

Vegetable Field Day

May 12, 2026

Southwest
Florida
Research and
Education Center

UF IFAS
UNIVERSITY of FLORIDA

Demonstrations and Presentations on the Following Topics:

- ✓ AI tool for extreme weather
- ✓ AI-Powered Crop Scouting and Early Disease Detection in Nurseries
- ✓ Nutrient Best Management Practices (BMPs)
- ✓ Pre-Emergence Herbicides Under Plastic Mulch
- ✓ Production Trends in Specialty Crops
- ✓ Tomato Viruses
- ✓ Water Dynamics for Plastic Mulched Crops
- ✓ Whitefly Management

2.5 CEUs available in these categories

- ❖ Agricultural Row Crop Pest Control
- ❖ Demonstration and Research
- ❖ Private Applicator Agriculture

Tuesday
May 12, 2026
8:00 am – 1:00 pm

UF/IFAS SWFREC
2685 SR 29 North
Immokalee, FL 34142
239-658-3400

Program is free.
Pre-registration is required.
2.5 CEUs will be available



Registration



Information

<https://swfrec.ifas.ufl.edu/events>

Vegetable Field Day Agenda

May 12, 2026

8:00 am - Welcome

Welcome and Registration

8:30 am – 9:30 am - Vegetable Fields

Evaluation of biorational methods of whitefly management.

Dr. Jawwad Qureshi, Associate Professor, Entomology

See the research currently ongoing in the field comparing different strategies for managing whiteflies in zucchini, including row covers, UV metalized reflective mulches, kaolin, limonene and insecticidal treatments.

UAV sprayer demo

Wenhao Liu, Graduate Researcher, Precision Agriculture

This demonstration will showcase a UAV-based spraying system designed for efficient, precise application in vegetable production, highlighting its operational features and potential to improve labor efficiency and reduce input waste.

What Your Crop Really Gets Under Plastic

Dr. Sanjay Shukla, Professor, Water Resources Engineering

How much of the rain actually gets into your beds? Learn what portion of rainfall is available to your crop under plastic mulch and how to use this information to adjust irrigation, reduce water stress, and lower disease risk.

9:45 am – 12:00 pm – SWFREC Auditorium

Pre-Emergence Herbicides Under Plastic Mulch: Research Updates

Dr. Ramdas Kanissery, Associate Professor, Weed Science

This talk shares the latest research updates on pre-emergence herbicide use under plastic mulch. It will also cover practical insights from recent studies on improving transplant safety and establishment in herbicide-treated, plastic-mulched beds.

Phosphorus Fertilizer BMPs: Updated Rates for Tomato, Potato, and Beans; Rows Near Ditches vs. Middle Rows: What We're Finding

Dr. Sanjay Shukla, Professor, Water Resources Engineering

Latest updates on phosphorus fertilizer recommendations for tomato, potato, and beans. Learn how to optimize rates to maintain yield while reducing input costs and potential losses.

Rows near ditches can behave differently than those in the middle, sometimes affecting up to half a tomato field. Learn how ditch proximity influences tomato and potato yields and what it means for bottom line and management decisions.

Evaluation of biorational methods of whitefly management

Dr. Jawwad Qureshi, Associate Professor, Entomology

Discussion of findings from using row covers, UV metalized reflective mulches, kaolin, limonene and insecticidal treatments for managing whiteflies in Zucchini.

Emerging viruses in tomatoes in Florida

Dr. Ozgur Batuman, Associate Professor, Citrus Pathology

This talk is about tomato-infecting viruses that are increasingly threatening the tomato crops in the fields. Also includes brief discussion of their insect vectors and their spread within and between fields.

Production Trends in Specialty Crops: Sweet Corn, Strawberries, Tomatoes, Bell Peppers, and Watermelons

Dr. Tara Wade, Associate Professor, Agricultural Natural Resources Economics

This discussion will present trends in Florida's five most economically important specialty crops, excluding citrus: tomatoes, strawberries, bell peppers, watermelons, and sweet corn. She will report on harvested acreage, prices, and shipment volumes from Florida and competing states from 2010 to 2022.

AI tool for extreme weather preparedness, flood risk, and crop damage assessment

Dr. Nikolaos Tziolas, Assistant Professor, Soil Science Artificial Intelligence

This talk presents a conversational AI tool designed to support growers and extension agents before and after extreme weather events (e.g., hurricanes, frost). It enables rapid, field-scale assessment of flood risk and crop impacts using satellite data and AI to support timely response and recovery decisions.

From Seed to Seedling: AI-Powered Crop Scouting and Early Disease Detection in Nurseries

Dr. Yiannis Ampatzidis, Professor, Precision Agriculture

This presentation will focus on next-generation AI tools designed specifically for nursery and early-stage crop management. It will showcase how AI-powered crop scouting enables accurate assessment of germination rates and seedling vigor at scale, providing growers with timely, objective insights into crop establishment. In addition, the talk will demonstrate advanced early disease detection systems capable of identifying stress and infections before visible symptoms appear, allowing for rapid, data-driven decision-making. By integrating real-time sensing, computer vision, and targeted application technologies, these tools enable precise, site-specific interventions, reducing unnecessary pesticide use, lowering input costs, and improving overall crop uniformity and health. Emphasis will be placed on practical, field-deployable solutions that can be readily adopted by growers and ag tech companies to enhance nursery efficiency and profitability.

Program is free. Pre-registration is required.

2.5 CEUs will be available (Ag Row Crop Pest Control, Demo and Research, Private Applicator - Ag)

12:00 pm - Lunch Thanks to Everglades Equipment Group