

Environmental Horticulture Issues

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Florida Survey on Responses to Insect Pests

University of Florida entomologists have conducted a telephone- interview survey of 600 Florida residents to assess typical responses to problems due to insects. Here are some of the most interesting (and, in some cases, surprising) findings:

- ◇ Over one-quarter of the respondents reported that they had allergies to insects or insect bites, and about 14% reported that they had allergies or were sensitive to chemical pesticides.
- ◇ Insect pests were judged to be "very harmful" to their households by 16% of the respondents, "somewhat harmful" by 52%, and "not harmful" by 30%, with 2% saying "do not know."
- ◇ Ratings of insect pest types as "most difficult to control" were as follows: 42% of the respondents named crawling insects, 22% named lawn and tree insects, 16% named wood-destroying insects, and 15% named flying insects. Nearly half of the respondents rated flying insects as the "most harmful" of the types. And about half of the respondents said that control of crawling insects cost them more than control of other types.
- ◇ Percentages of the respondents who had experienced particular problems within the previous year: crawling insect pests, 71%; lawn insect pests, 56%; flying insect pests, 38%; garden insect pests, 27%; stored product insect pests, 13%; termites, 10%.
- ◇ 82% of the respondents said that they used pesticides, and 18% said that they did not use pesticides. 8% said that they would "never" use pesticides, but some in this group later admitted that they might consider using chemical controls for termites, crawling insect pests, and/or lawn and tree insect pests.
- ◇ Homemade insecticides, such as soaps, had been tried by 42% of the respondents, especially for control of crawling insect pests. 49% of those who used homemade insecticides considered the materials to be "very effective," while 23% considered them "ineffective."
- ◇ The primary motivation for buying pesticides or anti-pest apparatus, or for hiring professional pest-control experts, was usually different for those who said that they used pesticides and those who said that they did not use pesticides. Most of the respondents in the former group indicated that they took action when they observed some damage due to insect pests, while most of the respondents in the latter group indicated that they took action only if they thought insect pests were dangerous to their families.

The entomologists who conducted the survey conclude that many of those surveyed would be quite receptive to least-toxic tactics adopted in many integrated pest management programs, since they were already practicing some of those tactics themselves.

American Entomologist, Summer 2008.

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News You Can Use

Thrips resistance forces spinosad suspension

On August 12, Dow AgroSciences announced that it is voluntarily suspending the sale and use of multiple spinosyn insecticides in Broward County and a portion of Palm Beach County in Florida. This action has been taken in response to evidence that western flower thrips have developed resistance to a product with the active ingredient spinosad. "Florida's uniquely long growing season combined with the rapid reproduction cycle of thrips creates an environment that is conducive to developing insecticide resistance. This suspension is necessary to preserve the viability of this important family of insecticides," says Mark Urbanowski, senior marketing specialist for Dow AgroSciences turf and ornamental products.

Products affected by this suspension are Conserve® SC turf and ornamental insect control, Delegate® WG insecticide, Entrust®, Radiant® SC, and SpinTor®. In Florida, these products are used in the nursery and greenhouse; lawn care; landscape; golf course; and fruit and vegetable markets. "Although this is a temporary suspension for a minimum of 12 months, Dow AgroSciences is committed to bringing these products back to the market as soon as possible," Urbanowski said. "We're working with the University of Florida and the Florida Department of Agriculture and Consumer Services to develop an educational program <http://www.dowagro.com/usag/thrips/> to help spinosyn users learn more about the necessity of proper product rotation and integrated pest management (IPM). The continuous application of any class of insecticides over an extended period of time, without proper rotation with other chemistries, can lead to resistance development.



Sabal palms dying in west central Florida counties

A lethal phytoplasma disease is killing Sabal palmetto on Florida's central west coast. Substantial numbers of Sabal palmetto (cabbage palm or sabal palm) are dying in Manatee and Hillsborough Counties. Nigel A. Harrison and Monica L. Elliott; University of Florida - IFAS, Fort Lauderdale Research and Education Center have posted information, preliminary analysis and color photographs. A link to the PDF file is available on the UF/IFAS Pest Alert site. <http://pestalert.ifas.ufl.edu/>

Increase in Applicator and Dealer License fees

As of July 9, 2008, Rule 5E-9.028 has been amended to increase the amount charged for RUP Applicator and Dealer license fees to the maximum amount allowed by law. The new amounts are as follows:

- Private Applicators will increase from \$60.00 to \$100.00 for 4 year licensure period.
- Public Applicators will increase from \$60.00 to \$100.00 for 4 year licensure period.
- Commercial Applicators will increase from \$160.00 to \$250.00 for 4 year licensure period.
- RUP Dealer License fees will increase from \$175.00 to \$250.00 for 1 year licensure period.

Tick-borne Hazards for Outdoor Workers

Outdoor workers are at risk of exposure to tick-borne diseases if they work at sites with ticks. Worksites with woods, bushes, high grass, or leaf litter are likely to have more ticks. Outdoor workers in most regions of the United States should be extra careful to protect themselves in the spring, summer, and fall when ticks are most active. Ticks may be active all year in some regions with warmer weather. "Tick-borne Diseases" at <http://www.cdc.gov/niosh/topics/tick-borne/> is a new NIOSH Topics Page that includes information for employers and employees. It explains illnesses, identifies tick carriers and provides recommendations for prevention.

News You Can Use (Continued)

Mobile lab helps growers conserve water



Florida's Lake County Mobile Irrigation Lab has identified potential savings of nearly 400 million gallons of water since its inception 2 years ago. The lab offers growers a free, unbiased and confidential evaluation of irrigation systems. Besides reducing water use, the program's participants are also running their pumps less and saving diesel. "It's like going from a truck that gets 8 to 10 mpg to a hybrid vehicle," said Ty Matlack, owner of Matlack Tree Farm in Clermont, Fla., who has cut irrigation time nearly in half based on the lab's recommendations. "It's not only good for me economically, it's good for the environment, county and state. The less water we use is good for everyone." The lab is funded by a grant from Florida Dept. of Ag. and Consumer Services, USDA's Natural Resources Conservation Service and the St. Johns River Water Mgmt. District. Contact the lab at (352) 343-2481, Ext. 6.

New spray increases plant cold tolerance

Freeze-Pruf, a spray developed by University of Alabama and Miami University in Ohio, can improve plants' cold tolerance between 2.2F and 9.4F, depending on species. Freeze-Pruf works to below zero Fahrenheit, depending on the plant. It's been studied on bananas, tropical foliage, palms and citrus. It protects both the foliage and the flower. The product is not yet commercially available, but the developers filed for a patent earlier this year. "It's nontoxic, it's cheap, and the idea is to apply it once per season," said co-developer David Francko, botany professor at University of Alabama.

Can Roundup Pro Be Used On Woody Landscape Groundcovers?



Groundcover plants are used extensively in the landscape to fill in beds and prevent erosion. Weed control among groundcovers in nursery production and landscape maintenance is challenging. Nursery growers often use preemergence herbicides, but these are not 100% effective. Often, landscape professionals are called upon to remove weeds from groundcover beds in which hand weeding is the only option. Because of rising labor costs and decreasing availability, hand weeding is costly and time consuming. While there are grass-selective postemergence herbicides labeled for use in groundcovers, there are no non-selective postemergence herbicides labeled.

The objective of this study was to determine the tolerance of six landscape groundcovers to post emergence herbicides Roundup Pro (glyphosate) and Finale (glufosinate-ammonium): Asiatic jasmine (*Trachelospermum asiaticum*), wintercreeper euonymus (*Euonymus fortunei coloratus*), variegated lirioppe (*Lirioppe muscari* 'Variegata'), English ivy (*Hedera helix*), mondo grass (*Ophiopogon japonicus*), and shore juniper (*Juniperus conferta* 'Blue Pacific'). Plants were grown in full sun and irrigated overhead.

Conclusions are that Roundup Pro and Finale can be used at specified rates to control many weeds and cause no significant long term injury to selected groundcovers. Low rates of Roundup have potential for use on Asiatic jasmine, euonymus, lirioppe, mondo grass, and juniper. Low Finale rates have potential use for lirioppe, English ivy, and juniper. Additional trials will be conducted to determine the effect of application timing on plant tolerance.

(From "Roundup Pro: Can It Be Used on Woody Landscape Groundcovers?" by A. Newby, C. Gilliam, J. Altland, C. Simpson, G. Wehtje, presented at the SNA Research Conference in Atlanta, July 2003).

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Celeste White *Celeste White*
Orange County Commercial Horticulture
Landscape Maintenance
Pesticide Certification
6021 South Conway Road
Orlando, FL 32812
Phone: 407-254-9200
Fax: 407-850-5125
Email: ctwhite@ufl.edu

Visit us at:
<http://landscape.ifas.ufl.edu>



Calendar of Events

- ◇ **CEU Day and Worker Protection Standard Train-the-Trainer.** On November 6, 2008 at the Orange County Extension Office.
- ◇ **Florida Green Industries Best Management Practice.** On November 14, 2008 at the Orange County Extension Office.
- ◇ **Expanding Your Plant Palette.** On November 19, 2008 at Leu Gardens. Contact Lake County Extension Office (352)343.4101.
- ◇ **Review and Exam for the Ornamental & Turf/ Private Ag Applicator.** On December 9, 2008 at the Lake County Extension Office (352)343.4101.
- ◇ **ID Cardholder Training.** On December 11, 2008 at the Orange County Extension Office.
- ◇ **Winter 2009 Lawn and Ornamental Pest Management Workshop.** On January 10, 2009 at the Orange County Extension Office.

Pesticide Updates

(From Chemically Speaking June - July 2008)

- ◇ Bayer CropScience has requested the cancellation of **Di-Syston® 15 G** on commercial ornamentals.
- ◇ Bayer CropScience has requested cancellation of all registrations containing fenamiphos (**Nemacur®**). This includes special local needs (SLN) registrations.
- ◇ On May 29, the EPA announced that the four rodenticides **brodifacoum, bromadiolone, difethialone, and difenacoum** will become restricted-use pesticides available only to professional applicators. Ten other rodenticides available to consumers will be available only in enclosed bait stations, and the sale of loose bait, such as pellets will be discontinued for use around residences.
- ◇ The EPA has registered the insecticide/acaricide **QRD 400** from Agraquest Inc for use in field- and container-grown non-food ornamental plants in commercial nurseries, greenhouses, and lath- and shadehouses. It is an extract of *Chenopodium ambrosioides* var. *ambrosioides*. The biopesticide reportedly has activity against mites, aphids, whiteflies, and thrips.