



UF/IFAS/St. Lucie Extension, 8400 Picos Road, Suite 101, Ft. Pierce, FL 34945  
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## Treasure Coast Citrus Notes

March - 2011

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### New Psyllid Predator Wasp from Mexico?

Some of you may have heard about a supposed new biological "wasp" predator that is being used in Mexico to battle the Asian citrus psyllid. Dr. Michael Rogers, entomologist at the CREC advises that the insects described in the article are in fact the green lacewing and *Tamarixia radiata*, both of which are well established in Florida. Unfortunately, populations of either insect were not high enough to provide anywhere close to the ACP control required for HLB management and have been further reduced by pesticide applications intended for the ACP. The story was focused on efforts by the Mexican government to rear these beneficial predators for release in groves where growers could not afford or were reluctant to apply pesticides for ACP control.

## Pesticide Resistance and Resistance Management

Since we just mentioned ACP control, I'd like to ask you to take the time to read and utilize the **Pesticide Resistance and Resistance Management** section of the 2011 Florida Citrus Pest Management Guide. Authored by Drs. Michael Rogers and Megan Dewdney, this section initially describes how populations of animals and plants are able to respond to sustained changes or stresses in their environment in ways that enable the continued survival of the species. In the past, Florida citrus growers have seen greasy spot resistance to Benlate and rust mite resistance to dicofol. Currently, we know that the strobilurin fungicides (Abound, Gem, Headline, Quadris Top) have potential for resistance development and that Agri-Mek tolerance in citrus rust mite is a concern. Growers have also reported several weed species that seem to be resistant to glyphosate herbicides.

Effective control of the Asian citrus psyllid to manage the spread of HLB has necessitated the application of a number of insecticidal sprays throughout the year. Although we are learning how to manage psyllid populations to subsequently reduce the number of sprays required, we still have to make a significant number of applications to be effective. This makes a working knowledge of utilizing pesticides with different modes of action (MOA's) in a pesticide application rotation so very important. The per acre costs of pesticides registered for use against the ACP vary considerably, and the temptation to use the relatively inexpensive products several times in a row should be resisted. The Pesticide Resistance and Resistance Management chapter includes tables of Insecticides and Miticides; Fungicides; and Herbicides used in Florida citrus, grouped by mode of action.

The chapter also recommends several operational procedures to help to avoid pesticide resistance to miticides, insecticides, fungicides and herbicides:

1. Never rely on a single pesticide class (organophosphate, pyrethroid, etc).
2. Integrate chemical control with effective, complementary cultural and biological control practices.
3. Always use pesticides at recommended rates and strive for thorough coverage.
4. When there is more than one generation of pest, alternate different pesticide classes.

5. Do not use tank mixtures of products that have the same mode of action (MOA).
6. If control with a pesticide fails, do not re-treat with a chemical that has the same mode of action (MOA).

## 2011 Citrus Pest Management Guide, SP043

I have a limited number of copies of the 2011 citrus pest management “bible” for Florida citrus available in my office for \$15. Or, the guide is \$17 per copy plus shipping from the IFAS Extension Bookstore in Gainesville. Call 1-800-226-1764 and ask for publication SP 043. Use a credit card and they’ll have your guide(s) to you in a couple of days. The guide can also be accessed online at the following link:

<http://www.crec.ifas.ufl.edu/extension/pest/>

## 2011 Florida Citrus Growers' Institute

This program is part of the continuing effort by UF/IFAS Extension and the Citrus Research and Development Foundation to keep Florida citrus growers aware of the research efforts and progress in our battle against HLB. The program will be held on Wednesday, April 6, 2011 (**That’s next week**) at the South Florida Community College in Avon Park. Preregistration is **required** so that we can plan for the sponsored lunch. Click on the following link for a copy of the program, registration information and directions to SFCC:

<http://citrusagents.ifas.ufl.edu/events/PDF/2011%20Institute%20Brochure%202-22-11.pdf>

## USDA Horticultural Research Laboratory Open House

The Horticultural Research Laboratory in Ft. Pierce has scheduled an Open House on **Friday, April 1, 2011** from 10:00 AM to 3:00 PM. The Lab is located at 2001 S. Rock Road, or just north of the Indian River Research and Education Center. The Open House will feature tours of this impressive facility with researchers providing short narratives about their work. If you haven’t previously visited this facility, this is a great chance to see what is going on for the benefit of the citrus industry and other facets of Florida agriculture. And, if it fits your schedule, a simple lunch will be provided at noon. Pre-registration is **not required** for this event.



## Citrus Mechanical Harvesting Field Day and Workshop: *GETTING READY FOR ABSCISSION*

Wednesday, April 20, 2011

**University of Florida, Southwest FL Research and Education Center  
2685 State Road 29 North  
Immokalee, FL 34142**

### Agenda

- 7:30      **Registration, coffee and refreshments**
- 8:00      **Welcome and program outline**
- 8:15      UF/IFAS Projects in Citrus Mechanical Harvesting & Abscission
- 8:30      Travel to SWFREC Concept Grove
- **Over the Row Mechanical Harvester Demonstration**
  - **CMNP Sprayer Demonstration**
  - **Abscission Pull-Force Demonstration**
  - **Tree Mapping Technology**
- 10:15     **Return to SWFREC Main Building**
- 10:30     What Do We Know About CMNP and What We Hope to Learn From the EUP
- 11:30     Canopy Uniformity, Fruit Recovery, and CMNP Value
- 12:30     **Lunch**
- 2:00      **Adjourn**

**To RSVP or further information contact:**

**Barbara Hyman- [hymanb@ufl.edu](mailto:hymanb@ufl.edu) or (239) 658-3461**

## **24C Label for Belay 50WDG Insecticide**

A special local need (24c) label has been issued for Belay 50 WDG, a new soil-applied insecticide for use on non-bearing Florida citrus. The active ingredient is clothianidin, a neonicotinoid insecticide with pest control characteristics similar to imidacloprid (Admire) and thiamethoxam (Platinum). Young tree plantings will benefit from this new chemistry in that the label allows two applications (high rate of 6.4 oz. /Acre) in addition to the maximum labeled rates of imidacloprid and thiamethoxam, theoretically allowing control through the entire season.

It should be noted that although Belay is a different chemistry, it has the same mode of action as the other compounds and the potential for psyllids and leafminer to develop resistance is increased if proper pesticide rotation management is not practiced. It is recommended that a foliar insecticide spray with a different mode of action be applied between applications of any of the three soil-applied products to reduce the possibility of developing pesticide resistance.

## **CCA CEU Day, April 13, 2011**

Certified Crop Advisors can earn 5 Nutrient Management and 5 Pest Management CEU's at several locations throughout Florida via videoconference on Wednesday, April 13, 2011. Cost is \$100 and pre-registration is required. Click on the following link for more information:

[http://www.crec.ifas.ufl.edu/crec\\_websites/cca/](http://www.crec.ifas.ufl.edu/crec_websites/cca/)

## **New and Revised Publications from UF/IFAS**

Citrus Black Spot: No Longer an Exotic Disease (PP281)

<http://edis.ifas.ufl.edu/pdffiles/PP/PP28100.pdf>

Exotic Citrus Diseases: Early Detection is the Solution to Protecting Florida Citrus (CH202)

<http://edis.ifas.ufl.edu/pdffiles/CH/CH20200.pdf>

Sampling for Asian Citrus Psyllid (ACP) in Florida (ENY857/IN867)

<http://edis.ifas.ufl.edu/pdffiles/IN/IN86700.pdf>

Camelina Production in Florida (AGR340)

<http://edis.ifas.ufl.edu/pdffiles/AG/AG35000.pdf>

## General Standards (CORE) CEU Program

Agents with IFAS St. Lucie Extension will be conducting a General Standards (CORE) CEU program on Wednesday, May 11, 2011. Mark the date in your calendar now to plan to pick up 3, hard-to-get CORE CEU's. More details next month.

## Pesticide Applicator Training Opportunities

### General Certification Standards (CORE) Training & Testing

- Wednesday, April 6, 2011, 9:00 AM to 10:40 AM with exam to follow.
- Cost is \$20 with checks payable to SLC Extension Advisory Council or click on the link below:
- Call (772) 462-1660 to **pre-register** or for more information:

[http://stlucie.ifas.ufl.edu/pdfs/natural\\_resources/2011/april2011%20-%20Core.pdf](http://stlucie.ifas.ufl.edu/pdfs/natural_resources/2011/april2011%20-%20Core.pdf)

### Aquatic Weed Control Training & Testing

- Friday, April 8, 2011, 9:00 AM to 11:00 AM with exam to follow.
- Cost is \$20 with registration information (REQUIRED) on the link below:
- Call (772)462-1660 for more information.

<http://www.eventbrite.com/event/1288087705>

### Citrus Industry Magazine

- Why Should Pesticide Applicators Care About Heat Stress?
- One General Standards (CORE) CEU

<http://citrusindustry.net/ceu3.html>

- The Label Is the Law
- One General Standards (CORE) CEU

<http://www.citrusindustry.net/2011ceu1.html>

### Florida Grower Magazine

- A Large Selection of General Standards (CORE) CEU's

<http://www.growingproduce.com/floridagrower/ceu/>

## Upcoming Dates to Remember

- **USDA Horticultural Research Lab Open House**  
Friday, April 1, 2011, 10:00 AM to 3:00 PM  
2001 S. Rock Rd., Ft. Pierce, FL
- **2011 Citrus Growers Institute**  
Wednesday, April 6, 2011, South Florida Community College, Avon Park
- **Mechanical Harvesting Field Day and Workshop**  
Wednesday, April 20, 2011, Southwest Florida REC, Immokalee

Take Care,

Tim Gaver, Extension Agent - Citrus  
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**UF/IFAS/St. Lucie County Extension Website**

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(Click on the **CITRUS** tab at the upper left for my **CITRUS** pages)



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