

August 20, 2019

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/



Dormitory Groundbreaking Set for Sept. 23



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benefit of the growers would not be possible without the

ASHS Presentations to Note

Five SWFREC faculty, staff, and students gave talks at the American Society for Horticultural Science annual conference in Las Vegas in July:

- Post-doctoral research associate Indu Tripathi (plant physiology program with Dr. Ute Albrecht): The influence of rootstock on the metabolic profiles of "Valencia" sweet orange trees: a case study using eleven different rootstock varieties.
- Post-doctoral research associate Aditi Satpute (Dr. Albrecht): Developing root anatomical markers to predict vigor potential in citrus rootstocks.
- Dr. Albrecht (an invited talk as part of a workshop titled "Envisioning a US Citrus Industry with Endemic HLB"): How effective are rootstocks in mitigating the negative effects of HLB?
- Daniel Boakye (Ph.D. student, citrus horticulturist Dr. Fernando Alferez, chair): Evaluation of plant growth regulators on cold storage and degreening of Tango and SugarBelle citrus varieties.
- Dr. Alferez (who also served as moderator of the "Citrus Crops 2" session): Understanding citrus rootstock fruit maturation for maximizing seed production.

Presentations Highlight Two Days of Expo

Six SWFREC faculty members gave talks during the recent two-day Citrus Expo and Vegetable and Specialty Crop Expo in North Fort Myers:

- Plant physiologist Dr. Ute Albrecht: Bigger is not always better: large-scale rootstock evaluations on ridge and flatwoods sites.
- Soil and water scientist Dr. Kelly Morgan: Effect of irrigation water acidification and soil pH on citrus nutrient availability.
- Citrus pathologist Dr. Ozgur Batuman: Tomato brown rugose fruit virus.
- Citrus horticulturist Dr. Fernando Alferez: Growing young citrus trees under individual protective covers: what we know after 18 months.
- Food science state specialized extension agent Matt Krug: Overview of farm readiness review/ag water treatment options.
- Precision ag engineer Dr. Yiannis Ampatzidis: Precision agriculture technologies for specialty crops.

Day two of the event, UF/IFAS faculty and staff had ten different hands-on activities that growers could experience, including three led by SWFREC faculty: Weed Science with Dr. Ramdas Kanissery, Water Treatment Technology with Food with Krug, and Soil and Water pH with Dr. Morgan.

In addition, five SWFREC faculty members participated in a UF/IFAS Meet the Specialist session, which enabled growers to interact with scientists on a small-group or even one-on-one basis: soil microbiologist Dr. Sarah Strauss, Dr. Ampatzidis, Dr. Albrecht, natural resource economist Dr. Tara Wade, and Dr. Ozgur Batuman.

Book Chapters

Weed scientist Dr. Ramdas Kanissery is a co-author of two new book chapters:

- Anaerobic Biodegradation of Pesticides in the book titled Microbial Metabolism of Xenobiotic Compounds. To see the abstract and for an opportunity to purchase, click here: <u>https://link.springer.com/chapter/10.1007/978-981-13-7462-3_2</u>.
- DNA Stable Isotope Probing to Examine Organisms Involved in Biodegradation in the book titled Microbial Metabolism of Xenobiotic Compounds. To see the abstract and for an opportunity to purchase, click here: <u>https://link.springer.com/chapter/10.1007/978-981-13-7462-3_3</u>.

Peer-Reviewed Publications

- Finite Difference Analysis and Bivariate Correlation of Hyperspectral Data for Detecting Laurel Wilt Disease and Nutritional Deficiency in Avocado, co-authors precision ag engineer Dr. Yiannis Ampatzidis and post-doctoral research associate Jaafar Abdulridha, appears in Remote Sensing (volume 11). To see the full article, click here: <u>https://swfrec.ifas.ufl.edu/docs/pdf/precision-ag-eng/2019-07-25-Ampatzidis-Remote-Sensing-11-01748.pdf</u>.
- Citrus Rootstock Evaluation Utilizing UAV-based Remote Sensing and Artificial Intelligence, co-authored by Dr. Ampatzidis, precision ag engineer Victor Partel, plant physiology biological scientist Bo Meyering, and plant physiologist Dr. Ute Albrecht, appears in Computers and Electronics in Agriculture (volume 164). To see the full article, click here: <u>https://swfrec.ifas.ufl.edu/docs/pdf/precision-ag-eng/2019-07-15-Ampatzidiz-Computers-Electrocnics-Ag.pdf</u>.

Trade Journal Articles

 Cutting Costs with Smart Sprayers, authored by precision ag engineer Dr. Yiannis Ampatzidis, appears in the August issue of Vegetable and Specialty Crop News. To view the full article, click here: <u>https://swfrec.ifas.ufl.edu/docs/pdf/precision-ag-eng/2019-08-Ampatzidis-Veg-Spec-Crop-News.pdf</u>.

Upcoming Events:

August 22, 2019, 10am-12:30pm Vegetable Growers Meeting SWFREC For more information and registration details, click here: https://swfrec.ifas.ufl.edu/docs/pdf/events-agendas/2019-08-22-Managing-Soil-Health.pdf.

September 4, 2019, 9am-3:15pm UF/IFAS Tomato Institute Ritz-Carlton Beach Resort, Naples

For a complete agenda and to register for the Institute (and any other Florida Tomato Conference events and activities), click here and scroll down to complete the form online: <u>https://www.floridatomatoes.org/conference-registration-form/</u>. Hotel registration details also can be found at the bottom of the form.

September 17, 2019, 9am-11am

Vegetable Research and Extension Program Discussion SWFREC To RSVP, contact Jennifer at 239-658-3415 or jderleth@ufl.edu.

November 14, 2019 SWFREC Open House



November 19-20, 2019 Farm Labor Supervisor Training SWFREC For schedule and registration

UFIIFAS FALL 2019 FARM LABOR SUPERVISOR TRAINING SCHEDULE

information, click here:

https://swfrec.ifas.ufl.edu/docs/pdf/economics/SWREC_FarmLaborSupervisorTrainingProgra mFlyer2019.jpg

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