# Fruit Trees: Planting and Care

# **Planting**

Fruit trees require 6 or more hours of full sun per day during the growing season and soil that is deep (about 3 feet or more) and well drained. Topsoil in residential areas has often been either removed by land grading or compacted by the weight of construction machinery. Yet fruit trees can be grown in as little as 1 to 1 ½ feet of good topsoil with proper irrigation management.

Hardpan or claypan beneath the soil surface presents an additional complication in some areas. Hardpan found within 1 ½ to 2 feet of the surface needs to be penetrated to allow for drainage and root growth. If not possible, a raised bed 1 to 2 feet high filled with quality soil may be the solution. In any case, it is important to use care when irrigating to prevent saturating the soil in the root zone.

#### **Tree Selection**

Fruit trees can be planted at any time of the year. They are often purchased during the winter months when they are dormant and available as bare root stock. The best trees have a trunk diameter from 1/2 to 5/8 inch and usually become established faster than smaller or larger planting stock. If bare root trees cannot be planted soon after purchase, cover the roots with soil, sawdust, or compost, and keeping them moist to prevent drying out.

# **Preparing the Planting Site**

Soil is another factor that must be considered. If it is compacted, it must be cultivated deeply, not only in the immediate planting area, but also in the surrounding area because roots will not grow through densely compacted soil. Do not add soil amendments or fertilizers directly into the planting hole. However, rototilling well-decomposed compost into the soil around the tree before digging the hole may be beneficial. Undecomposed organic amendments may rot or be toxic to new roots in heavy soils. Do not apply fertilizer until new growth is several inches long.

Dig the planting hole twice as wide as the span of the tree's roots, but no deeper than the depth of the root ball unless the soil is deeply compacted. Leave the bottom of the hole undisturbed to help prevent the tree from settling below its root crown. This reduces the possibility of crown rot, which often kills trees in poorly drained soil. In clay soils, score the sides of the planting hole with a shovel to encourage root growth outward from the hole.

### **Planting the Tree**

Examine the roots of bare-root trees and cut off any roots that are broken or kinked. Container-grown trees may have circling or girdling roots; gently pull them away from the root ball before planting. Place the tree in the hole with the graft union 2 to 4 inches above the soil surface. Orient the protruding notch toward the northeast to reduce the likelihood of sunburn

Partially fill the hole with the same soil that was excavated and firm gently, eliminating large air pockets. For properly planted, make sure the soil line on the trunk of the tree is 1 to 2 inches above the level of the surrounding ground. Placing a shovel handle or other straight edge across the hole can be a helpful way to check this during the filling process. When the soil has settled, check that the uppermost large root is just below the soil surface and that the soil slopes downward from the tree to prevent water accumulating near the trunk. Finish filling the hole and gently firm the soil into place.

Fruit Trees Page 1 of 2 R12/2024

# Irrigation

Water newly planted trees thoroughly to settle the soil around the root ball. For heavy loam or clay soil, avoid keeping the soil overly wet. Too much water eliminates air spaces in heavy soils, creating anaerobic conditions that can kill trees. If the soil is sandy to loam, clay soil is dry, or container-grown trees are planted during the growing season, basin irrigation may be used.

Construct a doughnut-shaped basin for watering the newly planted tree, making sure that water drains away from the trunk. Make the basin slightly wider than the planting hole so that water can be applied to the entire root area and just beyond. Most of the root volume occupies a rather limited area, particularly through the first growing season, so frequent watering may be needed until the roots become established. Fill the basin once or twice a week in hot weather, less often when it is cool or rainy. Water must soak into the root ball of container-grown trees since they cannot obtain water from the surrounding soil until their roots grow. Remove the basin in winter so that the tree does not stand in accumulated rainwater.

Keep the ground within about 3 feet of the tree trunk free of grass, weeds, or other vegetation that may compete with the tree for water and nutrients. Add a layer of mulch 3 to 6 inches thick, to control weeds and conserve moisture. Keep mulch several inches away from the trunk to minimize the occurrence of crown rot and eliminate hiding places for insect pests.

# **Heading the Tree**

Backyard orchard culture has the goal of maintaining relatively small trees to facilitate pruning, thinning, pest management, and harvesting. Head (cut) the newly planted tree at knee height, about 18 to 24 inches. This forces the tree to develop low branches. If access under the tree is important, head the tree higher, up to 36 inches.

Small trees, with a trunk diameter of 1/8 inch or less, usually have no lateral branches on their trunks worth saving, so remove all side branches. Larger trees, 1/2-inch diameter or larger, often have large lateral branches along their trunks. Some of these branches can be removed completely, but a few that are well spaced vertically and radially around the trunk can be headed back, leaving 3-inch outward-growing stubs with two or three lateral buds. These stubs will produce shoots that will become the main scaffold branches.

#### **Sunburn Protection at Planting**

Protect the bark of the tree from sunburn and subsequent infestation by borer insects. For this purpose, use white interior latex paint diluted to half strength with water. Apply the paint mixture from 2 inches below the soil surface up the entire trunk, including the dormant buds.

Source: Fruit Trees: Training and Pruning Deciduous Trees UCANR Publication 8057

Advice to grow by . . . ask us.

UCCE Master Gardeners of Orange County

mgorange.ucanr.edu mgorange.ucanr.edu/Gardening Hotline/

UC ANR is an equal opportunity provider and employer.