

SWFREC News

July 2026

Celebrating research, innovation, and the people advancing agricultural science.

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IN THE NEWS

Dr. Fernando Alferez Featured on À Punt Valencia TV, Spain

Citrus greening disease (HLB – Huanglongbing) remains one of the most serious threats to citrus production worldwide, affecting tree health, fruit quality, and the long-term sustainability of citrus orchards.

Dr. Fernando Alferez was recently featured in an interview on À Punt Valencia TV, where he discussed the global impact of HLB and the latest research efforts to better understand, detect, and manage the disease. During the interview, Dr. Alferez shared insights into current research, early detection strategies, and the collaborative work underway to help protect citrus production for the future.

Special thank you to Joan Miquel Llopis and the À Punt team for the opportunity to highlight this important agricultural challenge and raise awareness of the ongoing research dedicated to supporting the citrus industry.



[Watch the Interview](#)



RESEARCH AND INNOVATION

SWFREC Researchers Highlight Citrus Innovation at the 139th Annual Meeting of the Florida State Horticultural Society

Faculty, postdoctoral researchers, and graduate students from the **Southwest Florida Research and Education Center (SWFREC)** traveled to Jacksonville, Florida, to participate in the 139th Annual Meeting of the Florida State Horticultural Society (FSHS). The team represented SWFREC with a strong presence, sharing innovative research focused on improving citrus health, managing Huanglongbing (HLB), and advancing sustainable production practices.

Graduate students **Divya Aryal**, **Selin Boga**, **Lauren Fessler Mathews**, **Larissa Nunes**, **Pablo Orozco**, **Igor Rodrigues da Silva**, and **Sotirios Tasioulas**; postdoctoral researchers **Dr. Gabriel Pugina**, **Dr. Caroline Tardivo**, **Dr. Deived Uilian de Carvalho**, and **Dr. Munib Inam**; and faculty members **Dr. Ozgur Batuman**, **Dr. Ute Albrecht**, **Dr. Tara Wade**, and **Dr. Fernando Alferez** participated in the conference, presenting their latest research through oral presentations, poster sessions, and Citrus Section presentations.

SWFREC graduate students showcased a variety of research topics, including strategies to improve HLB management, citrus tree performance, oxytetracycline applications, plant physiology, and sustainable disease mitigation approaches.

Divya Aryal, **Lauren Fessler Mathews**, and **Igor Rodrigues da Silva** competed in the student oral presentation competition, with Lauren earning second place honors. **Selin Boga**, **Pablo Orozco**, and **Sotirios Tasioulas** presented their research during the poster session.

Additional SWFREC presentations in the Citrus Section featured research from **Larissa Nunes**, **Dr. Gabriel Pugina**, **Dr. Caroline Tardivo**, **Dr. Deived Uilian de Carvalho**, **Dr. Ute Albrecht**, and **Dr. Tara Wade**, highlighting continued efforts to address challenges facing Florida's citrus industry.

All SWFREC students who applied for the Graduate Student Travel Award received funding to help support their participation in the meeting, recognizing their dedication to advancing horticultural research.

During the FSHS business meeting, **Dr. Caroline Tardivo** was recognized for her service as Vice President-Elect of the Citrus Section, and **Dr. Tara Wade** was elected Treasurer of FSHS. The conference provided an excellent opportunity for SWFREC researchers to share discoveries, learn about ongoing horticultural research across Florida, and connect with colleagues and collaborators throughout the state.

Congratulations to all SWFREC participants for their outstanding representation and contributions to the horticultural research community!



Pablo Orozco, Dr. Munib Inam, Dr. Ute Albrecht, Dr. Deived Uilian de Carvalho, Selin Boga, Igor Rodrigues da Silva, Larissa Nunes, Lauren Fessler Mathews, Sotirios Tasioulas, Dr. Ozgur Batuman, Divya Aryal



RESEARCH AND INNOVATION

SWFREC Researchers Showcase Advances in Smart Agriculture at the American Society of Agricultural and Biological Engineers (ASABE) Florida Annual Meeting

Researchers from the **Southwest Florida Research and Education Center (SWFREC)** participated in the Florida Section ASABE Annual Meeting, held June 10–12, 2026, in Fort Myers, Florida. The meeting brought together agricultural engineers, scientists, and industry professionals to share emerging technologies and innovative solutions shaping the future of agriculture.

The SWFREC team, led by **Dr. Yiannis Ampatzidis**, highlighted groundbreaking research focused on artificial intelligence, automation, precision agriculture, robotics, and data-driven technologies to address current challenges in agricultural production.

During the conference, the team presented research exploring a wide range of topics, including AI-driven crop monitoring, autonomous harvesting technologies, UAV-based crop stress and nutrient assessment, machine learning for early disease detection, robotic spraying systems, blockchain applications in agriculture, LiDAR-based citrus orchard monitoring, and smart sensing technologies for improved crop management.

Dr. Ampatzidis contributed to several presentations, including the panel discussion *“Emerging Technologies for Resilient Agriculture in Florida”* and a session on AI, autonomous harvesting, and smart agricultural technologies to address workforce challenges in Florida agriculture. Graduate students and collaborators also shared innovative studies demonstrating how advanced technologies can improve efficiency, sustainability, and decision-making in agricultural systems.

A highlight of the meeting was the recognition of **Wenhao Liu**, who received the **1st Place Poster Award** for his research presentation, *“Monitoring Citrus Canopy Expansion Dynamics Using Ground-Based LiDAR.”* This work, conducted in collaboration with researchers from UF/IFAS, demonstrates the potential of LiDAR technology to improve citrus orchard monitoring and support precision management practices.

Additional presentations from the team included research on LiDAR applications for citrus tree health assessment, AI-based disease detection, plant phenotyping, smart irrigation, robotic weed management, fruit detection, and precision crop production.

The strong participation of SWFREC researchers at the Florida ASABE Annual Meeting reflects the center’s continued commitment to developing innovative technologies that support the future of Florida agriculture.

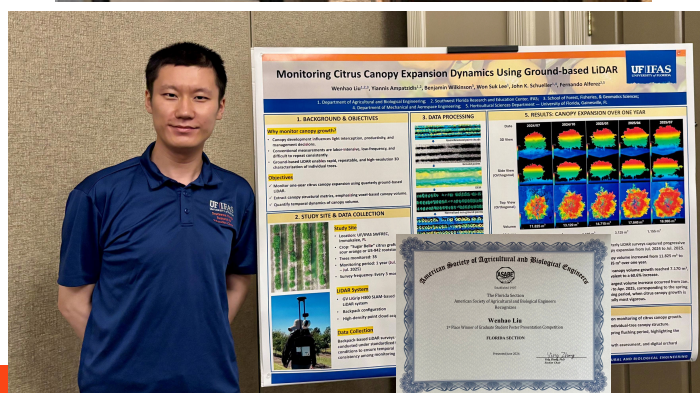
Congratulations to Wenhao Liu and the entire team for their outstanding contributions and achievements at the conference!



Samar Ashfaq, Wenhao Liu, Shiyu Liu, Georgios Paliouras, Dr. Yiannis Ampatzidis, Dr. Antonio de Oliveira Costa Neto, Dr. Deniver Reinke Schutz, Hengyue (David) Guan



Dr. Jeanette Hariharan



STUDENT AND FACULTY ACHIEVEMENTS

Congratulations to Dr. Jawwad Qureshi on His Promotion to Professor



We are pleased to celebrate the promotion of **Dr. Jawwad Qureshi**, entomologist in the UF/IFAS Department of Entomology and Nematology at the SWFREC, to **Professor**.

This well-deserved promotion recognizes Dr. Qureshi's distinguished record of scholarship, national reputation, exceptional service to the University of Florida, dedication to his profession, and meaningful contributions to agriculture and the broader community.

Throughout his career, Dr. Qureshi has advanced UF's world-class research and Extension programs while mentoring and training the next generation of scientists. His work has not only expanded scientific knowledge but has also delivered practical solutions that benefit growers, industry partners, and communities.

Dr. Qureshi's leadership and commitment exemplify UF/IFAS's mission of excellence in research, education, and Extension. We are proud to have him as a member of the SWFREC faculty and look forward to his continued contributions and impact.

Congratulations, Dr. Qureshi, on this outstanding achievement!

Congratulations to Wenhao Liu on Receiving a UF/IFAS Travel Award



Congratulations to **Wenhao Liu**, PhD Student, on being selected to receive a **UF/IFAS Travel Award** in support of his participation in the American Society of Agricultural and Biological Engineers (ASABE) Annual International Meeting 2026, taking place July 12–15 in Indianapolis, Indiana.

This recognition acknowledges the importance of his research contributions and supports his opportunity to share findings with the broader agricultural engineering community. We are proud of Wenhao's accomplishments and look forward to his continued success in advancing innovative technologies for agriculture.

Student Exit Seminars and PhD Proposals

Our graduate students continue to make meaningful contributions to agricultural sciences through innovative research addressing today's production challenges.



Igor Rodrigues da Silva, M.S. student in the Horticultural Sciences Department, presented his exit seminar, "*Exploring Strategies to Optimize Oxytetracycline Trunk Injections for Citrus Huanglongbing Management*," under the guidance of **Dr. Ute Albrecht**.

His research explored strategies to improve trunk injection applications of oxytetracycline as a management tool for citrus Huanglongbing (HLB), contributing to ongoing efforts to support citrus production.

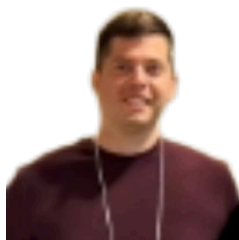
Bryan Merlos Osorio, M.S. student in the Horticultural Sciences Department, presented his exit seminar, "*Assessing the Efficacy of Commercial Biostimulant Products on Tomato Performance: Plant Growth, Crop Yield and Fruit Quality*," under the guidance of **Dr. Ramdas Kaniserry**.

His research evaluated the effectiveness of commercial biostimulant products in enhancing tomato growth, yield, and fruit quality, providing insights that may support more sustainable and productive crop management practices.



STUDENT AND FACULTY ACHIEVEMENTS

Student Exit Seminars and PhD Proposals



Sotirios Tasioulas, M.S. student in the Horticultural Sciences Department, presented his exit seminar, "*Plant Physiology, Crop Yield, and Postharvest Performance Under Various Nutritional Management Strategies in Tomato (*Solanum lycopersicum* L.) Production*," under the guidance of **Dr. Fernando Alferez**.

His research examined how different nutritional management strategies influence tomato plant physiology, crop yield, and postharvest performance, contributing valuable knowledge to improve tomato production and fruit quality.

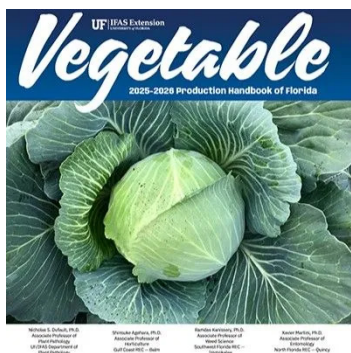
Seth Tsatsu, Ph.D. student in the Entomology Department, presented his dissertation proposal, "*Integrating Fungal Entomopathogens into Citrus Pest Management*," under the guidance of **Dr. Jawwad Qureshi**.

His research focuses on exploring the use of fungal entomopathogens as a potential tool for sustainable citrus pest management, contributing to the development of innovative approaches to protect citrus production.



PUBLICATIONS

Grower Handbooks



Vegetable Production Handbook of Florida

This handbook is designed to provide Florida growers with the latest information on crop cultivars, cultural practices, and pest management.

SWFREC authors featured in the book include weed scientist Dr. Ramdas Kanissery, entomologist Dr. Jawwad Qureshi, and vegetable pathologist Dr. Pam Roberts.

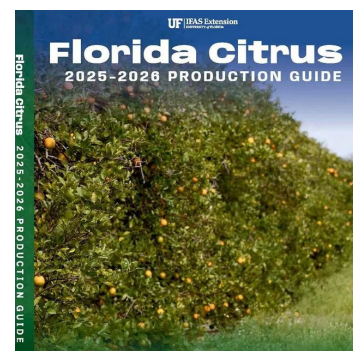
The book is available with printable sections here:

Ask IFAS: Vegetable Production Handbook

Florida Citrus Production Guide

This annual reference guide for the Florida citrus grower offers recommendations on the safest and most effective means of controlling pests of Florida citrus. Includes sections on horticultural practices; mites, insects and nematodes; diseases; weeds; and pesticides currently registered for use on Florida citrus.

SWFREC authors featured in the book include plant physiologist Dr. Ute Albrecht, citrus horticulturist Dr. Fernando Alferez, citrus pathologist Dr. Ozgur Batuman, weed scientist Dr. Ramdas Kanissery, entomologist Dr. Jawwad Qureshi, vegetable pathologist Dr. Pam Roberts, and soil microbiologist Dr. Sarah Strauss.



The book is available with printable sections here:

Ask IFAS: Florida Citrus Production Guide

PUBLICATIONS

Research Publications

Laboratory evaluation of commercially available and naturally occurring predatory mites against *Thrips parvispinus* (Thysanoptera: Thripidae), Paola Villamarin, Philip G Hahn, Yiannis Ampatzidis, Alexandra M Revynthi, *Experimental and Applied Acarology*, <https://doi.org/10.1007/s10493-026-01147-6>

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A soil satellite spectral service (Sat4): A strategy for stakeholders, Matheus Carraco Cardoso, José AM Demattê, Bruno dos Anjos Bartsch, Nikolaos Tziolas, Anastasia Kritharoula, Giannis Gallios, Jorge Tadeu Fim Rosas, Nicolas Augusto Rosin, Jean de Jesus Macedo Novais, Gabriel Pimenta Barbosa de Sousa, Renan Falcioni, Leticia Guadagnin Vogel, *Geoderma Regional*, <https://doi.org/10.1016/j.geodrs.2026.e01100>

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Disturbance reshapes functional redundancy and accelerates nitrification in soil nitrifying communities, Jun Zhao, Shannon M Brown, Jonathan Rodriguez, Eunkyung Choi, Nina C Infantado, Christina Hazard, Graeme W Nicol, Sarah L Strauss, Willm Martens-Habbena, *The ISME Journal*, <https://doi.org/10.1093/ismejo/wrag154>

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SWFREC AND THE COMMUNITY

Thank You to Our Community Partners

We are grateful for the generosity and support of our community partners who continue to make a meaningful impact at our center.

Thank You

Lott Agri Services, LLC for donating their time and expertise to level the vegetable fields on our farm. Their generosity has greatly improved our growing space and will benefit our farming program for years to come.



Florida Land & Fire for conducting a prescribed burn of our reservoir area. Their professional assistance has helped us maintain our property safely and effectively.

We are truly thankful for the partnership, generosity, and community spirit demonstrated by these companies. Their support plays an important role in helping us fulfill our mission.

OPPORTUNITIES AND UPCOMING EVENTS

Join Our Team: SWFREC Seeking a New Center Director & Professor

Are you passionate about advancing agricultural research, education, and Extension? The University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) is seeking an inspiring leader to serve as the next Center Director and Professor for the Southwest Florida Research and Education Center (SWFREC) in Immokalee, Florida.

We are looking for an accomplished scholar and collaborative leader with a strong record of research excellence, stakeholder engagement, and organizational leadership to guide SWFREC's continued contributions to agriculture and natural resources.

Location: **Immokalee, Florida**

Application review begins: August 2, 2026

Learn more about the position and application process

This is an exciting opportunity to help shape the future of agricultural innovation and make a lasting impact through research, education, and Extension. Please share this opportunity with colleagues and networks who may be interested. We look forward to welcoming the next leader of UF/IFAS SWFREC!

Open House: Save the Date!

When: **Tuesday, November 17, 2026**



You and your colleagues are cordially invited to the annual open house at the UF/IFAS Southwest Florida Research and Education Center (SWFREC).

Enjoy casual tours of our laboratories, guided trolley tours of our farm facilities, and educational science demonstrations. Learn about research, Extension, and other outreach activities that touch every community in southwest Florida.

Contact Us...



UF/IFAS Southwest Florida Research and Education Center
2685 SR 29 North, Immokalee, FL 34142
P: 239-658-3400 <http://swfrec.ifas.ufl.edu>

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