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University of California
Agriculture and Natural Resources
Making a Difference for California

UCCE

The Green Scene

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Meetings and Announcements

Welcome to Tulare Co. Readers!

I enjoyed meeting you and sharing time in your Master Gardener classes. Per my offer when I met you, please feel free to email me with question, jfkarlik@ucanr.edu. I think you have a new horticulture Advisor starting soon, but I'm available as an emeritus person.

Next Horticultural Study Tour

It has been almost 20 years since I offered our first horticultural study tour. That was in 2005, and these tours have been enriching and beneficial for me and for my work.

In cooperation with Travel Gallery of Pasadena, I do plan to offer our next horticultural tour to northern Spain and northern Portugal. I had thought to offer this itinerary for September 2024, and it is ready to go. However, in discussion with Frank Fish of Travel Gallery, we have come to the conclusion that we are not satisfied with the itinerary as it stands. In a few months, Frank will be accompanying a group from San Marino to this area of Spain, and he will have an opportunity to have on-site experience in several of the cities, as well as meeting in-person Spanish operators with whom he cooperates. Therefore, we have decided to not offer a hort tour this fall, but plan to move the program to the last week of April and first week of May 2025.

I hope this change is not confounding for any of us potential participants. However, in my past experience, it is better to have the itinerary tuned the way we want rather than move sooner than we should.

I would also like to mention that I intend to offer a horticultural tour to Japan in spring, 2026. Japan has superb examples of garden design, and one of the world's premier rose gardens is there, which I visited in 2009 as part of an international rose symposium.

Tree Selection for Bakersfield and Environs

I shared this information last year, but we're coming into an ideal time for tree planting. I read somewhere a Chinese proverb that says the best time to plant a tree was 20 years ago; the next best time is now.

The warm temperatures of summer will remind us again of the value of shade. Trees are a welcome addition to the landscape, providing cooler temperatures beneath the canopy, a microclimate for other plants, a habitat for birds, and pleasant aesthetics, such as flowers and perhaps fruit. I often receive phone calls or emails from people who have a tree that is not performing well. Many of those calls involve just a few species of trees.

A "native" species may or may not do well in the landscape. Native to where? California is a large state, and many California plants native to somewhere are not well adapted to Kern conditions. And will this plant do well in an irrigated landscape? Many Mediterranean species prefer dry summers and may be susceptible to root rot in an irrigated landscape.

Few tree species are native in our location, with its annual rainfall just over six inches. In the 1800s, when streams surged into the valley in the spring, trees were found in riparian areas or the perimeter of low areas that held water for some time during the summer. The buttonwillow (*Cephalanthus*), sycamore, poplar (some species) and willow are examples. In the foothill areas, native oaks can and digger pine can endure long dry summers. Development of housing with irrigation has seen introduction of many non-native tree species. Some come from parts of California, Australia, or Mediterranean areas of the world that share climatic similarities. Others, though, find their way based more on aesthetic qualities or perhaps nostalgia rather than their suitability for their current location.

When we speak of tree selection, it's important to recognize that trees within a species are not identical but rather have a range of genetic makeup, and many characteristics follow a normal (bell-shaped) distribution curve. Planting sites also vary. Therefore, in a population, some trees will grow exceptionally well, most will be average for the species, and some will do poorly. So, when we talk about adapted trees it is really about the odds of a particular tree performing well. Some trees we see in landscapes are outliers; that is, not representative of the species as a whole. Also, we don't see the trees that have died and have been removed, so our observations may be misleading.

Aside from mortality, some kinds of trees come with an associated nuisance. For example, poplars often develop extensive shallow roots which crisscross lawn areas, have brittle twigs which break in the wind, and are favorite hosts for certain insect borers. Poplars may still be useful for windbreaks in colder-temperature areas such as the Tehachapi Mountains and do make reasonably good firewood in a few years when planted for that purpose.

We can attempt to make the environment around the tree optimum, but that may not be enough compensation for poorly adapted species. In Kern County and the southern San Joaquin Valley, proper irrigation is the most important cultural practice in prolonging the life of trees. Irrigation is itself a subject but, in brief, soil should be monitored for water status and either wet or dry extremes should be avoided. Proper pruning for structure, health, safety, and appearance will help prolong the life of a tree.

A few comments about specific trees follow:

Birch – The white paper-like bark and pendulous growth habit may invoke nostalgia for cooler northern climes. Plant in cool semi-shaded areas for best results. Expect borers within five years, which cannot be controlled chemically. River birch may be more borer-resistant species, but as a riparian plant don't count on its overall adaptability. Even without borer attack, birch often insists on dying all by itself. If the tree dies, children can pull off and write on the bark or make small canoes to float in the bathtub, and birch makes excellent firewood.

Willow – Another riparian plant. Expect borers in limb junctions for which chemical control is not effective. Vigorous trees may find a balance with the borers and live for many years, although limbs should be checked for structural damage. Willows, especially weeping willow, give lots of shade and also have lots of twig and leaf litter.

Coast Redwood does amazingly well considering its native locations, but somehow redwoods in Bakersfield know they're not in Santa Cruz or Mendocino County. Trees of any age may show signs of stress—reddish-to-brown needles—which will not change back to green. With time, the odds of discoloration and canopy thinning grow greater. Specific diseases and insects do not seem to be the primary causes; rather, it's heat and alkaline soils that take their toll. I get more calls about redwoods than any other tree species. "Friends don't let friends plant redwoods," is my advice.

Leyland cypress is an outstanding tree for windbreaks or screens, but has an internal clock ticking. At about 10-12 years of age, Leyland cypress is attacked by a disease called Seiridium canker, which kills a branch at a time until the entire tree is brown. There is no remedy for this disease.

Maples are outstanding in the forests south of the Great Lakes, and a few do well in the Los Angeles area. Many species do well in Oregon. Maples prefer acid soils, uncommon here, and so maples around Bakersfield often have yellowed leaves (chlorosis). The thin bark of maples leads to sunburn and trunk damage. Silver (or soft) maple is a very fast grower, at least if or until sunburn slows it down, and it can become very large (>70 ft). Japanese maple is one of the smaller and more delicate maples, and is surprisingly often planted around Bakersfield. Try filtered light under an overstory for better odds with Japanese maple.

Southern Magnolia – Great in front of an antebellum home in the South or in the U.S. SE coastal states. Many do well here for 20 or even 30 years, and then the canopy begins to open up as limbs die back. Root decay fungi may play a part.

Sycamore – The California sycamore is native to streambeds in the foothills, and can be a magnificent tree with enough space and water. However, as the jazz standard says, "The falling leaves drift by my window, the autumn leaves of red and gold." Except here the falling leaves begin in summer and continue as leaves turn a bronze color from spider mite and lace bug feeding. Anthracnose disease is sporadic from year to year. Still, though, a lovely large tree that can withstand irrigation.

Dogwood – There are many species native to the northern U.S. and California mountain areas, an excellent plant for shade and wet conditions. If you want one in the Valley, try a cool protected location with filtered light and hope for the best.

Pines prefer acidic soils and cooler temperatures than those of the Valley floor. Good warm weather pines are Italian stone pine and Aleppo pine. Canary Island pine has also worked well. Other pine species can be considered, especially for higher elevations.

Spruce – Try something else. Even the Tehachapi area seems too low and warm for spruce, although better than the Valley floor.

Giant Sequoia is marginally adapted and a novelty on the Valley floor. Don't expect the General Sherman in a local landscape.

Eucalyptus is well adapted climatically. However, be prepared for lots of leaf and twig litter. Many species grow quite large (70+ ft) in a short time, so they are best on a larger property.

Oaks – Eastern oaks (red, pin, scarlet, etc.) are often chlorotic due to iron deficiency. California native oaks are adapted to dry rather than irrigated conditions in summer. Specifically, coast live oak is not reliable in Bakersfield under irrigated conditions, although valley oak has done well. Holly oak, English oak, southern live oak, and cork oak are species seen to tolerate our landscapes.

Liquidambar was formerly one of our most reliable trees, well adapted to irrigated conditions and having lovely fall color. That has changed. Perhaps 80% of liquidambar around Bakersfield are in decline, and we think it is due to *Xylella*, a bacterial infection that plugs the vascular system.

Purpleleaf plum is in a situation similar to that of liquidambar. It is no longer reliable.

Raywood ash (*Fraxinus oxycarpa*) is one of the smaller ash species. It has maroon fall color and is manageable in its growth habit. We do not seem to have the level of dieback in these trees in the Bakersfield area that has been observed further north.

Raywood ash does have more surface roots than most trees, so that's another consideration. We don't have (not yet, anyway) emerald ash borer. If that insect arrives, it will greatly change the picture as to the reliability of ash species.

On a positive note, there are many other trees which generally to do well in Bakersfield and in Kern County. We have a free publication, Shade and Ornamental Trees for Kern County, available at the Cooperative Extension Office, or which can be downloaded from our website, http://cekern.ucanr.edu, from the Environmental Horticulture page.

John Karlik

Environmental Horticulture/Environmental Science