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.

**In This Edition:**
- Spotlight on SWFREC
- Diagnostic Clinic Open at SWFREC
- Expos Feature SWFREC Research
- New Ag Economist Officially on Board
- Weed Scientist Named Award Winner
- McAvoy Participates in Hearings
- CALS Awards Reward SWFREC Students
- Vegetable Meeting Targets Weeds
- SWFREC Faculty/Staff/Students Shine in at ASHS
- Refereed Journal Article
- SWFL Fresh: Choose Local, Choose Fresh
- Extension Publications Provide Virus Info
- Graduate Student Residence Progress Photos
- Upcoming Events

**Spotlight on SWFREC**

The UF/IFAS Farm Labor Safety Training: COVID-19—Protecting Your Farm Labor Workers has been quite well attended following just two training dates.

Between last week’s and this week’s sessions, 478 had registered for the English virtual meeting and 146 for the Spanish section. Actual participation numbers are somewhat difficult to tally, as in many cases multiple workers are on one Zoom connection at their grower offices.

The training consists of three sections:
- Part 1: What is the Coronavirus or COVID-19?
- Part 2: COVID in agriculture.
- Part 3: Precautions

**Diagnostic Clinic Open at SWFREC**

The UF/IFAS SWFREC Plant Diagnostic Clinic is open and receiving samples for weed, insect, and plant disease identification. Prior to dropping off, please call or text 239-289-8870 for additional information. Due to current restrictions, samples will be received via “no contact” by placing samples in clearly marked labeled plastic bag(s) with your name and contact information and diagnosis requested (disease, insect, or weed). Bagged samples should be dropped off behind the north end of the building in the west parking lot in the corner of the building next to the unloading zone. Samples will be placed in a basket labelled for “clinic” on the blue bench where there is also a mail basket and other package delivery.

Please note that for some samples, the response time may be longer than usual due to current circumstances. Please call or text 239-289-8870 to notify us that a sample has been placed on the bench.

For further instructions and to download diagnostic clinic forms, please visit: [https://swfrec.ifas.ufl.edu/programs/veg-plant-path/plant-clinic/](https://swfrec.ifas.ufl.edu/programs/veg-plant-path/plant-clinic/).
Expos Feature SWFREC Research

Several SWFREC faculty members created video presentations for the Citrus Expo/Vegetable and Specialty Crop Expo event that was forced to become virtual giving the precautions against group conferences during COVID-19:

- **Is Bigger Ultimately Better? An Update on Large-scale Rootstock Evaluations on Ridge and Flatwoods Sites** by plant physiologist Dr. Ute Albrecht
- **Soil Health for Citrus: Considerations and Challenges** by soil microbiologist Dr. Sarah Strauss
- **IPCs: New Data on Tree Performance and Lessons Learned** by citrus horticulturist Dr. Fernando Alferez
- **Tomato Brown Rugose Fruit Virus and Resistance-breaking Tospoviruses in Tomatoes** by citrus pathologist Dr. Ozgur Batuman
- **Emerging Technology for Vegetables** by precision ag engineer Dr. Yiannis Ampatzidis
- **Examining Soil Health for Florida Vegetable Production** by soil microbiologist Dr. Sarah Strauss
- **Integrated Management of Whiteflies** by entomologist Dr. Jawwad Qureshi
- **Vegetable Weed Management Toolbox: Getting the Most out of Current Options and Potential New Additions** by weed scientist Dr. Ramdas Kanissery

To access these and additional presentations, please click here to register for access: [http://citrusexpo.net/registration/](http://citrusexpo.net/registration/). CEUs will be available through September.

New Ag Economist Officially on Board

Dr. Kimberly Morgan began as SWFREC’s new agricultural economist earlier this month. She comes to SWFREC from her current position as associate professor in the Department of Agricultural and Applied Economics at Virginia Tech University in Blacksburg, Virginia.

Dr. Morgan is a University of Florida Gator at heart. She received her B.S. degree in animal science from UF in 1993. She earned her M.S. degree in food and resource economics from UF in 1997 and her Ph.D. in the same department in 2007.

Dr. Morgan served as assistant professor at Virginia Tech from 2013-2019, when she was promoted to associate professor.

Already active with the SWFREC economics program, Dr. Morgan has assisted with the creation and implementation of the UF/IFAS Farm Labor Supervisor Training Program: COVID-19—Protecting Your Farm Labor Workers. For more information on the training, see the “Spotlight on SWFREC” article in this issue.

**Welcome, Dr. Morgan! We are excited to have you as part of the SWFREC team!**

Weed Scientist Named Award Winner

SWFREC weed scientist Dr. Ramdas Kanissery has earned a Dallas Townsend Extension Professional and Enhancement Award. The award recognizes a state extension specialist for demonstrating an outstanding ability to plan and implement Extension programs that address needs that have been identified in consultation with clientele.

Dr. Kanissery will receive a one-time $2,000 salary supplement, $1,000 for his extension program support, and a commemorative certificate. He will be recognized during the virtual 2020 UF/IFAS Extension Professional Associates of Florida Conference next month.

Dr. Kanissery’s program strives to develop weed control strategies that have a positive impact on crops and the environment. It provides outreach guided by research-based information on effective, economic, and sustainable weed management practices in citrus and vegetables to growers, industry representatives, county extension faculties, and citizens of Florida. Extension programs are offered for weed identification and crop-safe herbicide use through field days, hands-on training, workshops, and in-service trainings.
McAvoy Participates in Hearings

SWFREC Associate Director for Stakeholder Relations Gene McAvoy participated in fair trade hearings last week as part of an effort by the office of the US Trade Representative, the USDA, and the DOC. The hearings, designed to discuss foreign trade practices that may be harming American growers of seasonal and perishable produce, originally were planned to take place in Florida and Georgia, but changed to virtual because of the Coronavirus pandemic.

A recent article that appeared in the Naples Daily News spotlights McAvoy’s testimony. “New NAFTA leaves Florida farmers with old complaints, but someone is listening,” written by Brent Batten, includes: “In 1997 (according to McAvoy), there were about 300 medium-sized vegetable producers in Southwest Florida, most of them family farms. Now, the number is closer to 80. (McAvoy) blames Mexican farmers selling their products at less than what it costs them to produce them, resulting in unfair competition.

“‘Should these practices be allowed to continue, it is difficult to see how many of the remaining farms will be able to continue to survive,’ (McAvoy) said. “Florida growers support free trade, but it must me fair trade.’”


A story that appeared on the Vegetable and Specialty Crop News web site featured McAvoy’s input to the process. Author Clint Thompson previewed McAvoy’s hearing appearance. To read his story, click here: http://vscnews.com/mexico-virtual-hearings-florida-georgia/.

CALS Awards Reward SWFREC Students

Three graduate students working toward their Ph.D. degrees have received UF/IFAS College of Agriculture and Life Sciences scholarships:

- Kellee Britt (citrus pathologist Dr. Ozgur Batuman chair), Florida Fertilizer and Agrichemical Association Scholarship ($2,000).
- Clayton Nevins (soil microbiologist Dr. Sarah Strauss chair), Doris and Earl Lowe and Verna Lowe Scholarship ($2,000).
- Leigh Archer (plant physiologist Dr. Ute Albrecht chair), Murial Rumsey Scholarship ($5,000).

Vegetable Meeting Targets Weeds

A recent virtual vegetable grower meeting focused on early season weed management. It included two SWFREC presentations: “Managing Difficult Weeds in Vegetables” by weed scientist Dr. Ramdas Kanissery and “Precision and Smart Spraying Technology for Vegetables” by Dr. Yiannis Ampatzidis.
SWFREC Faculty/Staff/Students Shine at ASHS

SWFREC citrus horticulture Ph.D. student Daniel Boakye was elected to serve as secretary for the American Society for Horticultural Science (ASHS) during its recent virtual annual conference.

In addition, the following faculty members, staff, and graduate students presented talks and posters during the meeting:

- Anatomical and Physiological Traits of Mandarin x Trifoliate Orange Hybrid Rootstocks and Their Influence on Tree Growth in an HLB-Endemic Environment (post-doc associate Indu Tripathi)
- Asian Citrus Psyllid Colonization and Ca. liberibacter Asiaticus Transmission in Different Graft Combinations of Citrus (master’s student Caroline Tardivo)
- Assessing Rootstock Effects in the Horticultural Performance of ‘Valencia’ Orange Trees Grown Commercially in HLB Endemic Conditions (master’s student Sudip Kunwar)
- Comparison of Field Performance of Citrus Trees on Rootstocks Propagated by Seedling, Cuttings, and Tissue Culture (master’s student Sameer Pokhrel)
- Cuttings and Tissue Culture Propagation as Alternatives to Seed Propagation of Citrus Rootstocks (plan physiologist Dr. Ute Albrecht)
- Deciphering Uptake and Vascular Movement of Solutions in Grafted Citrus Trees to Optimize Delivery of Systemic Compounds (Ph.D. student Leigh Archer)
- Is the Vigor of a Grafted Citrus Tree Associated with the Xylem Anatomical Features of the Rootstock? (post-doc associate Aditi Satpute)
- Mechanisms of Graft Incompatibility of the Mandarin x Trifoliate Orange Hybrid Rootstock ‘US-1283’ with Lemon, Grapefruit, and Mandarin Scion (plant physiologist Dr. Ute Albrecht)
- Rootstock Effects on Root Growth and Other Traits of Grafted Sweet Orange Trees Infected with Candidatus Liberibacter Asiaticus (Ph.D. student Shahrzad Bodaghi)
- Trunk Injection as a Delivery Method for HLB Therapeutic Materials (plant physiologist Dr. Ute Albrecht)
- Use of Protective Covering and Its Effects on Citrus Tree Physiology and HLB Development (master’s student Susmita Gairhe)
- Effect of Zinc Sulfate and Potoassium Sulfate on Citrus Pre-harvest Fruit-drop on Huanglongbing (HLB) Affected Trees (Ph.D. student Daniel Adu Boakye)
- Yield Performance of ‘Salustiana’ Sweet Orange on Five Rootstocks under Subtropical Conditions (graduate research assistant Deived U de Carvalho)
- Deciphering Uptake and Vascular Movement of Solutions in Grafted Citrus Trees to Optimize Delivery of Systemic Compounds (Ph.D. student Leigh Archer)
- Olive Mill By-products for Organic Soil Management (Ph.D. student Leigh Archer)

Refereed Journal Article

“Laboratory and UAV-Based Identification and Classification of Tomato Yellow Leaf Curl, Bacterial Spot, and Target Spot Diseases in Tomato Utilizing Hyperspectral Imaging and Machine Learning.” Remote Sensing journal, published August 24, 2020, online. Post-doctoral research associate Jaafar Abdulridha, precision ag engineer Dr. Yiannis Ampatzidis, entomologist Dr. Jawwad Qureshi, and vegetable pathologist Dr. Pam Roberts are first through fourth authors, respectively. To read the article, click here: https://swfrec.ifas.ufl.edu/docs/pdf/precision-ag-eng/2020-08-24-Ampatzidiz_Laboratory_UAV-Based_Identification_Classification_TomatoDiseases_RemoteSensing.pdf.

SWFL Fresh: Choose Local, Choose Fresh

SWFL Direct to Market Producers can now list their business profile on the SWFL Fresh web site. “SWFL Fresh: Choose Local, Choose Fresh” is a brand created by UF/IFAS Extension and the SWFL Regional Planning Council to connect consumers with local producers. If you are a producer selling any direct to market or local sold products, create your profile by clicking the website and scrolling down to “Producers Register Now!”: www.swflfresh.com. For more information or to be involved in future development of this brand, contact Jessica Ryals, food systems agent, UF/IFAS Collier County Extension, Naples, at jessicaryals@ufl.edu.
Extension Publications Provide Virus Info

To read articles written by UF/IFAS faculty and staff about the Coronavirus, you can visit the Electronic Data Information Source here: https://edis.ifas.ufl.edu/topic_covid19.

Graduate Student Residence Progress—Expecting a September completion date

Upcoming Events

September 9, 2020, 1:00-5:00pm—online only
Tomato Food Safety Workshop/T-GAP Renewal
SWFREC associate director for stakeholder relations Gene McAvoy is among the presenters. For agenda and registration info, click here: https://swfrec.ifas.ufl.edu/docs/pdf/events-agendas/2020-09-19-Tomato-Food-Safety-Workshop.pdf.

September 15, 2020, 10:00-11:00am—online only [Registration info will be emailed soon]
Citrus Growers Workshop—online only

“Principles of trunk injection and practical considerations”
Dr. Ute Albrecht, UF/IFAS SWFREC
This presentation will provide an overview of the physical and physiological principles of trunk injections and their current areas of use. In addition, practical considerations for use of this methodology to deliver HLB therapeutic compounds will be discussed.

“Automated delivery system: can therapeutics be delivered through citrus trunk?”
Dr. Ozgur Batuman, UF/IFAS SWFREC
This talk will present UF researchers’ ongoing collaborative efforts on studying citrus vasculature for developing an alternative and automated delivery system to deliver therapeutics to citrus trees to control HLB and/or other maladies.

“UAV-based plant nutrient analysis and a novel smart spraying technology”
Dr. Yiannis Ampatzidis, UF/IFAS SWFREC
This talk will present a novel UAV-based technique that estimates plant nutrient content and creates management zones. It will also provide an overview of a new smart and variable rate sprayer for tree crops.

Julie A. Carson
Marketing and Communications Specialist
UF/IFAS Southwest Florida Research and Education Center
2685 SR 29 North | Immokalee, FL 34142
P: 239-658-3462 | F: 239-658-3469
carsonj@ufl.edu
http://swfrec.ifas.ufl.edu