

Growing Peaches and Plums in East Texas

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Soil and Site Selection - Peaches and plums grow on a diversity of Texas soils but do best on elevated sandy upland soils. Twenty-four to thirty-six inches of sandy loam topsoil and a red clay subsoil is ideal. An elevated site well above the surrounding terrain is preferred because on frosty spring days, cold air will drain to the lower lying areas. A sloping northeasterly exposure is ideal. It will contribute to later blooming by keeping colder temperatures around the trees during the late winter and early spring period.

Air Drainage - Air drainage is important to peach trees for several reasons. If air moves freely through the planting site, the possibility of late spring freezes of blooms will be reduced. Good air movement will reduce the relative humidity which will in turn reduce the pressures of insect and disease build-up.

Water Drainage - Water drainage is dependent on the subsoil. The subsoil should be fertile and possess good water-holding capacity, but it must be permeable enough for good movement of water, air, and roots. The subsoil that is yellow, blue, gray or mottle color usually has poor drainage characteristics, poor aeration, and is not satisfactory.

Irrigation - Peach and plum trees have been grown in East Texas under dryland conditions for many years. However, experience has proved that irrigation pays dividends. Newly planted trees benefit in increased growth and vigor while older trees set higher quality fruit with less stress. Trickle irrigation is well adapted to the orchard as water is delivered to the tree on a daily basis. Small amounts of water applied over a given area for longer periods of time make this system most efficient. It is very important to maintain an adequate soil moisture situation throughout the rootzone to supply the tree its daily requirement. See Table I.

Irrigation Water Requirements for Peaches & Plums
grown in East Texas

Table I.

| Month | Requirement in gallon per tree per day based on age of tree | | | |
|-------|---|---|----|----|
| | 1 | 2 | 3 | 4 |
| 1 | 1 | 2 | 2 | 2 |
| 2 | 1 | 2 | 2 | 2 |
| 3 | 1 | 2 | 3 | 4 |
| 4 | 1 | 2 | 3 | 4 |
| 5 | 1 | 2 | 3 | 8 |
| 6 | 2 | 4 | 6 | 16 |
| 7 | 4 | 8 | 12 | 30 |
| 8 | 4 | 8 | 12 | 30 |
| 9 | 2 | 4 | 6 | 16 |
| 10 | 1 | 2 | 3 | 8 |
| 11 | 1 | 2 | 2 | 2 |
| 12 | 1 | 2 | 2 | 2 |

Table II.

| | Fertilizing with trickle irrigation (lbs./tree) | | | |
|--------------|---|---|--------------------|------------------|
| Orchard age | application time | | | |
| (years) | Late February | April | May | June |
| 1st | .5 lbs 12-12-12 | .5 lbs Am. Sulf. | .5 lbs. Am. Sulf. | .5 lbs. Am. Sulf |
| 2nd | 1.0 lbs 12-12-12 | 1.0 lbs. Am. Sulf | 1.0 lbs. Am. Sulf. | 1.0 lbs Am. Sulf |
| 3rd | 3.0 lbs 12-12-12 | (3 lbs. Ammonium Sulfate following Harvest) | | |
| 4th year on: | follow fertilization as in third year | | | |

1. These rates are recommended only where trickle irrigation is used. For dryland orchards use $\frac{1}{2}$ the rates above.

Peach and Plum Varieties see Table III, Peaches and Table IV, Plum varieties.

Table III. Recommended Peach Varieties for East Texas

| Peach Varieties | Chilling Hours | Ripening Order | Fruiting Type |
|-----------------|-------------------|-------------------|------------------|
| Springold | 850 | May 25-30 | Clingstone |
| Rio Grande | 450 | May 25 | Semi-Cling |
| Florida King | 450 | June 5 | Cling |
| Bicentennial | 700 | June 5 | Cling |
| Derby | 850 | June 7 | Semi-Cling |
| Junegold | 650 | June 9 | Cling |
| Sentinel | 850 | June 12 | Semi-Cling |
| Sam Houston | 500 | June 15 | Freestone |
| Ranger | 900 | June 25 | Freestone |
| Harvester | 750 | June 30 | Freestone |
| La Feliciania | 550 | July 1 | Freestone |
| Redglobe | 850 | July 5 | Freestone |
| Milam | 800 | July 8 | Freestone |
| Denman | 850 | July 10 | Freestone |
| Loring | 750 | July 12 | Freestone |
| Dixieland | 750 | July 21 | Freestone |
| Redskin | 750 | July 24 | Freestone |
| Indian Cling | 850 | July 24 | Cling |
| Jefferson | 850 | July | Freestone |
| Rio Gem | 850 | August 3 | Freestone |
| Frank | 750 | August | Clingstone |

1. Peach trees are self pollinated.

Table IV. Plum Varieties for East Texas

| Plum Varieties | Pollination Requirement | Ripening period |
|----------------|--------------------------|--------------------------|
| Bruce | requires pollinator tree | Early June |
| Methley | excellent pollinator | Early June |
| Morris | requires pollinator | Mid-June |
| Santa Rosa | pollinator | Mid-June |
| Ozark Premier | pollinator | Late June |
| Excelsior | pollinator | Late June |
| Allred | self fruitful | Excellent Landscape tree |

Weed Control - Most Texas peach orchards have traditionally practiced clean cultivation to control weed population. In East Texas, a tandem disc has been used to accomplish this task for many years. It should be noted that nearly 30% of peach tree roots may be found in the upper 18"-24" of soil and that deep cultivation will prune off a great number of feeder roots. For this reason, it is recommended that weeds be controlled by shallow cultivation (2"-4") or better yet chemical herbicides. See Table V for herbicides cleared for use on Peaches and Plums. NOTE: Always read all pesticide labels and follow those instructions.

Table V. Chemical Herbicides Cleared for Use on Peaches & Plums

| Herbicide | | |
|-----------------------|------------|---|
| Chemical | Type | Comments* |
| Roundup (glyphosate) | contact | Roundup is a very effective contact herbicide which works on green, growing plants. On trees under 4 years old, protect the tree from scaffold limbs to soil line by covering with tin foil or similar protectants. After 4 years the bark should be thick and rough enough that no damage should occur if applied according to label instructions. Use 1 quart of Roundup in 10-40 gallons of water per treated acre. Demonstrations have shown excellent results where weeds were no taller than 8"-12"; that 1 quart in 20 gallons water applied per acre gave good control. Caution: For tank mixes, consult label instructions for chemicals to be used. |
| Surflan AS (Oryzalin) | Pre-Emerge | Cleared on bearing and non-bearing peach and plum trees. The label recommends 2-4 quarts Surflan AS in 20-40 gallons of water per acre. This can be applied in 2 applications of 2 quarts each in early March and again in 60-80 days for longer control or a one-time application of 4 lbs. in early March. Surflan AS is also cleared for tank mixes with Karmex and some other herbicides - consult labels for instructions. |
| Karmex 80W | Pre-Emerge | Use alone or in tank mix with Suflan or Sinbar, etc. Used only in trees established for at least 3 years. Apply 1-2 lbs. per acre when used alone, when used as tank mix with Sinbar use |

| | | |
|--------------|------------|---|
| | | 1# Karmex - 1# Sinbar in 25-50 gallons of water per acre. With Surflan use 2-4 qts. Surflan + 1# Karmex in 25-50 gallons of water per acre. Follow label instructions. |
| Sinbar 80W | Pre-Emerge | Use alone with 1# or in tank mix with Karmex at 1# Sinbar + 1# Karmex in 25-50 gallons water per acre. Use Sinbar only in trees established for at least 3 years. Sinbar has some contact effectiveness. Follow label instructions. |
| Princep 80W | Pre-Emerge | Best used in East Texas as fall applied, 2-2.5 lbs. in 20-50 gallons of water per acre. Follow label instructions. |
| Solicam 80WP | Pre-Emerge | Use on trees established at least 18 months. Use 2.5 lbs. in 20-100 gallons per acre as a directed spray. Follow label instructions. |

* Comments section is just that - comments - for use of all chemicals read label and follow instructions for your area and soil types.

Spacing and Pruning - The ideal spacing for peach and plum trees under irrigation is 18 feet within the row by 24 feet between the row and young peaches must be trained for development of a strong, well-shaped tree capable of supporting heavy crops and withstanding strong winds. Matured peaches must be pruned annually to stimulate the growth of fruit-bearing wood. Proper training is also used to develop a tree for harvest convenience and maximum light absorption.

Young Peach Trees - Peaches are trained in Texas to a three-limbed open center tree. The training procedure during the first two or three years is largely that of developing the three scaffold limb framework of the young tree. At planting time, prune the tree to a single stem and top at a height of 24 inches. Remove all branches or buds lower than 18 inches. This will leave buds in the top six inches and from these, the scaffold limbs will be selected. Within a few weeks after growth commences in the spring, select three vigorous scaffold shoots arising from a height of approximately 18 to 24 inches above the ground. These three young shoots will become the scaffold limbs. They should be evenly spaced with each pointing in a different direction. Remove all other shoots and buds back to the ground level. During the first growing season, the three scaffold limbs should be allowed to grow as much as possible. Other shoots and buds arising on the main trunk should be removed to the ground level.

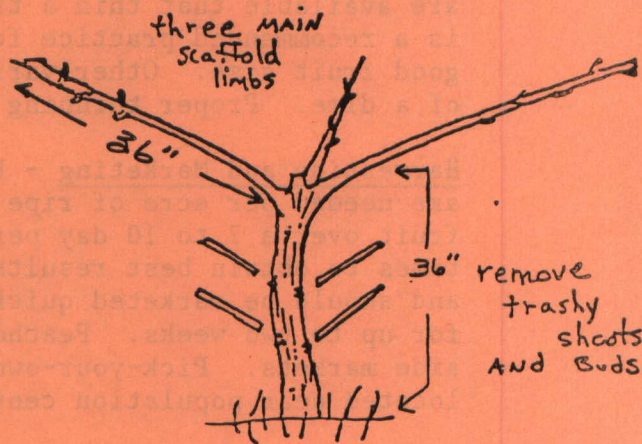
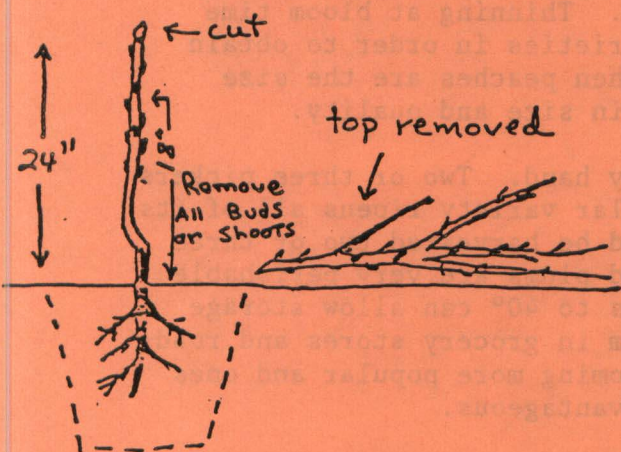
When the three scaffold limbs reach a length of 32 to 36 inches, tip the ends; this will allow lateral growth. At this time, remove all buds and shoots arising from both main trunk and scaffold limbs from a height of 36 inches

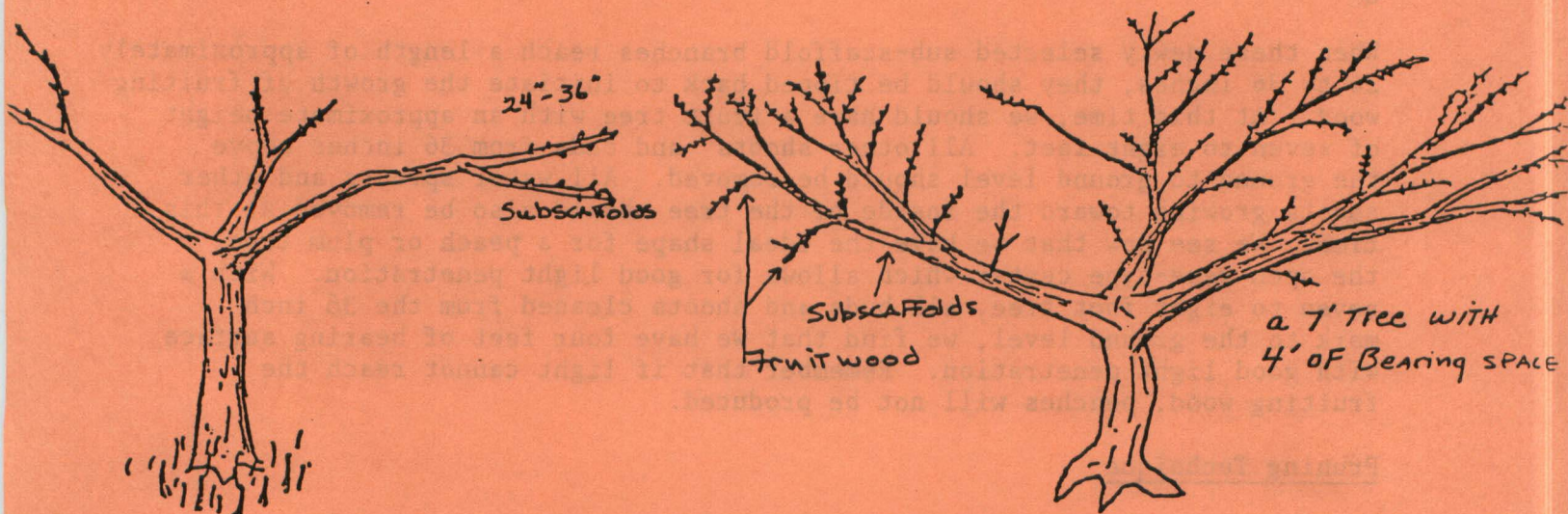
above the ground to the ground level. At this time you are forcing all nutrients to the lateral growth at the end of the scaffold branches.

When the lateral growth is grown such that you can select sub-scaffold branches, select two sub-scaffold branches on opposite sides of the main scaffold. Remove all other shoots and tip back the main scaffold branches from further growth.

When these newly selected sub-scaffold branches reach a length of approximately 24 to 36 inches, they should be tipped back to initiate the growth of fruiting wood. At this time, we should have a fruit tree with an approximate height of seven to eight feet. All other shoots and buds from 36 inches above the ground to ground level should be removed. All water sprouts and other shoots growing toward the inside of the tree should also be removed at this time. We see now that we have the ideal shape for a peach or plum tree, the open vase-type center which allows for good light penetration. With a seven to eight foot tree, all buds and shoots cleaned from the 36 inch mark to the ground level, we find that we have four feet of bearing surface with good light penetration. Remember that if light cannot reach the fruiting wood, peaches will not be produced.

Pruning Technique





Thinning - Peaches often set heavier crops than the tree can support. Peaches should be thinned to six to eight inches apart on the fruit bearing wood. The use of a padded stick can often speed up thinning by breaking up the clusters and fruit-heavy portions of the tree. Mechanical shakers are available that thin a tree in a few seconds. Thinning at bloom time is a recommended practice for early ripening varieties in order to obtain good fruit size. Other varieties are thinned when peaches are the size of a dime. Proper thinning will pay dividends in size and quality.

Harvesting and Marketing - Peaches are picked by hand. Two or three pickers are needed per acre of ripe peaches. A particular variety ripens all of its fruit over a 7 to 10 day period and fruit should be harvested two or three times to obtain best results. Fresh peaches and plums are very perishable and should be marketed quickly. Cooling peaches to 40° can allow storage for up to two weeks. Peaches are a popular item in grocery stores and roadside markets. Pick-your-own operations are becoming more popular and ones located near population centers appear to be advantageous.

Plant Sources - The following nurseries supply recommended peach and plum varieties:

1. Bob Wells Nursery, P. O. Box 606, Lindale, Texas 75711, phone 214/882-3550.
2. Texas Pecan Nursery, Box 306, Chandler, Texas 75758, phone 214/849-6203.
3. Womack's Nursery, Route 1, Box 80, De Leon, Texas 76444.

4. O. S. Gray Nursery, P. O. Box 550, Arlington, Texas 76010.
5. Senter's Plant Farm, P. O. Box 305, Whitehouse, Texas 75791,
phone 214/839-7248.

This list is not intended to discriminate against any nursery nor does it imply endorsement of these concerns by the Texas Agricultural Extension Service.

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PEACH VARIETIES

