Central Florida Youth

Peach Tree Growing Contest



UF/IFAS

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Care of Containerized Peach Trees

Transplanting

Your peach tree will be delivered in a cylindrical pot and comes with a 10 gallon pot. Only 10 gallon pots provided at tree distribution can be used for the peach tree growing contest. You may choose your own potting media. Below are potting media recipes suitable for growing containerized peach trees.

Potting media one:

one-third Michigan or Canadian peat one-third yellow or builders sand one-third hardwood shavings, sawdust or bark (cypress, sweet gum or other hardwood tree)

Potting media two:

one-half Michigan or Canadian peat one-tenth of yellow or builder sand four-tenths hardwood shavings, sawdust or bark (cypress, sweet gum or other hardwood tree)

You need to thoroughly mix the ingredients together in a large tub or container. You will also need to add to the mix 4 to 6 ounces, by weight, of dolomite per 10 gallon container.

Fill the 10 gallon container about three-quarters full with the potting media. Next hold the tree over the 10 gallon container and carefully remove the tree from it's original container. Remove as much of the potting media as possible from around the rootball allowing this media to go into the 10 gallon container. As long as the roots don't dry out, you can remove as much of the media from around the roots as you want. Dig out a hole in the potting media to place the tree. Make sure the tree is planted in the pot at a slightly higher level than it was in the original container. Never plant a tree at a level deeper than it was in the original container. At this point you can begin to add water to the container while adding additional potting media around the rootball. Lightly pack down the potting media as you are adding the water to firmly pack the media

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around the peach rootball removing any potential air pockets around the roots. Make sure the tree is at the proper level and standing vertical in the container. Finish adding potting media and water to the proper level. Leave about one to two inches from the top of the container to the potting media to allow for watering your newly planted peach tree.

Trees will likely come attached to a metal or bamboo stake. This is used to help hold the tree vertical when first transplanted. It is important to remove the ties and stake as soon as possible after the tree is transplanted (and can stand on it's own) to prevent the stake and ties from hindering tree growth.

Irrigation

Potted peach trees will require watering 3 to 4 times per week during the summer to prevent wilting. During the cooler months this can be reduced to about once per week if the trees still have foliage. Once trees have dropped most all of their foliage and go into dormancy, watering can be further reduced. During dormancy the tree will use very little water, and the goal is to keep the media from completely drying out. You can easily check the moisture of your media by using the "two finger moisture meter"; insert two fingers into the media and pinch the soil to check for moisture. If the tree is in a wilt, you have waited too long and this will affect tree growth.

When you first get your tree planted, it is important to keep it from drying out until you see evidence of new growth. Once this new growth appears, it is evidence the tree is becoming comfortable in it's new container.

When watering you can fill the container to the top with water (one to two inches) allowing the media to become saturated with water. This will be when you can see water run out of the drain holes at the bottom of the container. Avoid over watering which can lead to water logging. If trees are water logged for forty-eight hours, it can destroy the trees root system. If your media gets too dry, it may become difficult to add water to the media. In these cases it is best to add water slowly at a drip like rate to re-wet the media.

Fertilization

Nutrition, along with water, are the most important factors that will affect the growth and size of your peach tree. Trees can be fertilized by using dry granular, slow release or liquid soluble. Begin fertilizing your peach tree as soon as new growth appears after transplanting. You can use any one or a combination of these to fertilize your peach tree. The important idea in fertilization rates is to apply similar amounts of nitrogen to your tree regardless of the type of fertilizer used.

The following examples are based on applying 0.15 pounds of actual nitrogen to your tree for the year. Once the peach tree goes into dormancy and looses it's leaves, fertilization should stop until new growth begins to form after dormancy.

A dry granular 6-6-6 or 8-8-8 analysis fertilizer can be used (the numbers represent percent nitrogen, phosphorous and potassium in that order). Apply dry fertilizer at a rate of 3 to 4 ounces per month and incorporate it into the top layers of the potting media. Be careful not to place fertilizer in direct contact with the trunk.

If using slow release, apply the same amount of nutrients based on the analysis of the fertilizer. There are many slow release fertilization formulations available at most garden centers. One formulation readily available is "Miracle-Gro shake 'n feed continuous release for citrus" (13-7-13). The label indicates this formulation needs to be applied every 3 months. Based on the analysis of this formulation, apply every 3 months, 5 ounces of the fertilizer incorporating it into the top layers of the potting media.

Soluble fertilizer can also be used and the rate should again be based on the analysis of the fertilizer material. "Miracle-Gro liquid all-purpose concentrate plant food" (12-4-8) is a formulation that can easily be found at most garden centers. Based on the formulation, use three-quarters of an ounce mixed in a gallon watering can and applied to your tree every two weeks.

In addition to the macronutrients of nitrogen, phosphorous and potassium (the three numbers on the fertilizer container as listed in the above examples), peach trees may also require secondary (calcium, magnesium and sulfur) and micronutrients (iron, zinc, manganese, boron, copper, and molybdenum). Some of the secondary and micronutrients may be included in the fertilizer formulations listed above. Look on the fertilizer label for the names of these. It is important that these nutrients be included as part of a good peach fertilizer program. Most fertilizer formulations contain some of the secondary nutrients of sulfur, and the dolomite contained in the potting media will provide the calcium and magnesium. If the secondary or micronutrients are not included, then application of a complete fruit tree foliar nutritional spray can be applied after the new flush has fully expanded. Nutritional sprays should not contain copper. Copper, at certain rates, can cause leaf burn and defoliation and should not be used on your peach tree. Fruit tree nutritional sprays you purchase will likely contain iron, zinc and manganese, and these are the nutrient deficiencies that most commonly will appear on your peach tree, especially zinc. The following link has examples of peach deficiency symptoms: http://www.clemson.edu/extension/peach/faq/peach_nutrition.html.

Pest Control

Your peach tree will need to be protected from insect pests and peach diseases. Depending on the peach variety, a number of peach diseases can affect the growth and performance of your tree. Some of these diseases will produce symptoms on the fruit, leaves and stems. We will cover the most commonly occurring diseases you may need to control.

The common foliar and fruit diseases of peaches include: peach rust, brown rot, bacterial spot, and scab. The susceptibility of your peach tree to these diseases will be related to the variety and environmental conditions. Peach rust, bacterial spot and scab can be greatly reduced by not allowing the leaves to stay wet for long periods of time. If you keep your tree outside in full sun, these diseases will be less of a problem. Spray products containing sulfur labeled as fungicides for peaches will help control peach scab and rust. UFSun has better than average bacterial spot resistance and this should not become a problem. Brown rot is a disease that develops from existing disease cankers. The peach trees you will get should be free and clean of these brown rot cankers. The following link has some excellent information on these diseases: http://hos.ufl.edu/extension/stonefruit/stone-fruit-disease-management.

There are only a few numbers of insects and mites that can become problems on your peach tree. Excessive feeding by some insects can reduce tree growth. The most common insects that can cause problems include: scales, aphids, and peach borers. Scale insects on peach trees can become a problem and can be easily controlled by spraying the peach tree during dormancy (when the tree has no leaves in the winter) with horticultural oil according to the label instructions. Aphids are plant sucking insects and can be found on the new growth as it begins to expand. Malathion labelled for peaches, sprayed in accordance with the label, will help control these insects. Peach borers are small insects that bore into the trunk of the tree near or above the soil line. If you notice this damage you can physically remove the larvae.

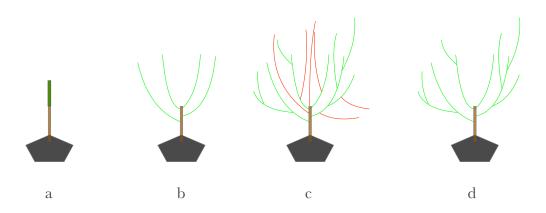
Pesticide Safety

When using pesticides you must read, follow and understand the instructions listed on the label. Reading the label should be done before you even open the pesticide container. These label instructions include how much to use, how to mix the pesticide, how to apply, what clothing must be worn during the application, what to do if the pesticide spills on you or your clothing and how to clean up your equipment after the application. It is also important your parent or guardian be present when you spray.

Pruning

Your peach tree will need to be shaped and pruned during the year. Heading back and thinning are two types of pruning techniques. Heading back is simply where the end of a twig or limb is cut, encouraging the lateral buds to develop. This will lead trees to produce more dense growth. Thinning discourages lateral bud development and growth. This type of pruning is where the entire twig or limb is cut back to it's origin.

In peach trees the proper method of pruning is to develop what is called an open vase. An open vase pruning system is where shoots in the center of the tree are removed so sunlight can get into the center of the tree. When you first receive your tree, you need to head back the main shoot. This means cut off the end of the single main shoot at about knee height. Once this is done it will encourage lateral limbs to develop. You want to select 3 to 5 of these new forming limbs to be the main branches of your tree. These 3 to 5 limbs need to be at an upward angle from the trunk. As the tree grows and develops these shoots that will bear next year's flowers. Using good pruning practices, you want to develop the shoots to grow outward away from the main trunk. Limbs that develop growing downward towards the ground need to be thinned and cut back to the attaching limb. This would also be true for shoots that may grow up in the center of the peach tree. Pruning should cease prior to the end of the summer, this will allow time for any new shoots to develop before dormancy.



Figures above demonstrate the first cut (a), main limb development (b), excessive growth and pruning of interior shoots, and proper removal of interior shoots (d).

In some cases trees can be staked or tied to encourage the desired shape or growth direction without the need for pruning. This technique will work in trees that have adequate foliage and

where there is no need to encourage additional branching. Take care not to cause limb damage using this method.

Grades and Standards

When returning your tree to the fair, judges will be looking for certain desirable characteristics in judging your tree as either a blue, red or white. These categories include:

Category		
Size	tree is proportional to the container	evidence of trunk growth, original stake removed, no girdling by plant ties, sturdy
Shape	pruning, branching, balance	absence of trunk sprouts, tree symmetrical and well shaped, scaffold branches
Color	deficiencies, toxicities	nutritional deficiencies, toxicities of the foliage, uniformly green foliage or twigs
Density	foliage quantity, size	good foliation, numerous leaves of normal size, if leaves are present
Injury	insects, mites, diseases, mechanical damage	tree free from damage