

Citrus Notes



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Extension Agent
for
Polk &
Hillsborough
Counties

IMPORTANT DATES

MARCH 7, 2017

OJ BREAK MEETING

Lake Alfred

APRIL 4, 2017

**FLORIDA CITRUS
GROWERS' INSTITUTE**

Avon Park

CONTACT INFO

POLK COUNTY EXTENSION SERVICE

PO Box 9005, Drawer HS03
Bartow, FL 33831
(863) 519-1052
Email: wcoswalt@ufl.edu

HILLSBOROUGH COUNTY EXTENSION SERVICE

5339 County Road 579
Seffner, FL 33584
(813) 744-5519
Ext. 541231

March

OJ Break Meeting



Our March OJ Break Meeting will be held on Tuesday, March 7, 2017, at UF/IFAS Citrus

Research and Education Center's, Ben Hill Griffin Hall, 700 Experiment Station Rd. in Lake Alfred. This month Dr. Ron Brlansky, Professor Emeritus and Plant Pathologist from the UF/IFAS Citrus Research and Education Center, will be making a presentation titled "Update on Citrus Blight and Citrus Leprosis; two diseases of concern". The meeting will begin at 11:00 am and will conclude prior to lunch at noon. There will be one CEU for your restricted pesticide license (RUP) and for certified crop advisors (CCA) Our lunch sponsor is Bayer CropScience and we need you to **pre-register by Friday, March 3rd** so we can order lunch.

Registration can be done by calling Gail Crawford at 863-519-1042 or email her at: dorothy@c@ufl.edu, online registration can be done at the following eventbrite link: <https://march2017ojbreak.eventbrite.com/>.

Hope to see you all next week.

2017 Florida Citrus Growers' Institute



The 2017 Florida Citrus Growers' Institute will be held on Tuesday, April 4, 2017, at

the South Florida State College, Alan Jay Wildstein Center for the Performing Arts in Avon Park. The enclosed brochure includes registration information.

Postbloom Fruit Drop Presentations

The presentations from the February 8, 2017, Postbloom Fruit Drop meeting held in Arcadia are now available on the Citrus Agents' website. The following link takes you directly to the presentations: <http://citrusagents.ifas.ufl.edu/pfd/>.

Nutrient Recommendations for HLB

Last month at our OJ Break Dr. Kelly Morgan provided the following recommendations in his presentation on nutrient recommendations. Nitrogen, Potassium should be maintained in the sufficient along with manganese and zinc (25-100 ppm). Avoid excessive or deficient foliar levels of manganese and zinc. To favor foliar, growth keep manganese and zinc in the lower levels of sufficiency (not below 25 ppm). To favor yield, keep manganese and zinc in the upper levels (not over 100 ppm).

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Q&A

Irrigation Water Quality

What are the irrigation water quality characteristics that are a concern today in citrus production?

Deep wells in Florida tap the Floridian aquifer which is located in an underground limestone structure. This water contains bicarbonates, calcium and magnesium carbonates and hydroxides from that limestone structure causing alkaline conditions and that is a concern.

Why is calcium and magnesium carbonate a problem?

Our first response would be, isn't this the same material as dolomitic limestone we use to raise soil pH. Yes it is, but by concentrating it in the wetted zone of irrigation it will significantly raise the soil pH.

What are some of the concerns when associated with this increase in soil pH?

HLB infected trees have root systems that are compromised. The increased soil pH reduces the availability of soil applied nutrients resulting in additional root stress and lower root densities.

What levels and water conditions would be an indicator of a bicarbonate issue?

Water with a pH of 7.5 or higher would be an indicator of a potential bicarbonate issue. When testing for bicarbonates in a water sample, levels exceeding 100 ppm would also be an indicator of a problem with excessive bicarbonate levels.

What other problems can be experienced by high water bicarbonate levels?

It is likely that at this pH level you could develop issues with mineral precipitation and the plugging of emitter and micro sprinklers.

How can one address the issue of high pH in irrigation water?

The standard treatment would be to lower the pH of the irrigation water to 6.5 by adding acid. At this level (6.5 pH) about half of the bicarbonates would be neutralized. You could also broadcast sulfur to lower the soil pH and neutralize the bicarbonates.

What are the pros and cons of water conditioning with acid injection?

Acid injection most commonly uses sulfuric and phosphoric acids. There are safety precautions that should be considered before handling these products. Acid injection can be used to lower the soil pH directly in the root zone. Continued injection will help maintain the soil pH at a desired level. These acids react faster at neutralizing soil bicarbonates and lowering soil pH.

What are the pros and cons of soil conditioning using ground applied sulfur?

Typically easier to handle and work with compared to liquid acids. Sulfur reacts more slowly (nine months) in lowering soil pH compared to the acidification. Doesn't affect the bicarbonate levels in the water source, but works by lowering soil pH and neutralizing bicarbonates in the soil. Application is made to entire grove area including areas not affected by high bicarbonates and soil pH.



Examples of high soil pH induced deficiency symptoms

MARCH

7



MARCH 2017 OJ BREAK

**UF/IFAS Citrus Research and
Education Center, BHG Hall
March 7, 2017 - 11am - 12pm**

Speaker: Dr. Ronald Bransky, Professor Emeritus and Plant Pathologist, UF/IFAS
Citrus Research and Education Center

Topic: Update on Citrus Blight and Citrus Leprosis; two diseases of concern.

Lunch: Lunch to follow, sponsored by Roy Morris and Bayer CropScience.
Please preregister before March 3, 2016, see below.

CEU's: Restricted Use License: 1.0 CEU in Private Applicator, Ag Tree Crop or
Demo & Research; Certified Crop Advisor: 1.0 CEU in Integrated Pest
Management.

**PREREGISTER BY EVENTBRITE AT: [HTTPS://
MARCH2017OJBREAK.EVENTBRITE.COM/](https://march2017ojbreak.eventbrite.com/) OR BY
CONTACTING GAIL AT 863-519-1042 OR BY EMAIL AT
DOROTHYC@UFL.EDU**

PURPOSE OF THE INSTITUTE

Citrus Greening or Huanglongbing (HLB) continues to impact all citrus production areas of Florida. The 2017 Florida Citrus Growers' Institute is an opportunity for Florida citrus growers to come together to learn about effective management of HLB and other challenging diseases affecting the industry. Topics this year include citrus tree health, Asian citrus psyllid management, post bloom fruit drop, plant bactericides and food safety.

CONTINUING EDUCATION UNITS

Continuing Education Units (CEU's) will be offered for holders of restricted use pesticide licenses (RUP) and certified crop advisors (CCA). CEU's have been granted in the following categories: private applicator, agricultural tree crop and demonstration & research for RUP holders. CEU's have been requested for CCA's in the appropriate CEU categories.

SPONSORS

PLATINUM

Bayer CropScience
Syngenta Crop Protection

GOLD

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SILVER

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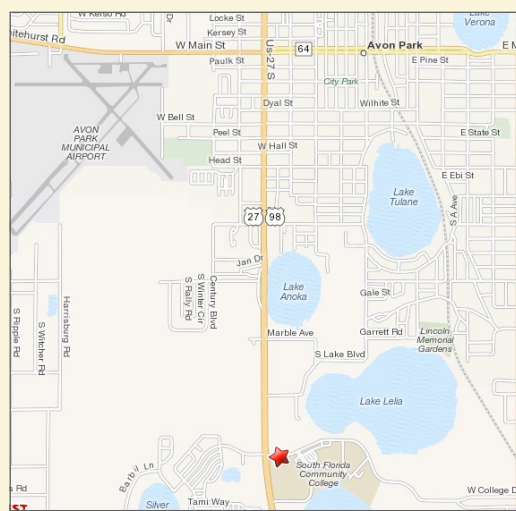
Gowan

BRONZE

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DIRECTIONS

The South Florida State College is located at 600 West College Drive in Avon Park.

From the South: Take U.S. Hwy. 27/98 north towards Avon Park, turn east onto W. College Drive and follow the signs to the Theatre.

From the North: Take U.S. Hwy. 27/98 south to Avon Park, continue south to W. College Drive, turn east onto W. College Drive and follow the signs to the Theatre.

From the East: Take U.S. Hwy. 98 north to where U.S. Hwy. 27/98 merge south of Sebring. Proceed on U.S. Hwy. 27/98 north towards Avon Park, turn east onto W. College Drive and follow the signs to the Theatre.

From the West: Take S.R. 64 east to Avon Park, turn south on U.S. Highway 27/98 to W. College Drive, turn east onto W. College Drive and follow the signs to the Theatre.

SOUTH FLORIDA STATE COLLEGE
ALAN JAY WILDSTEIN
CENTER FOR THE PERFORMING ARTS
600 W. COLLEGE DRIVE
AVON PARK, FL

FLORIDA CITRUS GROWERS' INSTITUTE



Conducted by

University of Florida, IFAS Extension
Citrus Research and Development
Foundation

South Florida State College
Alan Jay Wildstein
Center for Performing Arts
Avon Park, Florida

April 4, 2017

2017 Florida Citrus Growers' Institute

PROGRAM AGENDA TUESDAY, APRIL 4, 2017

8:00 AM - Registration

8:30 AM - Welcome and Introductions

Mr. Chris Oswalt, CES, Bartow, FL

ENTOMOLOGY AND PLANT PATHOLOGY

Moderators: Ms Laurie Hurner, CES, Sebring, FL,

Dr. Juanita Popenoe, CES Tavares, FL

8:45 AM - The Use of RNAi to Control
Psyllids in Citrus - *Dr. Bill Dawson, UF/IFAS
CREC*

9:15 AM - Distribution of Psyllids in Citrus
Groves - *Dr. Kirsten Pelz-Stelinski, UF/IFAS
CREC*

9:45 AM - What Have We Learned about the
Bactericides Available for Use in Citrus - *Dr.
Stephanie Sliniski, Citrus Research and
Development Foundation, Inc., Lake Alfred, FL*

10:15 AM - OJ Break - Sponsored by Florida
Citrus Mutual

10:30 AM - Postbloom Fruit Drop
Management - *Dr. Megan Dewdney, UF/IFAS
CREC*

FOOD SAFETY RULE

11:00 AM - FSMA's Produce Safety Rule and
the Florida Citrus Grower - *Mr. Travis Chapin,
UF/IFAS CREC*

CITRUS TREE HEALTH

Moderator: Dr. Steve Futch, UF/IFAS CREC

Dr. Mongi Zekri, CES, LaBelle, FL

11:30 AM - Citrus Root Health and HLB
Management - *Dr. Evan Johnson, UF/IFAS
CREC*

12:00 PM - Lunch

1:00 PM - Nematodes and Citrus Integrated
Pest Management - *Dr. Larry Duncan, UF/IFAS
CREC*

1:30 PM - Update on Irrigation and Nutrient
Management Studies of HLB Affected Trees -
Dr. Davie Kadyampakeni, UF/IFAS CREC

2:00 PM - Update on Citrus Nutritional Trials
- *Dr. Tripti Vashisth, UF/IFAS CREC*

2:30 PM - Genome Editing Technology: What
is CRISPR and What Will It Mean for
Florida Citrus - *Dr. Fred Gmitter, UF/IFAS
CREC*

3:00 PM - Adjourn

CES: County Extension Service

CREC: Citrus Research & Education Center,
Lake Alfred, FL

FSMA: Food Safety and Modernization Act

HLB: Huanglongbing a.k.a Citrus Greening

UF/IFAS: University of Florida, Institute of
Food and Agricultural Sciences

The Institute of Food and Agricultural Sciences
(IFAS) is an Equal Opportunity Institution.



FLORIDA CITRUS GROWERS' INSTITUTE

April 4, 2017

PREREGISTRATION
IS REQUIRED

Name: _____

Company: _____

Address: _____

City/State/Zip: _____

Phone: _____ Email: _____

Please send registration to: Gail Crawford, Polk County Extension Service, P.O. Box 9005, Drawer HS03, Bartow, FL 33831.

By March 31, 2017 By phone: 863-519-1042, Fax: 863-534-0001, email: dorothy@ufl.edu or

online at: <https://citrusinstitute2017.eventbrite.com/>