



Basic Fruit Tree Planting and Care

Fruit trees can be a wonderful addition to the home landscape or orchard. They provide not only an abundance of the freshest, ripest fruit but also beauty, shade, habitat for birds and opportunity for another level of relationship with the natural world. Your investment in making good tree selections, proper site development, planting, and long term care can pay back with years of gratification.

Although these guidelines are geared towards fruit, they apply generally to most ornamental trees as well.

Choosing a Fruit Tree

Matching the appropriate types and varieties of trees to your specific site and needs are the most important first steps in tree selection. Fruit trees should be chosen with regards to soil type, needs for winter chill and heat for fruit ripening, pollination requirements, pest and disease pressures, fruit ripening times and mature tree size. Study your yard well over the course of a year to learn about sun patterns, drainage issues, temperature highs and lows, and get to know the soil. Most fruit trees have a rootstock onto which is grafted a different variety - the tree that you see and which bears fruit. Rootstocks have different tolerances of soil types and play a role in disease susceptibility and to some extent determine the size of the tree. Resources for all of this information include good local nurseries, information posted by fruit nurseries on the internet, Master Gardeners, California Rare Fruit Growers, and observation of the trees in your neighborhood. See the Local Organizations page on the iGROW site, http://www.igrowsonoma.org/local_org for some useful links.

Buying a Fruit Tree

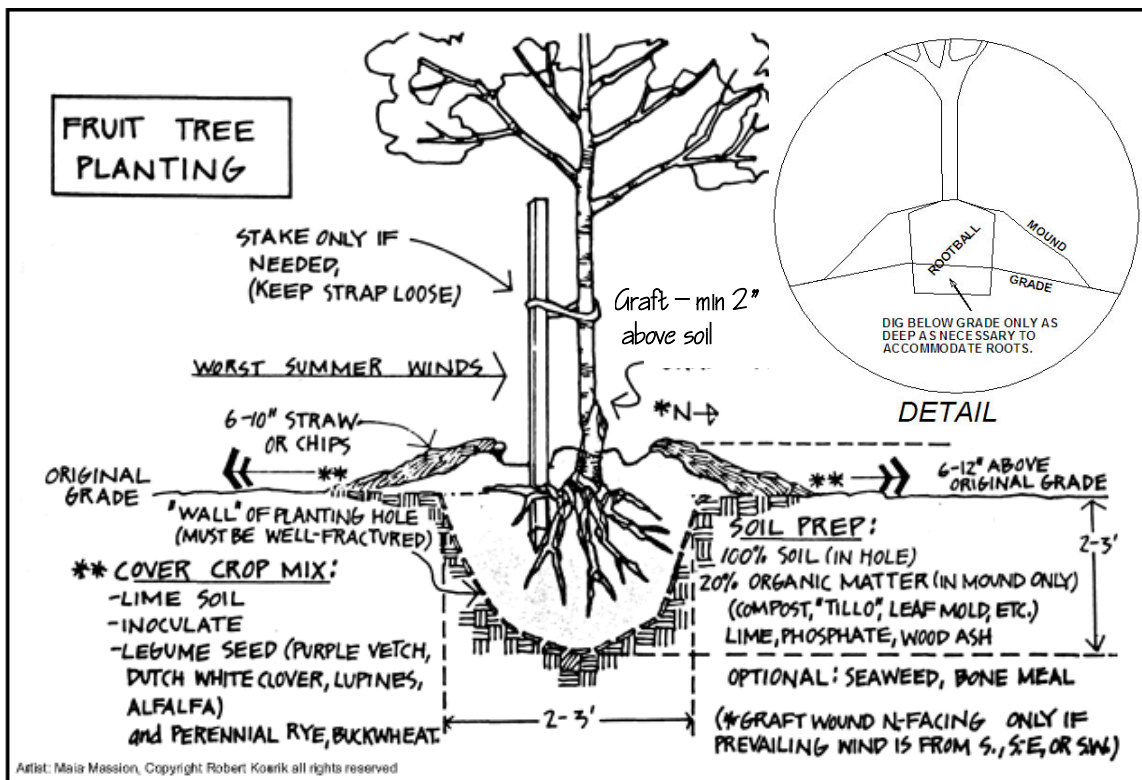
Trees get their best start when planted as small trees. Deciduous trees will generally do the best when purchased bare root in winter and planted then. Citrus and other tender evergreen trees should be purchased and planted in late spring or early summer so they can become established before the next winter. (Note that parts of Sonoma County are too cold in winter for most citrus, and cool nights in summer prevent ripening of some types of citrus in many locations.) The tree's root system will be strongest when it can spread out and grow naturally without circling around in a container or other restrictions. Look at the roots of any tree you are considering and make sure they are not severely

damaged and are nicely distributed in several directions. The larger the root system the better. Keep roots moist between purchasing and planting. If there are any branches on the tree, they should also be nicely spaced around and ideally at 45 degree angles from the trunk. Branches which stick out horizontally will be weak and should be avoided.

Planting the Tree

To understand how best to plant a tree, you need to understand how roots grow. Contrary to the common misconception, most tree roots grow *out* rather than *down*. The roots will go far beyond the outside edge of the canopy, as much as *three* times wider than the foliage in loose or sandy soils. The top two feet of the soil provides over fifty percent of the water and nutrients for good, healthy growth. Deeper roots gather some nutrients and moisture during dry spells and help anchor the tree. Tree roots will grow wherever the soil is soft enough and where there is moisture and nutrients. If you put a lot of compost or fertilizer in a planting hole, the roots will simply colonize the hole. If the hole is surrounded by hard clay soil, it can fill up with water during winter rains or with excess irrigation, which can lead to root rots and other disease problems. Studies show that trees with *no* additional nutrients or soil amendments in the planting hole grow better than amended plantings. Compost, aged manures and other organic mulches as well as fertilizers are best spread on the soil surface covering the area under the canopy and extending at least a few feet beyond the canopy's edge, leaving the area close to the trunk free from any mulch material. If minerals are lacking or needed to adjust pH, such as lime, rock phosphorus or gypsum, these can be worked into the top foot or so of the entire planting area. Alternately, they can be layered on the surface under the organic mulch and the earthworms will bring the minerals down to lower soil levels over time.

Good drainage is essential to prevent root rots. In places of poor drainage or heavy clay soil, planting on a six to 12-inch raised mound of well-drained soil will protect the roots from crown rot. If you have sandy soil or excellent drainage, a raised planting area isn't necessary. Use a spading fork to fracture the soil in the sides of the hole to keep it from "slicking". Dig a hole only as shallow and narrow as is necessary to fit the root system of your tree. If you are using a mound to increase drainage, the



Fruit Tree Planting. Courtesy of Robert Kourik, *Designing and Maintaining Your Edible ELandscape - Naturally*, 1986, Metamorphic Press.

hole should only be as deep as those roots which won't be covered by the mound (see Detail above). Scrape up good native topsoil from around the tree or gather some soil from another portion of the yard to form the mound. Take care to break up clods and tuck soil firmly around roots to avoid air pockets. Flood the root zone thoroughly after planting to settle the soil. It is very important that the soil level on the trunk after planting be the same as it was when the tree was at the nursery. You *can* add some compost or other amendments to the soil in the mound but nitrogen fertilizer is not recommended for most trees at planting time. Watch the new growth in spring and if it is not vigorous or leaves are very pale green, add recommended amounts of nitrogen fertilizer in late spring.

If you have gophers, a bigger hole is needed to allow for a protective wire basket. You can purchase pre-made baskets at garden centers. Be sure the upper edge of the basket sticks several inches above the soil and mulch to keep gophers from climbing into the basket.

Protect the trunk's bark from sunburn and insects by painting with white latex paint diluted half with water. It is a good idea to renew this paint every couple of years throughout the life of the tree.

Staking a tree

Don't do it! This is another widely done but very detrimental practice. Potted trees often come tied to a stake to keep them from being broken in the nursery or in transit. But those stakes should come out at planting time. Tied trees have wimpy trunks which never gain the girth or strength to hold up themselves or the branches. Trees need to sway in the breeze to become strong. If a tree is very wobbly when first planted or is in a vulnerable location – like along a sidewalk, street corner or where kids play – having one or two strong stakes a foot or more away from the trunk with soft ties anchored to the stake and going *loosely* around the tree trunk, can provide needed protection. Far too many trees are restricted or even girdled by ties that are too tight and can literally strangle the tree.

Pruning and Care

Most deciduous fruit trees should be pruned at planting time and will need some yearly pruning to develop proper strength and shape. Check the iGROW events calendar for workshops on fruit tree pruning. It is important to learn about proper irrigation, pest and disease control as well as supplying on-going fertility needs. As you watch your trees grow and come into bearing, you'll see how they respond to your care. May your relationship with your fruit trees be long lived and bountiful!