

HORTICULTURE FOR LANDSCAPES, ORCHARDS, AND GARDENS

CLASSES OFFERED FALL 2012

For more than 25 years we've offered horticulture classes to the community, and we are pleased to do so again this autumn. Upcoming classes can benefit homeowners by conveying knowledge of how to take care of turf and landscape plants as well as how to grow food, including vegetables and fruits, saving time and money. We emphasize water conservation and non-chemical alternatives to pesticides.

The classes have also been attended by many in the turf and landscape industry, since we offer research-based information on how plants grow and up-to-date information on pest management and irrigation practices. Representatives from homeowners associations and real estate professionals may also wish to attend to pick up tips on evaluating landscapes, using appropriate terminology to request work from landscape contractors, and evaluating work that is done.

A Horticulture I class will be offered Monday nights, 5:30-8:30 p.m., beginning August 20, 2012, and extending 16 weeks. Topics will include plant selection, soil science, landscape design principles, and pest management with an emphasis on organic and IPM methods, as well as sessions on vegetable crops, deciduous fruits, and citrus. A syllabus is available.

A Horticulture II class is planned for Thursday nights, also 5:30-8:30 p.m., beginning August 23, also for 16 weeks. Topics will be additions to those covered in the introductory class.

We ask those interested in either class to contact the Cooperative Extension office at cekern@ucdavis.edu or 868-6200, to pre-register to reserve a space and help us track class size. Cost of each 16-week class session will be \$70, same price as in recent years. Actual registration will be handled at the first class meeting. (In Kern County, we don't sponsor the Master Gardener program with its volunteer component.)

P.S. For those of you who want a level IV class, let's plan on next year, fall, 2013.

Wasps

There are two kinds of stinging wasps common in Kern County. As summer progresses, the colony sizes become greater and encounters with humans more likely. Polistes wasps, *Polistes* spp., are so-called paper wasps because they build nests out of paper-like material they produce by chewing on wood and bringing the wood fibers to the nesting site. The nests are shaped like an inverted umbrella, and can be found attached to tree branches or under eaves. The nests are usually 5-15 ft above ground, and may not be noticed until disturbed by an activity such as pruning or picking fruit. Polistes wasps aggressively defend the nest and can sting repeatedly. At the beginning, the nest is only about the size of a quarter-dollar, but can become the size of a dinner plate with a corresponding increase in number of defenders. The wasps are considered to be beneficial insects since they feed on lawn insects such as caterpillars. However, they are also attracted to sugary substances and water, such as leftover sodas, ripened fruit damaged by birds, buckets with irrigation water left behind, or swimming pools. Stepping on a wasp (barefoot) is probably the second-most common type of incident that results in a sting. The wasps themselves are red-brown with yellow interspersed, about 1½ inches in length, and fly with their hind legs trailing, resembling landing gear on an airplane. Like all wasps, they have a narrow thread-like waist.



If polistes wasps become a nuisance, it is best to find the nest and remove it. Although these wasps are not active at night, they will respond to disturbance. They respond more slowly if temperatures are cool but that is quite unlikely during a Kern County summer. Aerosol sprays that can reach 10-15 ft are available at home and garden stores. The sprays usually contain a pyrethroid that is very fast-acting and provides knock-down, but there is no guarantee that every

wasp will be stopped. Caution is the watchword when using one of these sprays and be sure to follow label directions.

“Meat bees” or western yellowjackets, *Vespula* spp., are common in the foothill areas. These are 3/8 – 1/2 inch in length, so smaller than polistes wasps, and are bright yellow with black interspersed. They’re agile fliers and can capture flying insects. They feed on protein as well as sugary substances. Unlike the paper wasps, they nest in the ground, and so finding and eliminating the nest is difficult. Bait stations (shown at right), available at home and garden stores, work well for collecting the flying wasps around houses and picnic areas. Meat bees remember where they found food in the past and they’ll come back to that location, so keeping garbage cans sealed and cleaning up food sources will help keep them at a distance.



For more information, please see the Pest Notes found at www.ipm.ucdavis.edu, including *Yellowjackets and Other Social Wasps* and *Bee and Wasp Stings*.

Preventing Nuisance Fruit Formation in Shade Trees



Plants produce seed, and sometimes that seed comes wrapped in a fruit. In summer, sidewalks and driveways can become littered with seeds and fruit from plants such as purpleleaf plum, fruiting mulberry, and olive, and the messy pulp can be tracked into houses, leaving stains on floors and carpets. Can fruit development be prevented? The answer is sometimes. There are at least three ways to prevent fruit formation that may be effective depending on the plant in question. The first is variety selection when planting a new tree or shrub. Plant breeders have developed non-fruiting cultivars that can be grown in place of the species. Examples include fruitless mulberry, seedless ash, and liquidambar that does not produce spiny seed balls. If male and female flowers are found on separate plants, the male plant can be grown. Ginkgo is large

tree where the male cultivar is desirable, since the female tree produces numerous and quite odiferous fruit.

For trees that are established, cultural practices may limit but don't usually prevent fruit formation. Heavy pruning can limit fruit formation both by reducing the amount of foliage and also by pushing the tree into a more vegetative state. A drawback is the deformed canopy and loss of shade that heavy pruning produces.

As a third approach, there are growth regulators that can limit or eliminate fruit formation. However, these don't work on all plants. For example, there is no growth regulator that can prevent fruit formation in mulberry and purpleleaf plum. However, for olive, crabapples, and liquidambar, the growth regulator ethephon is effective if applied at the right time (flowering) and the right concentration (per the label instructions). Ethephon breaks down to release the gas ethylene, which is a natural product responsible for fruit ripening—it's released by bananas, apples, and kiwis as they ripen, stimulating more ripening of surrounding fruit. One product that has been available with ethephon as its active ingredient is Florel™.

In addition to preventing fruit development in certain shade trees, ethephon can be used to remove mistletoe berries. Mistletoe is a parasitic plant living on a number of host tree species. There are two types of mistletoe found in Kern County: leafy mistletoe, often seen as green clusters of foliage among branches of native oaks, and dwarf mistletoe, found in conifers and much more destructive to its host than is leafy mistletoe. Application of ethephon in autumn can cause berry drop, limiting spread of mistletoe. However, unlike experiments in Northern California, we have not been successful in Kern or southern Tulare counties in causing leaf and stem abscission of leafy mistletoe with application of ethephon.

Maintenance Gardeners and Chemical Application

A reminder for maintenance gardeners and for those of us who employ them: If pesticides are applied, and that includes herbicides (weed killers, including Roundup™), insecticides, snail and slug bait, fungicides, gopher bait, and others, California law requires that the applicator have a current Qualified Applicator Certificate (QAC). A QAC, also known as a silver card, allows individuals to apply pesticides as an incidental part of their business, and is obtained by passing a test that covers laws and regulations regarding pesticides as well as questions about pest biology

and pest management. In addition, the California Food and Agriculture Code requires such individuals to have a Maintenance Gardener Business License, and the QAC is required to obtain that license. Maintenance gardeners are required to report monthly the pesticides they use to the County Agriculture Commissioner. These regulations are designed to limit the indiscriminate and improper use of pesticide products. The Commissioner's office is responsible for enforcement, and recently informs us that spot checks around Bakersfield have turned up quite a few maintenance gardeners applying pesticides but without the QAC. Those of us who hire gardeners and want weed control or insect control as part of their service can ask to see their QAC and business license. For questions about the regulations and licensing, please contact the Kern County Agriculture Commissioner's office at 1000 S. Mt. Vernon, 661 868-6300.

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Disclaimer: Discussion of research findings necessitates using trade names. This does not constitute product endorsement, nor does it suggest products not listed would not be suitable for use. Some research results included involve use of chemicals which are currently registered for use, or may involve use which would be considered out of label. These results are reported but are not a recommendation from the University of California for use. Consult the label and use it as the basis of all recommendations.

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