

Citrus Notes



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for
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IMPORTANT DATES

APRIL 3, 2018

**FLORIDA CITRUS
GROWERS' INSTITUTE**
Avon Park

APRIL 26, 2018

**FOOD SAFETY AND
MODERNIZATION ACT -
PRODUCE SAFETY RULE**
Balm

MAY 15, 2018

**OJ BREAK GROWER
MEETING**
Lake Alfred

JUNE 10 - 12, 2018

**131ST ANNUAL FLORIDA
STATE HORTICULTURAL
SOCIETY CONFERENCE**
Ft. Lauderdale

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2018

Florida Citrus Growers' Institute



2018 Florida
Citrus Growers'
Institute

The Florida Citrus Growers' Institute will be held on Tuesday, April 3, 2018, at

South Florida State College in Avon Park beginning at 8:00 a.m. I have included the program brochure with additional information and registration instructions. **Pre-registration is required and the deadline is Friday, March 30, 2018.**

FSMA - Produce Safety Rule Training

If you haven't already done so, plan to attend a Produce Safety Alliance (PSA) workshop sometime this year. The one day PSA workshop satisfies the Produce Safety Rule requirement that at least one person, from each "farm", complete food safety training. The next PSA training in our area is in Balm on April 26th. The flyer for this course is attached and the registration link is below. There are other PSA workshops in Live Oak, Apopka, and Homestead.

Produce Safety Alliance Grower Training, the one-day course for fruit and vegetable growers and packers who fall under FSMA's Produce Safety Rule. Lunch is included.

4/11/18 – Live Oak <https://psa041118.eventbrite.com>

4/26/18 – Balm <https://psa042618.eventbrite.com>

5/2/18 – Apopka <https://psa050218.eventbrite.com>

6/7/18 – Homestead <https://psa060718.eventbrite.com>

2018 May

OJ Break Meeting

The May OJ Break meeting will be held at the UF/IFAS Citrus Research and Education Center, Ben Hill Griffin Jr. Citrus Hall on May 15, 2018, beginning at 10:30 a.m. and concluding after lunch.

131st Annual Meeting of the Florida State Horticultural Society

The annual meeting of the Florida State Horticultural Society will take place June 10 to 12, 2018 in Ft.

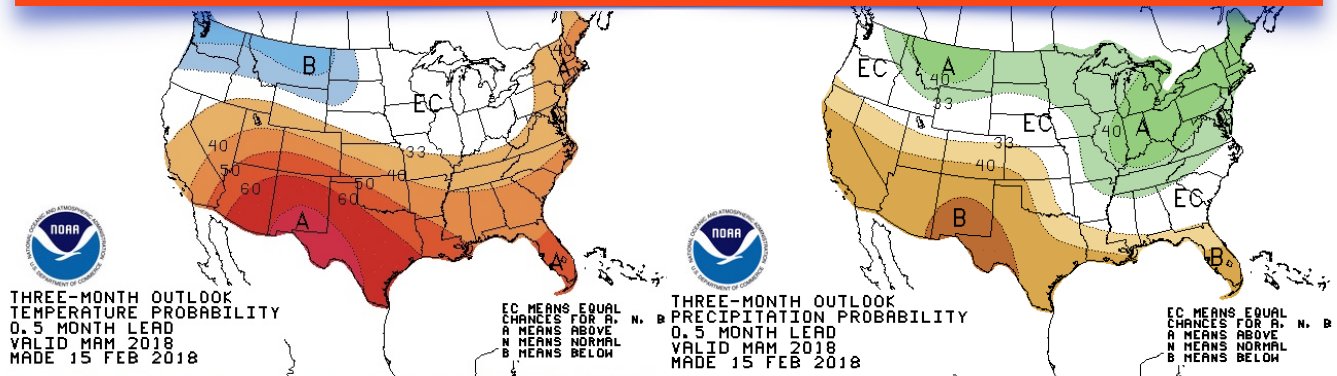


Lauderdale, FL. The host property is the Renaissance Ft. Lauderdale Cruise Port Hotel, 1617 SE 17th St. You can find registration and hotel information for the meeting at the following website: <https://fshs.org/meetings/>

UF | IFAS Extension
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*The Foundation for the Gator
Nation*

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NATIONAL OCEANIC AND ATMOSPHERIC ASSOCIATION, CLIMATE PREDICTION CENTER

The three month (March, April, May) outlooks for temperature and precipitation. Outlooks are for an above average probability for warmer than normal temperatures and an above average probability for below average rainfall.



CRDF to Benefit from Certis USA Sales Program

On June 14, 2017, the Citrus Research and Development Foundation, Inc. (CRDF) held its Annual Board meeting in Naples, Florida. Michael Harowitz, Kocide Business Manager and Joe Craig, Florida Regional Manager presented the CRDF with a check for \$22,000 representing this year's program donation and announced that the Certis for Citrus program will continue for another year.

Certis USA will make a monetary 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, 2017 to May 31, 2018. The donation will be presented at the annual CRDF board meeting held in Naples Florida in June of 2018. These dollars will be used to fund research projects in the ongoing search for a solution for HLB.

Tom Jerkins, President of CRDF states, "Our Foundation represents the entire Florida industry, and as such we are all very appreciative of the strong show of industry support that Certis USA and the "Certis for Citrus" program demonstrates. Kocide has been a reliable product for Florida growers for many

years and we appreciate Certis continuing the program."

"The Certis for Citrus program is a great example of the strong partnerships that make Florida Citrus such a wonderful industry. With strong partners, growers will overcome today's challenges. Kocide is a wonderful tool for the industry's crop protection needs and I am appreciative that Certis USA is investing in the research that is so crucial to the industry's future," said Larry Black with Peace River Packing Company.

Harold Browning, Ph.D., CRDF chief operating officer, said, "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 field."

"Florida citrus growers have been longtime users and supporters of Kocide. These are challenging times and I am 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 manufacturer of biopesticides products and supplier of 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.

Update - Paraquat Mitigation Timelines

John Taylor from Syngenta provided the following update on paraquat.

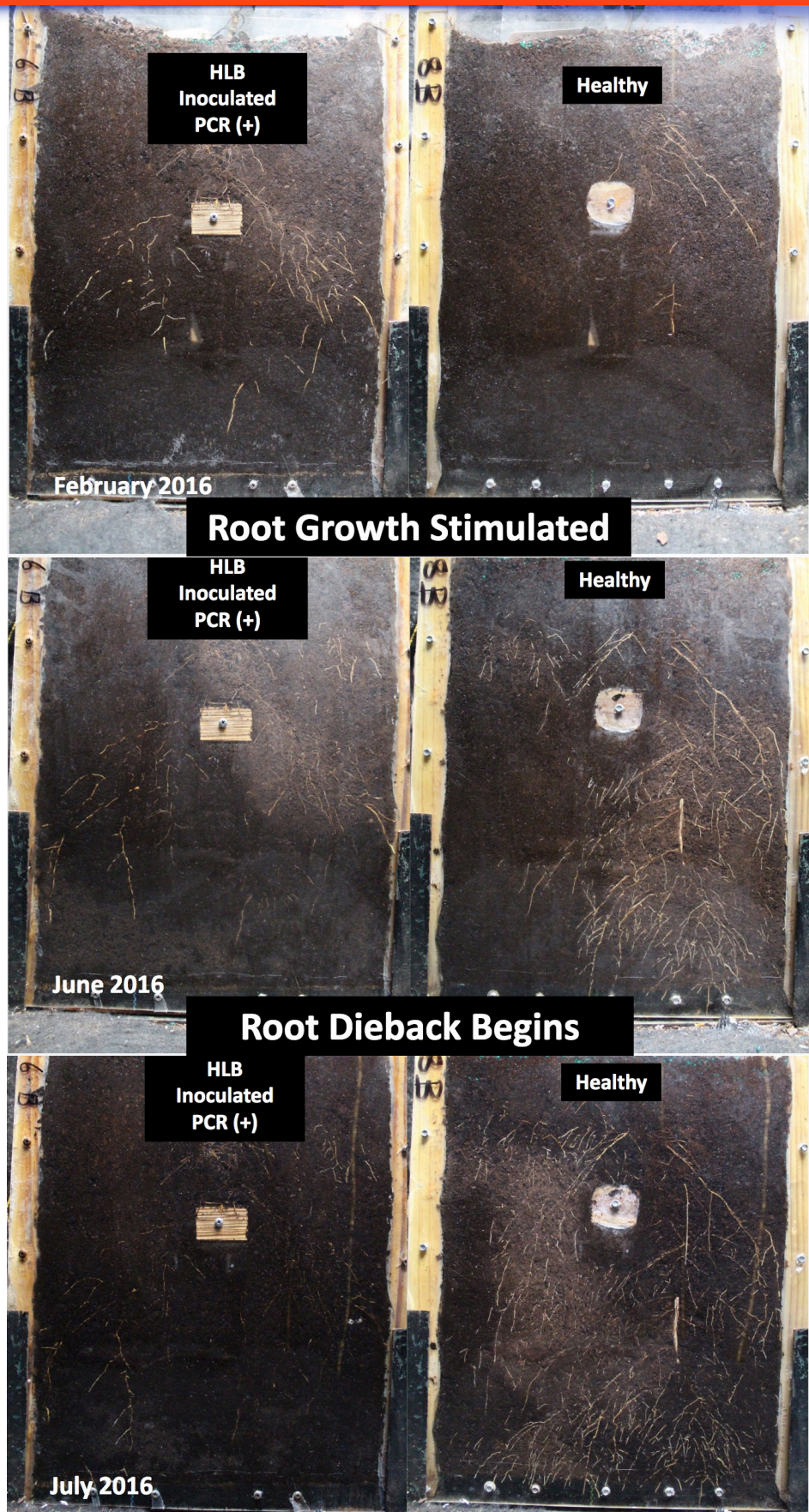
The new requirements for paraquat use due to the EPA mitigation decision were scheduled to go into effect October 1, 2018. However, this was contingent upon EPA approving new labels submitted by registrants which contains the revised label language required by the mitigation decision. EPA has stated they will not have labels approved in time to meet the October deadline. EPA will give registrants 12 months after approval of the new label to get the new labels on containers. So, at this stage there is no clear date. However, we know there will not be any changes in 2018, nor likely for the 2019 use season. When the new label for Gramoxone 2.0 SL is approved I will provide an update which should provide a clearer timeline.

The new requirements referred to above are: paraquat safety training required (on-line, EPA hosted video), additional warnings on label and containers, and mandating all applicators must be certified applicators (can no longer apply under supervision of a certified applicator). The closed system requirement date remains unchanged, Oct 1, 2020.

Citrus Root Growth & Soil Applied Inputs

Just thought it would be worth reviewing some of the information on citrus root growth in the era of HLB. Dr. Evan Johnson has done numerous presentations on this topic. My take home messages from these are that citrus root systems still continue to function and grow in HLB infected trees (see time progression of root growth on photos to the right). What is most effected by HLB is the longevity of these root flushes. This would lead one to consider the timing of soil applied inputs when root systems are growing and before they prematurely decline. In the time lapse photos (from a greenhouse citrus root growth study) you can see how this proceeds over time with a root flush beginning in February. By the time June rolls around root dieback begins on that original root flush. Dr. Johnson indicates that normally a citrus root flush would remain functional for about a year. In HLB infected trees, this has been reduced to the length of time until the next root flush occurs. The first growth flush in the spring is vegetative and flowering, followed by the first seasonal root flush when soil temperatures increase. One might consider this when applying any soil inputs.

*Photo Credit: Dr. Evan Johnson
UF/IFAS CREC*



EPA Releases Draft Risk

Assessments for Glyphosate

The U.S. Environmental Protection Agency (EPA) is releasing for public comment the draft human health and ecological risk assessments for [glyphosate](#), one of the most widely used agricultural pesticides in the United States.

The draft human health risk assessment concludes that glyphosate is not likely to be carcinogenic to humans. The Agency's assessment found no other meaningful risks to human health when the product is used according to the pesticide label. The Agency's scientific findings are consistent with the conclusions of science reviews by a number of other countries as well as the [2017 National Institute of Health Agricultural Health Survey](#).

EPA's human health review evaluated dietary, residential/non-occupational, aggregate, and occupational exposures. Additionally, the Agency performed an in-depth review of the glyphosate cancer database, including data from epidemiological, animal carcinogenicity, and genotoxicity studies.

The ecological risk assessment indicates that there is potential for effects on birds, mammals, and terrestrial and aquatic plants. EPA used the most current risk assessment methods, including an evaluation of the potential effects of glyphosate exposure on animals and plants. Full details on these potential effects as well as the EPA's methods for estimating them, can be found within the ecological risk assessment.

To read the draft risk assessments and supporting documents, go to www.epa.gov/ingredients-used-pesticide-products/draft-human-health-and-ecological-risk-assessments-glyphosate. The draft risk assessments and supporting documents will be available in glyphosate's registration review docket EPA-HQ-OPP-2009-0361 on www.regulations.gov in early 2018. EPA will open a 60-day public comment period for the draft risk assessments, evaluate the comments received, and consider any potential risk management options for this herbicide.

EPA is scheduled to publish the proposed interim registration review decision for glyphosate in 2019. The proposed interim registration review decision will outline any proposed mitigation measures to reduce risk, if any are needed. (EPA Update, 12/18/17)

Pesticide

Registrations and Actions

EPA SLN No. FL-890040 has been assigned as the special local need registration number for Alco Citrus Fix (isopropyl ester of 2,4-D dichlorophenoxyacetic acid), Plant Growth Regulator (EPA Reg. No. 5481-145) on citrus in Florida. (FDACS letter 12/5/17)

The EPA, under the provisions of section 18 of FIFRA, has issued a specific exemption for the use of Belay[®] Insecticide (clothianidin), EPA Registration Number 59639-150, to manage the transmission of Huanglongbing disease in citrus trees. This disease is vectored by the Asian citrus psyllid, a non-native insect species. This emergency exemption (File Symbol 17FL01) will expire October 31, 2018. (FDACS letter 1/22/18)

IARC Review of Glyphosate: A Case of Gross Scientific Negligence

Documents seen by Reuters show how a draft of a key section of the International Agency for Research on Cancer's (IARC) assessment of glyphosate underwent significant changes and deletions before the report was finalized and made public. Reuters found 10 significant changes that were made between the draft chapter on animal studies and the published version of IARC's glyphosate assessment. In each case, a negative conclusion about glyphosate leading to tumors was either deleted or replaced with a neutral or positive one. The full story is at: <http://www.reuters.com/article/us-who-iarc-glyphosate-specialreport/in-glyphosate-reviewwho-cancer-agency-edited-out-noncarcinogenic-findingsidUSKBNICO251>.

WSSA feels that the IARC review process for glyphosate was flawed and represents a case of gross scientific negligence. There is no question that IARC arrived at their conclusion due to their inclusion of the positive findings from a selection of studies with known limitations, a lack of reproducible positive findings, and the omission of the negative findings from credible and reliable research. <http://wssa.net/wp-content/uploads/WSSA-comments-to-FIFRA-SAP-on-glyphosate.pdf>.

On November 9, 2017, updated results from the Agricultural Health Study regarding glyphosate use and cancer incidence were published in the Journal of the National Cancer Institute: <https://academic.oup.com/jnci/advance-article/doi/10.1093/jnci/djx233/4590280>. The Agricultural Health Study (<https://aghealth.nih.gov/>) has monitored the health outcomes of over 89,000 licensed pesticide applicators and their spouses from Iowa and North Carolina since 1993. In this large, prospective cohort study, no association was apparent between glyphosate and any solid tumors or lymphoid malignancies overall, including NHL and its subtypes. Specifically, among 54,251 applicators, 44,932 used glyphosate, including 5,779 incident cancer cases. In unlagged analyses, glyphosate was not statistically significantly associated with cancer at any site. (WSSA Newsletter, January, 2018)

PURPOSE OF THE INSTITUTE

Citrus Greening or Huanglongbing (HLB) continues to impact all citrus production areas of Florida. The 2018 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 pathology, horticultural management of HLB, Asian citrus psyllid management, and the use of bactericides.

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 CCAs in the appropriate CEU categories.

SPONSORS

PLATINUM

Bayer CropScience
Harrells
Syngenta Crop Protection

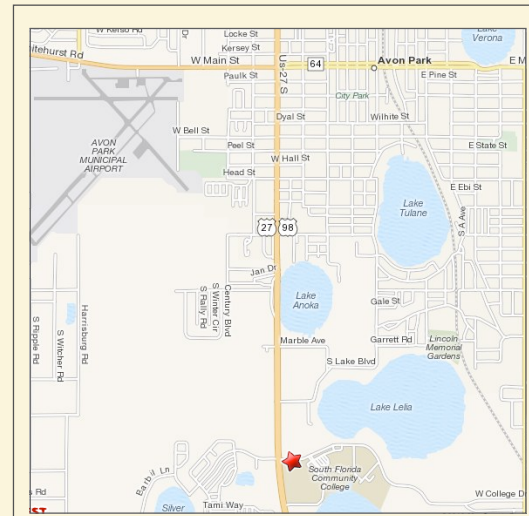
GOLD

BASF
FMC Corporation

Valent

BRONZE

Alltech
Farm Credit
Gowan



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 3, 2018

2018 Florida Citrus Growers' Institute

PROGRAM AGENDA TUESDAY, APRIL 3, 2018

8:00 AM - Registration

8:30 AM - Welcome and Introductions

Ms. Laurie Hurner, CES, Sebring, FL

8:45 AM - Review of CRDF Programs - *Dr. Lisa Weaver, CRDF*

CITRUS PATHOLOGY

Moderator: Mr. Chris Oswald, CES, Bartow, FL

9:05 AM - Citrus Compliance Agreements - *Ms Callie Walker, FDACS/DPI*

9:15 AM - Citrus Canker Control & Citrus Black Spot Update - *Dr. Megan Dewdney, UF/IFAS CREC*

9:45 AM - Update on Bactericide Effectiveness in the Battle Against HLB - *Dr. Robert Shatters, USDA/ARS*

10:15 AM - Break

HORTICULTURAL MANAGEMENT AND ECONOMICS

Moderator: Dr. Steve Futch, CES, UF/IFAS CREC

10:30 AM - Net Present Value of New Citrus Plantings - *Dr. Ariel Singerman, UF/IFAS CREC*

11:00 AM - Alternatives to Rootstock Propagation by Seed - What can we Expect? - *Dr. Ute Albrecht, UF/IFAS SWFREC*

11:30 AM - Citrus Under Protective Screen Update with Post Hurricane Observations - *Dr. Arnold Schumann, UF/IFAS CREC*

12:00 PM - Lunch

1:00 PM - Effective Citrus Weed Management - Challenges and Opportunities - *Dr. Ramdas Kanissery, UF/IFAS SWFREC*

PSYLLID MANAGEMENT

Moderator: Dr. Mongi Zekri, CES, LaBelle, FL

1:30 PM - Insecticide Mode of Action Rotation for Psyllid Control in Florida - *Dr. Lukasz Stelinski, UF/IFAS CREC*

2:00 PM - Imidacloprid Alternatives for Growing Young Citrus Trees - *Dr. Phil Stansly, UF/IFAS SWFREC*

2:30 PM - Tamarixia Release Results - *Dr. Robin Stuart, FDACS/DPI*

3:00 PM - Adjourn

CES: County Extension Service

CRDF: Citrus Research and Development Foundation

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

FDACS/DPI: Florida Department of Agriculture & Consumer Services/ Division of Plant Industry, Gainesville, FL

SWFREC: Southwest Florida Research & Education Center, Immokalee, FL

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

USDA/ARS: United States Department of Agriculture/Agricultural Research Service, Ft. Pierce, FL

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

PREREGISTRATION IS REQUIRED

Name: _____

Company: _____

Address: _____

City/State/Zip: _____

Phone: _____

Email: _____

Please send registration by March 30, 2018 to:

Gail Crawford, Polk County Extension Service, P.O. Box 9005, Drawer HS05, Bartow, FL 33851

By phone: 863-519-1042, Fax: 863-554-0001, email: dorothy@ufl.edu or

online at: <https://2018citrusinstitute.eventbrite.com>

FLORIDA CITRUS GROWERS' INSTITUTE

April 3, 2018





Produce Safety Alliance Grower Training

April 26, 2018

UF/IFAS Gulf Coast Research and Education Center
14625 County Road 672 • Wimauma, FL 33598

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 are encouraged to attend. 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.

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.

Cost to Attend: \$25 Please register at: <https://psa042618.eventbrite.com>

Cost includes the training materials, lunch, refreshments, and a certificate of course attendance issued by AFDO.

To pay by check, fill out and mail in the next page. Seats are limited to 50 persons.



Produce Safety
ALLIANCE

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Training materials and certificate are funded through the Florida Department of Agriculture and Consumer Services (FAIN #U18FD005909)



Produce Safety Alliance Grower Training

REGISTRATION FORM

Registration is also available online at: <https://psa042618.eventbrite.com>

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

UF/IFAS Gulf Coast Research and Education Center – April 26, 2018

Name: _____

Company: _____

Address: _____

Email: _____

Phone: _____

Special meal requirements (vegetarian, etc.)?: _____

Your name EXACTLY as you would like it to appear on your certificate:

Important: Make checks payable to “University of Florida”

Course registration of \$25 per participant is requested by April 20th, 2018. Registration will be confirmed upon receipt of registration materials.

Mail check and registration to: University of Florida
ATTN: Sarah McCoy
700 Experiment Station Road
Lake Alfred, FL 33850
sarahmccoy@ufl.edu or 863-956-8632



Produce Safety
ALLIANCE

UF | IFAS
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Training materials and certificate are funded through the Florida Department of Agriculture and Consumer Services (FAIN #U18FD005909)