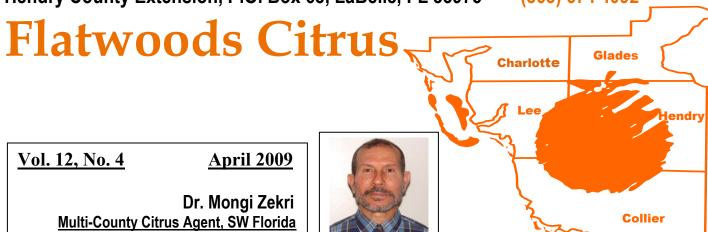


EXTENSION

Institute of Food and Agricultural Sciences

Hendry County Extension, P.O. Box 68, LaBelle, FL 33975

(863) 674 4092



<u>Flatwoods Citrus</u>. In order to save papers and postage, we would like to send you the "Flatwoods Citrus" newsletter electronically. <u>Please provide us with your e-mail address</u>. Send it to maz@ifas.ufl.edu

UPCOMING EVENTS

-- Workshop in Spanish for grove supervisors and pest scouts on recognition, scouting, and evaluation of psyllids, scales, mites, thrips, and the Sri Lanka weevil in citrus groves

<u>Date</u>: Tuesday, <u>April 28</u>, 2009, Time: 10:00 AM – 12:00 Noon

<u>Location</u>: Southwest Florida REC (Immokalee)

Speakers: Drs. Phil Stansly, Jawwad Qureshi, and Alejandro Arevalo

2 CEUs for Pesticide License Renewal, 2 CEUs for Certified Crop Advisors (CCAs)

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Employment Opportunity – Affirmative Action Employer authorized to provide research, educational information and other services only to individuals and institutions that function without regard to race, color, sex, age, handicap or national origin.

U.S. DEPARTMENT OF AGRICULTURE, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF FLORIDA, IFAS, FLORIDA A. & M. UNIVERSITY COOPERATIVE EXTENSION PROGRAM, AND BOARDS OF COUNTY COMMISSIONERS COOPERATING.

CERTIFIED CROP ADVISOR (See enclosed details)

Date: Wednesday, April 15, 2008, 7:30 AM - 6:00 PM

Locations: UF-Gainesville and Lake Alfred CREC, Immokalee, Wimauma, and

Ft. Pierce IFAS Research Centers

Citrus Mechanical Harvesting Field Day and Workshop:

Addressing Processors' Questions

Date: Wednesday, April 22, 2009

Location: UF-IFAS, Southwest FL Research and Education Center, Immokalee



Florida State Horticultural Society

& The Soil and Crop Science Society of Florida

Date: June 7 through 9, 2009

Location: Wyndham Jacksonville Riverwalk, Jacksonville

For more information and registration go to:

http://www.fshs.org/meetings.htm



FARM SAFETY DAY IN SW FL

Saturday, June 6, 2009 <u>Coordinator</u>: Mongi Zekri

Information on registration, program agenda, and sponsorship will be enclosed in the next issue of this newsletter.



SECOND INTERNATIONAL CITRUS BIOTECHNOLOGY SYMPOSIUM

CATANIA, ITALY, NOVEMBER 30 - DECEMBER 2, 2009

All information regarding the symposium will be available at: www.fagr.unict.it
For questions, please contact us at the following address: biotech2009@unict.it

Some of the information on the **Summary of 2007-2008 Citrus Budget for the Southwest Florida Production Region** by <u>Ronald Muraro</u>, Extension Economist University of Florida, IFAS, CREC, Lake Alfred, FL, is included in this issue. For more complete listing and information, please go to:

www.crec.ifas.ufl.edu/extension/economics/index.htm

Special Thanks to the following sponsors (on pages on pages 3, 4, and 5) of the Flatwoods Citrus Newsletter for their generous contribution and support. If you would like to be among them, please contact me at 863 674 4092 or maz@ifas.ufl.edu

Susan S. Thayer Maxijet "The Standard of Quality in Low-Volume Irrigation"

8400 Lake Trask Rd. P.O. Box 1849, Dundee, FL 33838 Phone: 800 881 6994

Steve Fletcher

Fletcher Flying Service, Inc.

Phone: 239 860 2028 Fax: 863 675 3725

Heath Prescott



Toll Free: 800 433 7117 Mobile: 863 781 9096 Nextel: 159*499803*6

Scott Houk Dow AgroSciences 13543 Troia Drive Estero, FL 33928

Phone: 239-243-6927 SEHouk@dow.com

FIRST BANK

P.O. Box 697 LaBelle, FL 33975

LaBelle Phone: 863 675 4242

Fax: 863 675 1099 Moore Haven: 863 946 1515

Ed Early

DuPont Ag. Products

5100 S. Cleveland Ave., Suite 318-368 Fort Myers, FL 33907 Phone: 239 994 8594

Gary Sawyer SYNGENTA

Office Phone: 813-737-1718 Cell Phone: 813-917-1818 gary.sawyer@syngenta.com

Donald Allen AGLIME SALES, INC.

1375 Thornburg Road Babson Park, FL 33827-9549 Mobile: 863 287 2925 Agnet # 52925

Bart Hoopingarner

United Phosphorus, Inc.

3605 162nd Ave East, Parrish, FL 34219

Phone: 941 737 7444 Ag Net: 158*17*9485

bart.hoopingarner@uniphos.com

Special Thanks to the following sponsors (on pages on pages 3, 4, and 5) of the Flatwoods Citrus Newsletter for their generous contribution and support. If you would like to be among them, please contact me at 863 674 4092 or maz@ifas.ufl.edu



Larry Bridge 321 303 7437

Nufarm Agriculture USA Craig Noll

Office-239 549 2494 Mobile-239 691 8060 craig.noll@us.nufarm.com

Gary Simmons Phone: 772 260 1058

Jay Hallaron

Chemtura Corporation

Phone: 407 256 4667 Fax: 407 523 1097 Cell: 321 231 2277

jay.hallaron@chemtura.com

MONSANTO

Mike Prescott

Phone: 863 773 5103 Nextel Agnet: 886 Thad G. Boatwright Phone: 561 478 4970

Nextel Agnet: 10556

FMC

FMC Corporation APG

Ronald Palumbo

Cell: 305 304-7491 Nextel Agnet: 14772 ronald.palumbo@fmc.com

fmccrop.com

Magna-Bon Agricultural Control Solutions

Canker Suppressant, Canker Wash Solutions, Line Cleaner

Nextel 158*17*10066 Phone: 800 845 1357 **Susan Wright**

FARM CREDIT SOUTHWEST FLORIDA

330 N. Brevard Ave. Arcadia, FL 34266 Phone: 800 307 5677 Fax: 863 494 6460

Special Thanks to the following sponsors (on pages on pages 3, 4, and 5) of the Flatwoods Citrus Newsletter for their generous contribution and support. If you would like to be among them, please contact me at 863 674 4092 or maz@ifas.ufl.edu

Nichino America

Paul Hudson

Phone: 941 924 4350 Fax: 941 924 4135 phudson@nichino.net



Brent Beer BEER LEVELING & LAND DEVELOPMENT

Citrus Tree Removal – Ditch Cleaning 863 675 1663 Office 863 673 3173 Mobile 158*17*43857 Nextel

Mark White G.P. SOLUTIONS

Liquid fertilizers, Micronutrients, & Organic Products

Phone: 239 214 1072 Fax: 863 938 7452

E-mail: mwhite@nitro30.com

Jeff Summersill THOMAS R. SUMMERSILL, INC.

Custom Aerial
Ground Application
Mobile 561-722-4502, Agnet # 33169
trsummersill@msn.com

Stacey Howell BAYER CropScience

239-272-8575 (mobile) 239-353-6491 (office/fax)

stacey.howell@bayercropscience.com

Garry Gibson BASF Corporation

1502 53rd Avenue Vero Beach, FL 32966 Cell: 772 473 1726 Fax: 772 567 2644

w.garry.gibson@basf.com

UF/IFAS, citrus leaders join forces to combat industry-threatening diseases

March 19, 2009

By Mickie Anderson, 352-392-0400, mickiea@ufl.edu

GAINESVILLE, Fla. --- The University of Florida will establish a not-for-profit arm to manage citrus research money in hopes of solving citrus greening and other diseases that threaten to cripple the industry. The new organization, called a university direct-support organization, or DSO, will manage and provide oversight for citrus producers' self-imposed taxes collected to foster scientific research to aid the industry. UF's Board of Trustees on Tuesday approved the Citrus Research and Development Foundation Inc. "This is a major step toward solving the serious threats that face Florida's citrus industry," UF President Bernie Machen said. "This DSO represents a new and unique partnership between citrus growers and the University of Florida." Besides UF, the other DSO partners are the Florida Department of Citrus, Florida Citrus Mutual and the Florida Department of Agriculture and Consumer Services. Michael Sparks, executive vice president and CEO of Florida Citrus Mutual, called it "absolutely necessary" to have "one entity manage this research effort, maintain accountability and protect intellectual property when results emerge." Bob Norberg, deputy executive director of the Florida Department of Citrus, echoed that thought. "Although Florida citrus growers are a resilient and dedicated group, they cannot battle this disease on their own anymore. It is absolutely necessary that a partnership such as this be formed to help focus the proper resources on this battle." Craig Meyer, a deputy commissioner with the state's Department of Agriculture and Consumer Services, said his agency is pleased to be involved with the organization. "We're very excited about the fact that the DSO is going to gather up people at the senior level in the citrus industry who will direct research that is funded by the industry," he said. "We think it's going to help our department in that we'll be on the forefront of fighting citrus greening." Florida's citrus industry is a \$1 billion-a-year enterprise with a \$9 billion economic impact, including activities such as growing, packing, processing and distributing the fruit. Citrus greening is among the first, and most important, of the problems the new DSO will tackle, but it's by no means the only trouble the industry faces. Other diseases include citrus canker and citrus tristeza virus. In 2007, the Florida Citrus Commission, the state citrus department's governing body, approved a 2-cent tax increase on fresh oranges and tangerines, to 18 cents a box. The commission also approved an increase from 22 to 24 cents a box for juice oranges. Growers pay the "box tax" to help market the citrus industry and bolster scientific research connected to it. Last year, Florida citrus officials enlisted some of the nation's top scientists in its fight against citrus greening. The Florida Citrus Commission entered a twoyear contract with the National Academy of Sciences to help set priorities for research and to recommend new research avenues. The commission pledged up to \$20 million in box-tax funds for research to combat the disease. And in December, the Florida Citrus Production Research Advisory Council and the National Academy of Sciences recommended 83 research projects that would cost \$14 million. Many of those projects involve UF Institute of Food and Agricultural Sciences researchers, although some will be conducted by scientists in other states and countries. Initially, the commission planned to create an independent public-private corporation to run the research program, but that plan later evolved into the direct-support organization idea. Florida law allows for state university boards of trustees to approve DSOs that operate in the state's best interest.

INCREASING EFFICIENCY AND REDUCING COST OF NUTRITIONAL PROGRAMS

Economics, nutrition, and Florida soils

- To maintain a viable citrus industry, it is necessary to produce large, high quality crops of fruit economically.
- Good production of high quality fruit will not be possible if there is a lack of understanding of soils and nutrient requirement of the grown trees.
- Most Florida citrus is grown on soils with inherently low fertility and low nutrient holding capacity and thus unable to retain enough amount of soluble plant nutrient against the leaching action of rainfall and irrigation.

Importance of N & K

- N & K are the most important nutrients for Florida soils and citrus.
- An adequate level of N is required for vegetative growth, flowering, and fruit yield.
- K also plays an important role in determining yield, fruit size, and quality.
- Fertilizer ratios of N to K₂O are usually 1:1. However, a ratio of 1:1.25 is recommended for high pH or calcareous soils.

Management practices to improve fertilizer efficiency

They include:

- ♦ Evaluation of leaf analysis data
- ♦ Adjustment of N rates to the level based on expected production and IFAS recommendations
- ◆ Selection of fertilizer formulation to match existing conditions
- ◆ Careful placement of fertilizer within the root zone
- ◆ Timing to avoid the rainy season
- ♦ Split application
- ♦ Irrigation management to maximize production and minimize leaching



Tissue and soil analysis

- Leaf sampling and analysis is a useful management tool for fertilizer decisions.
- The best indication of successful fertilizer management practices for citrus trees is having leaf nutritional standards within the optimum ranges.
- Trends in leaf N and K over several years provide the best criteria for adjusting rates within the recommended ranges.
- Soil analysis is useful for determining the pH and concentrations of P, Ca, and Mg.

N requirements for mature trees

In a mature grove where there is little net increase in tree size, N used for leaf growth is largely recycled as leaves drop, decompose, and mineralize. Replacement of the N removed by fruit harvest becomes the main requirement, and nutrient requirements should vary as the crop load changes.

Fertilizer Sources

- Inorganic and synthetic organic nitrogen fertilizers are high-analysis materials and are generally most economical to use in citrus groves. They are rapidly available, unless they have been formulated in a controlled-release form.
- The use of high analysis fertilizers eliminates much of the filler. A great deal of the mixing, transportation, and application cost is reduced.
- The use of controlled-release fertilizers for resets in established groves is a feasible option.

Timing and frequency of application

- 2/3 of the tree's nutritional requirements should be made available between January and early June, with most of it in place during flowering and fruit-setting period. The remaining 1/3 can be applied in September or October.
- Split fertilizer application or fertigation combined with sound irrigation management increase fertilizer efficiency by maintaining a more constant supply of nutrients and by reducing leaching if unexpected rain occurs. Less fertilizer will be required.
- Less fertilizer may also be required if fertilizer is confined to the root zone and if timing is adjusted to avoid rainy periods.

Foliar feeding

- Foliar feeding is useful under calcareous soil or any other condition that decreases the tree's ability to take up nutrients when there is a demand.
- Foliar applications of low-biuret urea (25-28 lbs N/acre) or phosphorous acid (2.6 quarts/acre of 26-28% P₂O₅) in late Dec.-early Jan. are known to increase flowering, fruit set, and fruit yield.
- Postbloom foliar applications of potassium nitrate or mono-potassium phosphate
 (8 lbs/acre K₂O) in late April have been found to increase fruit size and yield.

Phosphorus

- P applied to established groves had not leached but had accumulated in the soil at high levels and is available slowly so that P application may be reduced or omitted in established groves.
- P does not leach readily where the soil pH is 6 or higher and the fruit crop removes very little.
- Therefore, regular P applications are not necessary.
- However, some soils used for new citrus plantings may have low native P and P fertilizers should be applied for several years.

Micronutrients

- The use of most micronutrients is recommended only when deficiency symptoms persist.
- Copper should not be included in fertilizers if Cu sprays are used and if the grove soil test show adequate Cu (5-10 lbs/acre).
- Molybdenum (Mo) deficiency occurs on soils that have been allowed to become very acid. Liming those soils should fix the problem.
- Foliar spray applications of micronutrients (Mn, Zn, Cu, B, and Mo) are more effective and economically practical than soil applications when included with postbloom or summer foliar sprays after full expansion of the new flush.

Soil pH & liming

- Soils should have a pH ranging from 5.5 to 6.5 with the higher values used for soils containing high Cu levels.
- Under normal conditions, a clear advantage of pH 6 over pH 5 has been demonstrated in several studies. A pH of 7 was no better than a pH of 6.
- Soil pH can be increased by application of either calcite or dolomite. Dolomite supplies both Ca and Mg. Therefore, the choice of dolomite would be more appropriate to supply Mg and have a good balance between Ca and Mg.

Overliming

- Liming soils having a pH at or above 6 will be costly and not useful. In groves, where soils have adequate pH but low Ca levels, gypsum (CaSO₄) can be used as a source of Ca without affecting the soil pH.
- Applying dolomite as a source of Mg is not recommended if the soil pH is in the desired range. Under these conditions, soil application of either magnesium sulfate (MgSO₄) or magnesium oxide (MgO) and foliar application of magnesium nitrate {Mg(NO₃)₂} are effective for correcting Mg deficiency.

Nutritional balance

- Correct ratios of nutrients are critical to fertilizer management and sustainability.
- If an element is below the critical level, yield production will fall even though the other elements are kept in good supply.
- Too much N with too little K can reduce fruiting and result in lost crop yield and quality. High K with low N and P supply will induce luxury consumption of K, delay fruit development and reduce juice content.

FOLIAR FEEDING

Foliar feeding is not intended to completely replace soil-applied fertilization of the macronutrients (nitrogen, potassium, and phosphorous). However, macronutrients can be foliarly applied in sufficient quantities to influence both fruit yield and quality. Some crops, such as citrus, can have a large part of the nitrogen, potassium, and phosphorous requirements met through foliar applications.

Foliar applications of other plant nutrients (calcium, magnesium, and sulfur) and micronutrients (zinc, manganese, copper, boron, and molybdenum) have proven for many crops to be an excellent means for supplying the plants' requirements.

Foliar feeding should be used as an integral part of the annual nutritional program. It can be used in other situations to help plants through short, but critical periods of nutrient demand, such as fruit set and bud differentiation. Foliar nutrition may also prove to be useful at times of soil or environmentally induced nutritional shortages. Foliar application of nutrients is of significant importance when the root system is unable to keep up with crop demand or when the soil has a history of problems that inhibit normal growth.

Foliar feeding is proven to be useful under prolonged spells of wet soil conditions, dry soil conditions, calcareous soil, cold weather, or any other condition that decreases the tree's ability to take up nutrients when there is a demand. Foliar feeding may be utilized effectively when a nutritional deficiency is diagnosed. A foliar application is the quickest method of getting the most nutrients into plants. However, if the deficiency can be seen, the crop might have already lost some potential yield.

Foliar fertilization is also efficient since it increases the accuracy of fertilizer application. Applications made to the soil can be subject to leaching and volatilization losses and/or being tied up by soil particles in unavailable forms to citrus trees.

While foliar feeding has many advantages, it can burn plants at certain rates under certain environmental conditions. It is important, therefore, to foliar feed within the established guidelines. There are a number of conditions that can increase the chances of causing foliar burn. A plant under stress is more susceptible to damage. Stressful conditions include drying winds, disease infestations, and poor soil conditions. The environmental conditions at the time of application are also important factors. Applications when the weather is warm (above $80^{0}F$) should be avoided. This means that during warm seasons, applications should be made in the morning or evening. Additionally, applications should not be at less than two-week intervals to give the plant sufficient time to metabolize the nutrients and deal with the added osmotic stress.

Another important factor when applying nutrient foliarly is to ensure that the pH of the material is in the proper range. The pH range of the spray solution should be between 6 and 7. Attention should be paid to the pH of the final spray solution. This is significant in areas where water quality is poor.

Post-bloom foliar applications (applied in April when the spring flush leaves are about fully expanded) of potassium nitrate or mono-potassium phosphate have been found to increase fruit yield and size.

- 8 lb K2O per acre per application
- Foliar applications are not a substitute for a good nutrition program.

Spider Mites





The Texas citrus and citrus red mites occur on citrus throughout the year and usually are most abundant in groves between March and June. They are found most commonly on the upper leaf surface of recently mature flush, and all stages of the mites orient along the mid-vein.

Spider mites feed primarily on mature leaves and differ from rust mites by feeding beneath the epidermal layer of cells. They are capable of removing cellular contents, causing cell destruction and reducing photosynthesis. Mesophyll collapse and leaf drop can result when trees are stressed by high spider mite infestations alone or in combination with sustained dry, windy conditions that may occur in the late fall, winter or early spring months. When populations of Texas citrus mite or citrus red mites are high, they will also feed on developing fruit. Spider mites prefer dry weather and low relative humidities in the range of 30 to 60% and generally do not pose a sustained problem in the higher humidity conditions that occur between June and September.

Spider mites are suppressed to low densities by several species of predacious mites, insects, and entomopathogens in some groves. However, when populations averaging 5 to 10 motile spider mites per leaf develop between September and May it would be reasonable to apply a miticide, especially if the trees are stressed. However, infestations comprised predominantly of adults, particularly males, are in decline and would not require control. Adult mites are recognized by their large size relative to immatures and females distinguished by their round shape and shorter legs compared to males.

Need for controlling spider mites is based on temperature and humidity conditions, spider mite population levels, tree vigor, and time of the year. Petroleum oil provides some ovicidal activity against spider mite eggs. None of the other miticides provide ovicidal activity, and their residual activity must be sufficiently long-lasting to kill subsequently emerging larvae.

Selection of a miticide should be based on the target pests to be controlled, avoiding risks of phytotoxicity, products that will be tank mixed, the time of year, treatment to harvest interval, and prior use of a product. All miticides except petroleum oil should be used only once a year to minimize resistance development.

Recommended Chemical Controls. READ THE LABEL.

Agri-Mek 0.15 EC + Petroleum Oil 97+%
(FC 435-66, FC 455-88 or 470 oil)
Comite 6.55 EC
Envidor 2 SC
Kelthane MF
Micromite 80WGS
Movento 240 SC + Petroleum Oil 97+%
(FC 435-66, FC 455-88 or 470 oil)
Nexter 75 WP
Petroleum Oil 97+% (FC 435-66, FC 455-
88 or 470 oil)
Sulfur
Kumulus 80 DF
Microthiol 80 DF
Thiolux 80 DF
Temik 15 G
Vendex 50 WP

OWNERS GET TAX BREAK IF THEY DESTROY DERELICT GROVES

By GARY PINNELL

Highlands Today

Published: March 29, 2009

SEBRING - To the owners of groves that have been purchased for retail and housing

developments: your property taxes may be going up.

The Highlands County Property Appraiser's office is <u>mailing notices</u> to grove owners about the Citrus <u>Health Response</u> Program, which allows them to keep their Greenbelt Exemption if they remove all the trees.

"The Highlands County <u>Citrus Growers</u> Association is notifying its members, but there are still a lot of grove owners who still aren't aware of this program," said appraiser Raymond McIntyre. The problem, says Ray Royce, executive director of the <u>citrus growers</u> association, is that canker and greening diseases live in abandoned groves.

"I may maintain my groves, but if the guy next to me doesn't, then it's a host for all sort of citrus diseases," Royce said.

The <u>Crutchfield family</u> bought one of those groves, to develop <u>Crossroads Mall</u> where U.S. 27 intersects with U.S. 98 and S.R. 66. Terry Crutchfield, a real estate agent, supports the idea. "It's a great program, a federal program, for people who have said, 'We're not going to develop.

We're not in the grove business, and we never intended to be in the grove business," Crutchfield said. "We've been taking care of our groves. Ours are being sprayed."

If producing groves are maintained, they are taxed at a lower rate - as agriculture lands, said McIntyre.

If the grove is not maintained and picked, but the landowner destroys the trees, the land will be assessed at \$50 per acre. At the current millage rate, they'll pay 75 cents per acre.

If the grove bought for <u>development purposes</u> is not maintained and it's worth, for instance, \$50,000 per acre, the owner would pay \$750 per acre, McIntyre said.

"All <u>citrus groves</u> which ... have no trees remaining must be kept fallow, and clean from all citrus foliage and <u>sprouts</u> from old stumps that could harbor and contribute to the spread of citrus disease," said McIntyre's March 9 letter to citrus grove owners.

"If that grove has been abandoned," Royce said, "citrus diseases will spread from the next grove to the next grove. Push those trees into a pile and burn them."

Greening bacteria is spread by psyllid insects as they feed and move from tree to tree. Canker bacteria is transported by wind, rain, farmers and their equipment.

Thousands of grove owners around Florida have signed agreements, and hundreds have pushed down their trees, said Terry McElroy, Department of Agriculture and Consumer Services spokesman.

Some Highlands County grove owners have not complied, and their Greenbelt Exemptions already have been removed, McIntyre said.

"I'd say two or three dozen, in the last two years," McIntyre said.

Highlands Today senior reporter Gary Pinnell can be reached at 863-386-5828 or gpinnell@highlandstoday.com



Certified Crop Adviser

Educational Seminar and CEU Session

April 15, 2009

7:30 AM to 6:00 PM

Nutrient Management (5 CEUs)
Integrated Pest Management (5 CEUs)

On-site host: UF/IFAS Citrus Research and Education Center in Lake Alfred, and offered by videoconference at:

- Gulf Coast REC in Wimauma
- Southwest Florida REC in Immokalee
- Indian River REC in Ft. Pierce
- University of Florida main campus in Gainesville

Speakers will deliver their presentation from the site in their respective area.

Regular registration is \$100 Lunch will be provided at all sites.

Each participant will receive a Columbia fishing shirt. Please provide your shirt size on the Registration Form.

Please send the registration form to the <u>Citrus Research</u> and Education Center, Lake Alfred.

Visit the CCA Seminar website at www.crec.ifas.ufl.edu/cca for the specific program as it becomes available.



Future CCA Seminar Dates: Wednesday, Oct. 14, 2009
Wednesday, April 14, 2010 and Wednesday, October 13, 2010
On-site host: UF/IFAS Citrus Research and
Education Center in Lake Alfred, and offered by
videoconference at:

- Gulf Coast REC in Wimauma
- Southwest Florida REC in Immokalee
- Indian River REC in Ft. Pierce
- University of Florida main campus in Gainesville Speakers will deliver their presentation from the site in their respective area.

Regular registration is \$100 Lunch will be provided at all sites.

Please send the attached registration form to the Citrus Research and Education Center, Lake Alfred.

Visit the CCA Seminar website at www.crec.ifas.ufl.edu/cca for the specific program as it becomes available.



Citrus Health Response Program Update March 2009

Gulf Citrus Growers Association (GCGA) - Asian Citrus Psyllid (ACP) Area-Wide Spray Program

DPI, through the CHRP, is assisting the GCGA and the University of Florida/ Institute of Food & Agriculture Sciences with a program that involves spraying the outer boundaries and working inward of the GCGA's commercial citrus areas. The CHRP component of the program involves scouting and conduting pre- and post-treatment psyllid counts. The program began in November 2008 with pre-spray psyllid surveys and continued through February with aerial and ground spraying, and post-spray surveys.



Survey Area:

- √ 132 blocks in 32 groves
- √ 10 stops made in each block (5 on borders and 5 inside)
- √ At each stop, 10 trees sampled

Pre-spray Survey Data (averages):

- √ 9 ACP adults were detected per 100 tap samples*
- √ 13% of trees had ACP-infested flush
- √ 20% of trees had citrus greening symptoms

Spraying Activities:

- √ 77,000 acres (34 groves) sprayed by air
- √ 4,000 acres (5 groves) sprayed by ground

Post-spray Preliminary Results:

- √ 88% reduction of psyllids by aerial spraying (compared to unsprayed groves)
- √ 71% reduction of psyllids by ground spraying (compared to unsprayed groves)

Next Steps:

- √ Post-bloom counts
- √ Further evaluation of survey results



*Psyllid counts are made using a method called tap sampling. A branch from each sample tree is tapped using a piece of PVC pipe to knock any psyllids present onto a board. The number of psyllids is recorded. Also recorded are other insects, including beneficial ones, that fall from the tree.



Photos: UF/IFAS



1-800-282-5153 • www.doacs.state.fl.us/pi/chrp



Summary of Activities through February 2009

Activity	December	January	February	FY Total*
Multi-pest survey (MPS) #4	7,225 acres	7,789 acres	4,147 acres	53,428 acres
Fresh fruit survey	1,318 acres	1,355 acres	1,178 acres	33,412 acres
Grower requested survey	358 acres	900 acres	604 acres	11,473 acres
Nursery environs survey				
- commercial	1,403 acres	0 acres	435 acres	4,353 acres
- residential				3,151 properties
Fresh fruit applications			2	444**
Harvesting permits issued	240	154	240	4,167

*FY 7/1/08 - 6/30/09

Total includes 46 fresh fruit applications received in June ** Number has been revised to reflect current information



- ✓ 8,444 multi-blocks to be surveyed
- √ 7,500 completed as of 3/31/09
- √ 342 current Compliance Agreements
- √ 1,448 deliquent Compliance Agreements

Next steps after completing surveys are to begin contacting abandoned grove property owners to explain the need to remove abandoned grove trees as part of the CHRP, and to explain the property tax incentives if appropriate action is taken.

Grower Services - How can we help?

- ✓ Supplemental Surveys: scout for pests and diseases upon grower request, as resources permit
- ✓ Fresh Fruit Surveys: export to the European Union
- ✓ Disease Recognition Training: identify citrus canker, HLB, CVC and citrus leprosis
- ✓ Self-Survey Training: plan, execute and document surveys
- ✓ Decontamination Training: learn proper mixtures and application
- ✓ Train-the-Trainer: improve and customize training programs one-on-one

For survey and training services, please contact your local CHRP office

www.doacs.state.fl.us/pi/contacts.html
or the DPI Helpline

1-800-282-5153



1-800-282-5153 • www.doacs.state.fl.us/pi/chrp

Flatwoods Citrus

In order to save papers and postage, we would like to send you the "Flatwoods Citrus" newsletter electronically as an e-mail attachment or you can download it by yourself from several websites.

☐ If you wou	ald like to receive the <i>Flat</i>	woods Citrus newsletter electro	nically, <u>please check</u>
this box and	provide us with your e-ma	ail address. Send it to maz@ifa	as.ufl.edu
•		and wish to keep receiving a has	1 2
Please send:	Dr. Mongi Zekri Multi-County Citrus Age Hendry County Extensio P.O. Box 68 LaBelle, FL 33975 E-mail: maz@ifas.ufl.	n Office	
Subscriber's	Name:		
Company:			
Address:			
City:	State:_	Zip:	
Phone:			
Fax:			
E-mail:			-
	Racia	l-Ethnic Background	
American Asian Am Hispanic	Indian or native Alaskan erican	White, non-HisBlack, non-His	÷
		<u>Gender</u>	
	Female		Male