

18th Biennial Meeting of the Florida Phytopathological Society

May 17-19, 2023

UF/IFAS Southwest Florida Research and Education Center, Immokalee

Agenda

Wednesday, May 17, 2023

- 5:30 pm Reception
- 6:00 pm Employer Panel Discussion: Opportunities Outside of Academia
- 6:30 pm Poster Setup
- 6:45 pm Dinner and Blight Bowl

Thursday, May 18, 2023

- 8:30 am Coffee and Posters
- 9:00 am Welcome and Introductions

Plenary Session. Moderator: Jacobo Robledo

- 9:15 am **Jeremy Brawner:** Developing pathogen detection tools and disease resistant varieties
- 9:45 am **Lindsey Thiessen:** Follow that spore: Plant pathogen detection and monitoring
- 10:15 am **Megan Dewdney:** Prediction of a sporadic but important disease: The case of postbloom fruit drop
- 10:45 am Break
- 11:00 am **Tom D'Elia:** The transformative power of agricultural partnerships in education and outreach
- 11:30 am **Dana Choi:** Improving crop production using machine learning and synthetic data for specialty crops
- 12:00 pm Lunch
- 1:00 pm Field trip instructions

1:15 pm Load bus
1:30 pm Travel to Sakata®
2:00 pm Tour Sakata®
4:00 pm Load bus
4:15 pm Travel to UF/IFAS SWFREC
4:45 pm Arrive at UF/IFAS SWFREC
5:00 pm Dinner
6:00 pm Poster competition

Friday, May 19, 2023

Student Oral Competition. Moderator: Eva Mulandesa

9:00 am Welcome and Instructions
9:15 am **Mousami Poudel:** Identification and characterization of the first phytopathogenic subspecies in *Herbaspirillum huttiense*. UF/IFAS
9:30 am **Raquel Hill:** Recombinase polymerase amplification for field detection of citrus canker disease in the Caribbean. UF/IFAS
9:45 am **Salih Yilmaz:** Development of innovative isothermal amplification strategies for in-field tomato chlorotic spot virus detection. UF/IFAS
10:00 am **Aastha Subedi:** Population genomics of *Xanthomonas euvesicatoria* of pepper in Southwest Florida. UF/IFAS
10:15 am Break

Student Oral Competition. Moderator: Mariana Herrera Corzo

10:30 am **Amandeep Kaur:** Evolution of copper resistance in *Xanthomonas perforans* population. UF/IFAS
10:45 am **Jacobo Robledo:** HLB tolerance: less impairment in leaf carbohydrate export, increase expression of plant defense activators, and reduced alteration of xylem vessels. UF/IFAS
11:00 am **Samara V. Rocha:** Citrus cystatins: Plant defense proteins. UF/IFAS

11:15 am **Crissy Massimino:** Characterization of a novel jumbo phage and identification of lysins for potential agricultural applications. Indian River State College

11:30 am **Matthew A. Cullen:** Trends to target: Protein profiles correspond to watermelon variety-specific virulence phenotypes of *Fusarium oxysporum* f. sp. *niveum*. UF/IFAS

11:45 am **Christ Mane Belizaire:** Developing resources to facilitate the accurate identification of avocado scab (*Elsinoë perseae*). UF/IFAS

12:00 pm **Lis Porto:** Exploring the phenotypic diversity of *Neopestalotipsis* spp. isolates causing strawberry diseases. UF/IFAS

12:15 pm Lunch

Student Oral Competition. Moderator: Mousami Poudel

1:00 pm **Carlie Meehan:** Storage methods for, and the morphological characterization of, the blueberry rust pathogen in Florida. UF/IFAS

1:15 pm **Joshua Konkol:** Comparisons of tree colonization by the laurel wilt pathogen, *Harringtonia lauricola*, and the closely related non-pathogen, *H. aguacate*. UF/IFAS

1:30 pm **Eva L. Mulandesa:** Forging our path: understanding the citrus flush cycle and infection period of *Zasmidium citri-griseum* in grapefruit in Florida. UF/IFAS

1:45 pm **Rebecca L. Barocco:** Sensor-based monitoring system for peanut foliar disease epidemics. UF/IFAS

2:00 pm Break

Short Technical Presentations. Moderator: Christ Mane Belizaire

2:15 pm **Chiara Bernardini:** *Candidatus Liberibacter asiaticus* inhibits callose and ROS. UF/IFAS

2:30 pm **Poulami Sarkar:** Underlying regulatory network in grapefruit seed vasculatures associated with high *Liberibacter* titer using comparative transcriptomics. UF/IFAS

2:45 pm **Chunyi Lin:** The gut virome in Florida psyllid populations and the influence on *Diaphorina citri* biology. UF/IFAS

3:00 pm **Lederson Ganán Betancur:** Challenges and insights into the use of essential oil-based biopesticides for the management of foliar and fruit diseases in avocado and mango. UF/IFAS

3:15 pm **Monica Navia-Urrutia:** Preliminary screening of Mexican avocado germplasm for resistance to laurel wilt disease. UF/IFAS

3:30 pm Break

Short Technical Presentations. Moderator: Liz Porto

3:45 pm **Wardatou Boukari:** Use of plant essential oil products for Anthracnose and other fruit rot disease management in blueberry. UF/IFAS

4:00 pm **Shelby Weber:** Challenges and opportunities in tropical and subtropical plant diagnostics. UF/IFAS

4:15 pm **Abolfazl Hajihassanui:** Grafting tomato to manage southern blight and root-knot nematode diseases. UF/IFAS

4:30 pm **John McVay:** *Ceratobasidium theobromae*: An emerging plant pathogen of woody plants casual agent of vascular steak dieback (VSD). Florida Department of Agriculture and Consumer Services

4:45 pm Business meeting and student competition awards

Poster Session

*Student Competition

Avril Rosano*: Evaluating the utility of detached leaf assay for *Thielaviopsis* – palm interaction. UF/IFAS

Marie-Gabrielle Ayika*: Establishing *Agrobacterium*-mediated transformation method for *Thielaviopsis paradoxa*.
Miami Dade College

Carlos Andres Sendoya-Corrales*: Re-evaluating the use of propiconazole in controlling laurel wilt in avocado orchards in South Florida. UF/IFAS

Maria de los Angeles Lugo Duque*: Progress report on the search for alternative fungicides to manage laurel wilt of avocado.
UF/IFAS

Galvin Alonzo*: Tackling a new menace: Effect of fumigants on inoculum of *Neopestalotiopsis* spp. in strawberry crowns and soil. UF/IFAS

Maryam Khalilzadeh*: Characterizing the phloem cell responses associated with stem-pitting development using citrus tristeza virus mutants. UF/IFAS

Zahra Torkaman*: Improving citrus management under protective screens: Exploring the co-occurrence of citrus greasy spot and chilli thrips seasonal patterns. UF/IFAS

Muhammad Asim*: Screening of sweet orange and mandarin against citrus canker. UF/IFAS

Jessica Dominguez*: Potential antimicrobial agents against *Candidatus Liberibacter asiaticus*, causal agent of Huanglongbing. Florida International University.

Kiara Taibi-Briz*: Potential of fungal endophytes and silver pyrazolate for control of *Raffaelea lauricola*, causal agent of laurel wilt in avocado. Florida International University

Hiago Silva*: De-novo assembly of *Xanthomonas citri* pv *anacardii* TAQ-13 the causal agent of cashew black spot and characterization of transcription activator-like effector genes.
UF/IFAS

Josephine Pasche: Microbial makeover: The effects of soil cultivation on bacterial assemblages and *M. enterolobii* infections. UF/IFAS

Elena Karlsen-Ayala: From disturbance to resilience: Fumigation-induced changes in soil microbial communities. UF/IFAS

Maruthi Sridhar Balaji Bhaskar: Monitor and improve soil and plant health using spectral sensors and remote sensing. Florida International University

Kelly O'Brien: Cotton phenotypic response to foliar disease pressure under irrigated and non-irrigated conventional and sod-based rotation systems. UF/IFAS

Sanju Kunwar: Injecting oxytetracycline: An effective approach for managing HLB disease in citrus. UF/IFAS

Sanju Kunwar: New antimicrobials and systemic acquired resistance inducers for managing citrus canker disease. UF/IFAS

Kellee Britt-Ugarteandia: The Asian citrus psyllid as a bioindicator of citrus tristeza virus in Florida groves. UF/IFAS

Sara Salcedo: Assessment of the antagonistic effect of *Trichoderma* extracts towards *Harringtonia lauricola*. UF/IFAS

Katia Viana Xavier: Fusarium yellows threatening celery production in South Florida. UF/IFAS

James Fulton: Introducing the Florida Department of Agriculture and Consumer Services - Division of Plant Industry's exciting new diagnostic laboratory for honey bees, the Honey Bee Diagnostic Lab (HBDL). Florida Department of Agriculture and Consumer Services

Juliana Soares: Identification of diversity in *Xanthomonas albilineans* causing sugarcane leaf scald in Florida. USDA

Mariana Herrera-Corzo: Characterization of variation in virulence-related genes of *Phytophthora palmivora* associated with cacao. UF/IFAS