Meetings and Announcements

Horticulture V Class—It’s not too late to join!
Horticulture V is to begin Thursday, February 16, beginning at our usual time of 5:30 pm. Topics include landscape design, new water conserving plants, oaks & compost, ag and groundwater legislation, low input turf, and others. We will have a number of professionals as guest speakers. If you plan to attend, please let us know via email to cekern@ucanr.edu or 661 868-6200. If you would like to see the syllabus, please send me an email or check our website. However, if you find at the last minute that you can attend, please just come and we’ll welcome you at the door.

2017 Horticultural Tour: Iceland, July 15-22, 2017
Our Iceland group is forming nicely, and we now have a private tour; that is, it will be our group only on the designated itinerary. It’s not too late to join for a visit to the spectacular geology and horticulture of Iceland. However, because we are reserving hotel space and July is a busy season there, future booking will be subject to hotel availability. That means we can’t guarantee space if someone decides to add to the group in future weeks. We are going to set Feb 13 as the nominal close, although, again, given hotel space, a person may be able to add later.
Iceland is the world’s leader in use of geothermal energy for plant production, and its natural landscapes have plants with specific adaptations that allow them to thrive in low-water environments—low-water because the ground is frozen during winter. The details for this upcoming and exciting visit are found in a .pdf at http://travelgallery.com/images/Hort_Itinerary_2017_ver_2.pdf
Please contact me if questions, jfkarlik@ucdavis.edu or 661 868-6220.

Crabgrass and the Rule of the Superbowl—Now Is the Time...
Crabgrass is one of the most common weeds in turf in the Bakersfield area. Because it is an annual, it grows from seed each year. Therefore, its biology offers an opportunity to suppress it as it is becoming established, specifically through the use of a pre-emergent herbicide.
In the Bakersfield area, crabgrass seed begins to germinate around the first week of February. That is well ahead of the time bermudagrass and other warm season grasses emerge from dormancy, so crabgrass can have a month or more without competition from other plants. Because it reestablishes from seed, that process can be interrupted with herbicides that interfere with rooting of seeds, i.e., pre-emergents. There are several products on the market that can be used with bermudagrass or tall fescue (be sure to check the label!) that will suppress crabgrass but not injure the underlying turf. However, most
of these herbicides have little post-emergent activity; that is, they are not effective against established plants. Therefore, they need to be applied before the plants become established. Timing is key. If applied too late, they will not be effective.

By some quirk of fate, the playing of the Superbowl and crabgrass germination occur about the same time in Bakersfield and the southern San Joaquin Valley. So, a handy way to remember when to apply a pre-emergent herbicide is to associate its application with the game. If one does that, the herbicide will not be applied too late.

The wet weather we’ve had so far this winter will certainly be favorable for crabgrass germination.

**Fruit Trees for the Home Orchard**

The salubrious climate of the southern San Joaquin Valley allows many kinds of deciduous trees fruit to thrive. The typical winter fog 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. 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 (although cherries are sensitive to over-watering, and resulting root rot and it’s sometimes difficult to keep birds from devouring the crop)
- Peaches
- Nectarines
- Apples (summers are too warm in Bakersfield for most varieties)
- Pears (fireblight often kills young trees)

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 latex paint diluted 1:1 with water, to the trunks of young trees to prevent sunburn.

There are three pruning phases in the life of a deciduous fruit tree. Most fruit and nut 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 $15 of a $20 tree has been summarily 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. (The situation is very different for shade trees, where the top of the plant and how it has been pruned affects tree structure and development.) For deciduous fruit trees, this most-important cut serves to establish low origination points 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 heads for equipment passage, but a low head 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 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 in December to show how fruit trees should be pruned.

John Karlik

Environmental Horticulture/Environmental Science
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