



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

July - 2012

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USDA Citrus Pests Tool

Citrus Pests is one piece of a multi-tool resource initiative to provide an accurate identification resource for pests and diseases of cultivated citrus in the United States. The resource includes three individual identification tools: *Citrus ID Edition 2*, *Citrus Diseases*, and *Citrus Pests*. All three tools are packaged into the comprehensive *Citrus Resource*. *Citrus Pests* can be accessed by clicking on the Citrus Resource title or going to the following link:

<http://www.idtools.org/id/citrus/resource/index.php#pests>

Citrus Root Health/Canker Management Workshop

We had a good crowd of growers for this workshop that was held on June 1. Dr. Jim Graham made two very informative presentations that have been posted on the St. Lucie Extension website Citrus page. In a nutshell, Dr. Graham has found that the effective root mass of HLB infected trees begins to decline shortly after the tree contracts the disease. The natural resistance of the tree to stress and other diseases such as *Phytophthora* is also reduced. See both the Root Health and Canker presentations at the following link:

<http://stlucie.ifas.ufl.edu/pdfs/citrus/2012/Graham%20Root%20Health-Canker%20workshop%206-1-12.pdf>

Indian River Area Tank Mix Survey

In the spring of this year, I conducted a random survey of 18 finished spray tank mixes that were being applied to area groves. The purpose of this survey was to get a better idea of what was being applied in postbloom sprays and also to see how well growers were managing the pH of finished spray tank mixes, especially those that contained copper fungicides. Of course, that would be the case in virtually all fresh fruit spray applications in the postbloom period. I measured the pH and TDS (salt content) of the spray water sources and of the spray mixes after the pesticides, nutritional products and adjuvants were added. Only one sample site involved an artesian well water source, with growers apparently choosing to use better quality surface water sources if available. A relatively large number of nutritional products were used in the 18 spray mixes. These included three nitrogen or potassium sources, six nitrogen plus micronutrient combinations and 11 different micronutrient mixes or source materials. 16 out of the 18 samples included a copper fungicide, with 8 different brands of copper fungicides involved. A brief summary of my findings would include:

1. Growers are using a wide variety of foliar nutritional products in postbloom sprays.
2. The TDS of finished spray mixes ranged from 1000 ppm to over 5000 ppm, with most in the 2000 ppm to 3000 ppm range. There is a potential for phytotoxicity to foliage and fruit with sprays with a TDS over 4000 ppm.

3. 4 out of the 16 (25%) spray tank mixes containing copper fungicides had a pH of less than 6.5, which is **lower** than the recommendation on most copper fungicide labels because of the potential for phytotoxicity on fruit peels.

2012 Citrus Expo

The 2012 Citrus Expo will be held on **August 15-16, 2012** at the Lee Civic Center in Ft. Myers. The grower program will include a day and a half of informative presentations with lunch provided on both days. A **Casino Night** is also scheduled for Wednesday evening which benefits Florida FFA students. **Pre-registration is highly recommended** for the Expo, to help the organizers plan for lunch and also to speed you through the registration line. The grower program, directions to the Civic Center, hotel information and the pre-registration option are all available at the Citrus Expo website.

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

It's Hurricane Season Again

It seems to come around in a hurry, but June 1 was the official start of the 2012 hurricane season and we've already had 3 tropical storms and one hurricane in the early part of the hurricane season. For the entire six-month season, which begins June 1, NOAA's Climate Prediction Center says there's a 70 percent chance of nine to 15 named storms (with top winds of 39 mph or higher), of which four to eight will strengthen to a hurricane (with top winds of 74 mph or higher) and of those one to three will become major hurricanes (with top winds of 111 mph or higher, ranking Category 3, 4 or 5). Based on the period 1981-2010, an average season produces 12 named storms with six hurricanes, including three major hurricanes. Hurricane preparation is not a process that should be started a couple of days before a storm is predicted to head our way. Planning should begin now so that you are prepared to act in the last days before a storm. EDIS document HS-804, **Hurricane Preparedness for Citrus Groves** can help you begin that planning and preparation process.

<http://edis.ifas.ufl.edu/pdf/CH/CH17800.pdf>

Citrus Leaf Tissue Testing

One important process in achieving optimum citrus tree health is annual leaf tissue testing to eliminate guesswork when considering an adjustment in your fertility program. Standardized procedures have been developed for sampling, preparation and analysis to achieve meaningful comparisons and interpretations of the samples. Timing of the sampling is important because nutrient concentrations within the leaf are constantly changing. However, leaf mineral concentrations are relatively stable from 4-6 months after the new leaves emerge in the spring. Consequently, the optimum time to collect the appropriate spring flush leaves is in July and August. Proper techniques for obtaining samples that will provide meaningful data include:

- Sample areas should be no larger than 20 acres and the selected leaves from trees that are representative of those in the block being sampled.
- Each leaf sample should consist of about 100 spring flush leaves taken from non-fruiting twigs on 15 to 20 uniform trees.
- Take only 1 leaf (including petiole) from each shoot.
- Use clean paper bags to store the samples and keep the leaves cool and dry until they can be delivered to the lab.
- Avoid sampling abnormal, diseased trees, trees at the edge of the block or leaves that are diseased or insect damaged.

The information gathered from leaf tissue sampling is a much better indicator of the nutritional status of the tree than the results from soil testing. Optimum nutrient levels for the macroelements N, P, K and Mg can be compared with tissue testing results to make the best fertilizer management decisions. With most growers applying micronutrients on a regular basis as part of an HLB management program and frequent copper fungicides for citrus canker control, leaves should not be analyzed for Cu, Mn, or Zn because it is quite difficult to remove all surface contamination from sprayed leaves. Much more information on leaf tissue and soil sampling can be found in Chapter 4 of **Nutrition of Florida Citrus Trees, Second Edition**.

<http://edis.ifas.ufl.edu/ss478>

IFAS-CREC New Variety Display Dates

The New Varieties Development & Management Corporation is pleased to announce the IFAS variety display dates for the 2012/13 season. All of the display events will begin at 10:00 AM at the following locations.

Nov 06, 2012	CREC, Lake Alfred
Dec 18, 2012	CREC, Lake Alfred
Jan 22, 2013	IRREC, Ft. Pierce
Feb 19, 2013	CREC, Lake Alfred

These are informative events that are open to the citrus industry. Attendees are asked to sample a wide range of new citrus selections and complete a detailed survey form. Fruit is displayed by fruit type – broken into orange, grapefruit and grapefruit/pummelo types, and tangerine/mandarin hybrids. It generally takes about 45 minutes to complete the surveys for the display. All data from these events is compiled by NVDMC and provided to the IFAS Plant Improvement Team. This information feeds and helps direct the IFAS citrus breeding effort. Participants are needed from the nursery, packing, processing, production and marketing segments of the industry.

If you would like to participate, please contact Peter Chaires, Executive Director of the NVDMC at pchaires@nvdmc.org

Citrus Rootstock Table

The Citrus Rootstock Selection “Wheel” that many of you have used in the past as a rootstock selection tool is no longer available. However, Dr. Steve Futch has transferred the information on the wheel into a handy table form. He has included all the horticultural information that was on the old wheel and added information on other rootstocks such as US-802, US-812, US-852, US-897 and Kinkoji.

The complete electronic file of this table is **attached** to the newsletter greeting and can be downloaded for your files and subsequent use.

First Annual Florida Pomegranate Conference

Where: UF/IFAS/Citrus Research & Education Center
700 Experiment Station Road, Lake Alfred, FL 33850

When: Friday, September 14th, 2012

Time: Registration at 9:00 AM, Programming from 10 AM to 4 PM.

PROGRAM. Starting at 10 AM, UF/IFAS in cooperation with the Florida Pomegranate Association will offer educational programs that feature pomegranate production, varieties, marketing and culture practices for Florida. This meeting will offer a fruit taste test that serves to evaluate new and existing selections for the home landscape and provide retail nursery personnel the knowledge and experience of tree-ripe orchard fruit in order to encourage the sale and planting of the best tasting fruit varieties.

Jeff Moersfelder, from the National Clonal Germplasm Repository in Davis, CA will give an overview of pomegranate cultivars in the national collection and Bill Castle from UF/IFAS Citrus Research & Education Center will review the pomegranate website and describe the on-going cooperative evaluation project.

Pre-registration is required for the event. For more information on sponsoring, vendors, assistance and special dietary needs, call (863) 604-3778. Admission is \$25. A special discount is available with one year paid membership to the Florida Pomegranate Association. All current and prospective growers, nurseries, commercial investors, homeowners and Master Gardeners are encouraged to attend. For further information, go to the website: <http://www.crec.ifas.ufl.edu/extension/pomegranates/> where a membership brochure can be found at the bottom of the page.

To preregister for the conference contact:

Cindy Weinstein, President

Email: flpomegranate@gmail.com

Telephone: (863) 604-3778; or flpompres@gmail.com for questions or comments

Checks (\$25 each) payable to: Florida Pomegranate Association.

Include a list of attendees with farm affiliation and contact information (email and/or telephone number).

Send payment to:

David Weinstein, Treasurer, FPA

6360 Johnston Road

Zolfo Springs, FL 33890

Conference Location: Ben Hill Griffin Jr. Auditorium, UF/IFAS Citrus Research & Education Center (CREC), 700 Experiment Station Road, Lake Alfred, FL 33850-2243

Map to location: <http://www.crec.ifas.ufl.edu/about/map/map.shtml>

Pesticide Applicator Training/CEU Opportunities

General Standards (CORE) Training & Testing

- Wednesday, September 5, 2012, 9:00 AM to 11:00 AM with exam to follow at the Extension Classroom, 8400 Picos Rd, Ft. Pierce, FL 34945
- Cost is \$20 with checks payable to SLC Extension Advisory Council
- **Pre-registration Requested.** Call 772 462-1660 for more information

Certified Pesticide Applicator Exams

- Administered at the St. Lucie Extension office in the afternoon on the first and third Wednesday of each month.

Citrus Industry Magazine

- CORE CEU articles
- One General Standards (CORE) CEU

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

Florida Grower Magazine

- A Large Selection of General Standards (CORE) and category CEU articles

<http://www.growingproduce.com/crop-protection/ceu-series>

Just for Fun

Plowing at night

A husband and wife from the city were driving down a country lane on their way to visit some rural friends. They came to a muddy patch in the road and the car became bogged. After a few minutes of trying to get the car out by themselves, they saw a young farmer coming down the lane on his 4 wheel-drive tractor.

The farmer pulled up to the couple and offered to pull the car out of the mud for \$50. The husband eagerly accepted and minutes later the car was

free. The farmer turned to the husband and said, "You know, you're the fifth car I've helped out of the mud today."

The husband looks around at the large fields on each side of the road and asks the farmer, "When do you have time to plow your land? At night?"

"No," the young farmer replied seriously, "Night is when I put the water in the hole."

Take care,

Tim Gaver, Extension Agent - Citrus
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