

**133<sup>rd</sup> Annual Meeting of the Florida State Horticultural Society –  
October 19 – 20, 2020  
Virtual**



## Program Overview 2020 – Virtual

<b>Monday Morning</b>		<b>Page</b>
8:30-9:45	General Session	General Session TEAMS room
8:30	Welcome & Introductions: Gene McAvoy	
8:40	Welcome & Presidential Address: Jeff Williamson	
9:10	Keynote Speaker Sandy Wilson	
9:45	End of Session	
<b>Concurrent Monday Morning Sessions:</b>		
9:50-12:00	Agroecology & Natural Resources	3
9:50-12:00	Citrus	5
9:50-12:00	Handling & Processing	9
9:50-12:00	Krome Memorial Institute	11
9:50-12:00	Ornamental, Gardening & Landscaping	14
9:50-12:00	Vegetable	16
<b>Monday Lunch</b>		
12:00-1:20		
<b>Concurrent Monday Afternoon Sessions:</b>		
	Agroecology & Natural Resources	--
1:20-3:00	Citrus	6
1:20-2:00	Handling & Processing	10
1:20-3:30	Krome Memorial Institute	12
	Ornamental, Gardening & Landscaping	--
1:20-4:45	Vegetable	17
4:00-5:00	Posters	1
7:00	Virtual Reception	Lounge in TEAMS
<b>Tuesday Morning</b>		
8:30-9:45	FSHS Annual Business Meeting	General Session TEAMS room
<b>Concurrent Tuesday Morning Sessions</b>		
9:50-12:00	Citrus	8
9:50-12:00	Vegetable	19

# 2020 FSHS Patron Members

Theodore Winsburg

Anne Plotto

Ed Exteberria

## Welcome 2020 FSHS Sectional Vice Presidents

Agroecology & Natural Resources	Lyn Gettys <a href="mailto:lgettys@ufl.edu">lgettys@ufl.edu</a>
Citrus	Davie Kadyampakeni <a href="mailto:dkadyampakeni@ufl.edu">dkadyampakeni@ufl.edu</a>
Handling & Processing	Tie Liu <a href="mailto:tieliu@ufl.edu">tieliu@ufl.edu</a>
Krome Memorial Institute	Ron Rice <a href="mailto:rwr@ufl.edu">rwr@ufl.edu</a>
Ornamental, Gardening & Landscaping	Wagner Vendrame <a href="mailto:vendrame@ufl.edu">vendrame@ufl.edu</a>
Vegetable	Germán Sandoya <a href="mailto:gsandoyamiranda@ufl.edu">gsandoyamiranda@ufl.edu</a>
Posters	Taylor Clem <a href="mailto:taylorclem87@ufl.edu">taylorclem87@ufl.edu</a>



# Poster Session

**Taylor Clem**  
Coordinator

- [P-1] **Field Evaluation of a New Mechanical Strawberry Gripper Developed for Autonomous Harvesting.** Shinsuke Agehara<sup>1</sup>, Weining Wang<sup>1</sup>, Jonah Mapes<sup>2</sup>, and Yunjun Xu<sup>2</sup>.  
<sup>1</sup>UF/IFAS, Gulf Coast Research and Education Center, Wimauma, FL, <sup>2</sup>UF/IFAS Mechanical and Aerospace Engineering, Orlando, FL. ([sagehara@ufl.edu](mailto:sagehara@ufl.edu))
- [P-2] **Fertigation in Avocado: Monitoring Soil Ions as a Diagnosis in Nutrition.** Víctor García-Gaytán and Esteban Sánchez-Rodríguez. El Colegio de Michoacán, A.C. Laboratorio de Análisis y Diagnóstico del Patrimonio. ([garvitan@gmail.com](mailto:garvitan@gmail.com))
- [P-3] **Varieties of Tomato Saladette Type: Plastic Mulches, Nutrition and Production in Greenhouse.** Víctor García-Gaytán<sup>1</sup> and M. Elena Gómez-Cabrera<sup>2</sup>. <sup>1</sup>El Colegio de Michoacán, A.C. Laboratorio de Análisis y Diagnóstico del Patrimonio, Michoacán, México, <sup>2</sup>Universidad Politécnica de Pénjamo, Guanajuato, México. ([garvitan@gmail.com](mailto:garvitan@gmail.com))
- [P-4] **Nutritive Solution and Organo-mineral Fertilizer Affects the Growth and Yield of Cherry Tomatoes.** Víctor García-Gaytán and Luis R. Velazquez-Maldonado. El Colegio de Michoacán, A.C. Laboratorio de Análisis y Diagnóstico del Patrimonio, Michoacán, México. ([garvitan@gmail.com](mailto:garvitan@gmail.com))
- [P-5] **Landscaping for Livestock.** Maxine Hunter and Caitlin Bainum. UF/IFAS Extension Marion County, Ocala, FL. ([maxine32666@ufl.edu](mailto:maxine32666@ufl.edu))
- [P-6] **Multispecies lawns: an alternative strategy for water conservation and ecosystem functions.** Brooke Moffis<sup>1</sup>, Basil Iannone<sup>2</sup>, Wendy Wilber<sup>3</sup>, Adam G. Dale<sup>4</sup>, J. Bryan Unruh<sup>5</sup>, Julia Rczynya<sup>6</sup>, and Sandra B. Wilson<sup>6</sup>. <sup>1</sup>UF/IFAS Extension Lake County, Tavares, FL, <sup>2</sup>UF/IFAS School of Forest Resources and Conservation, Gainesville, FL <sup>3</sup>UF/IFAS Extension, Center for Landscape Conservation and Ecology, Gainesville, FL <sup>4</sup>UF/IFAS Entomology & Nematology Department, Gainesville, FL <sup>5</sup>UF/IFAS West Florida Research and Education Center, Jay, FL <sup>6</sup>UF/IFAS Department of Environmental Horticulture, Gainesville, FL. ([burnb48@ufl.edu](mailto:burnb48@ufl.edu))
- [P-7] **Harvest Yields for Sweet Corn Variety Trial in Northeast Florida.** Wendy Mussoline<sup>1</sup>, Juan Gonzalez<sup>2</sup>, Marcio Resende<sup>2</sup>, and Christian Christensen<sup>3</sup>. <sup>1</sup>UF/IFAS Extension Flagler/Putnam County, Bunnell, FL, <sup>2</sup>UF/IFAS, Horticultural Sciences Department,

Gainesville, FL <sup>3</sup>UF/IFAS Hastings Agriculture Extension Center, Hastings, FL.  
([wmussoli@ufl.edu](mailto:wmussoli@ufl.edu))

- [P-8] **Comparison of Drought Tolerance in Five Blueberry Cultivars by Using Dehydration Leaf Assay.** Amir Rezazadeh<sup>1</sup> and Eric T. Stafne<sup>2</sup>. <sup>1</sup>UF/IFAS Extension St Lucie, Fort Pierce, FL <sup>2</sup>Coastal Research and Extension Center, Mississippi State University, Poplarville, MS.  
([amir2558@ufl.edu](mailto:amir2558@ufl.edu))
- [P-9] **Increasing Adoption of Water-Saving Technologies on Farms.** Tatiana Sanchez. UF/IFAS Extension Alachua County, Gainesville, FL. ([tatiana.sanchez@ufl.edu](mailto:tatiana.sanchez@ufl.edu))
- [P-10] **Understanding Lettuce Downy Mildew, Pathogen Distribution and Available Host Resistance in Florida.** Lis Natali R. Porto, Richard N. Raid, Germán V. Sandoya- Miranda. UF/IFAS Everglades Research and Education Center, Belle Glade, FL.  
([gsandoyamiranda@ufl.edu](mailto:gsandoyamiranda@ufl.edu))
- [P-11] **Equipping Brevard County's Turfgrass Industry with Sustainable Production Know-How through the Space Coast Golf and Turf Association.** Bonnie C. Wells. UF/IFAS Extension Brevard County, Cocoa, FL. ([bcwells@ufl.edu](mailto:bcwells@ufl.edu))
- [P-12] **Extending Extension's Education to Half a Million.** Hannah Wooten. UF/IFAS Extension Orange County, Orlando, FL. ([hwooten@ufl.edu](mailto:hwooten@ufl.edu))
- [P-13] **Surveys for Resistance-Breaking Tospoviruses in Southwest and South Florida Tomato Fields.** Salih Yilmaz<sup>1</sup>, Felicia Parks<sup>3</sup>, Leon Lucas<sup>3</sup>, H. Charles Mellinger<sup>3</sup>, Tong Geon Lee<sup>4</sup>, Samuel F. Hutton<sup>4</sup>, Scott Adkins<sup>2</sup>, Ozgur Batuman<sup>1</sup>. <sup>1</sup>UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL, <sup>2</sup>U. S. Horticultural Research Laboratory, USDA-ARS Fort Pierce, FL, <sup>3</sup>Glades Crop Care Inc., Jupiter, FL, <sup>4</sup>UF/IFAS, Gulf Coast Research and Education Center, Wimauma, FL. ([salihyilmaz@ufl.edu](mailto:salihyilmaz@ufl.edu))
- [P-14] **Screening for Resistance to *Stemphylium* spp. In Florida-adapted baby spinach.** Lis Natali R. Porto<sup>1</sup>, Richard N. Raid<sup>2</sup>, Germán V. Sandoya- Miranda<sup>1</sup>. <sup>1</sup>UF/IFAS Everglades Research and Education Center, Horticultural Sciences Department, University of Florida IFAS, Belle Glade, FL <sup>2</sup>Everglades Research and Education Center (EREC), Plant Pathology Department, University of Florida IFAS, Belle Glade, FL. ([gsandoyamiranda@ufl.edu](mailto:gsandoyamiranda@ufl.edu))

# Agroecology & Natural Resources Section

Lyn Gettys

Presiding

[lgettys@ufl.edu](mailto:lgettys@ufl.edu)

## Monday Morning Session

(9:50 AM – 12:00 PM)

- 9:50 **Welcome and Introductions**, Lyn Gettys
- 10:00 **Connecting with Small Scale, Urban, Hobby and Community Garden Farmers through Video Mediums and Facebook Live**. Lisa Hickey<sup>1</sup>, Sarah Bostick<sup>2</sup> and Jessica Ryals<sup>3</sup>.  
<sup>1</sup>UF/IFAS Manatee County Extension, Palmetto, FL, <sup>2</sup>UF/IFAS Sarasota County Extension, Sarasota, FL, <sup>3</sup>UF/IFAS Collier County Extension, Naples, FL ([Lisa.Hickey@ufl.edu](mailto:Lisa.Hickey@ufl.edu)) [ANR-1]
- 10:15 **Homeowners Perceptions of Florida Wildflowers for Ecological Landscaping**. Tiare F Silvasy<sup>1</sup>. <sup>1</sup>UF/IFAS Extension Orange County, Orlando, FL. ([tsilvasy@ufl.edu](mailto:tsilvasy@ufl.edu)) [ANR-2]
- 10:30 **Investigating the Feasibility of Microorganisms in Hydroponic Systems**. Michelle Incledon<sup>1</sup> and Kimberly Moore<sup>1</sup>. <sup>1</sup>UF/IFAS Fort Lauderdale Research and Education Center, Ft. Lauderdale, FL. ([minclredo818@gmail.com](mailto:minclredo818@gmail.com)) [ANR-3]
- 10:45 **The Use of Algal Turf Scrubber (ATS) Biomass as a Slow-Release Fertilizer**. Emily E. Becks, Kimberly A. Moore and H. Dail Laughinghouse. UF/IFAS Fort Lauderdale Research and Education Center, UF/IFAS, Davie, FL. ([ebecks@ufl.edu](mailto:ebecks@ufl.edu)) [ANR-4]
- 11:00 **Sustainable Calcium Management and the Usage of Organic Acids: Impacts on Marketable Fruit Yield in Strawberries (*Fragaria x ananassa*)**. Jared Essman<sup>1</sup>, Michael J. Mulvaney<sup>2</sup>, Gabriel Maltais-Landry<sup>3</sup>, Shinsuke Agehara<sup>1</sup>. <sup>1</sup>UF/IFAS Gulf Coast Research and Education Center, Wimauma, FL, <sup>2</sup>UF/IFAS West Florida Research and Education Center, Jay, FL, <sup>3</sup>UF/IFAS Soil and Water Sciences Department, Gainesville, FL. ([jp.essman@ufl.edu](mailto:jp.essman@ufl.edu)) [ANR-5]
- 11:15 **Restoring a 1920's Golf Course into an Ecological Park: A Case Study of the Rolling Hills**. Tina McIntyre<sup>1</sup>, Kaydie McCormick<sup>1</sup> and Audrey Genest<sup>2</sup>. <sup>1</sup>UF/IFAS, Seminole

County Extension, Sanford, FL, <sup>2</sup>UF/IFAS, Department of Wildlife Ecology & Conservation, Gainesville, FL ([k.mcintyre@ufl.edu](mailto:k.mcintyre@ufl.edu)) [ANR-6]

## **Student Presentations**

- 11:30 **Plant diversity across agroecosystems representing different disturbance regimes in south Florida.** Cliff Martin, Daniel Calzadilla, and Zachary Brym. UF/IFAS Tropical Research and Education Center, Homestead, FL. ([brymz@ufl.edu](mailto:brymz@ufl.edu)) [ANR-7]
- 11:45 **Experiential Urban Forestry Extension: Tree-Juvenation Florida.** Marguerite M. Beckford. UF/IFAS Sarasota County Extension, Sarasota, FL. ([mbeckford@ufl.edu](mailto:mbeckford@ufl.edu)) [ANR-8]
- 12:00 **Evaluation of “Natural” Products for Water Hyacinth Control.** Lyn A. Gettys, Kyle L. Thayer and Joseph W. Sigmon. UF/IFAS Fort Lauderdale Research and Education Center, Davie, FL. ([lgettys@ufl.edu](mailto:lgettys@ufl.edu)) [ANR-9]
- 12:15 **Agroecology and Natural Resources Business Meeting**
- 12:30 **End of Section**

# Citrus Section

**Davie Kadyampakeni**

Presiding

[dkadyampakeni@ufl.edu](mailto:dkadyampakeni@ufl.edu)

## Monday Morning Session

(9:50 AM – 12:00 PM)

9:50 **Welcome and Introductions**, Davie Kadyampakeni

### A - Citrus Horticultural Practices

- 10:00 **Flushing pattern, Asian citrus psyllid colonization and *Ca. Liberibacter asiaticus* transmission in different graft combinations of citrus.** [Caroline de Favari Tardivo](#)<sup>1</sup>, Kim D. Bowman<sup>2</sup>, Jawwad Qureshi<sup>1</sup>, Ute Albrecht<sup>1</sup>. <sup>1</sup>UF/IFAS, Southwest Florida Research and Education Center, Immokalee, FL, <sup>2</sup>USDA-ARS, U.S. Horticultural Research Laboratory, Fort Pierce, FL. ([ualbrecht@ufl.edu](mailto:ualbrecht@ufl.edu); [caroline.defava@ufl.edu](mailto:caroline.defava@ufl.edu)) [C-1]
- 10:15 **Relative performance and gene expression patterns following abiotic and biotic stresses on open pollinated seedlings of S10 salt tolerant rootstock.** [Lamiaa M. Mahmoud](#)<sup>1,2</sup>, Patrick Huyck<sup>1</sup>, Christopher Vincent<sup>1</sup>, Fred Gmitter<sup>1</sup>, Jude W. Grosser<sup>1</sup>, and Manjul Dutt<sup>1</sup>. <sup>1</sup>UF/IFAS, Citrus Research and Education Center, Lake Alfred, FL, <sup>2</sup>Pomology Department, Faculty of Agriculture, Mansoura University, Egypt. ([manjul@ufl.edu](mailto:manjul@ufl.edu); [lamiaa.mahmoud@ufl.edu](mailto:lamiaa.mahmoud@ufl.edu)) [C-2]
- 10:30 **Evaluation of Varying Rates of Manganese on HLB-Affected Trees (Valencia) in Florida.** [Samuel Kwakye](#), Davie Kadyampakeni, Tripti Vashisth. UF/IFAS, Citrus Research and Education Center, Lake Alfred, FL. ([dkadyampakeni@ufl.edu](mailto:dkadyampakeni@ufl.edu); [skwakye@ufl.edu](mailto:skwakye@ufl.edu)) [C-3]
- 10:45 **Rootstock effects on the performance of 'Hamlin' orange trees grown in HLB endemic conditions.** [Sudip Kunwar](#)<sup>1</sup>, Ute Albrecht<sup>1</sup>, Jude Grosser<sup>2</sup>. <sup>1</sup>UF/IFAS, Southwest Florida Research and Education Center, Immokalee, FL, <sup>2</sup>UF/IFAS Citrus Research and Education Center, Lake Alfred, FL. ([ualbrecht@ufl.edu](mailto:ualbrecht@ufl.edu); [skunwar@ufl.edu](mailto:skunwar@ufl.edu)) [C-4]
- 11:00 **Canopy growth and physiological assessment of 'Valencia' orange trees (*Citrus sinensis*) with and without individual protective covers.** [Susmita Gaire](#), Fernando



Alferez, Ute Albrecht. UF/IFAS, Southwest Florida Research and Education Center, Immokalee, FL. ([alferez@ufl.edu](mailto:alferez@ufl.edu); [gair.susmita@ufl.edu](mailto:gair.susmita@ufl.edu)) [C-5]

11:15 **Effect of HLB on Chemical Components of Essential Oil Extracted from ‘Ray Ruby’ Grapefruit Peel.** Rhuanito S. Ferrarezi<sup>1</sup>, Maria A. da Cruz<sup>2</sup>, and Jinhe Bai<sup>2</sup>. <sup>1</sup>UF/IFAS Indian River Research and Education Center, Fort Pierce, FL, <sup>2</sup>Agricultural Research Center, Universidade Estadual de Londrina, Londrina, PR. ([jinhe.bai@usda.gov](mailto:jinhe.bai@usda.gov)) [C-6 and HP-9]

11:30 **Performance of HLB-affected trees to foliar and soil macro- and micronutrient applications.** Tanyaradzwa Chinyukwi, Samuel Kwakye and Davie Kadyampakeni. UF/IFAS, Citrus Research and Education Center, Lake Alfred, FL. ([dkadyampakeni@ufl.edu](mailto:dkadyampakeni@ufl.edu); [tchinyukwi@ufl.edu](mailto:tchinyukwi@ufl.edu)) [C-7]

11:45 **Evaluation of germination potential of citrus seed rootstocks.** Deived Uilian de Carvalho, and Fernando Alferez. UF/IFAS, Southwest Florida Research and Education Center, Immokalee, FL. ([alferez@ufl.edu](mailto:alferez@ufl.edu); [ddecarvalho@ufl.edu](mailto:ddecarvalho@ufl.edu)) [C-8]

12:00 **Citrus Section Business Meeting**

12:15 **Lunch** (on your own)

## Monday Afternoon Session

(1:20 PM – 3:00 PM)

1:20 PM **Welcome and Introductions**, Davie Kadyampakeni

### A - Citrus Horticultural Practices (continued)

1:30 **Implications of Huanglongbing (HLB) on Fruit Growth and Development of Sweet Oranges.** Mary Sutton, Tripti Vashisth, Christopher Vincent. UF/IFAS, Citrus Research and Education Center, Lake Alfred, FL. ([vashisth@ufl.edu](mailto:vashisth@ufl.edu)) [C-9]

1:45 **Horticultural attributes and root architecture of field grown ‘Valencia’ trees grafted on different rootstocks propagated by seed, cuttings, and tissue culture.** Sameer Pokhrel<sup>1</sup>, Ute Albrecht<sup>1</sup>, Bo Meyering<sup>1</sup>, Kim D. Bowman<sup>2</sup>. <sup>1</sup>UF/IFAS, Southwest Florida Research and Education Center, Immokalee, FL, <sup>2</sup>USDA-ARS, U.S. Horticultural Research Laboratory, Fort Pierce, FL. ([ualbrecht@ufl.edu](mailto:ualbrecht@ufl.edu)) [C-10]

- 2:00 **Brassinosteroid and IAA influence on citrus fruit abscission.** Daniel Boakye, Fernando Alferez. UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL. ([alferez@ufl.edu](mailto:alferez@ufl.edu)) [C-11]
- 2:15 **Citrus Nutrition Trends in the Florida Citrus Industry.** Jamie Burrow, Tripti Vashisth UF-IFAS Citrus Research and Education Center, Lake Alfred, FL. ([vashisth@ufl.edu](mailto:vashisth@ufl.edu)) [C-12]

## **B - Citrus Technologies, Entomology and Pathology**

- 2:30 **Developing a neutral electrolyzed water treatment for pest management in a citrus under protective screen production system.** Timothy Ebert, L. Waldo, P. Mungofa, W. Holmes, N. Mariner Jr., A. Schumann. UF/ IFAS Citrus Research and Education Center, Lake Alfred, FL. ([tebert@ufl.edu](mailto:tebert@ufl.edu)) [C-13]
- 2:45 **Development of a Greenhouse Portable and Adjustable Prototype Sprayer to Analyze Fungal Biopesticide Deposition on Citrus Leaves.** Sandra Guzman<sup>1</sup>, Eric Herrera<sup>1</sup>, Pasco B. Avery<sup>1</sup>, Robert C. Adair<sup>2</sup>. <sup>1</sup>UF/ IFAS Indian River Research and Education Center, Fort Pierce, FL. <sup>2</sup>The Florida Research Center for Agricultural Sustainability, Vero Beach FL. ([sandra.guzmangut@ufl.edu](mailto:sandra.guzmangut@ufl.edu)) [C-14]
- 3:00 **Adjourn**

# Citrus Section

**Davie Kadyampakeni**

Presiding

[dkadyampakeni@ufl.edu](mailto:dkadyampakeni@ufl.edu)

## Tuesday Morning Session

(9:50 AM – 11:00 AM)

9:50 **Welcome and Introductions**, Davie Kadyampakeni

### **B - Citrus Technologies, Entomology and Pathology (Continued)**

10:00 **Attraction of Asian citrus psyllid to metabolically engineered anthocyanin-producing lime.** Nabil Killiny, and Manjul Dutt. UF/IFAS Citrus Research and Education Center, Lake Alfred, FL. ([nabilkilliny@ufl.edu](mailto:nabilkilliny@ufl.edu)) [C-15]

10:15 **Performance of leaf wetness sensors for applicability in decision-support systems for management of citrus, blueberry, and strawberry diseases.** André Bueno Gama and Natalia A. Peres. UF/ IFAS Gulf Coast Research and Education Center, Wimauma, FL. ([nperes@ufl.edu](mailto:nperes@ufl.edu)) [C-16]

10:30 **Chemical control of citrus rust mite, *Phyllocoptruta oleivora* (Ashmead).** Jawwad Qureshi, Barry Kostyk. UF/ IFAS Southwest Florida Research and Education Center, Immokalee, FL. ([jawwadq@ufl.edu](mailto:jawwadq@ufl.edu)) [C-17]

10:45 **Incidence of Asiatic Citrus Canker on Poncirus And Poncirus Hybrid Accessions in A Florida Field Planting.** Ed Stover<sup>1</sup>, Chandrika Ramadugu<sup>2</sup>, Mikeal Roose<sup>2</sup>, Richard F. Lee<sup>3</sup>, Manjunath Keremane<sup>3</sup>. <sup>1</sup>USDA-ARS, U.S. Horticultural Research Laboratory, Ft. Pierce, FL. <sup>2</sup>University of California, Riverside, CA, <sup>3</sup>USDA-ARS National Clonal Germplasm Repository for Citrus and Dates, Riverside, CA. ([ed.stover@usda.gov](mailto:ed.stover@usda.gov)) [C-18]

11:00 **End of Session**

# Handling and Processing Section

**Tie Liu**

Presiding

[tieliu@ufl.edu](mailto:tieliu@ufl.edu)

## Monday Morning Session

(9:50 AM – 12:00 PM)

9:50 **Welcome and Introductions**, Tie Liu

10:00 **Effect of ‘Tahiti’ Lime Fruit Size on the Percent of Juice Content Measured by the Standard USDA Volume Method and an Alternative Weight Method.**

Jonathan H. Crane<sup>1</sup>, Steven A. Sargent<sup>2</sup>, Carlos F. Balerdi<sup>3</sup>, and Jay Harrison<sup>4</sup>. <sup>1</sup>UF/IFAS Tropical Research and Education Center, Homestead, FL, <sup>2</sup>UF/IFAS Horticultural Sciences Department, Gainesville, FL, <sup>3</sup>UF/IFAS Miami-Dade County Extension, Homestead, FL, <sup>4</sup>UF/IFAS Department of Statistics, Gainesville, FL. ([jhcr@ufl.edu](mailto:jhcr@ufl.edu)) [HP-1]

10:15 **Steam Explosion of Orange Juice Processing Residues and their Potential Value.**

Randall G. Cameron, John A. Manthey<sup>1</sup>, and Christina Dorado<sup>1</sup>. <sup>1</sup>USDA-ARS, U.S. Horticultural Research Laboratory, Ft. Pierce, FL ([christina.dorado@usda.gov](mailto:christina.dorado@usda.gov)) [HP-2]

10:30 **Produce Safety in Florida: Education, Outreach, and Compliance.** Taylor Langford<sup>1</sup>,

Joyjit Saha<sup>3\*</sup>, Leah Tapley<sup>2</sup>, Matthew Krug<sup>4</sup>, Travis Chapin<sup>3</sup>, Renée Goodrich<sup>1</sup>, and Michelle Danyluk<sup>3</sup>. <sup>1</sup>UF/IFAS Food Science and Human Nutrition Department, UF/ IFAS Gainesville, FL, <sup>2</sup>Florida Department of Agriculture and Consumer Services, Bartow, FL, <sup>3</sup>UF/IFAS Citrus Research and Education Center, Lake Alfred, FL, <sup>4</sup>UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL. ([mddanyluk@ufl.edu](mailto:mddanyluk@ufl.edu)) [HP-3]

10:45 **Using Omics Approaches to Understand Postharvest Storage Conditions of Broccoli**

**(*Brassica oleracea*).** Yogesh Ahlawat and Tie Liu. UF/IFAS Horticultural Sciences Department, Gainesville, FL. ([tieliu@ufl.edu](mailto:tieliu@ufl.edu)) [HP-4]

11:00 **Biology and abundance of Cowpea weevil (*Callosobruchus maculatus*) on different**

**leguminous seeds.** Garima Garima and Dakshina Seal. UF/IFAS Tropical Research and Education Center, Homestead, FL. ([garima.garima@ufl.edu](mailto:garima.garima@ufl.edu)) [HP-5]

11:15 **Food Safety and Regulatory Guidance for Florida Food Processors Operating Out of Shared-Use Commercial Kitchens.** Sarah Ellis<sup>1</sup>, Jennifer Hagen<sup>2</sup>, Jessica Ryals<sup>3</sup>, Matt Krug<sup>4</sup>. <sup>1</sup>UF/IFAS Citrus County Extension, Lecanto, FL, <sup>2</sup> UF/IFAS Lee County Extension, Ft. Myers, FL, <sup>3</sup>UF/IFAS Collier County Extension, UF/ IFAS Naples, FL. <sup>4</sup>UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL. ([mkrug@ufl.edu](mailto:mkrug@ufl.edu)) [HP-6]

11:30 **Handling and Processing Section Business Meeting**

12:00 **Lunch** (on your own)

## Monday Afternoon Session

(1:20 PM – 2:00 PM)

1:20 **Welcome and Introductions**, Tie Liu

### Student Oral Competition

1:30 **Recovery of Ripening by Mature Green Banana Fruit Following 1-Methylcyclopropene (1-MCP) Application.** Lan-Yen Chang and Jeffrey Brecht. UF/IFAS Horticultural Sciences Department, Gainesville, FL. ([lanyen.chang@ufl.edu](mailto:lanyen.chang@ufl.edu)) [HP-7]

1:45 **Sensory and Quality Analysis of HLB-Tolerant Citrus Cultivar Blends for Juice Production.** Charles Sims<sup>1</sup>, Renée Goodrich-Schneider<sup>1</sup>, Yu Wang<sup>2</sup>, Zhifeng Gao<sup>1</sup>, and Stephanie Hricik<sup>1</sup>. <sup>1</sup>UF/IFAS Food Science and Human Nutrition Department, Gainesville, FL, <sup>2</sup>UF/IFAS Citrus Research and Education Center, Lake Alfred, FL. ([goodrich@ufl.edu](mailto:goodrich@ufl.edu)) [HP-8]

2:00 **End of Section**

# Krome Memorial Institute

**Ron Rice**  
Presiding  
[rwr@ufl.edu](mailto:rwr@ufl.edu)

## Monday Morning Session

(10:00 AM – 12:00 PM)

9:50 **Welcome and Introductions**, Ron Rice

### A – Tropical Fruits

- 10:00 **Evaluation of Vigor of 4 Mango Cultivars in South Florida.** Noris Ledesma<sup>1</sup> and Javier Medina<sup>2</sup>. <sup>1</sup>UF/IFAS Tropical Research & Education Center, Homestead, FL. <sup>2</sup>Almería University, Almería, Spain. ([norisledesma.mango@gmail.com](mailto:norisledesma.mango@gmail.com)) [K-1]
- 10:15 **Current Recommendations for Control of Laurel Wilt and its Ambrosia Beetle Vectors in Florida’s Commercial Avocado Groves.** [Jonathan H. Crane](mailto:jhcr@ufl.edu)<sup>1</sup>, Daniel Carrillo<sup>1</sup>, Edward A. Evans<sup>1</sup>, Romina Gazis<sup>1</sup>, Bruce Schaffer<sup>1</sup>, Fredy Ballen<sup>1</sup> and Jeff Wasielewski<sup>2</sup>. <sup>1</sup>UF/IFAS Tropical Research & Education Center, Homestead, FL. <sup>2</sup>UF/IFAS Miami-Dade County Extension, Homestead, FL. ([jhcr@ufl.edu](mailto:jhcr@ufl.edu)) [K-2]
- 10:30 **The Introduction and Utilization of Kasturi to South Florida (*Mangifera casturi*).** [Noris Ledesma](mailto:norisledesma.mango@gmail.com)<sup>1</sup>, Tomas Ayala Silva<sup>2</sup> and Stephen Brady<sup>3</sup>. <sup>1</sup>UF/IFAS Tropical Research and Education Center, Homestead, FL. <sup>2</sup>USDA, Mayaguez, Puerto Rico. <sup>3</sup>Naples Botanical Garden, Naples, FL. ([norisledesma.mango@gmail.com](mailto:norisledesma.mango@gmail.com)) [K-3]
- 10:45 **Establishing Management Practices to Reduce Economic Losses Caused by Major Diseases in the Production of Dragon Fruit in Florida.** [Tiago P. Lelis](mailto:r.gazisseregina@ufl.edu)<sup>1</sup>, Cheng-Fang Hong<sup>2</sup>, Shouan Zhang<sup>1</sup>, Jonathan H. Crane<sup>1</sup> and Romina Gazis<sup>1</sup>. <sup>1</sup>UF/IFAS Tropical Research & Education Center, Homestead, FL. <sup>2</sup>National Chung Hsing University, Taichung City, Taiwan. ([r.gazisseregina@ufl.edu](mailto:r.gazisseregina@ufl.edu)) [K-4]
- 11:00 **‘Jumbo Kesar’ Mango for South Florida.** Noris Ledesma<sup>1</sup> and Bhaskar Savani<sup>2</sup>. <sup>1</sup>UF/IFAS Tropical Research and Education Center, Homestead, FL. <sup>2</sup>Savani Farms, Fort Washington, Pennsylvania. ([norisledesma.mango@gmail.com](mailto:norisledesma.mango@gmail.com)) [K-5]

## B – Student Presentations

11:15 **Artificial Chilling for Blackberry Production in Florida.** Christianah Oladoye, Jeffrey Williamson and Guodong Liu. UF/IFAS Horticultural Sciences Department, Gainesville, FL. ([guodong@ufl.edu](mailto:guodong@ufl.edu)) [K-6]

11:30 **Sustainable Strategies to Combat the Papaya Ringspot Virus.** Sarah E. Brewer and Alan H. Chambers. UF/IFAS Tropical Research and Education Center, Homestead, FL. ([sarah.brewer@ufl.edu](mailto:sarah.brewer@ufl.edu)) [K-8]

12:00 **Lunch** (on your own)

## Monday Afternoon Session

(1:20 PM – 3:30 PM)

1:20 **Welcome and Introductions**, Ron Rice

## C – Crop Management (Historical)

1:30 **University of Florida/IFAS, Tropical Research and Education Center – Efforts to Register Pest Control Substances for Florida’s Tropical Fruit Industry, 1993-2020.** Jonathan H. Crane<sup>1</sup>, Rebecca Tannenbaum<sup>1</sup> and Janine M. Spies<sup>2</sup>. <sup>1</sup>UF/IFAS Tropical Research and Education Center, Homestead, FL. <sup>2</sup>IR-4 Southern Region, UF/ IFAS Food and Environmental Toxicology Lab, Gainesville, FL. ([jhcr@ufl.edu](mailto:jhcr@ufl.edu)) [K-9]

## D – Vanilla Breeding

1:45 **Vanilla Chromosome Counting – Techniques and Implications.** Maria Brym and Alan Chambers. UF/IFAS Tropical Research and Education Center, Horticultural Sciences Department, Homestead, FL. ([maria.brym@ufl.edu](mailto:maria.brym@ufl.edu)) [K-10]

2:00 **Breeding Specialty Vanilla for Production in the United States.** Alan Chambers. UF/IFAS Tropical Research & Education Center, Horticultural Sciences Department, Homestead, FL. ([ac@ufl.edu](mailto:ac@ufl.edu)) [K-11]

## E – Subtropical Fruits and Other Crops

- 2:15 **O47-16-10: A PD Resistant and Premium Wine Producing Bunch Grape Hybrid with Later Bud Burst in Spring.** Z. Ren, V. Tsoleva and I. El-Sharkawy. Florida A&M University, Tallahassee, FL. ([zhongbo.ren@famuedu](mailto:zhongbo.ren@famuedu)) [K-12]
- 2:30 **An Improved Protocol for Efficient In-Vitro Micro-propagation of Two Blueberry Cultivars.** Matthew Creech<sup>1\*</sup>, Hanna Baz<sup>1</sup>, Abigail Plontke<sup>1</sup> and Heqiang Huo<sup>1,2</sup>. <sup>1</sup>UF/IFAS Mid-Florida Research and Education Center, Apopka, FL. <sup>2</sup>UF/IFAS Department of Environmental Horticulture, Gainesville, FL. ([mccreech@ufl.edu](mailto:mccreech@ufl.edu)) [K-13]
- 2:45 **Low Cost High Tunnel versus Open Field Production of Organically Grown Strawberries in North Florida: A Three-Year Evaluation.** Alex Bolques<sup>1</sup>, Gilbert Queeley<sup>2</sup>, Fanny Ospina<sup>1</sup> and Vonda Richardson<sup>2</sup>. <sup>1</sup>Florida A&M University, Research and Extension Center, Quincy, FL. <sup>2</sup>Florida A&M University Cooperative Extension Program, Tallahassee, FL. ([alejandrobolques@famuedu](mailto:alejandrobolques@famuedu)) [K-14]
- 3:00 **Enhanced Rooting for Begonia Propagation by the Application of Soluble Carbon-Nanoparticles.** Matthew Creech<sup>1\*</sup>, Hanna Baz<sup>1</sup>, Abigail Plontke<sup>1</sup> and Heqiang Huo<sup>1,2</sup>. <sup>1</sup>UF/IFAS Mid-Florida Research and Education Center, Apopka, FL. <sup>2</sup>UF/IFAS Department of Environmental Horticulture, Gainesville, FL. ([mccreech@ufl.edu](mailto:mccreech@ufl.edu)) [K-15]
- 3:15 **Krome Memorial Section Business Meeting:** Ron Rice and Ali Sarkhosh  
We need to finalize our next Krome VP-Elect!
- 3:30 **Adjourn** Krome Memorial Institute



# Ornamental, Garden & Landscape Section

Wagner Vendrame

Presiding

[vendrame@ufl.edu](mailto:vendrame@ufl.edu)

## Monday Morning Session

(9:50 AM – 12:15 PM)

9:50 **Welcome and Introductions**, Wagner Vendrame

### A – Genetics & Breeding

---

10:00 **UF-1013-1' ['Luscious(R) Royale Red Zone(TM)]: An Infertile Cultivar of Lantana camara.** [Zhanao Deng](#)<sup>1</sup>, Sandra B. Wilson<sup>2</sup>, Xiaobao Ying<sup>1</sup>, Chunxian Chen<sup>3</sup>, Rosanna Freyre<sup>2</sup>, Victor Zayas<sup>2</sup>, and David M. Czarnecki II<sup>1</sup>. <sup>1</sup>UF/IFAS Gulf Coast Research and Education Center, Department of Environmental Horticulture, Wimauma, FL, <sup>2</sup>UF/IFAS Department of Environmental Horticulture, Gainesville, FL, <sup>3</sup>USDA-ARS, Fruit and Tree Nut Research Laboratory, Byron, GA ([zdeng@ufl.edu](mailto:zdeng@ufl.edu)) [OGL-1]

### B – Micropropagation

---

10:15 **Micropropagation of a Novel Cordyline Hybrid.** [David Beleski](#), Wagner Vendrame, Jian Jian Xu, Damaris Hernandez, Jane Nguyen, Daniella Menendez. UF/IFAS Department of Environmental Horticulture, Gainesville, FL ([dbeleski@ufl.edu](mailto:dbeleski@ufl.edu)) [OGL-2]

### C – Extension Programs

---

10:30 **Provoking Behavior Change in Residential Fertilizer Users.** [Tina Mcintyre](#), UF/IFAS Extension Seminole County, Sanford, FL ([k.mcintyre@ufl.edu](mailto:k.mcintyre@ufl.edu)) [OGL-3]

10:45 **Shifting Tides: Lessons Learned from Virtual Plant Clinics.** [Michelle Leonard-Mularz](#), UF/IFAS Monroe County Extension Service, Key West, FL ([mleonard@ufl.edu](mailto:mleonard@ufl.edu)) [OGL-4]

### D – Pests, Diseases and Weed Control

---

11:00 **Estimating Neonicotinoid Insecticides Related Information Treatment Effects on Consumers' Preferences for Ornamental Plant.** [Hayk Khachatryan](#), Xuan Wei, and Alicia

Rihn, <sup>1</sup>UF/IFAS Mid-Florida Research and Education Center, Apopka, FL ([hayk@ufl.edu](mailto:hayk@ufl.edu)) [OGL-5]

11:15 **Selecting Preemergent Herbicides for Use in Container-grown Amaryllis.** Shawn Steed<sup>1</sup> and Michael Sweet. <sup>1</sup>UF/IFAS Hillsborough County Extension, Seffner, FL, <sup>2</sup>Sweet Dream Amaryllis, Valrico, FL ([ststeed@ufl.edu](mailto:ststeed@ufl.edu)) [OGL-6]

## E – Student Presentations

---

11:30 **Understanding of Genome Size and Chromosome Number Variation in *Begonia*.** Julian Ginori<sup>1,2</sup>, Heqiang Huo<sup>1,2</sup>, Sandra Wilson<sup>1</sup> Zhanao Deng<sup>1,3</sup>. <sup>1</sup>UF/IFAS Department of Environmental Horticulture, Gainesville, FL, <sup>2</sup>UF/IFAS Mid-Florida Research and Education Center, Apopka, FL, <sup>3</sup>UF/IFAS Gulf Coast Research and Education Center, Wimauma, FL ([julian08@ufl.edu](mailto:julian08@ufl.edu)) [OGL-7]

11:45 **Morphological and Cytological Characterization of Six Porterweed Selections.** Renjun Qian<sup>1</sup>, Stephen B. Parrish<sup>2</sup>, Sandra B. Wilson<sup>3</sup>, and Zhanao Deng<sup>2</sup>. <sup>1</sup>Zhejiang Institute of Subtropical Crops, Zhejiang, China, <sup>3</sup>UF/IFAS Gulf Coast Research and Education Center, Department of Environmental Horticulture, UF, IFAS, Wimauma, FL, <sup>3</sup>UF/IFAS Department of Environmental Horticulture, Gainesville, FL ([zdeng@ufl.edu](mailto:zdeng@ufl.edu)) [OGL-8]

12:00 **Lunch** (on your own) and **Adjourn** Ornamental, Garden and Landscape Section

# Vegetable Section

**Germán Sandoya**

Presiding

([gsandoyamiranda@ufl.edu](mailto:gsandoyamiranda@ufl.edu))

## Monday Morning Session

(9:50 AM – 12:00 PM)

9:50 **Welcome and Introduction**, Germán Sandoya

### A. Production Systems

- 10:00 **Promotion of Hops as an Alternative Crop in Florida using Group and Mass Media Extension Approaches.** Maríel Gallardo<sup>1</sup>, Aleyda Acosta-Rangel<sup>1</sup>, Amanda Rivera<sup>1</sup>, Zhanao Deng<sup>1</sup>, Jack Rechcigl<sup>1</sup>, Simon Bollin<sup>2</sup>, and Shinsuke Agehara<sup>1</sup>. <sup>1</sup>UF/IFAS Gulf Coast Research and Education Center, Wimauma, FL, <sup>2</sup>Agriculture Industry Development, Hillsborough County Economic Development Department, Tampa, FL. ([sagehara@ufl.edu](mailto:sagehara@ufl.edu)) [V-1]
- 10:15 **Lettuce in Advanced Production Systems as an Early Fall Alternative Crop.** Gary K. England<sup>1</sup>, German Sandoya<sup>2</sup>, Wendy Mussoline<sup>3</sup> and Gustavo Kreutz<sup>2</sup>. <sup>1</sup>UF/IFAS Hastings Agricultural Extension Center, Hastings, FL, <sup>2</sup>UF/IFAS Everglades Research and Education Center, Wimauma, FL, <sup>3</sup>UF /IFAS Flagler County Extension, Bunnell, FL. ([gke@ufl.edu](mailto:gke@ufl.edu)) [V-2]
- 10:30 **Gas exchange responses of hops to hill spacing and nitrogen fertilization at different development stages in a subtropical climate.** Aleyda Acosta Rangel<sup>1</sup>, Tiare Silvasy<sup>1</sup>, Jack Rechcigl<sup>1</sup>, Simon Bollin<sup>2</sup> and Shinsuke Agehara<sup>1</sup>. <sup>1</sup>UF/IFAS Gulf Coast Research and Education Center, UF/IFAS, Balm, FL, <sup>2</sup>Agriculture Industry Development, Hillsborough County Economic Development Department, Tampa, FL. ([sagehara@ufl.edu](mailto:sagehara@ufl.edu)) [V-3]
- 10:45 **Enhancing Strawberry Productivity using Drip Irrigation, Plastic Mulch, and New Cultivars in Bangladesh.** Prosanta K. Dash<sup>1</sup>, Carlene A. Chase<sup>2</sup>, Shinsuke Agehara<sup>3</sup>, Lincoln Zotarelli<sup>2</sup>. <sup>1</sup>Faculty of Agrotechnology Discipline, Life Science School, Khulna University, Khulna-9208, Bangladesh, <sup>2</sup>UF/IFAS Horticultural Sciences Department,

Gainesville, FL, <sup>3</sup>UF/IFAS Gulf Coast Research and Education Center, Wimauma, FL.  
([cachase@ufl.edu](mailto:cachase@ufl.edu)) [V-4]

11:00 **Characterization of leaf gas exchange in hops grown in the subtropical production system with supplemental lighting.** Aleyda Acosta Rangel<sup>1</sup>, Jack Rechcigl<sup>1</sup>, and Shinsuke Agehara<sup>1</sup>. <sup>1</sup>UF/IFAS Gulf Coast Research and Education Center, Wimauma, FL.  
([sagehara@ufl.edu](mailto:sagehara@ufl.edu)) [V-5]

## B. Germplasm and Genetics 1

11:15 **Globe Artichoke Variety Trials Using Controlled-Release Fertilizer in Northeast Florida.** Evelyn “Prissy” Fletcher<sup>1</sup> and Gary England<sup>2</sup>. <sup>1</sup>UF/IFAS St. Johns County Extension, St. Augustine, FL, <sup>2</sup>UF/IFAS Hastings Agriculture and Extension Center, Hastings, FL.  
([pfletch@ufl.edu](mailto:pfletch@ufl.edu)) [V-6]

11:30 **Developing Interspecific Bridge Lines between *Cucurbita pepo* and *C. moschata*.** Yuqing Fu<sup>1</sup>, Vincent Michael, Pamela Moon, Christine Waddill, Shouan Zhang and Geoffrey Meru. UF/IFAS Tropical Research and Education Center, Homestead, FL.  
([yuqingf@ufl.edu](mailto:yuqingf@ufl.edu)) [V-7]

11:45 **The genetic diversity of the genus *Lactuca* for Fusarium wilt.** Gulnoza Hisamutdinova <sup>1</sup>, Jesse J. Murray <sup>1,2</sup>, Richard N. Raid <sup>1,3</sup>, Maria J. Truco<sup>4</sup>, Germán V. Sandoya <sup>1,2</sup>. <sup>1</sup>UF/IFAS Everglades Research and Education Center, Belle Glade, FL, <sup>2</sup>UF/IFAS Horticultural Sciences Department Gainesville, FL, <sup>3</sup>UF/IFAS Department of Plant Pathology Gainesville, FL, <sup>4</sup>University of California Davis Genome Center, Davis, CA.  
([gsandoyamiranda@ufl.edu](mailto:gsandoyamiranda@ufl.edu)) [V-8]

12:00 **Lunch** (on your own)

## Monday Afternoon Session

(1:20 PM – 4:45 PM)

1:20 **Welcome back and introductions** - Germán Sandoya

## C. Germplasm and Genetics 2

1:30 **Resistance to Cucurbit Leaf Crumple Virus in Squash.** Geoffrey Meru<sup>1</sup>, Emily Wang<sup>1</sup>, Yuqing Fu<sup>1</sup>, Renato Carvalho<sup>2</sup>, Melanie Kalischuk<sup>2</sup>, and Matthews Paret<sup>2</sup>. <sup>1</sup>UF/IFAS Tropical Research and Education Center, Homestead, FL, <sup>2</sup>UF/IFAS North Florida Research and Education Center, Quincy FL. ([gmeru@ufl.edu](mailto:gmeru@ufl.edu)) [V-9]

- 1:45 **QTL-seq for rapid mapping of genomic regions associated with Zucchini Yellow Mosaic Virus resistance in squash.** Shrestha Swati, Yuqing Fu, Vincent Michael, Geoffrey Meru. UF/IFAS Tropical Research and Education Center, Homestead, FL 33031. ([s.shrestha@ufl.edu](mailto:s.shrestha@ufl.edu)) [V-10]

## D. Pest Management 1

- 2:00 **How economically important are thrips (Thysanoptera: Thripidae) to vegetable growers of South Florida?** Dakshina Seal, Rafia Khan, Cathie Sabines, Rosan Adhikari and Shawbeta Seal. UF/IFAS, Tropical Research and Education Center, Homestead, FL ([dseal3@ufl.edu](mailto:dseal3@ufl.edu)) [V-11]
- 2:15 **Alternative application strategy for nematode management in vegetable crops.** Sarah da Silva Benevenuto, Joshua Freeman, Rui Yang. UF/IFAS North Florida Research and Education Center, Quincy, FL. ([joshuafr@ufl.edu](mailto:joshuafr@ufl.edu); [sbenevenuto@ufl.edu](mailto:sbenevenuto@ufl.edu)) [V-12]
- 2:30 **Management of diamondback moth, *Plutella xylostella* (Lepidoptera: Plutellidae) by using reduced-risk insecticides.** Rafia A. Khan, Dakshina Seal, Cathie Sabines and Showbeta Seal. UF/IFAS Tropical Research and Education Center, Homestead, FL. ([rkhan@ufl.edu](mailto:rkhan@ufl.edu)) [V-13]

## E. Student Presentations

- 2:45 **Effect of a Multispecies Cover Crop on Root Colonization by *Arbuscula Mycorrhizal Fungi*.** Thioro Fall<sup>1</sup>, Guodong Liu<sup>1</sup>, Elias Bassil<sup>2</sup>, Yuncong Li<sup>2</sup>, Bruce Schaffer<sup>2</sup>, Kelly Morgan<sup>3</sup>, and Andy Ogram<sup>4</sup>. <sup>1</sup>UF/IFAS Horticultural Sciences Department, Gainesville, FL, <sup>2</sup>UF/IFAS Tropical Research and Education Center, Homestead, FL, <sup>3</sup>UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL, <sup>4</sup>UF/IFAS Soil and Water Sciences Department, Gainesville, FL. ([guodong@ufl.edu](mailto:guodong@ufl.edu); [tfall@ufl.edu](mailto:tfall@ufl.edu)) [V-14]
- 3:00 **Post-planting Root Growth Dynamics and Morphology of Bare-root and Plug Strawberry Transplants and Their Impacts on Field Performance.** Jose Hernandez-Monterroza and Shinsuke Agehara. UF/IFAS Gulf Coast Research and Education Center, UF/IFAS, Wimauma, FL. ([sagehara@ufl.edu](mailto:sagehara@ufl.edu); [josev.hernandez@ufl.edu](mailto:josev.hernandez@ufl.edu)) [V-15]
- 3:15 **QTL mapping of *Phytophthora* crown rot resistance in squash.** Michael Vincent Njung'e<sup>1</sup>, Yuqing Fu<sup>1</sup> and Geoffrey Meru<sup>1</sup>. <sup>1</sup>Tropical Research and Education Center, UF/IFAS, Homestead, FL. ([michael.vn@ufl.edu](mailto:michael.vn@ufl.edu)) [V-16]
- 3:30 **Vegetative and Reproductive Response of Long Bean and Luffa to Different Level of Nitrogen Input in High Tunnel.** Yanlin Wang<sup>1</sup>, Guodong Liu<sup>1</sup>, Gabriel Maltais-Landry<sup>2</sup>, Bala Rathinasabapathi<sup>1</sup>, and Steven A. Sargent<sup>1</sup>. <sup>1</sup>UF/IFAS Horticultural Sciences

Department, Gainesville, FL, <sup>2</sup>F/IFAS Soil and Water Sciences Department, Gainesville, FL. ([guodong@ufl.edu](mailto:guodong@ufl.edu); [yanlinewang66@ufl.edu](mailto:yanlinewang66@ufl.edu)) [V-17]

- 3:45 **Exogenous Gibberellic Acid and Cytokinin Effects on Budbreak, Flowering, and Yield of Blackberry Grown under Subtropical Climatic Conditions.** Syuan-You Lin and Shinsuke Agehara. UF/IFAS Gulf Coast Research and Education Center, UF/IFAS, Wimauma, FL. ([sagehara@ufl.edu](mailto:sagehara@ufl.edu)) [V-18 and K-16]
- 4:00 **Vegetable Business Meeting** - Germán Sandoya, VP and Lincoln Zotarelli, VP-Elect. Please volunteer to be a VP-Elect!

## F. Agricultural Engineering and Precision Agriculture

- 4:30 **Application of sUAV to Improving Vegetable Crop Management.** Qingren Wang. UF/IFAS Extension Miami-Dade County. ([qrwang@ufl.edu](mailto:qrwang@ufl.edu)) [V-19]
- 4:45 End of Monday Session

## Tuesday Morning Session

(9:50 AM – 11:45 AM)

- 9:50 **Welcome and introductions**, Germán Sandoya

## G. Nutrient Management

- 10:00 **Evaluation of Biostimulant Products for Tomato Production in Florida.** Weining Wang, Christopher Delcastillo, Aleyda Acosta-Rangel, Syuan-You Lin, Jose Hernandez-Monterroza, Mariel Gallardo, and Shinsuke Agehara. UF/IFAS Gulf Coast Research and Education Center, Wimauma, FL. ([sagehara@ufl.edu](mailto:sagehara@ufl.edu)) [V-20]
- 10:15 **Rapid Identification of Phosphorous-Efficient Genotypes from Commercial Tomato Varieties.** Guodong Liu. UF/IFAS Horticultural Sciences Department, Gainesville, FL ([guodong@ufl.edu](mailto:guodong@ufl.edu)) [V-21]
- 10:30 **Effect of IN-M1 Concentric® on Plant Growth and Yield of Tomato.** Qingchun Liu and Shouan Zhang. UF/IFAS Tropical Research and Education Center, Homestead, FL. ([szhang0007@ufl.edu](mailto:szhang0007@ufl.edu)) [V-22]
- 10:45 **Physiological, growth and yield responses of yellow squash and snap bean to Potassium and Zinc foliar fertilizer.** Ana I. Vargas, Dakshina Seal, and Bruce Schaffer.

TUF/IFAS Tropical Research and Education Center, Homestead, FL. ([dseal3@ufl.edu](mailto:dseal3@ufl.edu)) [V-23]

## H. Pest Management 2

- 11:00 **Management of the Pepper Weevil, *Anthonomus eugeni* Cano (Coleoptera: Curculionidae) using Bio-rational Insecticides in Combination with other Management Strategies.** Victoria O. Adeleye<sup>1</sup>, Dakshina Seal<sup>1</sup>, Oscar Liburd<sup>2</sup>, Heather McAuslane<sup>2</sup> and Hans Alborn<sup>3</sup>. <sup>1</sup>UF/IFAS Tropical Research and Education Center, Homestead, FL, <sup>2</sup>UF/IFAS Entomology and Nematology Department, Gainesville, FL, <sup>3</sup>UUSDA-ARS, Center for Medical, Agricultural and Veterinary Entomology, Gainesville, FL. ([vadeleye@gmail.com](mailto:vadeleye@gmail.com)) [V-24]
- 11:15 **Management of pepper weevil *Anthonomus eugeni* Cano using rotations of insecticides.** Jawwad A. Qureshi and Barry Kostyk. UF/IFAS Southwest Florida Research and Education Center, UF/IFAS, Immokalee, FL. ([jawwadq@ufl.edu](mailto:jawwadq@ufl.edu)) [V-25]
- 11:30 **Distribution pattern of Thrips (Thysanoptera: Thripidae) and Tobacco streak virus in snapbean within South Florida.** Rosan Adhikari, Dakshina R. Seal, Rafia A. Khan. UF/IFAS Tropical Research and Education Center, Homestead, FL. ([adhikarirosan@ufl.edu](mailto:adhikarirosan@ufl.edu)) [V-26]
- 11:45 **Adjourn Vegetable Section**
- 12:00 **End of Meeting.** See you next year in Daytona Beach for the 133rd FSHS annual meeting!