

Meetings and Announcements

Weekly Horticulture Zoom Talks, Thursdays at 4:30 pm

Horticulture Zoom talks have resumed. I offered 52 of these in 2020-2021. Although most were focused on notable gardens of Europe and Asia, I also did a series of talks on climate change and other topics about the environment. For March 31, the topic is Plants for Dry Climates followed on April 7 on roses. I don't have a Zoom link to share in this newsletter, but I welcome your participation, and if you to send me an email and I'll send you a link. If you were on past Hort Zoom talks, you'll receive an invitation from Travel Gallery, which is acting as host.

March-April: A Few Things to Do

Our spring season is a good time for several horticultural practices. These include the following:

- Turn on irrigation and test all valves. Check for clogged heads and sufficient clearance of heads so plants receive water.
- Adjust irrigation clocks to reflect spring conditions. Summer has not yet arrived, so we don't need the full amount of water needed in summer. Spring water use by plants is about 2/3 that of summer.
- Plant new roses. The sooner the better, since planting stock at home stores and nurseries will dry out, unless plants are already in containers.
- Plant fruit trees and whitewash trunks for sunburn protection.
- Finish up any residual pruning.
- Add fertilizer to lawns and landscapes as needed. For mature landscapes, no fertilizer may be needed, and fertilizer may lead to overgrowth and an earlier need to re-landscape.
- It's a good time to do a plant removal before weather warms.
- It's a good time to lay sod or reseed a lawn area, again before weather warms.
- It's a good time to plant palm trees.

Fireblight Disease of Trees and Shrubs

With the rains we've had, we will likely see a resurgence of fireblight. Fireblight takes its name from the blackened appearance of twigs and branches, which appear as though scorched by fire. If a tree or shrub contracts the disease, careful pruning may be needed to prevent death of sections of the canopy or even the whole plant. Only plants in

the rose family can be affected, so problems in unrelated trees and shrubs, for example, elm, willow, redwood, etc., cannot be the result of fireblight.

Although most plant diseases are caused by fungi, fireblight is caused by *Erwinia amylovora* bacteria. Infection occurs during wet spring weather when splashing rain, wind, bees, and other insects contribute to spread the bacteria from old bark infections to blossoms and new leaves. As bacteria multiply, plant shoots suddenly wilt, with leaves showing patches of brown and twigs turning black. Shoot tips bend over into a hook shape as wilt progresses down a twig. As bacteria move further down the stem to larger wood, attached branches may wilt as water-conducting tissues are killed. Cankers, which are sunken areas of dead tissue, form on branches. During warm (70-85°F) wet weather bacteria mixed with sap ooze to the surface of these cankers and can spread to uninfected parts of the plant or nearby susceptible plants. Overhead irrigation will prolong the active period. As weather turns warmer and drier, bacterial activity ceases, but bacteria residing in wood are not killed and remain quiet until the following spring.

Susceptible plants can be killed in one season by fireblight. Edible pears and quince are extremely susceptible, while apples and crabapple are less so, with some varieties showing more susceptibility than others. Ornamental pear species and varieties vary in susceptibility, with most exhibiting low incidence of fireblight in Kern County. However, 'Aristocrat' ornamental pear is very susceptible and cannot be grown further north in the San Joaquin Valley, although it does well in Bakersfield. Occasionally, pyracantha, hawthorn, photinia, cotoneaster, or loquat may be affected, but damage is usually slight. Non rose-family members, such as camphor, redwood, ash, and oaks, cannot contract fireblight.

If the disease is progressing in a tree or shrub, pruning several inches below the infected wood can arrest further damage. During dry weather dead areas should be cut out of the tree several inches below the diseased twigs or cankers. On heavier wood in very susceptible trees, like pears, pruning cuts should be made in healthy wood 6-12 inches below cankers. Because pruning tools can spread the bacteria, it is important to disinfect pruning tools between cuts by dipping in a solution of one part bleach to nine parts water, or using another household disinfectant.

If fireblight seems likely to occur based on weather, plant susceptibility, past history, and local disease prevalence, blossoms can be given limited protection through application of a copper-containing fungicide. For larger plants, such treatment would need to be repeated and is impractical in most landscape situations. Protective sprays must be applied before infection occurs, and it's already too late this year to catch the beginning of the disease.

Succulent growth is more susceptible to infection. Excessive nitrogen, heavy irrigation, and heavy pruning force rapid growth. Try to be moderate with these cultural practices if fireblight is a problem.

Further information is found in the University of California Pest Note, *Fireblight*, publication no. 7414, available at the UC Cooperative Extension office, or via the web at www.ipm.ucdavis.edu/PDF/PESTNOTES.



The left photo above shows infection centers in an ‘Aristocrat’ pear, while the right photo is a closeup. The photo below right shows small branches killed by fireblight, a lasting effect visible in summer on an ornamental pear.

Some plant problems resemble fireblight, but are not. A case in point is damage to juniper from juniper twig girdler. The insect prefers Hollywood juniper, *Juniperus chinensis torulosa*, and that’s the juniper almost always affected, as shown in the photos below. The left-hand photo shows advanced attack by the twig girdler, whereas a more typical amount of damage is shown on the right.

Lawn and Garden Equipment: California’s Recent (2021) Law

As reported in the LA Times and elsewhere, California will ban the sale of new gasoline powered lawn mowers, leaf blowers, and chain saws as early as 2024. (Citation: www.latimes.com/california/story/2021-10-09/california-moves-toward-ban-on-gas-lawnmowers-and-leaf-blowers.)

“The law requires all newly sold small-motor equipment primarily used for landscaping to be zero-emission — essentially to be battery-operated or plug-in — by that target date or as soon as the California Air Resources Board determined it is feasible. New portable gas-powered generators also must be zero-emission by 2028, which also could be delayed at the discretion of the state agency” (article cited above).

I've been trying battery-powered equipment at the office, and to some extent at home, and in the next *Greenscene* I plan to offer comments. A consideration in the practicality of a move to battery-powered or plug-in garden equipment is the energy density of gasoline compared to the common 20V or 40V batteries.

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