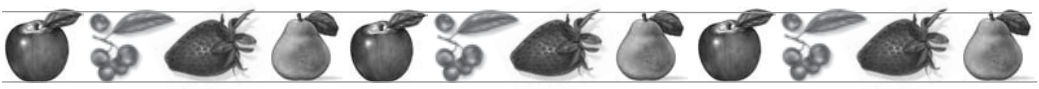


The
Louisiana
Home
Orchard



The Louisiana *Home Orchard*

Louisiana home fruit production appeals to many urban homeowners with limited space as well as to rural residents. Home-grown vine or tree-ripened fruit is higher in quality than that bought at the grocery store. Growing your own fruit can be profitable and satisfying, and most fruit trees add to your landscape.

You cannot expect to grow quality fruit without caring for the plants. Success will depend largely on variety selection, soil management, pruning, fertilization, irrigation, pest control and other cultural practices.

The size of your planting should be determined by the space available, site, size of your family and the time you can devote to orchard maintenance.

Select a Good Location

The success of the home fruit planting is influenced greatly by the site selected. This cannot be overemphasized. Remember: cold air, like water, flows downhill, so avoid low frost pockets.

A deep, well-drained soil with good surface and subsurface drainage is important. Fruit plants will not grow well in water-logged soil. Also, the site should provide ample sunlight for proper growth and development of the plants.

Choose the Right Kind of Fruit

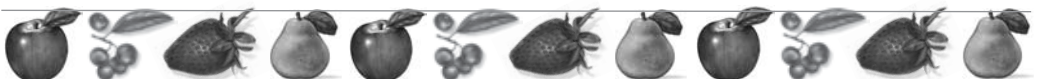
The decision to plant fruit should involve careful variety selection. Not all fruit species are adapted to all areas of Louisiana. To plant a given type or variety without considering its adaptation can lead to disappointment.

We are often led to believe that many of the older, well-publicized varieties will do well in Louisiana home gardens. For example, the Bartlett pear and Elberta peach are two fruit varieties that have little place in a Louisiana fruit planting. The Elberta peach has been replaced by superior peach varieties, and the Bartlett pear is not adapted to our climate.

Many factors ultimately determine the adaptation of a given fruit species to an area. Some of these conditions are discussed here.

Chilling Requirement

Most fruit species not of the tropical type have a “rest period.” This is a stage of plant inactivity commonly associated with a loss of leaves or dormancy in winter. Such plants will remain in this rest period until they receive a specific number of hours of cold below typically 45 degrees F. This is referred to as a “chilling requirement.” The chilling requirement of a given variety of fruit is genetically controlled and is constant for that variety. When the rest period is satisfied, the plant awakens and becomes active with the warmth of spring. Some varieties may have rest periods of only 200 to 300 hours; others may have more than 1,000 hours. “Pineapple” pear, for example, because of its short rest period, will normally bloom with the first warm



period of spring, often being injured by late cold weather. Other varieties with longer rest periods do not bloom until a month or so later.

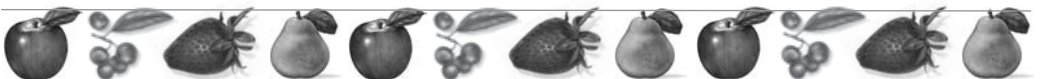
A plant that does not receive sufficient cold to satisfy its rest period requirements does not perform well. They are often delayed in both leafing out and blooming and will have a scattered bloom over a long period or blossoms may drop. In extreme cases, unadapted plants will not live more than a season or two in areas of warm winter.

Insect and Disease Resistance

Most homeowners are not adequately equipped to spray for control of insects and diseases. This problem can be minimized by selecting fruit types with few pest problems or selecting varieties with resistance to known pests.

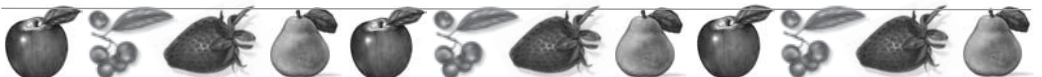
Fruit species may be grouped as high, medium or low maintenance crops relative to pest control needs:

Low Maintenance	Medium Maintenance	High Maintenance
Fruit Types		
Citrus Blueberry Fig Persimmon Loquat Pears (some varieties)	Muscadine Grape Blackberry	Apple Peach & Nectarine Plum Strawberry Bunch Grapes Mayhaw
It is wise to select fruit types primarily from the low-maintenance category.		

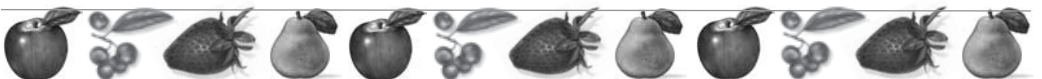


Fruit, Variety, Area and Fertilizer Recommendations

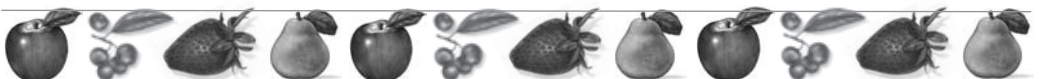
Fruit	Variety	Area	Spacing	Remarks (Fertilizer should not be placed within 9" of plant.)	
Apple					
	Ozark Gold	N	20'x25'	Fertilize at 1 lb. 8-8-8/yr/tree age. Do not exceed 5 lbs per tree. Anna needs pollinizer. Dorset Gold pollinates Anna.	
	Golden Delicious	N	20'x25'		
	Red Delicious	N	20'x25'		
	Stayman Winesap	N	20'x25'		
	Granny Smith	N	20'x25'		
	Gala	N	20'x25'		
	Molly Delicious	N & S	20'x25'		
	Anna	S	20'x25'		
	Dorset Gold	S	20'x25'		
Blueberry					
	Tifblue	N & S	6'x8'	Apply fertilizer at 2 oz. 8-8-8/yr/ tree age in February and after harvest. Do not exceed 1 1/2 lb/plant. Comparable rates of camellia/azalea fertilizer can be used. Ochlockonee and Alapaha are trial only, new.	
	Powder Blue	N & S	6'x8'		
	Climax	N & S	6'x8'		
	Premier	N & S	6'x8'		
	Brightwell	N & S	6'x8'		
	Ochlockonee	N & S	6'x8'		
	Alapaha	N & S	6'x8'		
Brambles					
Trailing Type	Boysenberry	N & S	4'x6'	Apply fertilizer at 1/2 lb 8-8-8/yr/ tree age/10 ft of row in February and after harvest. Don't exceed 2 lbs/ft/row. Apply in 3 ft. wide band.	
	Youngberry	N & S	4'x6'		
Semi-erect Type	Brison	S	3'x6'		
	Womack	N & S	3'x6'		
	Brazos	N & S	3'x6'		
	Cheyenne	N & S	3'x6'		
	Shawnee	N & S	3'x6'		
	Roseborough	N & S	3'x6'		
Erect Type	Kiowa	N & S	3'x6'		Navaho and Ouachita late ripening. Arapaho early ripening.
	Navaho (thornless)	N	2'x6'		
	Arapaho (thornless)	N & S	2'x6'		
	Apache (thornless)	N	2'x6'		
	Ouachita (thornless)	N & S	2x6		
Raspberries					
	Dorman Red	N & S	4'x6'		
Citrus					
Satsuma	Armstrong Early	S	15'x30'	Fertilize at 1 1/2 lbs. 8-8-8/yr/tree age up to 12 yrs. Do not exceed 15 lbs per tree in February.	
	Owari	S	15'x30'		
	Louisiana Early	S	15'x30'		
	Kimbrough	S	15'x30'		
	Early St Anne	S	15'x30'		
	Brown's Select	S	15'x30'		



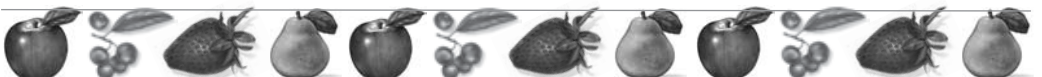
Fruit	Variety	Area	Spacing	Remarks (Fertilizer should not be placed within 9" of plant.)
Citrus (continued)				
Sweet Orange	Hamlin Sweet	S	15'x30'	Apply fertilizer at 1 1/2 lb. 8-8-8/yr./tree age in late January-early February. Do not exceed 18 lbs. per tree.
	Louisiana Sweet	S	15'x30'	
	Ambersweet	S	15'x30'	
	Moro Blood	S	15'x30'	
	Plaquemines	S	15'x30'	
	Pineapple Sweet	S	15'x30'	
	Valencia	S	15'x30'	
Navel	Washington	S	15'x25'	
Grapefruit	Duncan	S	15'x30'	
	Rio Red	S	15'x30'	
	Ruby Red	S	15'x30'	
Tangelo	Orlando	S	15'x25'	Kumquat is a sweet variety.
Mandarin	Ponkan	S	15'x25'	
Lemon	Meyer	S	15'x25'	
Tangerine	Dancy	S	15'x25'	
	Robinson	S	15'x25'	
	Sunburst	S	15'x25'	
	Orlando	S	15'x25'	
Kumquat	Nagami	S	10'x15'	
	Meiwa	S	10'x15'	
Fig				
	LSU Purple	N & S	15'x25'	Apply fertilizer at 1/2 lb. of 8-8-8/yr./plant age. Do not exceed 7 lbs. per plant. O'Rourke, Champagne, and Tiger are new LSU releases.
	LSU Gold	N & S	15'x25'	
	Celeste	N & S	15'x20'	
	O'Rourke (Tested as Improved Celeste)	N & S	15'x20'	
	Champagne (Tested as Golden Celeste)	N & S	15'x20'	
	Southeastern Brown Turkey	N & S	15'x20'	
	Alma	S & N	15'x20'	
	Tiger (Tested as Giant Celeste)	N & S	15'x20'	



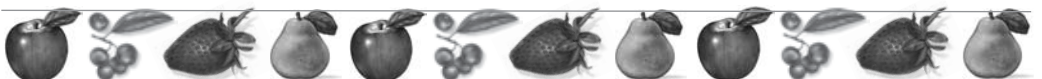
Fruit	Variety	Area	Spacing	Remarks (Fertilizer should not be placed within 9" of plant.)
Grape				
Bunch	Fredonia	N	10'x12'	Apply fertilizer at 1/2 lb. 8-8-8/yr/plant age. Do not exceed 2 1/2 lbs./plant. *Pierce's Disease resistant varieties.
	Blue Lake	S	10'x12'	
	Conquistador*	S	10'x12'	
	Niagara	N	10'x12'	
	Delaware	N	10'x12'	
	Miss Blanc	N & S	10'x12'	
	Miss Blue	N & S	10'x12'	
	Mid South	N & S	10'x12'	
	Suwanee*	N & S	10'x12'	
Mayhaw	Red Majesty	N & S	20'x25'	Apply fertilizer at 1/4 to 1/2 lb. 8-8-8/yr/tree age. All varieties fire blight and quince rust susceptible. Maximum of 3 lbs. 8-8-8 per year.
	Royalty	N & S	20'x25'	
	Texas Star (G-1)	N & S	20'x25'	
	Royal Star (G-5)	N & S	20'x25'	
	Spectacular (G-2)	N & S	20'x25'	
	Texas Super Berry	S	20'x25'	
Muscadine Self-unfruitful	Scuppernong	N & S	20'x12'	Apply fertilizer at 1/2 lb. 8-8-8/yr/tree age. Self-unfruitful varieties require a self-fruitful variety near them to provide pollen. Maximum of 4 lbs. per plant per year.
	Sugar Gate	N & S	20'x12'	
	Supreme	N & S	20'x12'	
	Darlene	N & S	20'x12'	
	Hunt	N & S	20'x12'	
	Topsail	N & S	20'x12'	
	Higgins	N & S	20'x12'	
	Sweet Jenny	N & S	20'x12'	
	Black Fry	N & S	20'x12'	
	Fry	N & S	20'x12'	
	Farrer	N & S	20'x12'	
Muscadine Self-fruitful	Carlos	N & S	20'x12'	
	Cowart	N & S	20'x12'	
	Nesbit	N & S	20'x12'	
	Granny Val	N & S	20'x12'	
	Tara	N & S	20'x12'	
	Ison	N & S	20'x12'	
Loquat				
	Seedlings	S	15'x20'	Apply fertilizer at 1/2 to 1 lb/yr/tree age up to 10 yrs. Do not exceed 5 lbs. per tree.
	Big Jim	S	15'x20'	
Nectarine				
	Ovation	N	20'x25"	Apply fertilizer at 1 lb/yr/tree age. Do not exceed 8 lbs. per tree. Three split applications in February, April and August after harvest.
	Armking	S	20'x25"	
	Karla Rose	N	20'x25"	
	Sunred	S	20'x25"	



Fruit	Variety	Area	Spacing	Remarks (Fertilizer should not be placed within 9" of plant.)
Peach				
North La. (Latitude above Alexandria)	Regal	N	20'x25'	
	Bicentennial	N	20'x25'	
	Surecrop	N	20'x25'	
	Gala	N	20'x25'	
	Harvester	N	20'x25'	
	Wildrose	N	20'x25'	
	Majestic	N	20'x25'	
	Redglobe	N	20'x25'	
	Loring	N	20'x25'	
	LaPremier	N	20'x25'	
	Ruston Red	N	20'x25'	
	Dixiland	N	20'x25'	
	Ouachita Gold	N	20'x25'	
	Flame Prince	N	20'x25'	
Mid-South Louisiana (Latitude between Alexandria and Baton Rouge)	Regal	S	20'x25'	Apply fertilizer at 1 lb. 8-8-8/yr/ tree age. Do not exceed 8 lbs. per tree. Three split applications in February, April and August after harvest.
	Delta	S	20'x25'	
	Gold Prince	S	20'x25'	
	LaSweet	S	20'x25'	
	Harvester	S	20'x25'	
	LaGold	S	20'x25'	
	Hawthorne	S	20'x25'	
	LaFeliciana	S	20'x25'	
	LaRouge	S	20'x25'	
	LaBelle	S	20'x25'	
South La. (Latitude below Baton Rouge.)	Florida King	S	20'x25'	
	LaFestival	S	20'x25'	
	Florida Gold	S	20'x25'	
Coastal area of La. (Southern-most parishes only).	Florida King	S	20'x25'	
	Gulf Crest	S	20'x25'	
	Gulf Prince	S	20'x25'	
	Delta	S	20'x25'	
	Gulf King	S	20'x25'	
	Sam Houston	S	20'x25'	
	Florida Prince	S	20'x25'	
	Earli Grande	S	20'x25'	
	Texstar	S	20'x25'	
	Sun Grande	S	20'x25'	



Fruit	Variety	Area	Spacing	Remarks (Fertilizer should not be placed within 9" of plant.)
Pear				
	Baldwin	N & S	20'X25'	Apply fertilizer at 1/2 lb. 8-8-8/yr/tree age. Do not exceed 4 lbs. per tree.
	Spalding	N & S	20'X25'	
	Orient	N & S	20'X25'	
	Maxine	N	20'X25'	
	Moonglow	N	20'X25'	
	Ayers	N	20'X25'	
Japanese Persimmon				
	Tanenashi	N & S	20'x25'	Apply fertilizer at 1/2 lb. 8-8-8/yr/tree age. Do not exceed 5 lbs. per tree.
	Eureka	N & S	20'x25'	
	Fuyu (non-astringent)	N & S	20'x25'	
	Fuyu Imoto (non-astringent)	N & S	20'x25'	
	Hana Fuyu (non-astringent)	N & S	20'x25'	
	Suruga (non-astringent)	N & S	20'x25'	
Pineapple Guava (Feijoa)				
	Seedlings	N & S	15'x15'	Apply fertilizer at 1 lb. 8-8-8/yr/tree age. Do not exceed 5 lbs. per plant.
	Coolidge	N & S	15'x15'	
	Triump	N & S	15'x15'	
Plum				
	Morris	N	20'X20'	Apply fertilizer at 1 lb. 8-8-8/yr/tree age. Do not exceed 8 lbs. per tree.
	Bruce	N & S	20'X20'	
	Ozark Premier	N	20'X20'	
	Byron Gold	N & S	20'X20'	Methley and Au-Rubrum are self-fruitful.
	Explorer	N	20'X20'	
	Methley	N	20'X20'	
	Au-Rubrum	N	20'X20'	
Strawberry				
	Chandler	N & S	1' apart on 42" rows	Apply fertilizer 6" deep under plants 2 weeks prior to planting.
	Strawberry Festival	N & S	1' apart on 42" rows	
	Camarosa	N & S	1' apart on 42" rows	
	Earliglow	N & S	1' apart on 42" rows	Use in matted row culture



Buy Good Nursery Stock

Obtain the best nursery stocks available. Buy only from reputable nurseries that guarantee plants to be true to name, of high quality, and packed and shipped properly. Beware of “bargains.”

A common mistake is to select and purchase oversized “ready-to-bear” nursery trees. Experience has shown that young trees bear fruit almost as soon, are easier to transplant and develop into healthier, more vigorous trees than do oversized stock. The older trees cost nurseries more to grow, are sold at higher prices, but are usually worth less. A well-branched 2- to 3-year-old tree is preferable, however, to a 1-year-old whip.

Handling Nursery Stock

Protect roots of nursery stock (bare-rooted plants) at all times before planting. If you don't plant the trees immediately, heel them in (See Figure 1). Distribute the roots of the plants in well-drained soil in a shallow trench, cover them with soil and keep them moist.

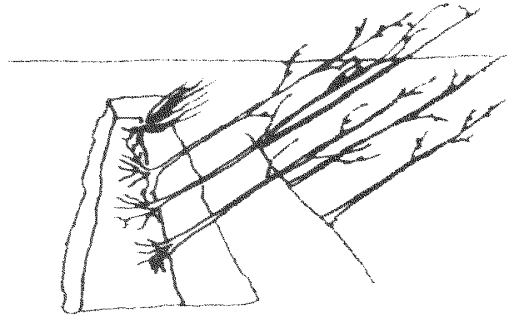


Figure 1. Heel in nursery stock if you cannot plant immediately.

Planting

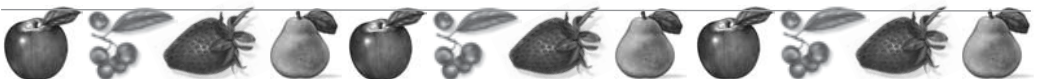
Bare-root fruit trees can be planted at any time during the dormant season, usually from about mid November through February in Louisiana. Container-grown plants may be planted over a longer period, usually from September through May. Planting bare-root trees early in the dormant season is often desirable because it allows the soil to settle and the roots to become established and begin developing before top growth begins in the spring.

Trees

Dig a hole large enough and deep enough to permit setting the plant without bending, breaking or crowding the roots.

Prune roots of the new plant only where it is necessary to remove damaged or dead roots or roots that are exceptionally long and out of proportion to other roots (See Figure 2).

Place loose topsoil in the bottom of the hole. Set the plant in the hole upright at the depth it was growing in the nursery. Then fill the hole about two-thirds full with pulverized topsoil so it will settle around the roots. It is advisable to back fill with the same soil removed from the hole. This will eliminate internal drainage problems. Never add organic matter as a back fill. This creates internal drainage problems. At this point, finish filling the hole with water to help pack the soil. After the water has soaked in, finish filling the hole with topsoil. When planting in soils with poor internal drainage, plant trees on a “crown” or “turtleback” for better drainage.



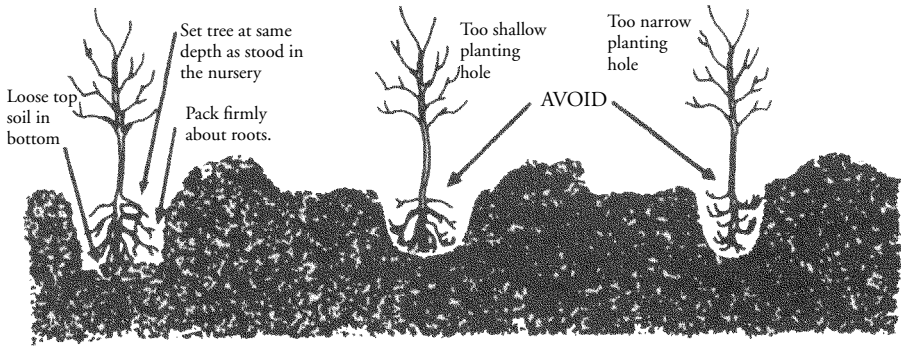


Figure 2. The proper technique of planting a fruit tree.

Grapes

Basically the same principles prevail as when planting a tree, but on a smaller scale. Cut grape plants back to two buds when planting (See Figure 3). Plant them at the same depth as grown in the nursery row.

Blackberries

Blackberries are normally planted as root cuttings placed horizontally in the soil. Depth of planting depends on the texture of the soil. In light sandy soils, plant the cutting 4 to 6 inches deep since such soils lose surface moisture readily. On heavier soils, plant them 3 to 5 inches deep. If 1-year-old plants are used, plant them slightly deeper than they were growing when dug.

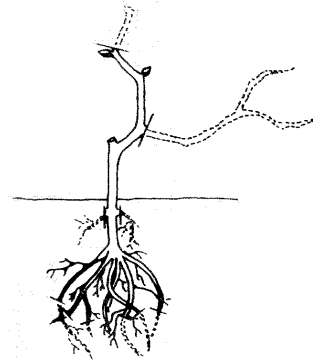


Figure 3. This newly planted 1-year-old grape plant has been pruned to two buds.

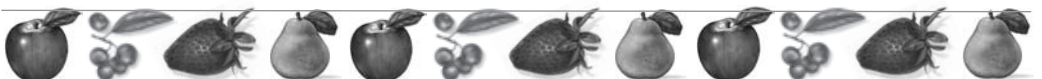
Cultural Practices

Weeds must be controlled so they will not compete for fertilizer and moisture. This can be done by shallow cultivation or the use of mulches. Materials used for mulch include pine needles, hay, straw, leaves, sawdust, grass clippings, peat moss and bagasse. Do not use mulches where drainage is poor, and do not apply in excessive amounts.

Nitrogen deficiencies may occur temporarily when some of the mulches begin to decay; this can be overcome by using high nitrogen fertilizers.

In addition to keeping down weeds, mulches add humus to the soil, keep the soil cool in summer and conserve moisture.

Fruit plants can be grown in sod, such as lawns, but competition for essential nutrients does occur and additional fertilizer must be supplied to support both the lawn grass and the fruit plant. Close mowing of lawn grasses under fruit trees is usually desirable. Mulches are desirable for at least the first few years to allow the plant to become well established with less competition.



Fertilization

As a general rule, no fertilizer is recommended at time of planting. In the spring after growth begins, one-half pound of a complete fertilizer such as 8-8-8, 6-12-6, or its equivalent, is beneficial.

After the initial application, fertilizer should be applied during the dormant season, preferably in February (Table 1).

In lawns, it is usually beneficial to make small holes in the ground about 6 inches deep in which to place the fertilizer. The number of holes required depends on the size of the tree. The more holes, the greater the distribution of fertilizer, but the recommended amount per plant should not be disregarded. Beware of concentrating large amounts of fertilizer in holes close to large feeder roots. This can injure the tree.

Avoid excessive vegetative growth. It can cause delayed fruiting and increased disease susceptibility. Avoid applying fertilizer after June, because it will encourage late season growth and increase susceptibility to winter injury.

Because of varying soil types and levels of fertility, it is difficult to make one fertilizer recommendation that will apply equally in all parts of the state. Therefore, only general fertilizer recommendations will be presented here. Rates are based on a 6-12-6 or 8-8-8 commercial fertilizer; other equivalents can be used. For specific recommendations, consult your county agent.

Applying a small amount of nitrogen may be desirable in June.

Pruning

Most fruit types should be pruned regularly beginning at planting. Pruning consists of cutting, removing or repressing certain living parts of the plant to modify and use its natural habits for the benefit of the grower.

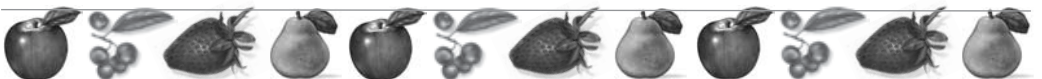
You should have a definite objective in mind when pruning fruit trees. Overpruning is generally more serious than underpruning with nearly all fruit. In general, apple, pear, fig, citrus and plum require less pruning than peach. While overpruning is usually more harmful than underpruning, there is usually a tendency to leave too many major branches on young apple, pear, plum and peach trees. If the main scaffold limbs are carefully selected when the tree is young, only a minimum of pruning will be needed as the tree gets older.

The purpose of pruning young, non-bearing trees is primarily to shape the tree so scaffold limbs will be well distributed up and down and around the trunk. This is the best way to avoid narrow crotches and limb breakage later. Careful selection of scaffold limbs early will eliminate the need for larger cuts later, reducing the hazard of the entrance of wood rotting fungi into older trees.

Apple and Pear

Many types of fruit trees are grafted onto size controlling rootstocks.

Young Trees — The popular form of the apple and pear tree is the central leader type. Its chief characteristic is the central trunk with scaffold branches growing from it. One of the best examples of the central type is the pine tree.



The trunk should be definitely larger than the branches, and the branches should be well separated up the trunk. The lowest branch should be 2 to 3 feet from the ground, but this is a matter of personal choice. A variety with wide-spreading branches should have the first branch starting higher than one with upright branches.

Young 2-year-old trees received from the nursery will have several branches, each not more than 3 inches apart. They may have one, two or more leaders – the upward top shoots of the tree. Cut off all but one of these leaders. If there are two or three leaders, they form narrow V crotches where they join. Such crotches are weak and tend to break in a storm or under a heavy crop load (See Figure 4).

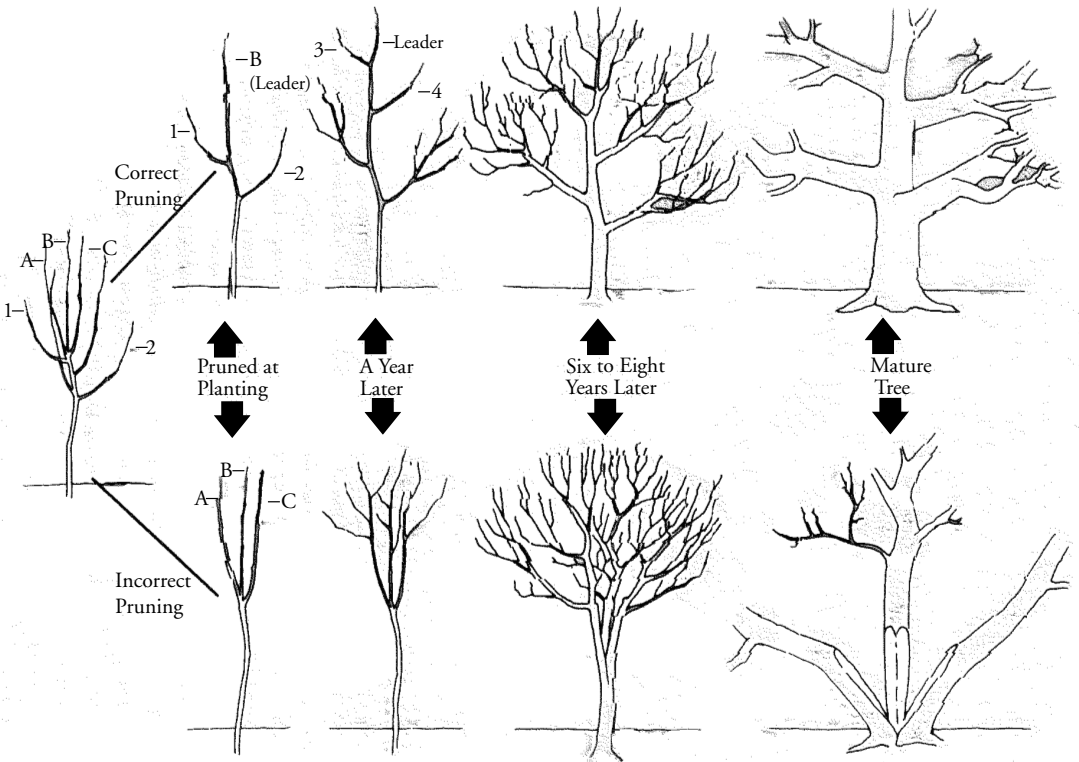
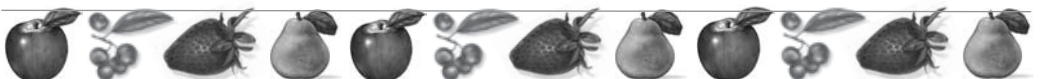


Figure 4. The proper and improper training of an apple or pear tree.



After selecting the leader, select the first or lowest branch for your tree. It is important that all scaffold branches have wide angles where they join the trunk.

To spread the tree, put wooden “spreaders” in or near the crotches or tie the branches down or outward to a more horizontal position. Pear and apple trees are slow to begin bearing. Tying down or bending of the upright branches tends to induce fruit buds and forces the tree into early production (See Figures 5 and 6).

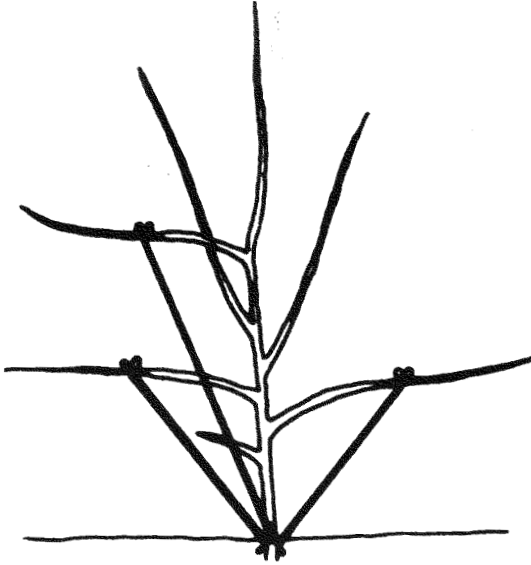
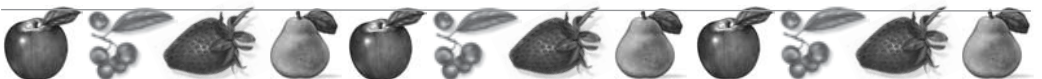


Figure 5. Bending limbs to a horizontal plane and tying them in that position will help develop a strong framework and induce early fruit bud formation. It is important that the horizontal position of the branches be truly horizontal and not bowed in a sharp arc with the tips lower than the origin of the branch from the main trunk. If the branch is arched in this manner, vigorous shoots will arise at the bend.

The first year of training usually produces a tree with one branch, occasionally two, and a leader. Cut back very long leaders to about 20 inches. New lateral branches will grow from the leader next year. From these you can choose another scaffold branch or two. As the tree grows older and higher, cut the top off at about 10 feet. Make such a cut at the junction of a lateral branch. This form is then known as the modified leader.

Four to six scaffold branches are enough for a tree. The space between branches should be 8 to 18 inches, and the branches should be distributed evenly around the central trunk. If certain branches are longer than others, prune them back to control their growth. When the permanent scaffold branches are selected, it is permissible to let other side branches grow. But remove them in a year or two before they interfere with proper development of the permanent branches. Avoid branches with narrow crotch angles, if possible. Be aware that, with young apple and pear trees that have not yet flowered, severe pruning delays flower bud formation. Severe heading back seems to delay flowering more than thinning out. Once young trees have begun to bear, pruning rarely inhibits fruit-bud formation.



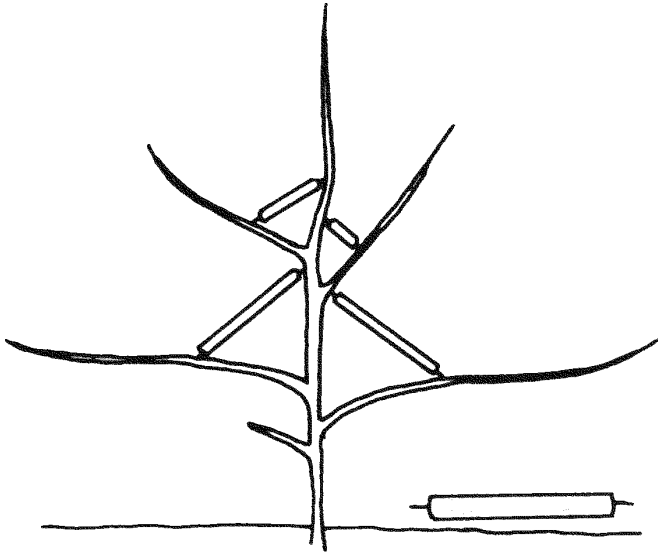


Figure 6. Wooden spreaders can be cut to various lengths with an approximate size of 1 inch square. A 1 7/8- or 2-inch nail can be driven about halfway into each end of the wooden spreader, the heads of the nails can be cut off and the sharp points of the nails will push into the bark of the tree providing a firm anchorage, and thereby holding the branches in place. In young trees, upright growth is more vigorous and less productive than wood that is closer to a horizontal position.

Bearing Trees — Bearing apple and pear trees require just as careful pruning as do the young trees, but the principles involved are somewhat different. In pruning young trees, as previously described, a great deal of attention is given to the spacing of branches and mechanical strength as well as to formation of the framework. With the older bearing tree, growth in different parts must be kept balanced by new growth evenly distributed throughout the tree. At the same time the spreading habit must be maintained rather than allowing the tree to become too tall and leggy.

The purpose of pruning mature trees is to remove sprouts and dead, diseased, injured, broken or interfering branches and to thin the tops of the trees for penetration of sunlight (See Figure 7).

Mature fruit trees may be pruned any time during dormancy, but the preferred time is in early spring before growth starts. You can remove water sprouts (suckers from the lower trunk and roots) and diseased or broken branches at any time, but complete all heavy pruning before the buds break in the spring.

Peaches

Peach trees bear fruit on 1-year-old wood, and pruning is one of the ways you can be assured of an annual supply of this essential fruiting wood.

Among the recognized methods of training, the 3-limb “open center” method is best for peaches grown in Louisiana. The training procedure during the first two or three years is largely that of developing the proper framework. By the third year trees will begin to bear and the type of pruning changes accordingly.

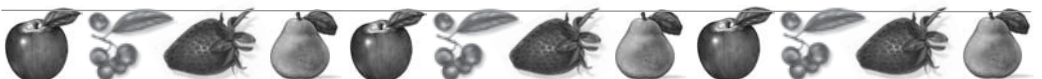
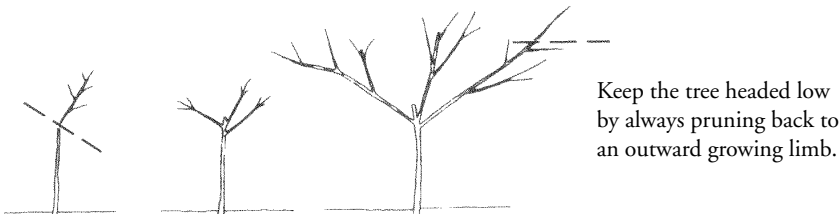




Figure 7. Bearing apple and pear tree before and after pruning. Note the spacing of branches and the balance of the pruned tree.

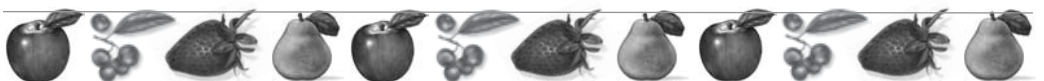
Young Trees — At planting, prune nursery trees to a single stem and top the tree at about 24 to 36 inches. If the tree is well branched, remove side branches lower than 16 inches and cut others back to 4- to 6-inch stubs. This ensures sufficient buds for tree growth in the spring (See Figure 8).

Within a few weeks after growth begins in the spring, select three vigorous shoots (when about 6 to 12 inches long) arising from near the same point on the main trunk, at a height of 18 to 24 inches. These young shoots, which ultimately become the primary scaffold limbs, should be evenly spaced, with each pointing in a different direction. Cut back all other shoots by 1/2. The short stub of the main stem above the junction of the scaffold limbs can be removed or left intact. If this stub is left, keep all shoots short. The advantage in leaving the stub is that it serves as a spreader and helps to prevent the top scaffold limb from becoming the dominant growing branch.



Keep the tree headed low by always pruning back to an outward growing limb.

Figure 8. Peach tree (a) headed back to 18 inches at planting; (b) selection of three scaffold limbs the second year; (c) tree showing the 3-limb open vase system keeping the tree low by always cutting back to outward growing limbs.



During the first winter, remove all branches arising from the main stem except the three primary scaffold branches. At this stage it is necessary to head back the primary scaffold branches. Remove water sprouts (vigorous upright shoots) arising on the lower parts of these main branches and low-hanging limbs. Continue this same type of training and pruning procedure during the second winter. When tree height reaches 5 to 6 feet, prune growth terminals back to an outward growing branch (this may not be necessary until the third winter) (see Figure 8). Remove any large lateral branches growing inward that will cause excessive shading of the center of the tree.

Bearing Trees — Beginning with the third winter, pruning will consist primarily of heading back growth to an outward growing branch and removing excess branches. Naturally, all dead or diseased branches should be eliminated. Based on variety and vigor of the tree, it may be necessary to thin out and renew fruiting terminals.

You can allow trees to grow to a height requiring a ladder for picking fruit, or you can avoid using a ladder by pruning your trees at a height you can reach, usually 6 to 8 feet.

While the center of the tree should be kept fairly open, it is not advisable to strip the center completely of all bearing wood. But, immediately after harvest, remove all heavy water sprouts from the center of the tree. This will encourage the development of fruiting wood and reduce shading in that area. When it becomes necessary to limit the height or spread of an older tree, head back the tree to 2- or 3-year-old wood at the point where one or more side branches occur. In those years after a heavy crop where limbs are forced to grow low, scaffold limbs may be headed back to favor an upward growing limb.

With proper care, a peach tree should live and remain productive for 10 to 12 years or longer. Pruning is a very important step toward the ultimate success of a back yard peach tree, but must be done at the right time and correctly for maximum benefit.

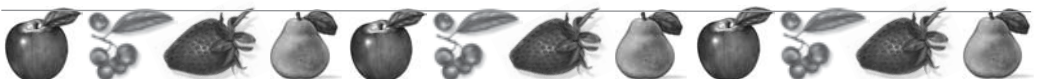
Plum Trees

There is a distinct variation in the habit of growth among varieties of plums, some being more upright while others are especially low and flat growing. No one type of pruning applies to all varieties. Plum trees in general should be pruned rather lightly. The Japanese variety Methley may require more pruning than the European varieties since a portion of the fruit of Japanese plum is borne on 1-year-old wood.

Some heading of branches may be necessary the first few years, but the later pruning consists mainly of a light thinning out of interfering branches throughout the top. Cutting back the top of a bearing tree is seldom done except to preserve the height of the tree by heading back unusually long shoots.

Young Trees — The scaffold branches of plum trees may be established during the first two or three years after planting in the same fashion as for peaches (see Figure 8). You can leave four instead of three scaffold branches, however.

Bearing Trees — The Bruce plum, for example, needs only light pruning. This degree of pruning entails removal of about one-third of the previous season's growth and only light thinning of interior branches and fruiting spurs. Maintain tree height about the same as for peaches unless you desire larger trees. Remove all overcrowded and low-hanging limbs annually, as well as excessive shoots arising on the trunk and main scaffold branches.



To maintain tree vigor, it may become necessary to prune more heavily about every third year. Light pruning will result in extremely heavy yields of medium-size fruits. More severe pruning increases fruit size but reduces yield. Plums will generally remain productive for about the same number of years as peaches.

Grapes

Fruit of the grape is borne on shoots developing from buds on canes of the previous season's growth. Vines must be pruned annually to encourage the development of these canes, to regulate the number of canes remaining and to limit the number of buds on these canes. The amount of pruning is adjusted to the vigor of the vine. More buds can be left on a vigorous vine than on a weak vine. Too few buds left on a vigorous vine will limit production. Too many buds left on a weak vine will result in small scraggly bunches.

Bunch Grapes — The first two years are devoted to vine training. In Louisiana the four-cane kniffin system is preferred for bunch grapes. In this system, two horizontal wires strung between posts form the complete trellis. The bottom wire should be 30 to 36 inches above the ground; the top wires should be 60 to 66 inches high. The top wire should be 30 inches above the bottom wire.

At planting, prune the vine to a single stem and cut this stem back to only two buds (see Figure 3). When new growth starts in the spring, select the more vigorous cane, tie it to a stake and remove the other cane. Allow the single cane to grow until it reaches the top wire of the trellis. It will become the primary permanent trunk of the grape vine. If side growth forms near the bottom wire, train one shoot along the wire in each direction and remove all other side growth (See Figure 9).

When the main cane reaches or nearly reaches the top of the wire, cut off the growing tip to induce branching and train one such branch along the wire in each direction. Thus, after two years of growth, the vine should have a trunk and four lateral branches.

A grape cane will grow one year without producing grapes. The second year, buds on this cane will produce fruiting branches. These branches will bear clusters of fruit. At the same time these canes are producing grapes, other canes will be growing from renewal spurs; these will bear fruit the next season.

Prune bunch grapes in late January or February. First, remove all canes that produced fruit the previous season. They won't produce again, so they are worthless. If you have pruned the plants properly previously, you will have to remove only four such canes; one from each direction of the wires (See Figure 10).

For each wire in each direction, select the most vigorous cane left and tie it to the wire. Canes about the diameter of a pencil should be most productive. Cut the tips off these four canes, leaving 10 to 12 buds on the upper cane and eight to 10 buds on the lower cane. These buds on the four canes will produce

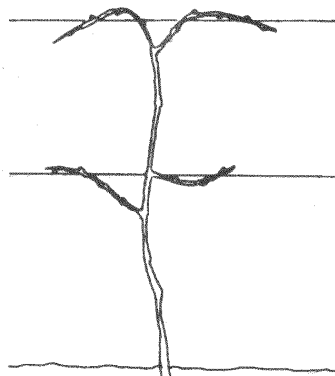
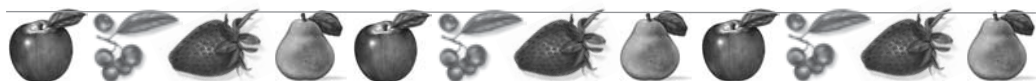


Figure 9. A 2-year-old vine pruned to the 4-arm kniffin system



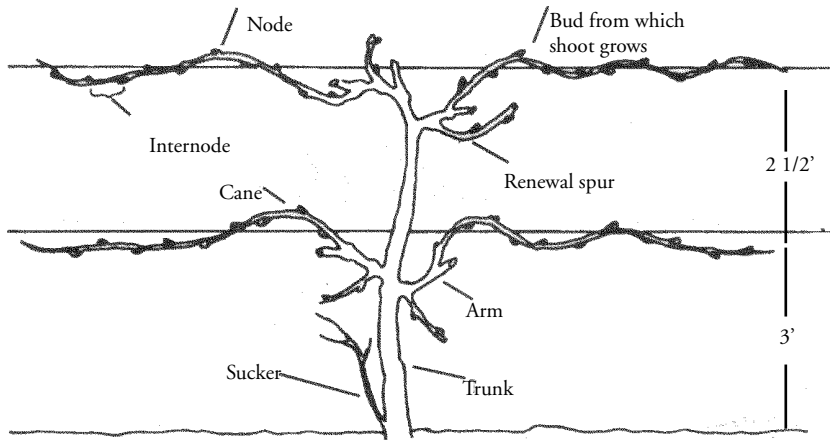


Figure 10. These are the major parts of a dormant vine. It has been pruned to 4-arm kniffin system.

grapes the next season. To determine the number of buds to leave the subsequent years, weigh the wood that is pruned, and leave 30 to 40 buds per vine for the first pound of wood removed. Leave eight buds for each additional pound of wood removed. Next select the most vigorous of the remaining canes (one for each direction on each wire). These canes should arise near the trunk; cut them off so only two buds remain on the stub. These stubs are called “renewal spurs,” and they will produce canes that will grow one year and fruit the next.

Finally, because you need only four canes for renewal spurs, remove all other canes at the base and remove all side growth from the trunk.

Muscadine Grapes — Muscadine grapes, unlike bunch grapes, are pruned to a 2-arm cordon system (see Figure 11). Muscadine vines must be pruned every year. If a year is missed, it will take several years to return the plant to normal production. For a great many years the idea has prevailed that pruning muscadine grapes from January through March will kill the vine. This is incorrect. Pruning may be done at any time while the vines are dormant. Early pruning is recommended, however, because of the excess bleeding that occurs with late pruning. The bleeding is not injurious to the plant.

Prune muscadine grapes to leave short spurs rather than long canes (See Figure 12). These fruit spurs are formed by cutting back the first lateral growth that arises

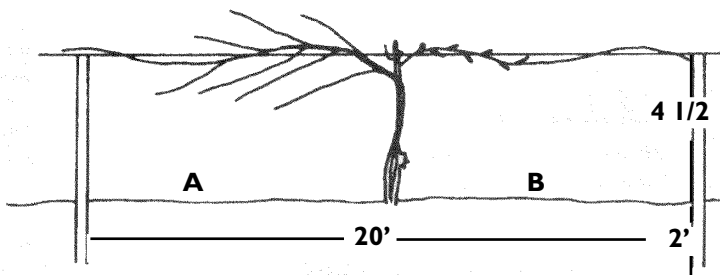


Figure 11. Two-year-old muscadine vine trained to a 2-arm permanent cordon system.
(a) unpruned (b) pruned

from the main permanent arms (cordon). This lateral growth is normally formed by the end of the second growing season. Cut back these lateral canes to two or three buds. Every year thereafter cut back the growth of the current year to two or three buds. The number of these short spurs determines the productivity of the plant. After two or three years, vines will develop clusters of spurs. If too many buds are allowed to remain on the vine, crowding and over production will result. It is recommended that every two or three years spur clusters be thinned by removing one-half of the clusters. Select spurs on the top of the arms. The purpose of pruning is to balance vegetative and fruit growth, increase berry size and cluster size, increase yields and to hold plants within convenient bounds.

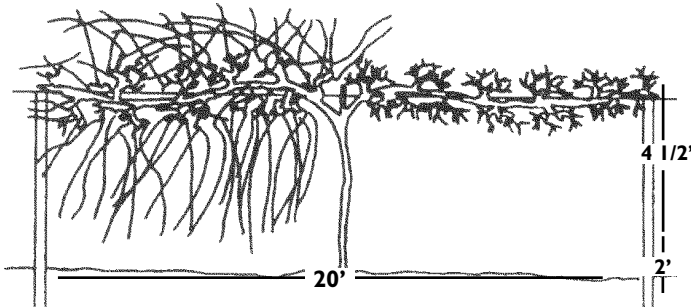


Figure 12. Mature muscadine vine before and after pruning each cane cut back to two or three buds, leaving a system of spurs on the permanent cordon.

Citrus

Citrus trees normally require little pruning. Young trees will usually have a framework already developed when purchased. They should begin branching at about 18 inches above ground level. Growth developing below this framework should be prevented.

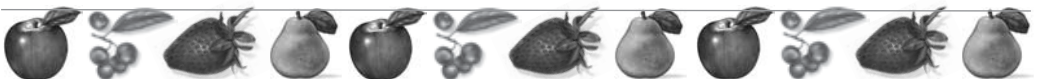
Remove dead wood periodically in older trees to help control melanose, a fungus disease. Also, thin overcrowded or crossed-over branches. Each year remove water sprouts arising from the rootstock in the center of the tree.

Citrus trees are very susceptible to low temperatures and are often injured in winter. When these conditions occur, it usually takes several months before the full extent of injury is evident. Early pruning often does more harm than good. After a severe freeze, it's usually best to prune in July.

Figs

Figs can be trained to either the tree type or bush type. If the tree type is desired, plant about 2 inches deeper than they grew in the nursery. Select well-positioned laterals with wide crotch angles to form a strong framework. In subsequent pruning, head back main branches to keep them smaller than the central leader. Remove inward growth when necessary to keep the tree open. Remove dead, diseased or damaged wood along with suckers and water sprouts.

If a bush type is desired, plant the tree 4 inches deeper than it grew in the nursery. Head the young tree back to one-half its original height at time of transplanting. The following winter, select about five well-spaced branches for the framework.



Prune shoots growing upward short, but leave those growing outward long to encourage a low branching, flat-topped, open form. Where trees are frequently killed by cold weather, this method is often desirable. When existing branches are killed, select new sprouts the next year and reshape the tree. Certain varieties will recover and produce again within a year or two. Although the multiple trunk form has many advantages, the main disadvantage is that it produces a weak crotch susceptible to splitting later.

Blackberries

Blackberries usually require no pruning the first year they are planted. Each year new canes arise from the crown and live for two years. They grow one season, fruit the second and gradually die. Remove old canes, and burn them immediately after the fruiting season (See Figure 13).

Top new canes in the summer when they reach a height of about 36 inches. This will encourage lateral branch development on which fruit will be produced the next year. Prune erect-growing varieties to the desired row width, semi-trailing varieties, to four to eight canes and trailing varieties to 12 to 16 canes. In winter, remove dead and diseased canes and prune laterals back to about 12 inches.

In plantings severely infested with double-blossom disease, cut all canes back to ground level immediately after harvest and fertilize heavily to encourage new growth.

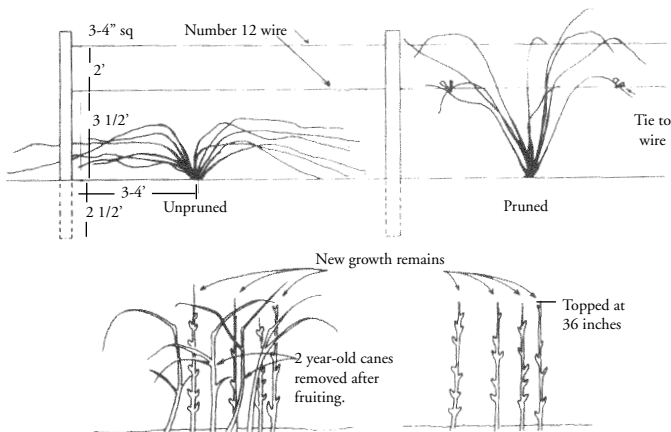
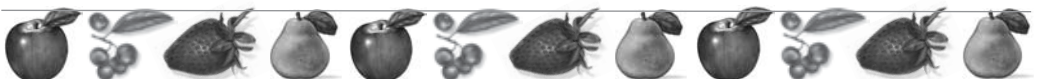


Figure 13. Trailing blackberry (top) and upright blackberry (below) before and after pruning. Only fruiting canes are removed immediately after fruiting.

Blueberries

Blueberries usually require little pruning the first few years other than removal of low spreading branches growing near the ground. As the plant matures, thin the dense growth in the center of the plant to eight to 10 canes maximum, leaving only the stronger canes (See Figure 14). This will facilitate harvesting as well as improve size and quality of fruit. Also, head back canes to keep the plant in bounds and make harvesting easier. Always strive for an erect-growing bush rather than one with low branching shoots.



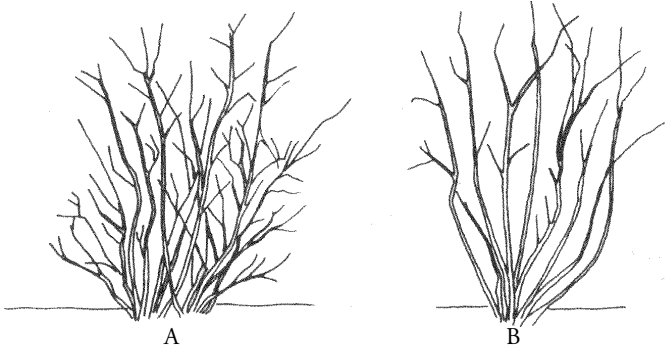


Figure 14. Pruning a 4-to 5-year-old blueberry bush. (a) before pruning (b) the same bush pruned with removal of weak and unproductive growth.

Thinning Fruit

Thinning fruit from trees results in larger fruit as well as improved fruit color and quality, reduced limb breakage and increased general tree vigor. Regular annual bearing also can be promoted in some varieties. Another benefit of fruit thinning is a more effective spraying program.

Frequently, fruits such as the peach, pear and apple set larger crops than they can mature to a desirable size.

Time of thinning influences fruit size and ripening. The amount of thinning depends on the size of the tree, overall growing conditions and variety grown. As a general rule, thin early maturing varieties and those with small fruit more than later maturing varieties and varieties with larger fruit.

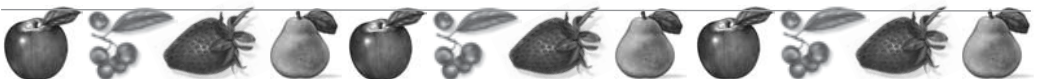
Peach thinning is a standard practice in all well-managed commercial orchards. Research indicates that the sooner peaches are thinned after bloom, the earlier the ripening and the larger the fruit at harvest. It is suggested that peaches be spaced 6 to 8 inches apart on the branch.

Several methods of thinning are practiced. A common method, and the one used most frequently by home gardeners, is to remove individual fruit by hand. Although this method is slow, it gives a more uniform spacing of fruit with little or no tree injury.

Some growers prefer the pole method of thinning because it reduces time and cost. Make a pole for thinning by forcing a 3/4-inch garden hose 15 inches long over a 4- to 5-foot bamboo or wooden pole, leaving 8 to 10 inches of hose extending beyond the end of the pole. Thin peaches by striking the limbs about 18 inches from their tips with the flexible part of the hose.

For maximum benefit, apples and pears should be thinned within 25 days after full bloom. A desirable distance between these fruits is 6 inches. Where larger fruit is desired, leave more space between individual fruit. The center apple of a cluster is usually the largest and the best apple to leave.

Small fruits are not usually thinned, although it is often desirable to thin the large Japanese plum by hand to about 4 inches apart.



Insects and Diseases

Healthy plants and fruit free of disease and insect injury don't just happen. They require a complete spray schedule with thorough coverage in timely applications. Use insect- and disease-resistant varieties whenever possible. Because insect and disease recommendations change periodically, contact your LSU AgCenter extension agent for the most up-to-date recommendations.

A few of the major insects and diseases are discussed briefly here. For detailed information on these and other fruit pests and their control, contact your county agent or home economist.

Plum Curculio

The plum curculio is the most serious insect attacking peaches and plums in Louisiana. Damage is caused by larvae feeding in the fruit. The eggs hatch into small yellowish-white, legless grubs with brown heads. The young fruit usually drop before maturity. Older fruit mature with the worms still inside.

Peach Tree Borer

The peach tree borer attacks peach and plum trees and can kill trees. The presence of masses of a jellylike substance exuding from the base of the tree is the first sign of this pest. White worms with brown heads may be found burrowing into the trunk 2 to 3 inches below the soil line. A jellylike substance found on the above-ground parts of the tree is usually caused by the lesser peach tree borer.

San Jose Scale and West Indian Peach Scale

These tiny sucking insects are about the size of a pinhead when full grown. They are found on trunks and branches of both peach and plum trees. San Jose Scale adults are legless and orange to brown under a silvery gray waxy shell with a black center. West Indian Peach Scale adults are yellow under a circular waxy shell that is white with a yellow center. Immature scale have legs and are referred to as crawlers. They lose their legs after the first molt.

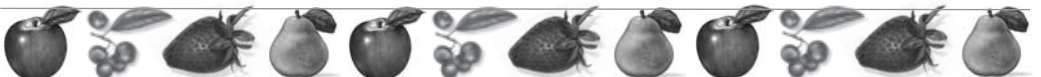
Catfacing Insects

Tarnished plant bugs, stinkbugs and leaf-footed bugs are the primary insects responsible for catfacing. The southern green stink bug is the most important stink bug infesting peaches, but several species of brown stink bugs, as well as the northern green stink bug, also feed on peaches. All three have sucking mouthparts. Tarnish plant bugs feed throughout the fruiting season. They are most damaging early in the season. Their feeding kills cells in the fruit, causing misshapen fruit. Although stink bugs can cause similar problems, they will cause more serious damage early because their long beaks may kill the seeds, causing some fruit drop. Stink bugs and leaf-footed bugs tend to get on fruit after the second swell and feed on the sugars in the fruit, causing some spotting, sunken areas that may act as entrance points for disease.

Tall grass and weeds attract catfacing insects into the orchard. Also, peach trees along woody areas, fence rows, etc. tend to sustain more damage from catfacing insects than the areas of the orchard away from the border.

Brown Rot – Peaches and Plums

Brown rot is one of the most destructive diseases of peaches and plums in Louisiana. One phase of this disease, known as blossom blight, will kill blossoms where



severe infections occur. On the fruit, infection first appears as a brown rotted spot that may enlarge rapidly. Later the rotted portion becomes covered with a brown to gray mass of spores. After the fruit has completely rotted, it shrivels and mummifies. Spores are produced on these mummies, which reinfect the tree the next year.

Scab – Peaches and Plums

Scab of peaches and plums is characterized by greenish to black spots on the fruit. During early stages of infection the spots are usually confined to one side near the stem end of the fruit. The entire fruit surface becomes covered and cracks in severe cases. The fungus also forms irregular blotches on the leaves. The fungus overwinters on infected twigs.

Rosette – Blackberries

Rosette, often referred to as double-blossom disease, is a serious disease of blackberries. It can be recognized by the production of multiple short, bunched shoots or rosetted growth on the fruiting canes in the spring. The spores on this fungus are produced on the flower and infect new canes in the spring. The disease then develops inside these infected canes until the next spring.

Leaf or Thread Blight – Figs

Leaf or thread blight is a common disease of figs in the state, and leaves and fruit may be affected. Infection usually starts at the base of the leaves, and the fungus spreads in a fanlike fashion, producing a large, semicircular, brown dead spot. Diseased leaves may shrivel and die; others may be full of irregular holes.

As a result of hot, humid weather, many leaves may be killed within a few days. The fungus is characterized by dead leaves being matted together and held on the tree by threads resembling a spider web.

Fire Blight – Apples, Pears and Mayhaws

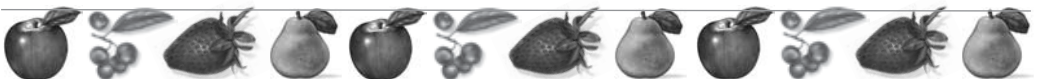
Fire blight is a serious bacterial disease of apples, mayhaws and pears in Louisiana. The disease attacks blossoms and young fruits and tender tips of twigs and water sprouts, causing them to blacken as if burned. Twigs are often killed back for several feet. Spurs, large branches, trunks, bases of trees and roots also can be attacked. In severe cases, the tree can be killed in one season. Overuse of nitrogen fertilizers increases susceptibility to fire blight and should be avoided. Prune out infected branches in the spring to reduce inoculum.

Early Leaf Spot – Pears

Early leaf spot caused by the fungus *Entomosporium* sp. causes a leaf spot in early summer. By August, trees may be defoliated. Initially, the spots are small (1-2 mm) and red to purple. As the numerous spots progress, the leaves turn yellow and fall. Early leaf spot can be controlled with fungicide sprays.

Harvesting

In general, fruits grown for home use should be allowed to remain attached to the plant until they are fully mature. An exception, however, is the pear. Most pears grown in the state are crosses between the gritty-fleshed oriental type and the European varieties of good quality.



In our climate, these pears do not ripen properly if left on the tree. When harvested before becoming fully ripe and stored at a dry temperature of 65 degrees F for about 10 days to two weeks, they will be of better eating quality.

Most fruits, if they are to be used for processing, should be harvested in the firm ripe stage rather than the fully mature stage. This improves the quality of the processed product.

Why Fruit Trees Fail to Bear

In general, fruit trees bear when they become old enough to blossom freely if other conditions are favorable. Pollination, cultural practices and environment affect a plant's ability to bear. Any of these factors alone or in combination can prevent fruit set or cause flowers not to develop and fruit to drop prematurely if not at or near optimum. Fortunately, you have some control over most factors.

Even though trees blossom freely, most will either fail to set fruit or they will shed most of their fruit prematurely if adequate pollination does not occur.

Some fruit trees are self-fertile and have "perfect flowering" blossoms with both male and female parts. When they bear fruit as a result of pollination from their own blossoms, they are said to be "self fruitful." Some examples include peaches, citrus and perfect flowered muscadines.

Unfortunately, many fruits with perfect flowers set little or no fruit with their own pollen, but require pollen from another variety to set fruit. Varieties such as these are "self unfruitful." Examples include rabbiteye blueberries and apples.

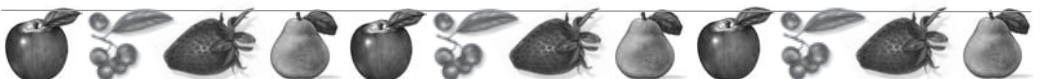
In some fruit varieties, the pollen-producing or staminate (male) blossoms, which never produce fruit, are borne on separate trees from the pistillate (female) or fruit-producing blossoms. In cases such as this, it is necessary to have at least one plant with male flowers to serve as a pollinizer. Plants with only staminate flowers will normally pollinate a number of plants with female blossoms. Persimmon is a good example of this type. Varieties that produce male and female flower parts on separate trees should not be planted whenever other acceptable varieties are available.

In general, citrus, figs and peach trees are "self fruitful" and require no other varieties for pollination. Most apples, pears and plums are "self unfruitful" and require two or more varieties in the planting. To assure adequate pollination, the varieties should have the same bloom period and be planted within 25 feet of one another.

Soil fertility influences the ability of trees to hold and mature fruit. Overfertilization, especially too much nitrogen causing excessive vegetative growth, can cause fruit to drop. During extremely dry periods, fruit not completely pollinated will generally drop before those that were adequately pollinated.

In some instances, insects and diseases may cause fruit drop. In certain cases, deep cultivation too close to trees has been the cause of fruit drop. Adverse weather at time of bloom may interfere with pollination and result in bud injury and prevent fruit production.

Even if all of the previously mentioned factors were ideal, some fruit drop would occur. A fruit tree normally produces more fruit buds than it can properly mature. Fruit drop is a normal physiological process and results in larger, higher quality fruit. Do not get alarmed if some fruit drop. If excessive fruit shedding occurs, however, this can be disastrous.



Winter Injury to Fruit Trees

Tree injury usually referred to as winter freeze injury is not, in most instances, caused by cold weather alone. It is the result of fluctuating temperatures, and a more correct term would be winter sunscald brought about by a combination of circumstances.

On cold clear afternoons when there is no wind, areas of the tree not shaded are exposed to the full heat of the sun's rays. The temperature of the exposed wood is raised far above that of the shaded parts of the tree. As the sun goes down, the temperature of the exposed wood drops rapidly until it reaches the temperature of the surrounding atmosphere. It is during this period of rapid change in temperature that the injury referred to as winter sunscald occurs. Shortly afterward, the tissue in the injured area will die. Later, that injury is evident and is characterized by dead, dry, cracked bark.

Deciduous trees become dormant in late fall as a result of normal physiological processes. If the plant hardens off gradually before being exposed to a sudden drop in temperature, it can withstand rather low temperatures without injury. The temperature can remain well below freezing for extended periods, and the tree may be free of cold injury.

The best care for a plant injured in this manner is to apply ample water and nutrients and allow one growing season before pruning. All dead wood should be removed. In some instances, entire limbs must be removed. If this is necessary, make the cut flush with adjoining limbs. Do not leave stubs to serve as entry points for wood-decaying organisms.

Peach and Plum Spray Schedule For Control of Insects and Diseases in the Home Garden

	25 Gallons Water	3 Gallons Water
Fungicides Recommended		
Captan (50%) (Captan 50 WP, etc.)	10 oz.	1.2 oz. or 6 Tbs.
Chlorothalonil (29.6%) (Bonide Fungonil, Ortho Garden Disease Control, etc.)	9.4 fl. oz.	1.1 fl. oz. or 2¼ Tbs.
Myclobutanil (1.55%) (Spectracide Immu-nox Multi-purpose Fungicide)	12½ fl. oz.	1½ fl. oz. or 3 Tbs.
Sulfur (90%) (Wettable or Dusting Sulfur, etc.)	¼ - ½ lb.	2.9 oz. or 9 Tbs.
Insecticides Recommended		
Malathion (do not use on plums)		
Malathion Insect Spray (28%)	16.6 fl. ozs.	2 fl. ozs. or 4 Tbs.
Malathion Concentrate (50%)	12.5 fl. ozs.	1½ fl. ozs or 3 Tbs.
Endosulfan Thiodan Garden & Ornamental Spray (9.7%)	25 fl. ozs.	3 fl. ozs. or 4 Tbs.
Carbaryl Liquid Carbaryl Garden Spray (23.7%)	16.6 fl. ozs.	2 fl. ozs. or 4 Tbs.
Sevin Insecticide (23.7%)	16.6 fl. ozs.	2 fl. ozs. or 4 Tbs.
Dormant Oil	Follow Label	Follow Label
Read and follow all product label directions for mixing, application and safety. Products may be packaged in different concentrations and formulations. Different dilutions may be required for different formulations. Always wash fruits before eating and processing.		
Captan is sometimes mixed with insecticides in fruit tree spray products.		

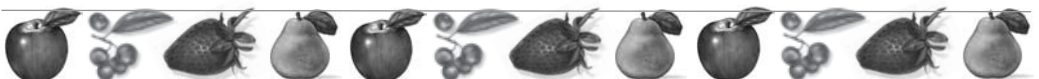
Time of application	Material to Use	Remarks
Dormant season (before bud swell)	Dormant oil	Spray trees thoroughly (dormant season only) to control scale insects. Repeat in 10 to 14 days.
Pink bud through 10% bloom	Malathion and captan or chlorothalonil or myclobutanil	Do not apply myclobutanil more than 7 times in a season.
Full bloom	Captan or chlorothalonil or sulfur or myclobutanil	Apply sulfur at 3-day intervals during bloom. Alternate myclobutanil with other fungicides.
Petal fall	malathion or carbaryl and captan or chlorothalonil or myclobutanil or sulfur	Do not apply chlorothalonil after shuck split.
Summer cover sprays (7-10 days apart) from petal fall to 2 weeks before harvest.	Captan or myclobutanil or sulfur and malathion or Carbaryl.	Do not apply sulfur when temperatures exceed 90°F.
2 weeks before harvest to harvest	Captan or myclobutanil or Sulfur and malathion or carbaryl	Captan, myclobutanil and Sulfur may be applied up to the day of harvest. Do not apply malathion within 7 days of harvest. Do not apply carbaryl within 5 days of harvest.
September 1st and October 1st	Endosulfan	Thoroughly wet trunk and main branches. Two applications required. Only apply after harvest.
Fungicides and insecticides listed are intended for information purposes. No endorsement of products listed or criticism of products not listed is intended.		

Schedule for Peach Tree Borer Control

The peach tree borer attacks the crown area of the roots of peach, plum and related trees. Make two applications of Endosulfan at four-week intervals, starting September 1. Direct the spray at the trunk from the crotch at the scaffold limbs to the soil line. Completely wet the trunk and spray enough solution to wet or slightly puddle the spray at the base of the tree. It is essential that the trunk and soil area are wet all around the tree.

White Peach Scale – West Indian Peach Scale Control

White peach scale attacks the entire tree and can kill trees if uncontrolled. During the growing season, a regular spray program will help to maintain this pest. Dormant sprays in the fall or prior to bud break may be applied using dormant oil following manufacturer recommendations. Two sprays should be applied at 10- to 14-day intervals. *Complete Coverage Is Essential.*



Other publications available through your parish

Extension office:

Louisiana Home Citrus Production, Pub. 1234

Figs for Commercial & Home Orchards in Louisiana, Pub. 1529

Growing Blackberries for Pleasure and Profit, Pub. 1553

Home Blueberry Production in Louisiana, Pub. 1978



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