

Meetings and Announcements

Next Horticultural Tour—Spain and Portugal, May, 2025

No particular update. I will keep you informed with developments.

In cooperation with Travel Gallery of Pasadena, I plan to offer our next horticultural tour to northern Spain and northern Portugal. The planned dates are May 11 – May 23, 2025. Unless there is something totally unforeseen, we will go with these dates.

The itinerary features at least two nights in all hotels, and much less driving with more free time than our previous hort tour to the UK. The tour begins at Madrid Barajas airport, moves to the north, moves to the west to the famous pilgrimage site of Santiago de Compostela, and then turns south to northern Portugal. We envision the southern California group traveling together from LAX to Madrid, leaving Sunday, May 11, with arrival early afternoon Monday, May 12.

Expect good food.

As we found in our previous hort tour to Spain, I know of no other country that handles large public spaces, e.g., squares and boulevards, as well as the Spanish.

I will 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.

Master Gardener Program

No particular update here either. The wheels are turning at the pace typical in UC.

UC Cooperative Extension in Kern County has received funding for a Master Gardener (MG) coordinator, and interviews for that position are progressing.

If you are interested in becoming a Master Gardener, you may call our office, 661-868-6200, or email cekern@ucdavis.edu, and ask to be put on the list for contact when the MG classes begin. We expect classes to begin this coming autumn.

Sun and Shadow

Yes, it has been warm in early July. The good news is, as of July 10, sunrise and sunset are a full two degrees further south than their maximum values, and the zenith angle of the Sun is 77 degrees rather than its maximum of 78 degrees. That may not seem like much, but there is a steady movement of the zenith angle to a lower elevation which will mean lower solar intensity. Day length on July 10 is almost 10 minutes shorter than day length at the solstice. That may not seem like much, but the shortening of day length

from day to day will increase (for awhile) and be cumulative. Physics is on our side with regard to cooler days and nights.

Ants

I awoke today to make coffee, finding a sea of ants, or at least a lake of ants, on the kitchen counter.

Ants are perhaps the most common household insect pest in Kern County, which has favorable weather for colony development of several species. Ants can also be found in landscapes, often more as a nuisance to humans than as a damaging insect to plants. Arrival of summer and warmer weather allows ants to reproduce rapidly and colonies to increase in size. Development of improved ant baits has helped in managing these insects.

A useful reference regarding ant biology and control are several files on the UC IPM website, <http://ipm.ucanr.edu/>. Some of the background information for this newsletter article has been excerpted from the Pest Notes found on that website, e.g., UC ANR publication 7411 *Ants* by Rust and Choe.

Ants are social insects of the order Hymenoptera, the same insect order containing bees and wasps. Like bees, the duties within an ant colony are divided among different groups or castes, workers being the most numerous. The queen remains protected in the colony and produces eggs, which pass through complete metamorphosis of larva, pupa and adult. Unlike termites, ants have a thread-like waist and antennae with an elbow rather than straight. Of the two hundred or so species found in California, fewer than a dozen are important pests, and in Kern County most ant problems are caused by only two species, Argentine ant (*Linepithema humile*) and southern fire ant (*Solenopsis xyloni*). Argentine ants are common household pests, while southern fire ants are found mostly outdoors. Argentine ants are unusual in that a colony has multiple queens and workers from one location are welcomed elsewhere; thus, Bakersfield is essentially one supercolony of Argentine ants. Southern fire ants (not the same as the red imported fire ant of Texas, and more recently Southern California) are recognizable by their stings when crawling on exposed skin.

Ants need food, water, and shelter. Outdoors, food sources for some species include honeydew secreted by aphids and soft scales. Reducing aphid populations may limit the food source and hence the colony size. It is, however, impossible to completely and permanently eliminate ants from a landscape and would be counterproductive, since ants perform useful scavenging functions, feeding on dead insects and animals. Since neither very wet nor very dry conditions are favorable for ants, it should be no surprise that an irrigated landscape, with its combination of wet and dry soil conditions, provides very favorable conditions for ant colonies. Occasionally, ant colonies may be found in potted indoor plants or in planter areas, especially if the planter area has contact with soil beneath the house. Colonies may also be found underneath concrete slabs with access into houses through cracks in the slab or via expansion joints in a garage. Partly depending on species and time of year, ants may prefer sugary foods, oils, or protein such as meat. Kitchens are sources of all of these, so ants may discover via scouts a food source and quickly build a trail to the colony.

Management of ants includes familiar principles of IPM, including exclusion and sanitation. Caulking cracks and sealing openings into houses is helpful. Cleanup of food residues and countertops leaves less source material for ants to find. Because ants leave

behind and follow chemical scents to form a trail, cleanup of trails with soap disrupts the procession and ants must rediscover food sources.

What about limiting ant numbers with insecticides? Household aerosol sprays often contain pyrethroids, which are analogs of the naturally occurring pyrethrins, and are fast acting but short-lived. These can be used when an ant trail is discovered and provide quick knockdown (be sure to follow label directions with any insecticide product). However, worker ants are easily replaced by the colony. To limit intrusion by ants, a perimeter spray around a dwelling may be helpful and is something a pest control service can provide. A barrier will be temporary, since insecticides break down.

Baits are often part of an effective IPM strategy. These materials are a big improvement in terms of both effectiveness and environmental safety compared to products available 20 years ago. (Formerly, one could search for the ant nest and attempt to eliminate it with contact insecticides. However, removing even 90% of the workers would not be effective since the queen was well protected and new workers would be produced.) The newer ant baits, containing insecticides such as hydramethylnon, fipronil, abamectin, or the older material borax, are slow-acting with very low toxicity to mammals. The active ingredients can be included in either protein or sugar baits. (Be sure to read the label of any product for current registration and active ingredients.) After feeding, workers carry the active ingredient to the queen, leading to collapse of the colony. Ant baits should be used according to label directions, and the bait material selected according to the food preferences of the ant in question (sugar or protein-feeding, for example). The insecticides in the baits can be degraded rapidly by sunlight and to a lesser extent by water, so application in shaded, dry areas, or application in the evening, can allow more time for workers to find the bait and carry it back to the nest. Placing a little bait in an ant runway will result in workers congregating and feeding almost immediately if bait is desirable to them. Several baits can be tried to see which is most attractive.

Since colonies typically increase in size, ant problems tend to become worse as we move through summer. Repeat applications of baits, as needed, can limit these nuisance insects. Please note that ant insecticides containing pyrethroids, such as bifenthrin or lambda-cyhalothrin, are short-lived contact materials and will have limited effectiveness as baits. Although ant insecticides are widely available, the more effective bait products may not be available at the big box home stores; however, specialty turf and landscape stores often carry them.

Again, follow label directions for use of any pesticide.

The UC IPM website, <http://ipm.ucanr.edu/>, has peer-reviewed free publications about ants and many other insect, weed, and disease pests.

John Karlik
Environmental Horticulture/Environmental Science

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