University of California Agriculture and Natural Resources

The Green Scene

Making a Difference for California

February 2025

# **Meetings and Announcements**

#### Welcome to New Greenscene Readers

We welcome new readers, especially those who signed up at our January pruning demonstrations. I hope you find helpful the horticulture information, and let me mention the UC IPM website with its many Pest Notes, https://ipm.ucanr.edu/

#### Master Gardener Program

Our new Master Gardener Coordinator is Jonathan Moody. He brings extensive background in teaching and in the citrus industry. We plan to offer classes beginning March 6, 2025. If you are interested in becoming a Master Gardener, you may call Jonathan directly at 661 868-6238. Or you may email him at <u>imoody@ucanr.edu</u>, and he will respond to you.

#### Irrigation

Rainfall as of this writing has been low for the winter of 2024-2025. It may be necessary to restart landscape irrigation later in February or early March, as reference ET values (water needs) for plants increase toward spring values, which are about 0.15 inches per day for the Bakersfield area.

## **Planting Time**

As we enter early spring, we enter an excellent time for planting of fruit trees and shade trees. Bare-root plants are available locally or can be obtained from mail-order suppliers. The plant list would include bare-root roses.

Bare-root plants give us the opportunity to see the root system, and these plants may cost less than later in the season since a nurseryman has not incurred costs related to potting. The cooler temperatures of early spring mean low rates of water loss—in a planting scenario, it's a race between the plant developing new roots vs water loss through stems and leaves.

Planting in most situations is easy. We dig a hole large enough for the root system, place the plant at about the same height it was growing in the nursery (after cutting off any damaged roots), backfill with existing soil, and water thoroughly (no tamping). The plant does the rest for us.

#### **Deciduous Fruit Trees for the Home Orchard**

The salubrious climate of the southern San Joaquin Valley allows many kinds of deciduous trees fruit to thrive. Winter fog, although less than earlier years, is also beneficial for deciduous fruits because fog events increase the number of chilling hours.

Mountain locations are also suitable for fruit species, such as apples, which require additional chilling and cooler summer temperatures to develop quality fruit. However, mountain sites may experience an increased risk of late spring frost, an event that can destroy the crop. Desert locations may be suitable for some fruit varieties, and good yields may be obtained in home orchards —again if late frost does not injure the crop.

When selecting fruit trees, be sure to obtain a variety suitable for your location. The widest selection is often found in early spring when bareroot trees become available. These allow the buyer to see the root system and also generally cost less than container stock. Nemaguard rootstock is preferred for stone fruits where nematodes may be a problem, which would be in most locations in Kern County. For apple trees, various rootstocks of the MM series give varying degrees of dwarfing. A list of fruit varieties suggested for home orchards located on the valley floor is available from the UC Cooperative Extension Office, 1031 S. Mt. Vernon, Bakersfield. Furthermore, some commercial nurseries will provide recent commercial varieties, their horticultural characteristics, and information regarding chilling hours and growing zones. Some fruit species are easier to grow than others, and in order of easiest to more difficult I rank them as follows:

- Apricot (vigorous, self-fruitful, few pest problems, what to do with all the apricots?)
- Plums (often partly self-fruitful and with few pest problems)
- Cherries (However, cherries are sensitive to over-watering and resulting root rot, and it's sometimes difficult to keep birds from devouring the crop. The loss of chilling hours is another factor that is limiting cherry adaptation to the Valley floor.)
- Peaches (well adapted but a life expectancy of only 12-15 years)
- Nectarines (more temperamental than peaches)
- Apples (summers are too warm in Bakersfield for most varieties)
- Pears (However, fireblight often kills young trees, so not reliable in Kern County.)

Some varieties of each species are better adapted locally than others. Variety selection may also obviate some pest problems. For example, mid-season peaches mature during the annual green fruit beetle flight, whereas later- or earlier-maturing varieties avoid this insect. If cross-pollination from another variety is necessary for fruit set, such as for sweet cherries, be sure to get a compatible pollinator, or use a two-in-one or three-in-one grafted tree. Labeling branches of grafted trees may prevent an inadvertent pruning cut which completely removes one of the varieties. It's also a good idea to keep a record of tree varieties.

When planting, choose a location that will receive plenty of sunlight and, if possible, will be protected from wind. Allow plenty of space for the mature trees. For full-sized trees, 20 to 24 feet from others is a typical spacing. Soil amendments or fertilizer in the planting hole are generally not necessary and may prove deleterious. After planting, it's best to settle the soil with water rather than tamping the soil. We recommend applying whitewash, or white <u>latex</u> paint diluted 1:1 with water, to the trunks of young trees to prevent sunburn. In mountain areas, a north-facing slope can slow down flower development and may limit the damage from spring frosts.

There are three pruning phases in the life of a deciduous fruit tree. Most fruit trees grown locally can be trained to an open center. (For trees in cold climates, a modified

central leader is often preferred.) The first pruning occurs at planting, when the first cut should be made to foster development of a low vase-shaped structure. After a bareroot tree is planted, the trunk should be headed at 24-32 inches above the soil surface. This cut may be emotionally difficult to make, because it may seem as though \$15 of a \$20 tree has been removed. But when we purchase a deciduous fruit tree at the nursery, we are really paying for a well-developed root system and the grafted (scion) variety—the top structure is not important. (Note: The situation is different for shade trees, where the structure of the top of the plant and how it has been pruned greatly affect further development.) For deciduous fruit trees, this most-important cut serves to establish low origination of structural branches, which will allow most pruning, harvesting, and pest management to be performed without a ladder during the life of the tree. Trees in agricultural fields need higher branching for equipment passage, but low branching greatly facilitates tree care at home.

The second phase of pruning serves to establish structure, and this phase begins the year following establishment. The low heading cut of the previous year will result in several branches growing outward at various directions and angles, and three or four strong, upwardly growing branches spaced at intervals around the trunk should be selected as scaffolds. Additional branches can be removed. Pruning over the next few years emphasizes structural development, including a well-spaced system of scaffolds and laterals.

The third phase of pruning begins with the onset of maturity, which is 5 - 7 years for most fruit trees. At this stage, the tree should be pruned for fruit production, with consideration of the location of fruiting wood. Pruning at this stage serves to invigorate and direct growth of the tree, with a goal of keeping it forever young; that is, annually producing new fruiting wood. A detailed discussion is beyond the scope of this article, but principal determinants for pruning are the location and amount of fruiting wood. We hold annual pruning demonstrations to show how fruit trees should be pruned. We also have a publication, available at our office, which discusses pruning deciduous fruit trees.

### John Karlik Environmental Horticulture/Environmental Science

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