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Treasure Coast Citrus Notes

August - 2011

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2011 Citrus Expo

The 2011 Citrus Expo will be held on August 17 & 18, 2011 at the Lee Civic Center in North Ft. Myers. The program features 22 presentations over the day and a half show on topics of major importance to the citrus industry in Florida. The simultaneous trade show will have dozens of exhibitors featuring equipment, software, crop protection and nutritional products and educational booths. Admission to the Expo is free and a hot lunch will be provided for attendees on both days. **Pre-registration** is highly recommended which will expedite your entrance into the Expo and also help the organizers to plan for the lunches.

Click on the following link to pre-register, view the exciting program, get directions or maybe make hotel reservations:

<http://www.citrusexpo.net/index.html>

Citrus Health Management Area (CHMA) Workshop

Mark your calendar to attend a Citrus Health Management Area Workshop on Thursday, August 25, 2011 at the Indian River REC. I've made reference in several past newsletters about the Citrus Health Management Area (CHMA) concept and the potential benefits that result from neighboring growers working together to manage Asian citrus psyllid populations. Several groups of growers in the Indian River Area have been cooperating for a couple of years now as functional "CHMAs", but have not taken the steps to formalize their efforts. Some of the issues or concerns include Pre-harvest Intervals (PHIs), loss of the option to select your pesticide of choice, more government intrusion into your business, etc. This workshop will address those issues and any other questions you might have about the benefits of CHMAs.

Citrus Health Management Area Workshop Agenda

9:30 AM – The DPI/USDA Role in the Statewide CHMA Effort - Greg Carlton, Statewide CHMA Coordinator, DPI

10:00 AM – The IFAS CHMA Website; Grower Benefits – Dr. Michael Rogers, IFAS Entomologist, CREC

11:00 AM – Update on Citrus Reset Pest Management – Dr. Michael Rogers

11:45 AM – Lunch (Sponsored by KeyPlex and BASF Corporation)

Pre-Registration is Required. Call (772) 462-1660 or email tgaver.49@ufl.edu

Phosphorous Acid Fertilizers/Fungicides

Neutralized phosphorous acid (H_3PO_3) or phosphonate products have been used in Australia, South Africa, Spain and other developed countries since the 1980's. Work with these products in the U.S. began about 1987 and commercial production began in 1993. Since that time, the number of products and volume produced has increased dramatically as new uses on many crops are investigated. Use in Florida citrus has increased with the inclusion of these products as a part of foliar nutritional therapy programs in an attempt to manage HLB. Examples of these products include brands such as Agri-Fos, Fortress, Kphite, Nutri-Phite, ProPhyt, Phostrol and many others.

There is some confusion in the field regarding terminology of the Phosphorous Acid products. Most often, Phosphorous Acid (H_3PO_3) is confused with the Phosphoric Acids (H_3PO_4) used in liquid fertilizer production. A reference to “phosphorous acid” products usually means H_3PO_3 that has been neutralized with bases such as potassium hydroxide or ammonium hydroxide to form “phosphites”. Recent advances in this chemistry have resulted in phosphites formulated with calcium, magnesium and micronutrients. These inorganic salts or esters of phosphorous acid contain the phosphite radical (PO_3) and may also be generally referred to as “phos acids”.

When applied to plants as root drenches, foliar sprays or direct injection, these compounds are rapidly broken down into phosphonate ions, which provide limited phosphorus nutrition and inhibit the growth of several root and foliar pathogens. These include *Phytophthora*, *Fusarium*, *Rhizoctonia*, *Pythium* and *Armillaria*. This fungicidal activity is evidently both curative and preventative.

Proper product formulation requires complete neutralization of a quality phosphorous acid over several days time. Problems with phytotoxicity may occur with lesser quality products or with tank mix combinations. Because of the nature of the chemistry of these products, product labels often caution against their use in spray tank mixes. Those tank mixes containing relatively large amounts of Calcium, Magnesium, Iron and Sulfur should be avoided. However, tank mixing for application to citrus and vegetables has been reported with many different nutritional and pesticide products. Tank mixes that have been buffered to a pH above 6.0 have shown to be generally safe. Applications with copper fungicides would require that the pH of the tank mix be maintained above pH 6.2 to avoid phytotoxicity from soluble copper. Conducting a jar test with potential tank mix products prior to application is highly recommended. Click on the link below to access an EDIS Fact Sheet with more information:

<http://edis.ifas.ufl.edu/pdf/files/HS/HS25400.pdf>

Tangerine Hybrids/Alternaria Brown Spot Survey

Dr. Megan Dewdney, pathologist at the CREC and one of her graduate students are conducting a survey for *Alternaria* fungicide resistance in tangerine hybrids and want to know how common it is across the state. *Alternaria* affects Minneola tangelos, Murcotts, Dancy tangerines and less frequently Orlando tangelos, Novas, Lees, and Sunburst. The end result will be a project to better manage the fungal resistance issues and perhaps aid in the development of additional disease management tools for the future. If you have a block of one of these varieties and would be willing to allow this student to visit the block and collect data, contact me at tgaver.49@ufl.edu or at (772) 462-1660. Give me a call!

Advanced Citriculture Courses

In an effort to reach citrus growers throughout citrus production regions statewide, both **Advanced Citriculture I**, offered fall of 2011, and **Advanced Citriculture II**, for spring 2011, are being delivered with interactive videoconference by UF/IFAS Citrus Research and Education Center Professor, Dr. Gene Albrigo. Dr. Albrigo's expertise is with regulation of citrus flowering, fruit set and fruit development. His extensive research experience includes study of climatic effects on fruit quality and citrus stress response.

Citriculture I will commence Monday, August 22, from 4 until 7 p.m., and continue through December 16. The course will cover regulation of vegetative growth of citrus. Citriculture II starts January 9 and will continue through April 25, from 4 until 7 p.m., and will cover regulation of reproductive growth of citrus.

Student services, computers and networking with fellow students are available at locations convenient to enrollees. As with other UF/IFAS locations, The UF/IFAS Indian River Research and Education Center near Fort Pierce, will offer course participants state-of-the-art videoconference equipment so that they may interact live with the instructor, as the course takes place in several locations simultaneously.

Course enrollees will review literature on climatic, physiological, production practices and other factors which influence vegetative or reproductive development of citrus. Participants will review literature, prepare short reports on several papers and participate in a lecture-discussion sessions scheduled for weekly topics.

Each course is graduate-level, 3-credits. Tuition is \$1,494.27 per course. Both courses are available for Continuing Education units, for non-degree-seeking students, or as regular Graduate School offerings.

Course prerequisites include basic plant physiology, citrus production courses or several years experience in citrus production.

To enroll in either course please contact UF/IFAS Indian River Research and Education Center Coordinator of Student Services Jackie White (772) 468-3922, Ext. 148, or by e-mail: jkwhite@ufl.edu. For more information about the courses, please contact Dr. L. Gene Albrigo in Lake Alfred at (863) 956-1151, or by e-mail: albrigo@ufl.edu

Fall Soil and Tissue Testing

It's that time of year again to be conducting soil and tissue analysis to quantify the nutrients in your soil and trees and use that information to most efficiently and effectively manage your fertilizer applications.

Tissue samples should involve 4 to 6-month old spring flush leaves and should be collected according to the following guidelines:

- A sampled citrus grove block or management unit should be no larger than 20 acres. The sampler should make sure that the selected leaves represent the block being sampled.
- Each leaf sample should consist of about 100 leaves taken from non-fruiting twigs of 15 to 20 uniform trees of the same variety and rootstock that have received the same fertilizer program.
- Use clean paper bags to store the sample. Label the bags with an identification number that can be referenced when the analytical results are received.
- Avoid immature leaves due to their rapidly changing composition.
- Do not sample abnormal-appearing trees, trees at the edge of the block, or trees at the end of rows because they may be coated with soil particles and dust.
- Do not include diseased, insect-damaged, or dead leaves in a sample.
- Select only one leaf from a shoot and remove it with its petiole (leaf stem).

Soil sampling can be helpful in determining pH, Phosphorus, Potassium and Magnesium levels in the grove. Testing over a period of several years will help to identify the pH and soil nutrient trends in particular grove blocks. Meaningful soil tests results can be obtained by following these procedures:

- In Florida, soil samples should be collected once per year at the end of the summer rainy season and before fall fertilization (August to October).
- It is convenient to take annual soil samples when collecting leaf samples to save time and reduce cost.
- The accuracy of soil test interpretations depends on how well the soil sample represents the grove block or management unit in question.

- Each soil sample should consist of one soil core taken about 8 inches deep at the dripline of 15 to 20 trees within the area wetted by the irrigation system in the zone of maximum root activity.
- Sampled areas should correspond with grove blocks where leaf samples were collected. The area should contain similar soil types with trees of roughly uniform size and vigor.
- Thoroughly mix the cores in a non-metal bucket to form a composite sample. Take a subsample (cupful) from this mixture and place it into a labeled paper bag.

Much more information can be found in Chapter 4 of Nutrition of Florida Citrus Trees, Second Edition.

<http://edis.ifas.ufl.edu/pdffiles/SS/SS47800.pdf>

Pesticide Applicator Training/CEU Opportunities

Private Applicator Training & Testing

- Tuesday, September 13, 2011, 8:00 AM to 11:00 with exam to follow.
- Cost is \$15 with checks payable to the SLC Extension Advisory Council.
- **Pre-registration Required**, call (772) 462-1660 for more information.

Natural Areas Weed Control Training & Testing

- Wednesday, August 17, 2011, 9:00 AM to 11:00 AM with exam to follow.
- Cost is \$20 with checks payable to SLC Extension Advisory Council or use the online registration and payment option at the link below.
- **Pre-registration Required**. Call (772) 462-1660 for more information.

<http://www.eventbrite.com/event/1907392061>

Aquatic Weed Control CEU Opportunity

- South Florida Aquatic Plant Management Society
- 5 Aquatic Weed Control CEUs (\$10 for non-members)
- Thursday, August 24, 2011, Delray Beach, FL

http://sfapms.org/SFAPMS_generalMeeting_08_25_11.htm

General Standards Training and Testing

- Wednesday, September 7, 2011, 9:00 AM to 11:00 AM with exam to follow.
- Cost is \$20 with checks payable to SLC Extension Advisory Council or use the online registration and payment option at the link below.
- **Pre-registration Required.** Call (772) 462-1660 for more information.

<http://www.eventbrite.com/event/1973459671>

Citrus Industry Magazine

- Understanding Pesticide Formulations
- One General Standards (CORE) CEU

<http://www.citrusindustry.net/2011ceu3.html>

Florida Grower Magazine

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

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

Surplus Harvesting Bins?

Got a call recently from an individual looking for up to 500, used 10-box harvesting bins. Call me if you know anyone who has a supply they might want to part with.

Just for Fun

Bad Dog Bites the Dust

Bubba was bragging to the boys at the bar about how bad his bulldog Spike was.

"My dog is as bad as any dog in the county," he announced. "Spike has whipped German shepherds, Dobermans and a truckload of other bulldogs and they're all afraid of him. He's tied up outside with a 3/8" chain."

Just then, a mild-looking man walked up to Bubba and said, "I'm sorry, fella, but my dog just killed your Spike."

Bubba bowed up and began to sputter, "That's impossible! Spike is the baddest dog around! What kind of dog do you have?"

"He's a Chihuahua," the man quietly replied.

"You've got to be kidding me!" Bubba yelled. "How could your little Chihuahua kill Spike?"

"He got stuck in Spike's throat."

Take Care,

Tim Gaver, Extension Agent - Citrus
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