

Citrus Notes



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for
Polk &
Hillsborough
Counties

IMPORTANT DATES

APRIL 21, 2017

**INTERNATIONAL
RESEARCH CONFERENCE
ON HLB (IRCHLB)
GROWER DAY**

Lake Alfred

MAY 9, 2017

OJ BREAK MEETING

Lake Alfred

JUNE 4 - 6, 2017

**130TH ANNUAL FLORIDA
STATE HORTICULTURAL
SOCIETY CONFERENCE**

Tampa

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

May

OJ Break Meeting



Our May
OJ Break
meeting will
be held on
Tuesday,

May 9, 2017, beginning at 10:30 a.m. It will be held at the UF/IFAS Citrus Research and Education Center, Ben Hill Griffin Hall at 700 Experiment Station Road in Lake Alfred. We have two great speakers this month. Dr. Jude Grosser with the CREC Plant Improvement Team, will be presenting the latest information on the yield and horticultural performance of the new series of UF rootstocks.

Dr. Kelly Morgan will be here this month to discuss the all important topic of citrus irrigation, scheduling and management with HLB infected trees. I also asked him to cover the interpretation of water analysis as related to adjusting irrigation water pH on HLB infected trees.

This month our sponsor will be Trey Whitehurst and Harrells Fertilizer. Please pre-register for the meeting by Friday, May 5, 2017. Registration can be done by calling Gail Crawford at 863-519-1042, emailing her at: dorothy@c@ufl.edu or eventbrite at: <https://polkojbreakmay2017.eventbrite.com>

Food Safety Modernization Act **Produce Safety Rule**

Travis Chapin, Uf/IFAS, State
Specialized Extension Agent for Food
Safety, provided a summary of the rule

areas fresh fruit citrus growers will need to comply with:

What a Fresh-Market Citrus Grower Needs to Know About FSMA's Produce Safety Rule

The Produce Safety Rule (PSR), under the Food Safety Modernization Act (FSMA), is the first mandatory federal standard for the production of fruits and vegetables, including citrus, in the United States. Compliance for the largest farms (those averaging >\$500,000 in annual total produce sales over the previous 3 years) begins on January 26, 2018. Farms with \$250-500,000 in total produce sales have an additional year to comply in January 2019, and farms with \$25-250,000 in total produce sales have until January 2020 to comply. Find the rule and more information, including information about exemptions and compliance dates, at <http://www.fda.gov/Food/GuidanceRegulation/FSMA/ucm334114.htm>. If you open the PSR in the federal register, you'll find the full 216-page document that includes the preamble and public comments; the actual regulatory requirements are in the last 21 pages (pp. 74547-74568).

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REGISTER NOW

FOR IRCHLB GROWER DAY - APRIL 21, 2017

The 2017 Grower Day will be held on Friday, April 21st at the Citrus Research and Education Center in Lake Alfred from 9 am to 12 pm. Lunch will be provided afterward by Florida Citrus Mutual. Please RSVP to Clark Baxley at clarkb@fcitrusmutual.com by April 17th.

A clear advantage of holding the International Research Conference on HLB (IRCHLB) every two years is the intense immersion that is made possible by several hundred scientists, from around the world, spending several days exchanging information and results of their research. Such a large collection of scientists focused on the topic of HLB results in information sharing and coordinated efforts going forward, which should lead to earlier solutions and best use of funding support.

A more important advantage of the meeting being held in Florida is the opportunity to share the outcomes of these technical presentations and discussions with citrus growers so that they, too are made aware of results coming from the research. Separating the grower day from technical discussions has proven beneficial.

The April date allows participants in the IRCHLB to capture and summarize outcomes important to growers, and to prepare a program that is truly focused on communicating results to growers. This year the grower day will be built around current challenges to growers in managing citrus in the presence of HLB.

Program content and agenda is currently being prepared and will be disseminated upon completion.



CRDF to Benefit from Certis USA Sales Program



Florida citrus growers who use Certis USA's Kocide copper fungicides will be helping to support the fight against

Huanglongbing (HLB, citrus greening). Certis USA announced the "Certis for Citrus" program at the 2016 Citrus Expo in North Ft. Myers, Florida. Certis USA will make a monetary donation to the Citrus Research and Development Foundation (CRDF), a non-profit corporation that has oversight responsibilities for HLB research efforts.

"Florida citrus growers have been longtime users and supporters of Kocide," said Michael Harowitz, Kocide Business Manager, "Certis USA wants to show our appreciation and support in the fight against HLB."

The Certis USA will make a donation to the CRDF based on every pound of Kocide[®] 3000 or Kocide[®]

2000 copper fungicide purchased by a Florida citrus grower from June 1, 2016 to May 31, 2017. The monetary donation will be presented at the CRDF June board meeting, held in conjunction with the Florida Citrus Mutual (FCM) annual meeting in June of 2017. These dollars will be used to fund research projects in search of a cure for HLB.

"CRDF is pleased that Certis has taken this step to show its support for the HLB fight and to contribute towards the financial support that is so important to success. Proceeds from this effort will be invested directly into moving solutions to the eld," said Harold Browning, Ph.D., CRDF chief operating officer.

"These are challenging times for the Florida citrus grower. I'm pleased and proud that Certis USA has joined the fight to help find a solution to HLB," said Michael Harowitz.

Headquartered in Columbia, Maryland, Certis USA is a leading supplier of biopesticides and Kocide copper fungicides. For more information about Certis USA products contact Joe

Craig (863-291-9203) or Chuck Goodowns (352-538-4471) or visit www.CertisUSA.com.

From Dow AgroSciences Intrepid Edge and Chlorpyrifos

Alejandro Calixto, CPRD Field Scientist with Dow AgroSciences, informed me of the availability of Intrepid Edge insecticide for Asian citrus psyllid and citrus leafminer under a EPA Special 2(e) label for Florida. This product contains the active ingredients methoxyfenozide and spinetoram.

Additionally, EPA denied a recent petition seeking to revoke U.S. tolerances for chlorpyrifos.

For further information contact your crop protection specialists or representatives at Dow AgroSciences.

FSMA's Produce Safety Rule

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Exemptions and Exclusions

Depending on your operation, there are four possible exemptions or exclusions from the Produce Safety Rule. For the purposes of the PSR, your grove(s) operation is a farm.

1. Farms that sell less than \$25,000 in total produce sales annually (averaged over the previous 3 years) are exempt from the PSR.
2. An exhaustive list of certain fruit, vegetable and grain crops that are cooked before eating are excluded from the PSR (e.g., potatoes, winter squash). No citrus fruit is on this list of excluded crops.
3. Farms that sell less than \$500,000 in total food sales annually (averaged over the previous 3 years) AND have more than half of sales directly to qualified end-users (either the consumer or a restaurant or retail establishment in the same state or same Indian reservation as the farm or within 275 miles from the farm) are eligible for a "qualified exemption." Qualified exempt farms must keep documentation and records that support the sales requirements. The name of the farm and complete business address must also appear either on product packaging, on a sign or other identifier at the point-of-sale, or in documentation accompanying the fruit.
4. Farms that sell all their fruit to a commercial processor (e.g., for pasteurized orange juice) are eligible for exemption. Farms under this exemption need to disclose that this fruit is "not processed to adequately reduce the presence of microorganisms of public health significance" in accompanying documents or on the container. In return, the juice processor needs to

provide written assurance annually that they have processed the fruit in a way to adequately reduce the presence of microorganisms of public health significance.

Fresh-Market Citrus

If you have more than \$25,000 in annual produce sales and don't meet the direct marketing requirements of the qualified exemption outlined above and you sell any fresh-market fruit, your operation will be covered under the Produce Safety Rule as it applies to "covered activities." A covered activity is defined as "growing, harvesting, packing, or holding covered produce on a farm." Grove care-taking companies and harvest companies need to follow the PSR requirements as they relate to growing and harvesting activities, respectively. FDAs draft guidance regarding classification of activities is available online at <http://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/ucm517567.htm>.

For a fresh-market citrus grower who transfers ownership of the crop prior to harvest, the PSR requirements associated with growing the crop fall under the categories of:

- health and hygiene;
- personnel qualifications and training;
- equipment, tools, buildings, and sanitation;
- biological soil amendments of animal origin and human waste;
- domesticated and wild animals; and
- agricultural water.

Some important considerations are highlighted below, but growers should reference the PSR and future FDA guidance for comprehensive compliance requirements. Requirements are covered in much more detail during Produce Safety Alliance (PSA) training courses.

Find a list of PSA courses offered by IFAS at crec.ifas.ufl.edu.

Health and Hygiene

Everyone working for the covered farm, even those that don't handle fruit, needs to follow basic health and hygiene practices which include things like handwashing, maintaining personal cleanliness, not eating in the field, and not working while sick.

Personnel Qualifications and Training

Each farm must identify at least one supervisor or other responsible party (e.g., consultant) tasked with ensuring compliance with the PSR. This person must also complete food safety training that is acknowledged by FDA. Currently, the Produce Safety Alliance (PSA) curriculum is the only training material that meets this requirement. All other employees must receive food safety training relevant to their jobs which includes principles of food safety, personal hygiene, and certain PSR standards.

Equipment, Tools, Buildings, and Sanitation

Any equipment, tools, and buildings used for growing activities (including stored equipment and buildings or sheds used to store equipment) need to be checked, cleaned and maintained to ensure food safety.

Biological Soil Amendments of Animal Origin and Human Waste

This section doesn't apply if you don't use any biological soil amendments (BSAs) of animal origin (e.g., manure, compost, manure/compost teas, blood meal, bone meal, fish meal, feather meal). The use of Class A biosolids is allowed without any additional restrictions beyond the EPA and state requirements already in place.

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Q&A

Citrus Leprosis

What is citrus leprosis?	A viral disease of citrus.
Do we or did we have it if Florida?	Currently it is not in Florida, however we did have it at one time.
Where is its' current distribution?	South and Central America and Mexico.
How is it transmitted?	Transmitted by mites (in the genus <i>Brevipalpus</i>).
What are the symptoms?	It causes circular chlorotic spots on leaves, stems and fruit and may cause leaf and fruit drop and dieback. The blemished fruit are unsaleable.
What will it do to the growth and yield of citrus trees?	It causes reduced fruit yield and tree dieback.
If it shows up in Florida how will we be able to control it?	Tree removal if found in small areas, control of the mite vectors and tree defoliation to remove the chlorotic lesions that contain the virus.

From: Dr. Ron Brlansky, Professor Emeritus, Plant Pathology, UF/IFAS CREC



FSMA's Produce Safety Rule (continued on page 3)

If you purchase a treated BSA of animal origin from a 3rd party, you need to obtain a Certificate of Conformance or other documentation annually demonstrating that a scientifically valid, and monitored, process was used and that the risk of cross-contamination with untreated products was minimized. If you treat your own BSA of animal origin, you need to use a scientifically valid treatment process and keep monitoring records of the process controls (e.g., time, temperature, turnings). There are also specific application methods and application-to-harvest intervals allowed depending on whether the BSA of animal origin is considered treated or untreated.

Animals and Wildlife

Growing areas need to be monitored for intrusion and contamination by domestic or wild animals. Contamination should be removed before harvest and/or any findings should be shared with the harvest crew.

Production Agricultural Water

Production agricultural water applies to any water that comes in contact with fruit on the tree and could include water used to irrigate (if it contacts the fruit), to make crop sprays, or for cold

protection. If the water does not contact fruit, it is not considered agricultural water. The sources and distribution systems of all production agricultural water need to be reviewed at least annually. All production agricultural water must meet specific microbial criteria which is detailed in the PSA course. If production agricultural water does not meet the microbial criteria, you can still use the water if you do at least one of the following:

- apply a time interval between last application of water and harvest (which meets specific requirements),
- apply a postharvest time interval or treatment (like commercial washing), or
- treat the water (and meet specific requirements).

Farms have an additional two years from their compliance dates to come into compliance with the agricultural water requirements.

While some important considerations were highlighted here, these topics are covered in much more depth in the PSA training courses. Find a list of PSA courses offered by UF/IFAS at crec.ifas.ufl.edu.

There will also be a number of additional trainings this fall in our area. When the schedule is confirmed I will provide that information to you.



Register now! • fshs.org/meetings



130th Annual Conference

June 4th through 6th, 2017

- Westin Tampa Harbour Island, 725 South Harbour Island Blvd, Tampa, FL, 33602
- Deadline for reservations at the FSHS rate is May 10, 2017

1

Citrus Production/Harvesting

Rootstocks, scion cultivars, insect, disease and weed control, fertilization, irrigation, cold protection and cultivation.

2

Vegetables Commercial/Home

Cultivars, selection, food safety, improvement, cultural practices and harvesting methods, and insects, diseases and weeds.

3

Ornamental/Garden Gardening/Landscaping

Cultivars, selection, landscape design, cultural practices, pests and optimal production.

1

Handling/Processing Postharvest/Handling

Postharvest quality, food and facility safety, treatments, storage, transport, by-products, and waste utilization.

2

Krome Memorial Tropical/Subtropical

Tropical/subtropical crops, cultural practices, harvesting, food safety, and management of these unique crops.

3

Natural Resources Environmental and Related

Soils, water, biofuels, biofertilizer, and information related to horticultural and agronomic crops.

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WWW.FSHS.ORG/MEETINGS

fshs@fshs.org

700 Experiment Station Road
Lake Alfred, FL, 33850, USA

More Info 863-956-1151

REGISTRATION FORM

Please note: Substitutions are NOT acceptable.

Registration is also available online at:
<http://psa042817.eventbrite.com>

**PSA Training – FSGA Event Center –
April 28, 2017**

Name _____

Company _____

Address _____

Email _____

Phone _____

Special meal requirements (vegetarian, etc.)?

Your name exactly as you would like it to
appear on your certificate (please write legibly):

**Important: Make checks payable to
“University of Florida - CREC”**

Training registration of \$150 per participant and \$125
for government/academic employees is requested by
April 21st, 2017. If you are a member of FFVA or
FSGA, a discounted rate of \$99 is available. (Not sure
if you're an FFVA member? Contact Sonia Tighe at
321-214-5245 or sonia.tighe@ffva.com)

Please note: NO refunds will be issued within one
week of the training start date.

Mail check and registration to:

University of Florida - CREC
ATTN: Sarah McCoy
700 Experiment Station Road
Lake Alfred, FL 33850

sarahmccoy@ufl.edu or 863-956-8632

PLANNED PSA TRAININGS

February 13 – Marianna, FL
<http://psa021317.eventbrite.com>

March 13 – Arcadia, FL
<http://psa031317.eventbrite.com>

March 16 – Homestead, FL
<http://psa031617.eventbrite.com>

March 20 – St. Augustine, FL
<http://psa032017.eventbrite.com>

April 20 – Tavares, FL
<http://psa042017.eventbrite.com>

April 28 – Dover, FL
<http://psa042817.eventbrite.com>

May 17 – Palmetto, FL
<http://psa051717.eventbrite.com>

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This training is supported in part by Florida
Department of Agriculture and Consumer Services
Training Grant (Contract #00099035).

Produce Safety Alliance Grower Training



April 28, 2017

Florida Strawberry Growers Association Event Center
13138 Lewis Gallagher Road
Dover, FL 33527

Sponsored by:
UF/IFAS Citrus Research and Education Center
UF/IFAS Food Science and Human Nutrition Department

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Produce Safety
ALLIANCE

ABOUT THE PROGRAM

Who Should Attend

Fruit and vegetable growers and others interested in learning about produce safety, the Food Safety Modernization Act (FSMA) Produce Safety Rule, Good Agricultural Practices (GAPs), and co-management of natural resources and food safety. The PSA Grower Training Course is one way to satisfy the FSMA Produce Safety Rule requirement.

What to Expect

The trainers will spend approximately seven hours of instruction time covering content contained in these seven modules:

- Introduction to Produce Safety
- Worker Health, Hygiene, and Training
- Soil Amendments
- Wildlife, Domesticated Animals, and Land Use
- Agricultural Water (Part I: Production Water; Part II: Postharvest Water)
- Postharvest Handling and Sanitation
- How to Develop a Farm Food Safety Plan

In addition to learning about produce safety best practices, key parts of the FSMA Produce Safety Rule requirements are outlined within each module. There will be time for questions and discussion, so participants should come prepared to share their experiences and produce safety questions.

ABOUT THE PROGRAM (CONT'D)

Benefits of Attending

The course will provide a foundation of Good Agricultural Practices (GAPs) and co-management information, FSMA Produce Safety Rule requirements, and details on how to develop a farm food safety plan.

After attending the entire course, participants will be eligible to receive a certificate from the Association of Food and Drug Officials (AFDO) that verifies they have completed the training course.

PSA TRAINING AGENDA

8:30	Registration and Refreshments
9:00	Welcome and Introductions
9:15	Module 1: Introduction to Produce Safety
10:00	Module 2: Worker Health, Hygiene, and Training
11:00	Break
11:15	Module 3: Soil Amendments
12:00	Module 4: Wildlife, Domesticated Animals, and Land Use
12:45	Lunch
1:30	Module 5: Agricultural Water Part 1: Production Water
2:15	Part 2: Postharvest Water
3:15	Break
3:30	Module 6: Postharvest Handling and Sanitation
4:30	Module 7: How to Develop a Farm Food Safety Plan
5:00	Final Questions and Evaluations

LEAD INSTRUCTORS

Travis Chapin, UF/IFAS CREC
Michelle Danyluk, UF/IFAS CREC
Jill Dunlop, FFVA
Renée Goodrich Schneider, UF/IFAS FSHN
Keith Schneider, UF/IFAS FSHN

LOCATION

Dover, FL is accessible from the Tampa International Airport. You can access a map and more information about the Florida Strawberry Growers Association Event Center at <http://floridastrawberry.org/>.

REGISTRATION

The fee for the training is \$150 for industry participants. A reduced fee of \$125 is available for government/academic employees that make prior arrangements. For attendees who are members of FFVA or FSGA, a discounted rate of \$99 is available. (Not sure if you're an FFVA member? Contact Sonia Tighe at 321-214-5245 or sonia.tighe@ffva.com)

Registration is limited.

Registration fee includes the training materials, lunch, refreshments, and a Certificate of Course Attendance issued by AFDO.

Participation for the entire training is required for the certificate.