Healthy Garden—Healthy Home

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!

Inside this issue:

Hungry Sticks Invade Landscapes

Vincent Lazaneo, UCCE Urban Horticulture Advisor

A strange looking insect from the other side of our planet is feeding on landscape plants in local neighborhoods. The exotic pest which looks more like a twig than an insect is the Indian stick insect or *Carausius morosus.* The insect feeds at night on the foliage of a wide range of landscape plants including azalea, blackberry, camellia, fuchsia, hawthorn, hibiscus, ivy, pittosporum, privet, pyracantha, raspberry and rose.

Adult Indian Walking Stick

Indian stick insects are native to southern India. They are used for educational purposes in other countries, and a permit is required to posses them in the United States because of their potential to become a pest. The insect multiplies quickly and can easily escape from captivity and become a pest in the landscape. Their eggs are mixed with debris and can accidentally be discarded when their enclosure is cleaned.

The first estab-

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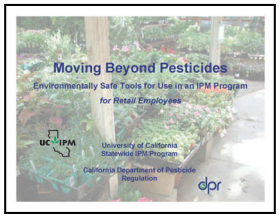
New FREE Online Course Helps Employees and Consumers Move Beyond Pesticides

Are your customers going green? When customers ask about alternatives to pesticides, do your employees know how to direct them to nonchemical tools and devices or less toxic pesticides that will get their pest problems under control? Whether you have new staff with training needs or seasoned employees in need of a refresher course, help is here. The University of California (UC) Statewide Integrated Pest Management (IPM) Program has released a new, free, online course for retail employees at www.ipm.ucdavis.edu/IPMPROJECT/beyondpesticides.html .



IPM On-Line Training

Moving Beyond Pesticides includes a basic overview of IPM and gives tips on how to diagnose and manage pest problems. The course features low-toxicity tools and products sold in most garden centers. Participants will have the opportunity to learn about resistant cultivars, mulches, and pruning and irrigation tools, types of hoes and cultivators, and types of pest traps. The course also includes tips for identifying, protecting and encouraging the use of beneficial insects and installing fabric mulch. The program ends with specific examples of IPM programs featuring garden center products for managing snails and slugs, weeds, rats and mice, and aphids. Although the *Moving Beyond Pesticides* course takes about an hour to complete, it is broken into 6 sections that can be viewed in separate sittings. Users finishing the course receive a certificate of completion that can be displayed in the store.

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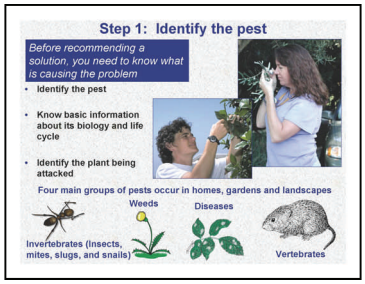
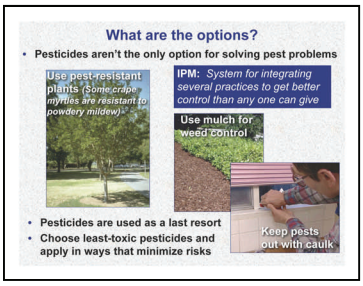
On-Line Staff Training cont. from page 1



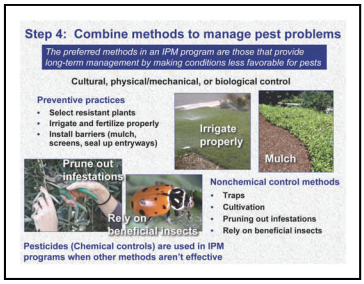
Sample Screen: Pest ID

UCIPM's first online course, *Introduction to Pesticides for Retail Employees*, was released in March 2008 and has been very well received. "The online course organizes a lot of information that can be very confusing and dangerous, if misunderstood," said Rosanne Mignosa of Redwood Barn Nursery in Davis, who completed the course. "Having worked at our nursery for a number of years, I knew a lot already, but I think the course would be extremely useful for any new employees. It would be a good thing for all of us at the nursery to do once a year to keep our information fresh and up-to-date. "

Introduction to Pesticides teaches about the types of pesticides, how to direct customers to least-toxic products, how to use the pesticide label to answer questions, and how to advise customers about safely using and storing pesticides or cleaning up spills. Home gardeners often look to their local garden center for information to help solve their pest problems. Surveys by UC IPM confirm that many consumers do not know how to choose, use, or dispose of pesticides properly and are not always aware of safer alternatives. *Introduction to Pesticides* and *Moving Beyond Pesticides* were created to help increase consumer awareness about pesticides and alternative options for managing pests in homes and gardens.



Sample Screen: Management Options



Sample Screen: Combine Methods

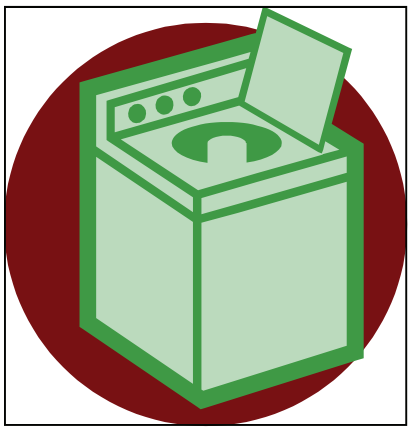
More than 400 people across the U.S. have taken the pesticide course with several garden centers requiring all their sales staff take it. Dennis Milliken, a grower for Hoboken Gardens in Rockport, Maine, completed the first course along with some of his staff. "The course was quite good, especially for employees who do not have their pesticide license but sell retail. Now they have some exposure to selling different pesticides—what to use where, when and how."

Next year, the UC IPM Program plans to look for ways to help retailers integrate both courses into their existing training programs.

Pesticide Safety Tips from the National Pesticide Information Center - How to Properly Wash Pesticides Out of Clothing

The following safety tips are good to follow whether you are a retail nursery staff person responsible for handling pesticides or you are advising consumers about the safe handling of pesticide products.

- *Store and Wash contaminated clothing separately from the family laundry.*
- *Clothes that are soaked with pesticides should be thrown away rather than washed.*
- *Wash work clothing each day to maximize removal of chemicals. Clothing can keep pesticides away from the skin during work hours; however, that same clothing can become a source of contamination if pesticides aren't laundered after each use.*



- *Pre-rinse contaminated clothing by hosing them down outdoors, soaking in a separate tub or agitating in the washing machine.*
- *Wash only a few items at a time.*
- *Use hot water - the hotter the better.*
- *Use heavy duty laundry detergent.*
- *Laundry additives such as chlorine bleach or ammonia do not improve removal of pesticide residues.*
- *Line dry, if possible. Sunlight breaks down many pesticides and it can prevent residues from collecting in the dryer.*
- *Remove any leftover pesticides from the washer by running an "empty load" through the complete cycle with hot water.*

Taken from the NPIC Common Pesticide Questions: Dirty Work Clothes: How Should I Wash Out Pesticides?

Indian Walking Stick *cont. from page 1*

lished population of Indian walking sticks in California was found during June, 2001 in a residential neighborhood in the La Jolla area of San Diego. Additional infestations have since been found in other areas of the county, including Carlsbad, Encinitas, and the San Diego neighborhoods of Pt. Loma, Mission Hills and Balboa Park. Infestations have also been found in San Luis Obispo county (August 2001) and other coastal counties as far north as San Francisco.

Adult Indian stick insects are about 3 inches long, wingless and light green to dark brown in color with a characteristic red mark at the base of the first pair of legs. Its body and appendages are long and slender. When disturbed the insect drops to the ground and plays dead, drawing its legs and antennae close to its body resembling a stick, hence its common name.

Indian stick insects are female and parthenogenic which means they reproduce without mating. One female can lay several hundred eggs over a period of about 4-6 months. The small brown eggs are produced continually and fall to the ground beneath the host plant. They take about three months or more to hatch, depending on temperature and moisture. Upon hatching, the nymphs, which look like tiny versions of the adult, grow by shedding their exoskeleton or skin several times.

Indian Walking Stick Eggs which are approximately 2 mm in length.

Indian stick insects are masters of camouflage. They hide inside host plants during the day and are difficult to see because of their cryptic shape, coloration and tendency to remain motionless. They are active at night and chew holes in tender foliage.

Other pests also chew holes in leaves. If you notice this damage, inspect the plant at night to determine if stick insects are present. Plants can also be checked during the day by placing a light colored cloth on the ground under a host plant and shaking it vigorously to dislodge insects clinging to the branches. Spraying water on infested plants will also disturb Indian stick insects and may cause some to climb to the surface where they can be seen.

Hand picking Indian stick insects from plants at night will help reduce the population. To kill the insects, drop them into a container with soapy water. This method alone may not provide adequate control. To effectively protect plants from damage, the insects must be eliminated before they begin laying eggs. This can be accomplished by treating plants with an insecticide that leaves a toxic residue on foliage. Lightly spray the outer surface of infested plants in late afternoon before the insects emerge to feed.

Before you use a pesticide, read the label to find out if it is registered to use on the plants you are treating, especially if they are edible crops. The insecticide Spinosad (Green Light Lawn and Garden Spray) is effective against walking sticks. It is less harmful to beneficial insects than more persistent chemicals like Carbaryl (Sevin) or products containing pyrethroids like Cyfluthrin (Bayer Rose & Flower spray). Re-treatment should not be necessary for at least two months and no more than three treatments should be required annually. All plants that harbor stick insects should be treated at the same time. Better control will be attained if adjacent neighbors also treat infested plants on their properties.

Photos by Gevork Arakelian, Ph.D., Senior Biologist, Los Angeles County Department of Agricultural Commissioner/Weights & Measures

10% Off University of California Agriculture and Natural Resources Publications!

For a limited time, you can order any publication from the UC Agriculture and Natural Resources on-line catalog, and receive a ***10% discount***.

How to Order:

1. Go to http://anrcatalog.ucdavis.edu
2. Select Publications and add to Cart
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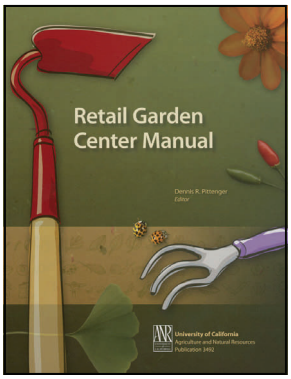

SAMPLE PUBLICATIONS

HEALTHY GARDEN—HEALTHY HOME

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FREE Point-of-Purchase Educational Materials and Training Workshops Available for Local Nurseries and Garden Centers!

As part of the ***Healthy Garden – Healthy Home*** Integrated Pest Management (IPM) outreach effort, research based educational materials, and the fixtures necessary to display them, are available to nursery and garden centers throughout San Diego County. Materials include water resistant pest cards and informational tear-off sheets. Pest Card topics include; *Ants, Aphids, Cockroaches, Earwigs, Fleas, Giant Whitefly, Gophers, Head Lice, Rats, Snails & Slugs, Spiders, Termites, Safe Use & Disposal of Pesticides, Lawn Insects,* and *Gardening with Good Bugs.* Tear-Off Sheet topics include; *General IPM Information, Ants, Snails & Slugs, Aphids,* and *Preventing Irrigation Runoff.*

In addition to these Point-Of-Purchase items, several educational videos ranging in length from 15 seconds to 3 minutes are available for use in your store. Both DVD and video format are available.

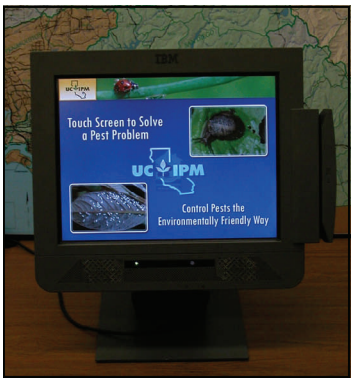
Workshops for nursery staff focusing on topics related to IPM and Water Quality are also available for booking.

For more information about any of these opportunities or to make arrangements for your nursery or garden center to participate in this program please contact Scott Parker by phone, 858-694-2184, or email, saparker@ucdavis.edu.

Sample Pest Cards Display Racks

Touch-Screen IPM Kiosks Available 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 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.



IPM Touch-Screen Kiosk

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.