs to come off.
- Remove branches that rub against each other.
- Remove branches with weak, unnatural branch-union angles, as they are vulnerable to breaking.
- Remove suckers and thin out *water sprouts*, or *epicormic shoots*, which are weakly attached vertical shoots that emerge from latent buds.



3. Pruning to Limit Growth

The math is simple: Smaller equals more.

Pruning to Shape



You may want to prune off low limbs to reveal attractive bark or interesting stem and trunk forms—a technique called *lifting*

4. Pruning to Encourage Flowering and Fruiting

- Pruning young plants stimulates vegetative growth and delays the production of flowers and fruits.
- Note: for trees that bear fruit on terminals (for example mangos, lychees and longans) - the more terminals you have, the more fruit.



5. Pruning to Repair or Renew

- When a tree, shrub, or vine is damaged or allowed to outgrow its space, drastic surgery may be required.
- Severe pruning, which may mean topping (removing most or all of a plant's crown) or cutting plants to the ground, carries risks.
- Some species grow back successfully, but others respond less successfully—or not at all.
- If a mature tree needs to be topped, remove it instead.



When to cut?

- Right now is always the best time to remove dead or damaged wood.

Spring, after growth begins, is an acceptable time to;

- Cut out damaged or dead wood;
- Remove small shoots heading in the wrong direction;
- Pinch back new growth.



Caveat!!!

- Don't be a botanical butcher!
- Pruning stresses trees, shrubs, and vines—it's surgery, after all.
- A faultily pruned plant won't recover for years.



Experience teaches

- Over time you'll develop your own pruning techniques, but it never hurts to take advantage of others' knowledge and experience.



For the health of the plant:

- Respect the natural form of the plant when you prune.
- Don't overstress plants by cutting away too much at one time.
- Always cut back to healthy, living wood.



Make clean cuts.

- No ragged edges, no torn or bruised bark.
- Don't leave stubs and snags when you cut and saw.
- Don't expect pruning to solve problems created by an inadequate site or poor maintenance.



Heading Cuts and Thinning Cuts

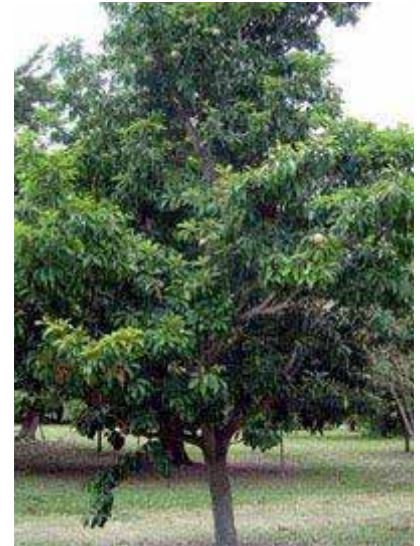
- All pruning begins with these two basic approaches, Heading or Thinning.
- **Heading** or *heading back*, is cutting off a portion of a stem or branch. Since heading eliminates the terminal bud, it forces new growth close beneath the cut.



A badly placed heading cut

Heading cuts

- The more stem you remove, the more vigorous the new growth on the portion that's left.
- If you want to invigorate a plant, to encourage branching and bushiness, heading back shoots and limbs is the way to do it.
- Heading back, which is also known as *tipping*, is most effective with young stems.



Heading cuts

- When heading, make your cuts above a node—the point on the stem where buds, leaves, or stems are attached. Now the bud or buds just below the cut become the stem's new growing point, or terminal.

Heading cut

