



Retail Nursery Newsletter

An Information Source for Retail Nursery Professionals

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Healthy Garden— Healthy Home

*Helping to improve
water quality in
San Diego County
through the
implementation of
Integrated Pest
Management
practices.*

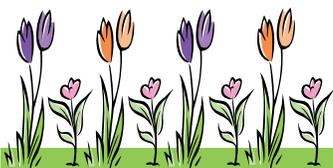
It's The Water

That Connects Us!



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Brown Widow Fright Worse than Bite

by Vincent Lazaneo, UCCE San Diego County Urban Horticulture Advisor

A close encounter with a black widow spider is an unnerving experience, and the arrival of a new spider, the brown widow, in San Diego County has increased the public fear factor. The brown widow's venom is potent, but rumors about the spider's danger to people have been grossly exaggerated.

The brown widow



Brown Widow Spider

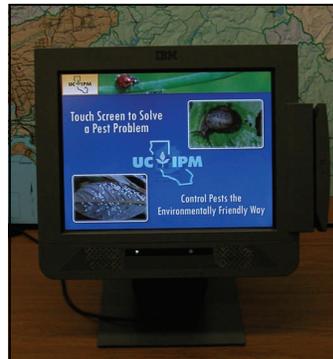
is not native to San Diego County, but it is now

found along the coast from Carlsbad to San Ysidro and as far inland as El Cajon, according to the San Diego Natural History Museum. The spider is native to southern Africa. It is not known exactly when the brown widow arrived in California, but it is now found along the coast as far north as Los Angeles County.

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Touch-Screen IPM Information Kiosks Available for Local Nurseries and Garden Centers

The Healthy Garden/Healthy Home Program, in collaboration with the UC Statewide IPM Program, has developed an interactive Information Kiosk. The touch-screen units, which provide the consumer with UC generated IPM information, are available for use for 45-day periods during the initial test year. The IPM Kiosk provides the consumer with management tips related to irrigation, fertilization, pest identification, pest management, least toxic control tips, safe use and disposal of chemicals, and runoff prevention. Each unit



IPM Touch-Screen Kiosk

also has printer capabilities so that the user can print out useful management tips and contact information for the Cooperative Extension and Master Gardener program.

Retail nursery and garden centers can use these units as part of their customer education efforts. Each unit is self-contained and only requires a simple electrical outlet for operation. We are looking for additional retailers to help in the evaluation of this outreach tool by placing a kiosk in their store, nursery or garden center. Interested managers should contact Debbie McAdams, dmcadams@ucdavis.edu 858-694-3393, at the UC Cooperative Extension Office to arrange for the placement of a unit in your establishment.

Quality Control

by Cheryl A. Wilen, UCCE Area IPM Advisor

I often go through nurseries, not only to buy plants and other gardening items for my own home, but to observe what's going on at the site. I see new plants, displays, pesticides, and gadgets that I miss when I go to wholesale nurseries or trade shows for work.

Because I can't turn my mind off, I am always testing myself on weed identification. So imagine my surprise when I saw a citrus tree in the sales area growing in a planting sleeve that was absolutely LOADED with yellow nutsedge. Yellow nutsedge is one of the worst weeds one can introduce to an area because it spreads by tubers in the soil and is almost impossible to get rid of once planted. Luckily the tree did not look so good so I am hoping that no one bought it. But this brings me to the issue of quality control.

Should the tree have been available for sale? Absolutely not. Did the retailer know that the tree

was infested when he or she took delivery? Probably not. Should the retailer dump the tree once the nutsedge was apparent? Yes. When a perennial weed is found in nursery stock, it should be tossed. Annual weeds can pose problems too, but to a much lesser extent and are generally easier to control.



Container Stock Infested with Various Weeds

Now that it is getting cooler and things may be slower for a month or so, it is a good time to look around the nursery and see if there

are any older plants that may be showing some disease symptoms, getting weeds in the pots, or otherwise need some TLC. Also check under the benches for algae, moss, liverwort, and/or weeds. Some of these can be overwintering hosts for insects. Snails also like that environment. Cool and damp weather often is conducive for development of some plant diseases. Try not to water in the evening because leaves will stay wet longer and create a good environment for disease development. Spreading plants farther apart is good to increase aeration.

Finally, check out your pesticide and storage areas, especially where you keep larger bags. The bags tend to get holes in them as people move them around. Pesticides and fertilizers can fall on the ground and need to be cleaned up. Pesticides, including those in weed and feed products, are considered hazardous waste and cannot be thrown out in the trash.

New Beetle Killing Oaks

By Vincent Lazaneo, UCCE San Diego County Urban Horticulture Advisor

If you want to burn oak in your fireplace this winter, be careful where it came from. Many oaks in the mountains east of San Diego have been attacked by a new insect pest, the goldspotted oak borer (GSOB) *Agrilus coxalis*. Transporting oak firewood out of the infested area could spread GSOB to new areas and endanger other oaks.

GSOB is not native to California and may have been introduced with firewood from Mexico. For the past seven years, Oak decline has been evident in eastern San Diego County near the communities of Descanso and Pine Valley. Over the past few months, US Forest Service entomologist Tom Coleman discovered that damage was due to the feeding activity of GSOB. Prior to the beetle's discovery, drought was thought to be the main cause of oak deaths.



Bark Staining Found Along the Main Stem

The beetle has killed California live oak, Canyon live oak and California black oak in the area from

Alpine, east to Mt. Laguna and north to Julian. For now, Englemann oak seems to resist the pest. As many as 70% of the oak trees in some areas are infested. Some campgrounds in the national forest have been closed and no permits are being issued to remove oak firewood.

The adult GSOB is a small,



Lateral View of the Adult GSOB

bullet-shaped beetle about 10mm (0.4 in.) long and has six golden-yellow

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Brown Widow Spider cont. from page 1

The brown widow is a little smaller than the common black widow spider, which has a shiny body and red hourglass mark on the bottom of its abdomen. The same hourglass mark appears on both sexes of the brown widow, but it is orange to orange-yellow in color. The color and markings on brown widows can vary. The spider's body can range from light tan to dark brown or almost black. The top of its abdomen may have a red broken stripe or a series of white spots with parallel rows of black spots on either side of the stripe. The female brown widow produces a distinctive egg sac; it is round in shape with numerous short spike-like projections. The black widow's egg sac is also round but has a smooth surface.



Female Brown Widow with Egg Sacs

The brown widow may be seen in or near its web which it builds in secluded locations. The

spider is commonly found around homes and in gardens, but it poses very little threat to humans. The brown widow does not attack people and does not defend its web. Bites from the brown widow are not common and usually only occur when the spider is accidentally squeezed or lain on. Bites may occur when a person sticks their hand into a recessed area or dark corner where a spider is hiding.

According to Dr. G. B. Edwards, a curator with the Florida State Collection of Arthropods, the venom of brown widows is twice as potent as that of black widows, but much less venom is injected when a person is bitten, and the effects tend to be more localized. There are none of the serious protracted symptoms that can occur with the bite of a black widow, which injects much more venom. The bite of a brown widow is about the same as any non-poisonous spider. The main symptom for most people is localized pain, usually no more severe than a bee sting.

If you are bitten by a brown widow, wash the bite area with soapy water and apply an antiseptic to prevent infection. Use ice or ice water to reduce swelling and discomfort. If the wound begins to itch use medication to relieve it. Do not scratch the wound since this may

break the skin and lead to bacterial infection. Medical care should be obtained if the bite of any spider causes an unusual or severe reaction, such as increasing pain or severe swelling.



**Ventral View
of the Hourglass Markings**

Spiders help control many pests and their activity in gardens should be encouraged. Pesticide control is difficult and rarely necessary. A variety of non-chemical control methods are effective against spiders. For more information on how to control spiders in and around the home visit: <http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7442.html> (UC Pest Note on spiders.) For notes on the brown widow visit: <http://spiders.ucr.edu/brownwidow.html>, and <http://www.sdnhm.org/> (type brown widow in the Search box).

**Photos by Fred Santana, PhD
University of Florida Extension**

Diaprepes Root Weevil Update

by Loretta Bates, UCCE San Diego County Staff Research Associate

Since the root weevil *Diaprepes abbreviatus* was first reported in San Diego County in 2006 the County and the State of California have been aggressively monitoring the movement of the weevil and attempting to contain and eradicate the pest. Currently, over 70 square miles are in quarantine zones, from La Jolla to Ocean-side. The latest area to be added to the quarantine is in Vista, south of Highway 78. Within the quarantine zones, the CDFA had been spraying confirmed find sites until

July 2008 when funding ran out. Money (at a reduced level) for continued spraying was initially included in the new State Budget, but at the last minute, Governor Schwarzenegger deleted all money for *Diaprepes* spraying. The San Diego County Farm Bureau is actively seeking funding to continue spraying. UCCE research activities to evaluate the effectiveness of various chemical and biological control agents continue and are funded through the end of this fiscal year (June 2009).



Late-instar larva of diaprepes root weevil, *Diaprepes abbreviatus*, and its feeding damage to a large root exposed by excavating soil.

HEALTHY GARDEN—HEALTHY HOME

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Goldspotted Oak Borer *cont. from page 2*

low spots on its dark green forewings. It is active from summer to fall and may feed on foliage but is rarely seen. Eggs are probably laid in bark crevices and the larvae feed under the bark on the trunk and larger branches. Mature larvae are white, legless, slender and about 18mm (0.75 in.) long. Larval feeding kills patches and strips of cambium



White, Legless Larvae of GSOB

tissue beneath the bark which causes dark staining and sap flow on the bark surface. Prolonged infestations causes limb die-back

and eventual tree death. The larvae pupate in the outer bark and leave D-shaped exit holes about 1/8" wide when they emerge.



D-Shaped Exit Holes of GSOB

It is difficult to protect susceptible oaks from attack by GSOB. At this time it is not known if insecticides will help protect healthy oaks or save infested trees. Research is planned to evaluate the effectiveness of chemical sprays and systemic treatments. Before an insecticide product is

used, always read and follow all label directions. For more information on GSOB visit www.fs.fed.us (in the search box enter CA under state and Cleveland under name).

How to keep GSOB from spreading?

- Do not transport oak firewood or logs to un-infested areas
- Remove heavily infested dying or dead oaks
- Chip wood into 1" pieces and use as mulch or place cut wood and logs in a sunny location, then cover with two layers of clear plastic and secure tarp edges with soil

*Photos by Tom W. Coleman,
USDA Forest Service*