



January 27, 2020

Welcome to SWFREC Update E-news! This newsletter is distributed biweekly and contains news about the center and its faculty and staff, program research updates, and upcoming events.

Web site: <https://swfrec.ifas.ufl.edu/>

Social media:  

Ag Legislative Discussion Draws Growers, Media!

Nearly fifty growers and other industry representatives participated in the **Second Annual SWFREC Discussion of Local Ag Issues with Legislators** last month. The event focused on agricultural best management practices (BMPs) and included three presentations:

- **“Success of Best Management Practices Program in the Everglades Agricultural Area”**—Dr. Samira Daroub, professor of soil and water sciences, UF/IFAS Everglades Research and Education Center, Belle Glade.
- **“Payment for Water Storage and Treatment Services in the Northern Everglades”**—Dr. Sanjay Shukla, professor of agricultural and biological engineering, SWFREC.
- **“Next Step in BMP Research and Implementation”**—Christopher Pettit, director, Office of Agricultural Water Policy, Florida Department of Agriculture and Consumer Services, Tallahassee.



A panel discussion was led by growers Wes Roan with Lipman Family Farms and Danny Sutton with Alico Citrus, as well as Gary Ritter with Florida Farm Bureau. To read more about their comments and hear those from SWFREC center director Dr. Kelly Morgan, who emceed the event, click here to access Citrus Industry

online: <http://citrusindustry.net/2020/01/07/growers-discuss-bmps/>.

Another panel discussion and question-and-answer period was led by Representative Bob Rommel and Representative Byron Donalds, who explained that they are trying to educate themselves and other state legislators about water quality issues in Florida. To read more about their comments, click

here: <http://citrusindustry.net/2019/12/31/growers-and-representatives-meet/>.

WINK-TV reporter Stephanie Byrne and writer Jack Lowenstein also covered the event. To view and read their reports, click here:

<https://www.winknews.com/2019/12/16/discussion-in-immokalee-focuses-on-agricultures-impact-on-swfl-environment/>.

Assistant Professors Awarded Funding



Citrus horticulturist Dr. Fernando Alferez and weed scientist Dr. Ramdas Kanissery (pictured below, from left) have been named winners in the UF/IFAS Dean for Research Early Career Scientist Seed Grant Program. Their proposals, **“Advancing Maturation of Valencia Oranges with Brassinosteroids to Avoid HLB-related Preharvest Fruit Drop and Warrant Continuous Fruit**

Supply to Juice Processors” and **“Suppress Weeds, Not Trees: Herbicide Persistence and its Impacts on Citrus Health and Yield”** (respectively) were selected for funding “designed to facilitate development and success of (new UF/IFAS faculty) research programs.” Both Dr. Alferez and Dr. Kanissery will receive nearly \$50,000 in funding for their research projects.

Faculty Member Featured



Plant pathologist Dr. Pam Roberts was featured in the Winter 2019 issue of the Florida GATOR alumni magazine. In the “Numbers of Note” section, the title “4 Years” relates to the length of her “\$3 million USDA-funded research study that is expected to produce better ways to reduce bacterial diseases in many types of peppers.” For the project, Dr. Roberts is leading a team of scientists from Georgia, Ohio, North Carolina, and South Carolina. The magazine will be available online soon here:

<https://connect.ufalumni.ufl.edu/network/florida-gator>.

Graduate Student Earns Travel Award



Biwek Gairhe, a master’s student in the weed science program, has been named the only student from UF to win a travel award to attend the Weed Science Society of America Annual Meeting in Maui, Hawaii, in March. The awards are designed to encourage graduate students’ involvement in the society’s annual meeting early in their degree programs. The competition requires an application , titles and abstracts for any presentations planned for the meeting, a letter of support from a supporting faculty member (weed scientist Dr. Ramdas Kanissery), and a commitment to assist with some work responsibilities during the conference.

Horticulturist Presents Invited International Talk



Citrus horticulturist Dr. Fernando Alferez gave an invited talk to the Valencian Institute of Agricultural Research in Valencia, Spain, last month. **“Living with HLB: The New Reality of Florida’s Citriculture”** was presented to an audience of about 100 researchers, growers, and other citrus industry representatives from throughout Spain.

Peer-reviewed Publications

- **“Cultivar-specific Infestation by *Phyllocnistis Citrella* (Lepidoptera: Gracillariidae), Leaf Morphology and Trace Elements in Citrus.”** Crop Protection, volume 129. Entomologist Dr. Jawwad Qureshi is fifth author. To see the full article, click here: <https://reader.elsevier.com/reader/sd/pii/S0261219419303710?token=C555C8B1CE7D6692AE59C29B40F1DD2CD395F490F22BAF6B037B40F0F6E60B80295C511F613B73ECB83BCAB71119BED4>.
- **“Insights into the Regulation of Molecular Mechanisms Involved in Energy Shortage in Detached Citrus Fruit.”** Nature Research Scientific Reports, volume 10. Citrus horticulturist Dr. Fernando Alferez is second author. To see the full article, click here: <https://swfrec.ifas.ufl.edu/docs/pdf/citrus-hort/2020-Alferez-Scientific-Reports-Natureresearch.pdf>.
- **“Feeding Behavior of Asian Citrus Psyllid [*Diaphorina citri* (Hemiptera: Liviidae)] Nymphs and Adults on Common Weeds Occurring in Cultivated Citrus Describes Using Electrical Penetration Graph Recordings.”** Insects, volume 11. Weed scientist Dr. Ramdas Kanissery is second author. To see the full article, click here: https://swfrec.ifas.ufl.edu/docs/pdf/weed-science/2020-01-10_Kanissery_MDPI_insects.pdf.
- **“Detection of Target Spot and Bacterial Spot Diseases in Tomato Using UAV-based and benchtop-based hyperspectral imaging techniques.”** Precision Agriculture. Post-doc associate Dr. Jaafar Abdulridha, precision ag engineer Dr. Yiannis Ampatzidis, engineer Sri Kakarla, and plant pathologist Dr. Pam Roberts are first-fourth authors, respectively. To see the full article, click here: https://swfrec.ifas.ufl.edu/docs/pdf/precision-ag-eng/2019-11-30_Ampatzidis_Roberts_Diseases_tomatoes_Precision_Agriculture.pdf. The research findings in this article have been reported widely via numerous ag-related news outlets on the heels of a press release about the research written by UF/IFAS Communications’ Brad Buck. To see his release, click here: <http://blogs.ifas.ufl.edu/news/2020/01/13/drone-images-detect-two-tomato-diseases-with-99-accuracy/>.
- **“Phospholipase D (PLD) Response to Water Stress in Citrus Roots and Leaves.”** Agronomy, volume 10. Citrus horticulturist Dr. Fernando Alferez is first author. To see the full article, click here: <https://swfrec.ifas.ufl.edu/docs/pdf/citrus-hort/2019-12-27-Alferez-Agronomy-10-00045-v2.pdf>.

Extension Publications

The following articles were recently published on the UF/IFAS Electronic Data Information Source web site (www.edis.ifas.ufl.edu):

- **“Preflight and Flight Instructions on the Use of Unmanned Aerial Vehicles (UAVs) for Agricultural Applications.”** Engineer Sri Kakarla, engineer Leon Nunes, and precision ag engineer Dr. Yiannis Ampatzidis are first, second, and third authors respectively. To read the full article, click here: <https://edis.ifas.ufl.edu/ae535>.
- **“Postflight Data Processing Instructions on the Use of Unmanned Aerial Vehicles (UAVs) for Agricultural Applications.”** Engineer Sri Kakarla and precision ag engineer Dr. Yiannis Ampatzidis are first and second authors, respectively. To see the full article, click here: https://swfrec.ifas.ufl.edu/docs/pdf/precision-ag-eng/2019_10_Kakarla_Ampatzidis_EDIS_AE533_Postflight_Data_Processing_Instructions.pdf.

Trade Journal Publications

- **“Psyllid Management: Organic and Conventional Systems”** (author entomologist Dr. Jawwad Qureshi) was published in the November issue of Citrus Industry magazine. To see to full article, click here: <http://citrusindustry.net/2019/11/13/psyllid-management-organic-and-conventional-systems/>.
- Two articles authored by SWFREC faculty appeared in the December 2019 issue of Citrus Industry magazine: **“Food Safety Marathon: Keeping Up with the Produce Safety Rule”** (food safety extension specialist Matt Krug is second author) and **“Citrus Shipping Costs and Concerns”** (natural resource economist Dr. Tara Wade is author). To see the full articles, click here: <http://www.mirabelsmagazinecentral.com/DigitalEdition/index.html?id=1049fa7d-b7d5-4779-816f-bf815977abf6>.
- **“The ABCs of Psyllid Management”** was published in the January issue of Citrus Industry magazine. Entomologist Dr. Jawwad Qureshi is a co-author. To read the full article, click here: <http://citrusindustry.net/2020/01/07/the-abcs-of-psyllid-management/>.
- **“Know Your Nuts: From Flowering to Fruiting”** (precision ag engineer Dr. Yiannis Ampatzidis is sixth author) was published in the January issue of Pecan South magazine. To see the full article, click here: https://swfrec.ifas.ufl.edu/docs/pdf/precision-ag-eng/2020-01-06-Ampatzidis_Pecan_South.pdf.

Operation Clean Sweep

The Florida Department of Environmental Protection and the Florida Department of Agriculture and Consumer Services announces the 2019-2020 Operation Clean Sweep program, a mobile pesticide collection effort that provides a safe way to dispose of cancelled, suspended, and unusable pesticides. The free service is available to farms/groves, greenhouses, nurseries, golf courses, and pest control entities. For more information, including how to sign up, click here: <https://floridadep.gov/waste/permitting-compliance-assistance/content/operation-cleansweep-pesticides>.

Upcoming Events:

January 29, 2020, 9:00am-1:00pm

Worker Protection Standard Respirator Workshop

SWFREC

Cost is \$20. For detailed agenda and to register, click here:

<https://www.eventbrite.com/e/wps-respirator-workshop-tickets-89300011739>.

February 4, 2020, 9:00am-1:00pm

Vegetable Growers Meeting

SWFREC

SWFREC presentations will include:

- **“Conventional and Compact Bed Plasticulture for Drip-irrigated Fresh Produce: Management and Production Risks”**—Ag and biological engineer Dr. Sanjay Shukla
- **“Fundamentals of Water and Nutrient Management for Drip-irrigated Plasticulture and Compact Bed Design”**—Ph.D. student Kira Hansen
- **“Incidence and Severity of Disease on Tomato Grown on Conventional and Compact Bed Plasticulture”**—plant pathologist Dr. Pam Roberts

For complete agenda and registration information, click here:

https://calendar.google.com/calendar/event?eid=MjZxb2Jia25sMzg4bXU3dW9tc3Nkc3E5bzQga3VlbzhtOGI5M3RtY2RqZmw4djN2bDAybTBAZw&ctz=America/New_York.

February 5, 2020, 8:30am-4:30pm

Certified Pile Burner Course

SWFREC

Limited to fifty participants. Cost: \$50.00. For registration information and detailed agenda, click here: https://swfrec.ifas.ufl.edu/docs/pdf/events-agendas/2020-02-05-Certified-Pile_Burner_Class-Info.pdf.

February 19, 2020, 10:00am-1:00pm

Citrus Squeezer: Agenda to come

SWFREC

February 20, 2020, 9:45am-2:00pm

Weed Science and Economics Workshop for Master Gardener Agents and Volunteers

SWFREC

Weed scientist Dr. Ramdas Kanissery and ag resource economist Dr. Tara Wade will be among the presenters. To see the full agenda and for registration details, click here:

https://swfrec.ifas.ufl.edu/docs/pdf/events-agendas/2020-02-20-Weed-Science-Economics-Workshop-Agenda_Flyer.pdf.

February 25, 2020, 9:00am-12:30pm

Vegetable Growers Meeting: Agenda To come

SWFREC

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