

FLORIDA STATE HORTICULTURAL SOCIETY

2019



2019 Program Contents

Program Overview	
2018-2019 FSHS Board of Directors	
2019 Meeting Facilitators	7
Meeting Sponsors	7
Patron Members	
Sectional Vice-Presidents	9
Presentations, Publications and Submission Guidelines	8
Student Competitions and Awards	
Technical Program Schedule	
Poster Session	10
Agroecology & Natural Resources	12
<u>Citrus</u>	15
Handling & Processing	19
Krome Memorial Institute	29
Ornamental, Garden, & Landscape	24
Vegetable	33
In-Service Training	
Sheraton North Orlando Hotel Map	

Program Overview

Registration Desk Hours –Oscar Wilde Foyer 1

Registration De	sk nouis oscul what loyer i	
Sunday June 9	2:00PM—6:00 PM	
Monday June 10	7:30 AM—5:00 PM	
Tuesday June 12	8:00 AM—12:00 PM	
Sunday Afterno	on—June 9	
9:00—1:00	ASHS Certified Horticulture Exam	Beaufort
1:30—3:30	FSHS Board of Directors Meeting	Beaufort
1:00—3:00	Poster Session Set up, Taylor Clem	Oscar Wilde Foyer 1
1:00—3:00	Master Gardener Super Session <i>Registration 30 minutes prior to start</i>	Oscar Wilde 1
4:00—5:00	Opening Ceremony, Eric Simonne	Oscar Wilde 1
4:15—4:45	Speaker: Holly Bell , Director of Cannabis FDACS	
4:45—5:00	Awards Ceremony	
5:00—6:00	Welcome Reception with Miss Florida Citrus 2019: Michaela McLean	Bloom Café

Monday Morning—June 10

8:00—8:30	Coffee & Tea	Oscar Wilde Foyer 1
8:30—9:45	General Session	Oscar Wilde 1
8:30	Welcome & Presidential Address: Gene McAvoy, FSHS President	
9:00	Discussion—FSHS Board of Directors and Members " Vision for the Future of FSHS " Where do we go from here?	
9:45	End of General Session	

Concurrent Monday Morning Sessions:

9:50—12:00	Agroecology & Natural Resources	a
	Agroecology & Matural Resources	Swift
9:50—12:00	<u>Citrus</u>	Oscar Wilde 4
9:50—12:00	Handing & Processing	Oscar Wilde 3
9:50—12:00	Krome Memorial Institute	Beaufort
9:50—12:00	Ornamental, Garden, & Landscaping	Oscar Wilde 2
9:50—12:00	Vegetable	Oscar Wilde 1
Monday Lunch		
12:00—1:20	Lunch (on your own)	
Monday Aftern	ioon	
Concurrent Mo	nday Afternoon Sessions:	
1:20—4:30	Agroecology & Natural Resources	Swift
1:20—4:15	Citrus	Oscar Wilde 4
1:20—4:00	Handing & Processing	Oscar Wilde 3
1:20—4:45	Krome Memorial Institute	Beaufort
1:20—4:15	Ornamental, Garden, & Landscaping	Oscar Wilde 2
1:20—5:00	<u>Vegetable</u>	Oscar Wilde 1
Monday Evenin	8	
5:15—6:15	Reception (Included in paid conference registration)	Bloom Café
5:00—5:30	Poster Session—Posters moved into Café for viewing	Bloom Café
Tuesday Morni	ng —June 11	
7:00—8:15	Horticultural Crops Breakfast (Event ticket required)	Joyce 1 & 2
	Invited Speaker: Dr. Nicole Steadman , Professor, UF/IFAS Department of Agricultural Education and	

Communication

8:30—9:45	FSHS Annual Business Meeting	Oscar Wilde 1
9:30	Coffee Break	Oscar Wilde Foyer 1

Concurrent Tuesday Morning Sessions:

	Agroecology & Natural Resources	
9:50—11:30	<u>Citrus</u>	Oscar Wilde 4
9:50—11:30	Handing & Processing	Oscar Wilde 3
9:50—11:30	Krome Memorial Institute	Beaufort
9:50—11:30	Ornamental, Garden, & Landscaping	Oscar Wilde 2
9:50—11:45	Vegetable—Session 1	Oscar Wilde 1
9:50—12:00	Vegetable—Session 2	Swift

Tuesday Lunch

12:00—1:00	Extension Luncheon (Event ticket required)	Joyce 1 & 2
	Invited Speakers: Dr. Charles Barrett & Dr. A.J. Reisinger	
	"Overview of Agricultural and Residential Irrigation Management"	

Tuesday Afternoon

1:00—5:00	In-Service Training	Swift
	Agricultural Irrigation, Scheduling,	
	and Use of Soil Moisture Sensor	
	see full agenda at back of program	
1:00—5:00	In-Service Training	Beaufort
	Residential Irrigation and Land-	
	scape Management	
	see full agenda at back of program	

Florida State Horticultural Society 2018-2019 Board of Directors and Ex-Officio Members

Chairman of the Board:	Eric H. Simonne
President:	Gene McAvoy
President-Elect:	Jeffrey Williamson
Sectional Vice Presidents	
Agroecology & Natural	
Resources:	Zachary Brym
Citrus:	Jawwad Qureshi
Handling & Processing:	Yu Wang
Krome Memorial Institute:	Alan Chambers
Ornamental, Garden and	
Landscape:	Wayne Hobbs
Vegetable:	Shinsuke Agehara
Secretary & Treasurer:	Jamie Burrow
Proceedings Editor:	Mary Lamberts
Marketing Coordinator/	Steve Rogers at
Webmaster:	EcoStat, LLC
Members At-Large:	Eric Waldo
	Adrienne Hunsberger
	· · · · · · ·

Program Coordinator: Cami Esmel McAvoy

6

Florida State Horticultural Society 2019 Meeting Facilitators

Local Arrangements	Kaydie McCormick
Coordinators:	Tina McIntyre
	Richard Tyson
Sponsorship Coordinator:	Gene Albrigo
Student Competitions	
Coordinator:	Michelle Danyluk
CEU Coordinator:	Cami Esmel McAvoy
Poster Session Coordinator:	Taylor Clem
FSHS Newsletter Team:	Tatiana Sanchez
	Alicia Lamborn
	Mark Ritenour

2019 Meeting Sponsors

Platinum Level Sponsor (\$2,000 and above)

Citrus Research and Development Foundation, Inc. UF/IFAS Horticultural Sciences Department

Gold Level Sponsor (\$1,000—\$1,999)

Bayer CropScience Valent BioScience

Silver Level Sponsor (\$500—\$999)

Plant Food Systems

Bronze Level Sponsor (under \$500)

McLean Agricultural Sciences

Please see the full list of sponsors on the FSHS Website, poster section, and meeting rooms.

7

2019 FSHS Patron Members

Eric Simonne

Anne Plotto

Presentation, Publication and Submission Guidelines

- Full payment of page charges from past years is required before presentations and submissions can be accepted in current year.
- The SENIOR AUTHOR must be a member of the Society, and the PRESENTING AUTHOR of the paper must be registered at the annual meeting (except for invited papers) for papers to be accepted for the Proceedings. Papers not presented at the meeting will not be published.
- Electronic submissions prior to the meeting are highly encouraged and preferred. Manuscripts should be delivered in FINAL electronic form **at the time of the meeting** to the FSHS editor, Mary Lamberts (editors@fshs.org) and copy their appropriate sectional VP.
- Authors may also publish their manuscripts in any of the ASHS journals including *HortTechnology*, *HortScience*, or the *Journal of ASHS*.
- For all submissions, see complete Manuscript Preparation Guide (*http://fshs.org/author-instructions/*) for the Proceedings of the Florid State Horticultural Society.

Attention FSHS Authors

- FSHS welcomes and encourages color pictures and color figures in Proceedings articles.
- Did you know that videos can also be linked to Proceedings articles?
- Color pictures, figures and videos are included FREE of CHARGE in the online Proceedings.

Welcome 2019 FSHS Sectional Vice-Presidents!

• •	Zachary Brym , UF/IFAS Tropical Research and Education Center, brymz@ufl.edu
Citrus:	Jawwad Qureshi, UF/IFAS Southwest Florida Research and Education Center, jawwadq@ufl.edu
Handling & Processing:	Yu Wang , UF/IFAS Citrus Re- search and Education Center, <u>yu.wang@ufl.edu</u>
Krome Memorial Institute:	Alan Chambers, UF/IFAS Tropical Research and Education Center, <u>ac@ufl.edu</u>
Ornamental, Garden, & Landscape:	Wayne Hobbs, UF/IFAS Extension Clay County,
Vegetables:	Shinsuke Agehara, UF/IFAS Gulf

Coast Research and Education Center, <u>sagehara@ufl.edu</u>

9

Technical Program Schedule

Poster Session:

Taylor Clem

Coordinator taylorclem87@ufl.edu

Monday Evening Session

(Authors present posters from 5:00pm –5:30pm during Reception in Bloom Café. Posters will be need to be moved from the Oscar Wilde Foyer 1 to the Café.)

- [P-1] Alternative Crops Extension Program Aims to Enhance Sustainability of Florida Farms. B. Wells* UF/IFAS Extension Brevard County, Cocoa, FL. (bcwells@ufl.edu)
- [P-2] How Much Compost Do Homeowners Produce? A Case Study. A.G.B. Hunsberger*. UF/IFAS Extension Miami-Dade County, Homestead, FL. (aghu@ufl.edu)
- [P-3] Contacts and Work Accounting for Efficient Reporting. T. Sanchez, DPM*. UF/IFAS Extension Alachua County, Gainesville, FL. (tatiana.sanchez@ufl.edu)
- [P-4] Development of Antirrhinum Mutants with Enhanced Axillary Branching with Transposon Transposition. Z. Lian*. UF Environmental Horticulture Department, Gainesville, FL. (lianzhaoyuan@ufl.edu)
- [P-5] Promoting Research-Verified Pollinator Plants to Enhance Overall Pollinator Health. H. Kalaman*. UF Environmental Horticulture Department, Gainesville, FL. (hkalaman@ufl.edu)
- [P-6] Fruit Firmness and Susceptibility to Splitting and Spotted-wing Drosophila on Different Grape Cultivars. A. Rezazadeh^{1*}, E. Stafne², & B. Sampson³. ¹UF/IFAS Extension St. Lucia County, Fort Pierce, FL. ²Mississippi State University Extension, Poplarville, MS. ³United States Department of Agriculture. (amir2558@ufl.edu)
- [P-7] Phenotyping Dual-Purpose Cowpea (Vigna unguiculata L. Walp) for Agronomic Traits. R. Dareus^{1*}, E. Rios¹, Y. Lopez¹, C. Chase², & B. Gouveia³. ¹University of Florida Agronomy Department,

Gainesville, FL, ²University of Florida Horticultural Sciences Department, Gainesville, FL, ³Universidade Federal de Lavras, Lavras, Brazil. (rocheteau.dareus@ufl.edu)

- [P-8] Evaluation of Egg-mass-based Bioassay and Molecular Markers for Identifying Root-know Nematode Resistance in Pepper. D. Padilla^{1*}, M. Maquilan¹², D. Dickson², and B. Rathinasabapathi². ¹University of Florida Horticultural Sciences Department, Gainesville, FL, ²University of Florida Entomology and Nematology Department, Gainesville, FL. (dpadilla@ufl.edu)
- [P-9] The Effect of Chlorine Dioxide (ClO₂) Gas on Reducing Postharvest Decay Caused by *Rhizopus stolonifer* in Strawberries. T. Zhong^{1,2*}, J. Zhang², J. Kou³, X. Sun⁴, J. Bai⁴, J. Brecht⁵, S. Surgent⁵, A. Plotto⁴, and M. Ritenour². ¹Zhuhai College of Jilin University, School of Pharmacy and Food Science, China, ²UF/IFAS Indian River Research and Education Center, ³Agricultural University of Hebei, College of Horticulture, China, ⁴USDA/ARS/USHRL, Fort Pierce, FL. ⁵UF/IFAS Horticultural Sciences Department, Gainesville, FL.

Agroecology & Natural Resources Section

Zachary Brym Presiding brymz@ufl.edu

Monday Morning Session

(9:50 A.M. – 12:00 P.M.) Swift

9:50 Welcome and Introduction, Zachary Brym

A – Plants, Soil and Habitat

- 10:00 How Can We All Get Along? The common goals for the diversity of topics relevant to the new FSHS Agroecology and Natural Resources Section. Zachary Brym*. UF/IFAS Agronomy Department, Tropical Research and Education Center, Homestead, FL. (brymz@ufl.edu) [ANR-1]
- 10:30 Using Soil Moisture Sensors to Conserve Water on Farms. Charles Barrett*. UF/IFAS Extension Regional Specialized Agent, Water Resources, Live Oak, FL. (<u>cebarrett@ufl.edu</u>) [ANR-2]
- 10:45 Utilization of Cover Crops as Indicators for Agroecosystem Evaluation. Stacy Swartz^{1*} and Zachary Brym². ¹ECHO Global Farm, Ft. Myers, FL, ²UF/IFAS Agronomy Department, Tropical Research and Education Center, Homestead, FL. (<u>readers@ufl.edu</u>) [ANR-3]
- 11:00 Using Quantum[™] on Leatherleaf Fern as an IPM Soil Conditioning Tactic to Stimulate Growth. Karen Stauderman^{1*} and David J. Norman². ¹UF/IFAS Extension, Volusia County, Commercial Horticulture Agent II, DeLand, FL, ²UF/IFAS Plant Pathology Department, Assistant Professor, Mid-Florida Research and Education Center, Apopka, FL. (kstauderman@volusia.org) [ANR-4]
- 11:15 Evaluating herbicide efficacy on floating aquatic invaders. Lyn A. Gettys*, Kyle L. Thayer, Ian J. Markovich, Joseph W. Sigmon and Mohsen Tootoonchi. UF/IFAS Agronomy Department, Ft. Lauderdale Research and Education Center, Davie, FL. (lgettys@ufl.edu) [ANR-5]

- 11:30 Plant Diversity at selected areas of the Tropical Research and Education Center, University of Florida, Homestead, and the Educated Concerns for Hunger Organization, N. Ft. Myers. Cliff Martin^{1*}, Stacy Swartz² and Zachary Brym¹, ¹UF/IFAS Agronomy Department, Tropical Research and Education Center, Homestead, FL, ²ECHO Global Farm, Ft. Myers, FL. (cgm@ufl.edu) [ANR-6]
- 11:45 The Magnitude of the Cultivated Flora of Florida. Alan Franck*, College of Arts & Sciences, Florida International University, Miami, FL. (afranck@fiu.edu) [ANR-7]

12:00 Lunch (on your own)

Monday Afternoon Session

(1:20 P.M. – 4:30 P.M.) Swift

1:20 Welcome and Introduction, Zachary Brym

B – Agricultural, Natural, and Food Systems

- 1:30 Linkages and Interactions: A Systems Concept for Agriculture and natural resource management. Zachary Brym*. UF/IFAS Agronomy Department, Tropical Research and Education Center, Homestead, FL. (brymz@ufl.edu) [ANR-8]
- 2:00 *Eumaeus atala* Poey (Florida Atala Butterfly) Native Plant Society Field Days in St Lucie County, FL. Kenneth T. Gioeli*. UF/ IFAS Extension, St. Lucie County. (<u>ktgioeli@ufl.edu</u>) [ANR-9]
- 2:15 Management of Silverleaf Whitefly and Tomato Yellow Leaf Curl Virus with Insecticides in Field Grown Tomatoes. Jawwad Qureshi*, Barry Kostyk, and Monica Triana. UF/IFAS, Southwest Florida Research and Education Center, Immokalee, FL. (jawwadq@ufl.edu) [ANR-10]
- 2:30 Lessons for Florida from Southern Spain Horticulture Tour. Juanita Popenoe^{1*}, Karen Stauderman² and Elizabeth Felter³. ¹UF/ IFAS Extension, Lake County, ²UF/IFAS Extension, Volusia County, ³UF/IFAS Extension, Central District. (jpopenoe@ufl.edu) [ANR-11]
- 2:45 Implementing a Regional Strategy for Confronting the Challenges of a Basin Management Action Plan (BMAP) in North Florida. Rhoda T. Broughton*. UF/IFAS North Florida Research and Education Center, Live Oak, FL. (deonne@ufl.edu) [ANR-12]
- 3:00 Applying Principles of Sustainability and Agroecology to the

Agroecology and Natural Resources Section

Community Garden – A Systems Approach at Derbyshire Place, a Daytona Beach Food Desert. Joseph J. Sewards*. UF/IFAS Extension Volusia County, Deland, FL. (sewards@ufl.edu) [ANR-13]

- **3:15 Urban Agriculture Initiatives in Orange County, Florida.** Richard Tyson*, Caitlyn Glatting and Liz Felter. UF/IFAS Extension Orange County, Orlando, FL. (<u>rvt@ufl.edu</u>) [ANR-14]
- 3:30 Identifying Local Food System Needs and Opportunities. Yvette Goodiel^{1*}, William Messina², Lisa House², Carol Alberts³. ¹UF/IFAS Extension Martin County, Stuart, FL, ²UF/IFAS Food and Resource Economics Department, Gainesville, FL, ³UF/IFAS Extension St. Lucie County, Fort Pierce, FL. (goodiel@ufl.edu) [ANR-15]
- 3:45 Agroecology and Natural Resources Business Meeting. Volunteer to be a VP-Elect!
- 4:15 Collaborative Opportunities in Agroecology and Natural Resources Discussion
- **4:30** End of Section! See you next year.
- 5:00 Poster Session Begins
- 5:15 Reception

Citrus Section

Jawwad Qureshi Presiding jawwadq@ufl.edu

Monday Morning Session

(9:50 A.M. - 12:00 P.M.) Oscar Wilde 4

9:50 Welcome and Introductions, Jawwad Qureshi

A. Soil, Rhizosphere and Fertilization

- 10:00 Influence of Soil Type on Citrus Rhizosphere Composition. John Santiago*, Ute Albrecht, Sarah Strauss. UF/IFAS Southwest Florida Research & Education Center, Immokalee, FL. (strauss@ufl.edu) [C-1]
- 10:15 Synergistic Effects of Soil Salinity and *Phytophthora parasitica* on Citrus Rootstocks 'Carrizo' and 'Swingle' Physiology and Anatomy. Dario Racano*, Marco Pitino, Liliana Cano, Lorenzo Rossi. UF/IFAS Indian River Research and Education Center, Fort Pierce, FL. (l.rossi@ufl.edu) [C-2]
- 10:30 Response of Huanglongbing (HLB)-Affected Citrus Trees to Zinc Fertilization. Qudus Uthman^{1*}, Davie Kadyampakeni¹, Peter Nkedi-Kizza². ¹UF/IFAS Citrus Research and Education Center, Lake Alfred, FL, ²University of Florida, Soil and Water Science Department, Gainesville, FL. (<u>dkadyampakeni@ufl.edu</u>) [C-3]
- 10:45 Improving Root Hair Growth on a Citrus Rootstock A Possible Fertilizer Strategy to Increase Tolerance to HLB. Laura Waldo*, Arnold Schumann, Tim Ebert. UF/IFAS Citrus Research and Education Center, Lake Alfred, FL. (schumaw@ufl.edu) [C-4]

B. Rootstock and Plant Improvement

- 11:00 Seed and Seedling Nursery Characteristics for New USDA Citrus Rootstocks. Rayane Barcelos Bisi^{1*}, Ute Albrecht¹, Kim D. Bowman². ¹UF/IFAS, Southwest Florida Research and Education Center, Immokalee, FL, ²US Horticultural Research Laboratory, USDA, ARS, Fort Pierce, FL. (<u>ualbrecht@ufl.edu</u>) [C-5]
- 11:15 Phenology of Valencia and Hamlin Sweet Oranges on Two Different Rootstocks. Daniel Adu Boakye*, Fernando Alferez.

UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL. (<u>alferez@ufl.edu</u>) [C-6]

11:30 Effect of Individual Protective Covers (IPC) on Physiology and Growth of Citrus Trees. Susmita Gaire*, Fernando Alferez, Ute Albrecht. UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL. (alferez@ufl.edu) [C-7]

C. Nutrient and Disease Management

11:45 Deep Learning for Diagnosis of Citrus Leaf Symptoms. Perseverança Mungofa*, Arnold Schumann. UF/IFAS Citrus Research and Education Center, Lake Alfred, FL. (schumaw@ufl.edu) [C-8]

12:00 Lunch (on your own)

Monday Afternoon Session

(1:20 P.M. - 4:15 P.M.) Oscar Wilde 4

1:20 Welcome and Introductions, Jawwad Qureshi

C. Nutrient and Disease Management (continued)

- 1:30 Nutrient Management on HLB-Affected Grapefruit on Flatwoods Soil in The Indian River District. Rhuanito Ferrarezi¹, Dinesh Phuyal^{1*}, Taylor Meadows¹, Kelly Morgan², Davie Kadyampakeni³. ¹UF/IFAS Indian River Research and Education Center, Fort Pierce, FL, ²UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL. ³UF/IFAS Citrus Research and Education Center, Lake Alfred, FL. (rferrarezi@ufl.edu) [C-9]
- 1:45 Intake, Translocation of Streptomycin and Oxytetracycline Within Citrus Trees. Nabil Killiny*, Fuad Alrimawi, Faraj Hijaz. UF/ IFAS Citrus Research and Education Center, Lake Alfred, FL. (nabilkilliny@ufl.edu) [C-10]
- 2:00 Physiological Effects of Oak Bioactive Extracts to Contain and Suppress HLB Disease on Citrus? Lorenzo Rossi^{1*}, Marco Pitino¹, Liliana Cano¹, Christina Dorado², Robert Shatters². ¹UF/IFAS Indian River Research and Education Center, Fort Pierce, FL, ²U.S. Horticultural Research Laboratory, U.S. Department of Agriculture, Agricultural Research Service, Fort Pierce FL. (Lrossi@ufl.edu) [C-11]
- 2:15 Phytotoxicity Threshold for Neutral Electrolyzed Water in Citrus. Timothy Ebert*, Laura Waldo, William Holmes, Napoleon

Mariner Jr., Arnold Schumann. UF/IFAS Citrus Research and Education Center, Lake Alfred, FL. (<u>schumaw@ufl.edu</u>) [C-12]

2:30 Citrus Section Business Meeting – Volunteer to be VP elect

D. Phenology and Environment

- 3:00 Whole-Plant Ontogenic Pattern of Flush Phenology and Plant Growth Regulator responses. Sheng-yang Li*, Christopher Vincent, Kirsten Pelz-Stelinski. UF/IFAS Citrus Research and Education Center, Lake Alfred, FL. (civince@ufl.edu) [C-13]
- 3:15 Manipulating Flowering with the Use of Gibberellins in Huanglongbing-affected Sweet Orange. Garima Singh*, Lisa Tang, Tripti Vashisth. UF/IFAS Citrus Research and Education Center, Lake Alfred, FL. (tvashisth@ufl.edu) [C-14]
- 3:30 Environmental Parameters Inside the Citrus Under Protective Screen System for Fresh Grapefruit Production. Rhuanito Soranz Ferrarezi, Yahel Hernandez Villanueva*, John Stephens. UF/IFAS Indian River Research and Education Center, Fort Pierce, FL. (rferrarezi@ufl.edu) [C-15]

E-Student Presentations

- 3:45 Rootstock Effects and Influence of Propagation Method on Traits of Grafted Sweet Orange Trees. Shahrzad Bodaghi^{1*}, Bo Meyering¹, Kim D. Bowman², Ute Albrecht¹. ¹UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL, ²US Horticultural Research Laboratory, USDA-ARS, Fort Pierce, FL. (ualbrecht@ufl.edu) [C-16]
- 4:00 Yield and Fruit Quality of 'Ray Ruby' Grapefruit Cultivated Under Protective Screen. Rhuanito Soranz Ferrarezi^{1*}, Natalia Macan^{1*}, Jawwad Qureshi², Mark Ritenour¹. ¹UF/IFAS Indian River Research and Education Center, Fort Pierce, FL, ²UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL. (rferrarezi@ufl.edu) [C-17]
- 4:15 End of Monday Session
- 5:00 Poster Session Begins
- 5:15 Reception

Tuesday Morning Session

(9:50 A.M. - 11:30 A.M.) Oscar Wilde 4

9:50 Welcome and Introductions, Jawwad Qureshi

E. ACP Management

- 10:00 Evaluating Pummelo X *Citrus latipes* Hybrids for Asian citrus psyllid, *Diaphorina citri* Preference. Nabil Killiny*, Manjul Dutt, Qibin Yu, Fred G. Gmitter, Jude W. Grosser. UF/IFAS Citrus Research and Education Center, Lake Alfred, FL. (nabilkilliny@ufl.edu) [C-18]
- 10:15 Highlands Youth Citrus Project: Mimicking the Florida Citrus Industry and Finding Success. Laurie Ann Hurner*. UF/IFAS Extension Highlands County, Sebring, FL. (<u>lhurner@ufl.edu</u>) [C-19]
- 10:30 Residual Toxicological Effects of Afidopyropen on Adult Asian Citrus Psyllid. Monica Triana*, Barry Kostyk, Jawwad Qureshi. UF/ IFAS Southwest Florida Research and Education Center, Immokalee, FL. (jawwadq@ufl.edu) [C-20]

F. Fruit Drop and Yield

- 10:45 Effect of Glyphosate on Premature Citrus Fruit Drop. <u>Biwek</u> <u>Gairhe*</u>, Ramdas Kanissery, Fernando Alferez, Ozgur Batuman. UF/ IFAS Southwest Florida Research and Education Center, FL. (<u>rkanissery@ufl.edu</u>) [C-21]
- 11:00 Exploring the Attributes of Dropped Fruit in Huanglongbingaffected Sweet Orange Trees. Sukhdeep Singh*, Tripti Vashisth. UF/IFAS Citrus Research and Education Center, Lake Alfred, FL. (tvashisth@ufl.edu) [C-22]
- 11:15 Adjusting Crop Load to Reduce HLB-Associated Fruit Drop. Tripti Vashisth*, Evan Johnson, Taylor Livingston. UF/IFAS Citrus Research and Education Center, Lake Alfred, FL. (tvashisth@ufl.edu) [C-23]
- 11:30 End of Section. See you next year!
- 12:00 Extension Luncheon

Handling & Processing Section

Handling & Processing Section

Yu Wang

Presiding yu.wang@ufl.edu

Monday Morning Session

(9:50 A.M. – 12:00 P.M.) Oscar Wilde 3

9:50 Welcome and Introduction, Yu Wang

A – Post Harvest Quality

- 10:00 Postharvest physiological disorders of mango. Jeffrey K. Brecht*, UF/IFAS, Horticultural Sciences Department, Gainesville, FL. (jkbrecht@ufl.edu) [HP-1]
- 10:15 NIFA project: Accelerating implementation of HLB tolerant hybrids as new commercial cultivars for fresh and processed citrus. Elizabeth Baldwin^{1*}, Ed Stover¹, Jinhe Bai¹, Anne Plotto¹, John Manthey¹, Rhuanito Ferrarezi², Fred Gmitter², Yu Wang², Mike Rouse³, and Goutam Gupta⁴. ¹USDA, ARS, US Horticultural Research Laboratory, Ft. Pierce, FL, ²UF/IFAS, Citrus Research and Education Center, Lake Alfred, FL, ³University of California, Riverside, Riverside, CA, ⁴New Mexico Consortium, Los Alamos, NM. (Liz.Baldwin@ars.usda.gov) [HP-2]
- 10:30 Identification of Flavor Active Compounds in Citrus Fruits for Flavor Modulation: A Flavoromics Approach. Shi Feng^{1*} and Yu Wang¹. ¹UF/IFAS Citrus Research and Education Center, Lake Alfred, FL. (fsophias@ufl.edu) [HP-3]
- 10:45 Role of Pre-harvest Nutrition on Postharvest Quality of HLBaffected Mandarins. Faisal Shahzad^{1*}, Jeffrey K. Brecht², Fred Gmitter¹, Yu Wang¹, Mark A. Ritenour³, and Tripti Vashisth¹. ¹UF/ IFAS, Citrus Research and Education Center, Lake Alfred, FL, ²UF/ IFAS, Horticulture Sciences Department, Gainesville, FL, ³UF/IFAS, Indian River Research and Education Center, Fort Pierce, FL. (amiabu@ufl.edu) [HP-4]
- 11:00 Metabolomic analysis of lemon juice (*Citrus limon*) from HLB-

Handling & Processing Section

affected trees grafted on different rootstocks. Laura Reuss^{1*}, Shi Feng¹, Wei-Lun Hung³, Qibin Yu², Frederick G. Gmitter Jr.² and Yu Wang¹. ¹UF/IFAS Citrus Research and Education Center, Food Science and Human Nutrition, Lake Alfred, FL, ²UF/IFAS Citrus Research and Education Center, Horticultural Science, Lake Alfred, FL, ³School of Food Safety, Taipei Medical University, 250 Wu-Hsing Street, Taipei 11031, Taiwan. (<u>lereuss@ufl.edu</u>) [HP-5]

- 11:15 Edible Coatings as Carriers of Antioxidant Compounds to Maintain Appealing Appearance of Fresh-cut Mango. Anna Marín^{1*}, Elizabeth Baldwin¹, Jinhe Bai¹, David Wood¹, Jeffrey K. Brecht², Anne Plotto¹. ¹USDA, ARS, US Horticultural Research Laboratory, Fort Pierce, FL, ²UF/IFAS, Horticultural Sciences Department, Gainesville, FL. (anne.plotto@ars.usda.gov) [HP-6]
- 11:30 Identification of Anti-adipogenic Compounds from Pepper (Capsicum annuum L.) Seeds and Elucidation of Its Anti-Obesity Mechanisms. Jeehye Sung* and Yu Wang. UF/IFAS Citrus Research and Education Center, Lake Alfred, FL. (j.sung@ufl.edu) [HP-7]
- 12:00 Lunch (on your own)

Monday Afternoon Session

(1:20 P.M. - 4:00 P.M.) Oscar Wilde 3

1:20 Welcome and Introductions, Yu Wang

B-Food Safety

- 1:30 Developing a methodology to screen *Lactuca sativa* cultivars and breeding lines to predict shelf life potential. Catherine E. Belisle^{1*}, German V. Sandoya², Steven A. Sargent¹, and Jeffrey K. Brecht¹. ¹UF/IFAS Horticulture Sciences Department, Gainesville, FL,²UF/IFAS Everglade Research and Education Center, Belle Glade, FL. (cbelisle1@ufl.edu) [HP-8]
- 1:45 Evaluation of consumer acceptance of Huanglongbing (HLB) tolerant Citrus cultivars. Yanli Jiao^{1,2} *, Charles Sims¹, Zhifeng Gao³, Yu Wang^{1,2}. ¹UF/IFAS, Food Science and Human Nutrition Department, Gainesville, FL, ²UF/IFAS, Citrus Research and Education Center, Lake Alfred, FL, ³UF/IFAS Gulf Coast Research and Education Center, Food and Resource Economics Department, Wimauma, FL. (yu.wang@ufl.edu) [HP-9]

- 2:00 Filling in the GAPs Towards Produce Safety Rule Implementation. Travis Chapin^{1*}, Matt Krug², Renee Goodrich³, Keith Schneider³, and Michelle Danyluk^{1,3}. ¹UF/IFAS, Citrus Research and Education Center, Lake Alfred, FL, ²UF/IFAS, UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL, ³UF/IFAS, Food Science and Human Nutrition Department, Gainesville, FL. (tkchapin@ufl.edu) [HP-10]
- 2:15 Establishing a scientific basis for buffer zones following animal intrusion. Matthew Krug^{1*}, Eugene McAvoy², Travis Chapin³, Lorrie Freidrich³, Min Li⁴, Arie Havelaar^{4,5}, and Michelle Danyluk^{3,6}. ¹UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL, ²UF/IFAS Extension Hendry County, LaBelle, FL, ³UF/IFAS Citrus Research and Education Center, Lake Alfred, FL, ⁴UF/IFAS Emerging Pathogens Institute, Department of Animal Sciences, Gainesville, FL, ⁵UF/IFAS Institute for Sustainable Food Systems, Gainesville, FL, ⁶UF/IFAS Department of Food Science and Human Nutrition, Gainesville, FL. (mkrug@ufl.edu) [HP-11]

C–Student Presentations

- 2:30 Variation among strawberry cultivars in bruising susceptibility related to wound ethylene production and sensitivity. Lanyen Chang^{1*}, Jeffrey K. Brecht^{1, 1}UF/IFAS Horticultural Sciences Department, Gainesville, FL, ²UF/IFAS, Tropical Research and Education Center, Homestead, FL. (jkbrecht@ufl.edu) [HP-12]
- 2:45 Sensory and Flavor Differences between Florida Honeys. Jessica Lee^{1*}, Charles Sims¹, Linda Bartoshuk² and Thomas A. Colquhoun³. ¹UF/IFAS, Food Science and Human Nutrition Department, Gainesville, FL, ²UF College of Dentistry, Gainesville, FL, ³UF/IFAS, Department of Environmental Horticulture, Gainesville, FL. (jessicalee1011@ufl.edu) [HP-13]
- 3:00 Cooling Method Affects Postharvest Quality of New Breeding Lines and Commercial Broccoli Cultivars in Florida. Carina Theodore*, Steven A. Sargent, Jeffrey K. Brecht, Lincoln Zotarelli, UF/IFAS Horticultural Sciences Department, Gainesville FL. (sasa@ufl.edu) [HP-14]
- 3:15 The use and stability of monk fruit plant-derived sweetener in a prototype orange juice beverage. Zhou Zou^{1*}, Renée Goodrich -Schneider. UF/IFAS, Food Science and Human Nutrition Department, Gainesville, FL. (goodrich@ufl.edu) [HP-15]

Handling & Processing Section

- 3:45 Handling and Processing Business Meeting. Volunteer to be a VP-Elect!
- 4:00 End of session
- 5:00 Poster Session
- 5:15 Reception

Tuesday Morning Session

(9:50 A.M. – 11:45 A.M.) Oscar Wilde 3

9:50 Welcome and Introduction, Yu Wang

D-Post Harvest Handling

- 10:00 Ethephon to Assist Degreening 'Tango' and 'Vernia' Citrus Fruit. Mark A. Ritenour^{1*}, W. Code Estes Sr.², Cuifeng Hu¹, and Wilmer Chu¹. ¹UF/IFAS Indian River Research and Education Center, Florida, Fort Pierce FL, ²Estes Citrus Inc., Vero Beach, FL. (<u>ritenour@ufl.edu</u>) [HP-16]
- 10:15 Effect of spray-drying temperature on physiochemical, antioxidant and antimicrobial properties of pectin/alginate encapsulated carvacrol. Xiuxiu Sun, Randall G. Cameron and Jinhe Bai*. USDA-ARS, Horticultural Research Laboratory, Ft. Pierce, FL. (Jinhe.bai@ars.usda.gov) [HP-17]
- 10:30 Optimizing Essential Oil Application to Prevent Postharvest Decay in Strawberries. Anna Marín^{1*}, Xiuxiu Sun¹, Marcela Miranda¹, Chris Ference¹, Elizabeth Baldwin¹, Jinhe Bai¹, Mark Ritenour², Anne Plotto¹. ¹USDA-ARS, US Horticultural Research Laboratory, Fort Pierce, FL, ²UF/IFAS, Indian River Research and Education Center, Fort Pierce, FL. (<u>anne.plotto@ars.usda.gov</u>) [HP-18]
- 10:45 Control of Strawberry Postharvest Decay Caused by Botrytis cinerea and Rhizopus stolonifer Using Essential Oils (Carvacrol and Thymol). Jingjing Kou^{1*}, Jiuxu Zhang², Tian Zhong², Jeffrey K. Brecht³, Steven A. Sargent³, Anne Plotto⁴, Jinhe Bai⁴, Xiuxiu Sun⁴, and Mark A. Ritenour². ¹College of Horticulture, Agricultural University of Hebei, PR. China, ²UF/IFAS Indian River Research and Education Center, Fort Pierce, FL, ³UF/IFAS Horticultural Sciences Department, Gainesville, FL, ⁴USDA-ARS, US Horticultural Research Laboratory, Fort Pierce, FL. (ritenour@ufl.edu) [HP-19]

E-Chlorine Dioxide Treatments

- 11:30 The Effect of Chlorine Dioxide Gas on Postharvest Preservation of *Citrus* Fruit During Ethylene Degreening. Zhike Zhang^{1*}, Cuifeng Hu², Wilmer Chu², Tian Zhong², Jiuxu Zhang², Jingjing Kou³, and Mark A. Ritenour². ¹College of Horticulture, South China Agricultural University, Guangzhou, PR. China, ²UF/IFAS Indian River Research and Education Center, Fort Pierce, FL, ³College of Horticulture, Agricultural University of Hebei, PR. China. (ritenour@ufl.edu) [HP-20]
- 11:15 A Slow-Release Chlorine Dioxide Gas Treatment Can Reduce Postharvest Decay of Fresh Strawberries. Jiuxu Zhang^{1*}, Jingjing Kou², Tian Zhong³, Jeffrey K. Brecht⁴, Steven A. Sargent⁴, Anne Plotto⁵, Jinhe Bai⁵, Xiuxiu Sun⁵, and Mark A. Ritenour¹. ¹UF/IFAS Indian River Research and Education Center, Fort Pierce, FL, ²College of Horticulture, Agricultural University of Hebei, PR. China, ³Zhuhai College, Jilin University, Guangdong, PR. China, ⁴UF/IFAS Horticultural Sciences Department, Gainesville, FL; ⁵USDA-ARS, US Horticultural Research Laboratory, Fort Pierce, FL. (ritenour@ufl.edu) [HP-21]
- 11:30 End of Section. See you next year!
- **12:00** Extension Luncheon (Ticket Required)

Ornamental Garden and Landscape

Wayne Hobbs

Presiding whhobbs@ufl.edu

Monday Morning Session

(9:50 A.M. – 12:00 P.M.) Oscar Wilde 2

9:50 Welcome and Introduction, Wayne Hobbs

A-Extension Programming

- 10:00 Bringing extension downtown. Kate Rotindo* and Edward A. Skvarch, UF/IFAS St. Lucie County Extension, Fort Pierce, FL. (krotindo@ufl.edu) [OGL-1]
- 10:15 Demonstration landscape overhaul: how to create habitat, foster partnerships and inspire volunteers! Tina McIntyre*, Kaydie McCormick, Hannah Wooten. UF/IFAS Extension Seminole County, Sanford, FL. (k.mcintyre@ufl.edu) [OGL-2]
- 10:30 Trade show attendee objectives, booth visit likelihood, and visual attention: A TPIE case study. Alicia Rihn*, Hayk Khachatryan. UF/IFAS Mid-Florida Research and Education Center, Food and Resource Economics Department, Apopka, FL. (hayk@ufl.edu) [OGL-3]

B-Consumer Preferences and Green Industry

- 10:45 Assessing the relationship between Green Industry consumers' shopping styles and in-store promotion effectiveness. Alicia Rihn*, Hayk Khachatryan. UF/IFAS, Mid-Florida Research and Education Center, Food and Resource Economics Department, Apopka, FL. (hayk@ufl.edu) [OGL-4]
- 11:00How visual attention affects consumer preference for product
labels: an eye tracking study. Xuan Wei*, Hayk Khachatryan,

Alicia Rihn. UF/IFAS, Mid-Florida Research and Education Center, Food and Resource Economics Department, Apopka, FL. (hayk@ufl.edu) [OGL-5]

- 11:15 Preferences for Florida-Friendly residential landscapes: the interplay between monetary incentives and environmental attitudes. Xumin Zhang*, Hayk Khachatryan. UF/IFAS, Mid-Florida Research and Education Center, Food and Resource Economics Department Apopka, FL. (hayk@ufl.edu) [OGL-6]
- 11:30 What Eco-label format is the most effective in the Green Industry? Alicia Rihn^{*}, Hayk Khachatryan, Xuan Wei. UF/IFAS Mid-Florida Research and Education Center, Food and Resource Economics Department, Apopka, FL. (hayk@ufl.edu) [OGL-7]

C-Water and Nutrient Management

11:45 Three methods for determining nitrate runoff concentrations from containerized Homalomena 'Emerald Gem'. Kayla Howard^{1*}, Kenneth J. Sweeney¹, Malcolm M. Manners² and John L Griffis, Jr.³. ¹Biology Department, Florida Gulf Coast University, Fort Myers, FL, ²Horticultural Science Department, Florida Southern College, Lakeland, FL, ³Marine & Ecological Sciences Department., Florida Gulf Coast University, Fort Myers, FL. (jgriffis@fgcu.edu) [OGL-8]

12:00 Lunch (on your own)

Monday Afternoon Session

(1:20P.M. – 4:15 P.M.) Oscar Wilde 2

1:20 Welcome and Introduction, Wayne Hobbs

D-Water and Nutrient Management (continued)

1:30 Sustainable fertilizer management for ornamental production in South Florida via optical sensor technology. Ariel Freidenreich^{1*}, Gabriel Barraza¹, Krishnaswamy Jayachandran¹, and Amir A. Khoddamzadeh¹. ¹Department of Earth and Environment, Florida International University, Miami, FL. (<u>afrei006@fiu.edu</u>) [OGL-9]

- 1:45 Rain impacts container plant irrigation. Tom Yeager*. UF/IFAS, Environmental Horticulture Department, Gainesville, FL. (yeagert@ufl.edu) [OGL-10]
- 2:00 Relationships between leaf chlorophyll content, fertilizer application rates and visual grades of greenhouse-grown *Homalomena* 'Emerald Gem'. Kenneth J. Sweeney^{1*}, Morgan Jones², Adam Cruz², Carolyn Cureton², Malcolm M. Manners³, and John L Griffis, Jr.⁴. ¹Biology Department, Florida Gulf Coast University, Fort Myers, FL, ²Biology Department, Florida Southern College, Lakeland, FL, ³Horticultural Science Department, Florida Southern College, Lakeland, FL, ⁴Marine & Ecological Sciences Dept., Florida Gulf Coast University, Fort Myers, FL. (jgriffis@fgcu.edu) [OGL-11]

E-Plant Physiology

- 2:15 Development of Antirrhinum mutants with enhanced axillary branching using transposon transposition. Zhaoyuan Lian^{12*}, Sandra Wilson¹, Heqiang Huo¹², ¹UF/IFAS Environmental Horticulture Department, Gainesville, FL,² UF/IFAS Mid-Florida Research and Education Center, Apopka, FL (lianzhaoyuan@ufl.edu) [OGL-12]
- 2:30 Effects of melatonin and AVG in alleviating dark-induced plant deterioration of three *Pilea* species Diying Xiang^{1,2,3*}, Linhchi Nguyen^{1,3}, Heqiang Huo^{1,3}. ¹College of Horticultural Science, Hebei Agriculture University, Baoding, China, ²UF/IFAS Mid-Florida Research and Education Center, Apopka, FL, ³UF/IFAS Department of Environmental Horticulture, Gainesville, FL. (<u>hhuo@ufl.edu</u>) [OGL-13]
- 2:45 Effects of pre-harvest LED light, melatonin and AVG treatments on plant quality of cut-snapdragon. Diving Xiang^{1,2,3*}, Linhchi Nguyen^{1,3}, Heqiang Huo^{1,3}. ¹College of Horticultural Science, Hebei Agriculture University, Baoding, China, ²UF/IFAS Mid-Florida Research and Education Center, Apopka, FL, ³ UF/ IFAS, Environmental Horticulture Department, Gainesville, FL. (hhuo@ufl.edu) [OGL-14]

- 3:00 Evaluation of light quality and light levels for in vitro production of ornamental bananas. Cassandre Feuille^{1*}, Wagner Vendrame¹. ¹UF/IFAS, Tropical Research and Education Center, Environmental Horticulture Department, Homestead, FL. (vendrame@ufl.edu) [OGL-15]
- 3:15 Effects of anthocyanin enrichment induced by *VvMyb1* on the stress tolerance of lettuce. Jucheng Li^{1,2,3*}, Linhchi Nguyen¹, Heqiang Huo¹. ¹UF/IFAS Environmental Horticulture Department, University of Florida, Gainesville, FL, ²UF/IFAS Mid-Florida Research and Education Center, Apopka, FL, ³Fruit Tree Institute, Guangdong Academy of Agricultural Science, Guangzhou, China. (hhuo@ufl.edu) [OGL-16]

F-Promotion and Protection of Pollinators

- 3:30 Celebrating and protecting Florida's native pollinators. Alicia Lamborn^{1*} and Nicole Pinson², ¹UF/IFAS Extension Baker County, Maclenny, FL and ²UF/IFAS Extension Hillsborough County, Seffner, FL. (alamborn@ufll.edu) [OGL-17]
- 3:45 Promoting research-verified pollinator plants to enhance overall pollinator health. Heather Kalaman^{1*}, Gary Knox², and Sandra Wilson¹. ¹UF/IFAS Environmental Horticulture Department, Gainesville, FL, ²UF/IFAS North Florida Research and Education Center, Quincy, FL. (hkalaman@ufl.edu) [OGL-18]
- 4:00 Ornamental Garden and Landscape Business Meeting.

Volunteer to be a VP-Elect!

- 4:15 End of Monday Session
- 5:00 Poster Session Begins
- 5:15 Reception

Tuesday Morning Session

(9:50 A.M. – 11:30 P.M.) Oscar Wilde 2

9:50 Welcome and Introduction, Wayne Hobbs

G-Master Gardeners and Volunteer Extension Programming

- 10:00 Building on tradition: working with volunteers to reimagine an established school garden. Wayne Hobbs*. UF/IFAS Extension Clay County, Green Cove Springs, FL. (whhobbs@ufl.edu) [OGL-19]
- 10:15 Master Educators: effectiveness of a pilot advanced Master Gardener volunteer educator training to improve skills and increase confidence. Wayne Hobbs*. UF/IFAS Extension Clay County, Green Cove Springs, FL. (whhobbs@ufl.edu) [OGL-20]
- 10:30 The Tree Steward Volunteer Pruning Program in Jacksonville Florida. Larry Figart*. UF/IFAS Extension Duval County, Jacksonville, FL. (lfigart@ufl.edu) [OGL-21]

H-Varieties and Diseases

- 10:45 Landscape performance and fruiting of eight varieties of trailing lantana grown in north and central Florida. Carlee Steppe^{1*}, S.B. Wilson¹, Z. Deng², K. Druffel², and G.W. Know¹. UF/ IFAS Environmental Horticulture Department, Gainesville, FL, ²UF/ IFAS Gulf Coast Research and Education Center, Wimauma, FL. (csteppe@ufl.edu) [OGL-22]
- 11:00 Caladium varieties introduced by the UF/IFAS caladium breeding program in recent years. Zhanao Deng*,.UF/IFAS, Gulf Coast Research and Education Center, Wimauma, FL. (zdeng@ufl.edu) [OGL-23]
- 11:15 Lethal viral necrosis (LVN), the new nightmare for Saint Augustine grass 'Floratam'. L. Albrecht^{1*}, H. Mayer², R. Gazis³, P. Harmon⁴, J. Paulson⁴. ¹UF/IFAS Extension Palm Beach County, West Palm Beach, FL, ²UF/IFAS Extension Miami-Dade County, Miami, FL ³UF/IFAS Tropical Research and Education Center, Homestead, FL, ⁴UF/IFAS Plant Pathology Department, Gainesville, FL. (hmayer@ufl.edu) [OGL-24]
- **11:30 End of Section.** See you next year!
- **12:00** Extension Luncheon (Ticket Required)

Krome Memorial Institute

Alan Chambers Presiding (ac@ufl.edu)

Monday Morning Session

(10:00 A.M. – 12:00 P.M.) Beaufort

9:50 Welcome and Introductions, Alan Chambers

A – Tropical Fruits

10:00 Sensory evaluation of 15 mango cultivars in South Florida using potential Mangos for the industry in Colombia. Noris Ledesma^{1*}, Luzmila Andrea Nieto², and Luisa Pacheco². ¹Fairchild Tropical Botanic Garden, Miami FL, ²Universidad del Magdalena, Santa Marta, Magdalena, Colombia. (nledesma@fairchildgarden.org) [K-1]

- 10:15 Morphological Characterization of Pollen of 18 accessions of Mangifera species. Pedro del Llano Rivas^{1*}, Rodrigo Vasquez Lopes¹, Sergio Roberto Marquez¹, and Noris Ledesma². ¹University of Chapingo, Mexico, ²Fairchild Tropical Botanic Garden, Miami, FL. (nledesma@fairchildgarden.org) [K-2]
- 10:30 Angie' Mango for South Florida. Noris Ledesma*, Fairchild Tropical Botanic Garden, Miami, FL. (nledesma@fairchildgarden.org) [K-3]
- 10:45 Mango Pollen Collection and Preservation method for Mangifera: M. odorata, M. quadrifida, M. lalijiwa, and M. laurina. Rodrigo Vasquez Lopes^{1*}, Pedro del Llano Rivas¹, Sergio Roberto Marquez¹, and Noris Ledesma². ¹University of Chapingo, Mexico, ²Fairchild Tropical Botanic Garden, Miami, FL. (nledesma@fairchildgarden.org) [K-4]
- 11:00 Salinity tolerance of five mango ecotypes (Manginfera indica
 L.) in Santa Marta, Colombia. Noris Ledesma^{1*}, Felipe Andrés
 Arias Acevedo², and Yeiser Javier Estrada Púa². ¹Fairchild Tropical

Botanic Garden, Miami , FL., ²University of Magdalena, Santa Marta, Magdalena, Colombia. (<u>nledesma@fairchildgarden.org</u>) [K-5]

B – Vanilla Breeding

- 11:15 Development of biotechnological tools to advance precision breeding in Vanilla. Vovener de Verlands Edmonds*, Pamela Moon, Alan Chambers and Elias Bassil, Tropical Research and Education Center, Homestead FL. (ebassil@ufl.edu) [K-6]
- 11:30 Genomics-based diversity of Vanilla planifolia and native Florida Vanilla species. Alan Chambers^{1*}, Ying Hu², Marcio F. R. Resende Jr.², Aureliano Bombarely³, Maria Brym¹, Elias Bassil¹.
 ¹Tropical Research and Education Center, Homestead, FL, ²UF/ IFAS Horticultural Sciences Department, Gainesville, FL, ³School of Plant and Environmental Sciences, Virginia Tech, Blacksburg, VA. (ac@ufl.edu) [K-7]

C – Tropical Fruits (continued)

11:45 Efficacy and phytotoxicity of glufosinate and glyphosate on weeds under banana, guava and lychee grove conditions at the Tropical Research and Education Center. Jonathan H. Crane^{1*}, Rebecca Tanenbaum¹, Adrian Casanola¹, and James Colee². ¹Tropical Research and Education Center, Homestead, FL, ²IFAS Statistical Consulting Unit, Gainesville, FL (jhcr@ufl.edu) [K-8]

12:00 Lunch (on your own)

Monday Afternoon Session

(1:20 P.M. to 4:45 P.M.) Beaufort

1:20 Welcome back and introductions, Alan Chambers

B – Student Presentations

- 1:30 Cane management of floricane-fruiting blackberries grown in Central Florida. Syuan-You Lin* and Shinsuke Agehara. UF/IFAS Gulf Coast Research and Education Center, Wimauma, FL. (syuanyou.lin@ufl.edu) [K-9]
- 1:45 Performance and Characterization of Several Papaya (*Carica papaya* L.) Accessions Grown in South Florida. Sarah E. Brewer* and Alan H. Chambers. UF/IFAS Tropical Research and Education

Center, Homestead, FL. (sarah.brewer@ufl.edu) [K-10]

2:00 Plant growth measurements as a predictor of yield for seven accessions of tea (*Camellia sinensis*), a new crop for Florida. James M Orrock^{1*}, Brantlee Spakes Richter¹, and Bala Rathinasabapathi². ¹UF/IFAS Department of Plant Pathology, Gainesville, FL, ²UF/IFAS Horticultural Sciences Department, Gainesville, FL. (jorrock90@ufl.edu) [K-11]

C – Tropical Fruits (continued)

- 2:15 Growing Bananas in the Everglades Agricultural Area. Nicholas Larsen*, NK Lago Farms, Canal Point, FL. (nklagofarms@aol.com) [K-12]
- 2:30 Rooting for resilience: identifying mechanisms for improved abiotic stress tolerance in avocado. Melinda Yin* and Elias Bassil. UF/IFAS Tropical Research and Education Center, Homestead FL. (ebassil@ufl.edu) [K-13]
- 2:45 Yield performance and miraculin content of a novel fruit (*Synsepalum dulcificum*) in Homestead, Florida. Lynhe Demesyeux*, Alan H. Chambers. UF/IFAS Tropical Research and Education Center, Homestead, FL. (<u>l.demesyeux@ufl.edu</u>) [K-14]

E – Temperate Fruits and Crops

- How does substrate temperature affect root respiration of different blueberry cultivars? Michael J. Schreiber and Gerardo H. Nunez*. UF/IFAS Horticultural Sciences Department, Gainesville, FL () [K-15]
- 3:15 Use of Sparkleberry as a Potential Rootstock in Commercial Blueberry Production. Jeff Williamson* and Rebecca Darnell. UF/ IFAS Horticultural Sciences Department, Gainesville, FL. (jgrw@ufl.edu) [K-16]
- 3:30 Plant growth, cone yield and quality of 14 hop varieties grown under extended day length in Florida. Zhanao Deng¹*, Shinsuke Agehara¹, Gary Vallad¹, Hugh Smith¹, Johan Desaeger¹, and Simon Bollin². ¹UF/IFAS, Gulf Coast Research and Education Center, Wimauma, FL, ²Hillsborough County Agriculture Industry Devel-

opment, Tampa, FL. (zdeng@ufl.edu) [K-17]

- 3:45 Muscadine grape production in Florida: a potential alternative fruit crop. Ali Sarkhosh*. UF/IFAS Horticultural Sciences Department, Gainesville, FL. (sarkhosha@ufl.edu) [K-18]
- 4:00 'O21-4-1', A Potential Breeding Selection for Table Muscadine Grape Industry. Z. Ren*, I. El-Sharkawy, and V. Tsolova. Center for Viticulture & Small Fruit Research, College of Agriculture and Food Sciences, Florida A&M University, Tallahassee, FL. (islam.elsharkawy@famu.edu) [K-19]
- 4:15 Screening Pomegranate Varieties for Resistance to Leaf Spots Caused by Colletotrichum. Xinjie Yu, Katia Xavier, Gary Vallad, and Zhanao Deng*. UF/IFAS Gulf Coast Research and Education Center, Wimauma, FL. (zdeng@ufl.edu)[K-20]
- **4:30 Krome Memorial Section Business Meeting:** Alan Chambers Volunteer to be a VP-Elect!
- 4:45 End of Monday Session.
- 5:00 Poster Session Begins
- 5:15 Reception

Tuesday Morning Session

(10:00 A.M. – 11:30 A.M.) Beaufort

9:50 Welcome and Introductions, Alan Chambers

E – Sugarcane and Crops (continued)

10:00 Parasitic Nematodes on sugarcane in Florida. Stewart Swanson^{1*}, William Crow², and Benjamin Waldo². ¹UF/IFAS Extension Hendry County, LaBelle, FL, ²UF/IFAS, Entomology and Nematology Department, Gainesville, FL. (stew@ufl.edu) [K-21]

F – Stonefruits

10:15 Subtropical stone fruit production in Florida: a review.

Ali Sarkhosh¹* and John Peterson². ¹UF/IFAS Horticultural Sciences Department, Gainesville FL, ²UF/IFAS Environmental Horticulture

Department, Gainesville FL. (sarkhosha@ufl.edu) [K-22]

- 10:30 Evaluating efficacy of Hydrogen Cyanamide at different rates to induce uniform flowering in Low-Chill Peach Cultivars. Bikash Adhikari* and Tripti Vashisth. UF/IFAS Citrus Research and Education Center, Lake Alfred, FL. (<u>tvashisth@ufl.edu</u>) [K-23]
- 10:45 Seasonal borer (*Synanthedon* spp.) emergence in Florida peach orchards. Brianna Whitman*. UF/IFAS Doctor of Plant Medicine, Gainesville, FL. (<u>bwhitman@ufl.edu</u>) [K-24]
- 11:00 Influence of rootstocks on leaf mineral element and seasonal nutrients contents of peach cv. 'UF Sun' during spring, summer, and autumn in tropical climate. Shirin Shahkoomahally, and Ali Sarkhosh. UF/IFAS Horticultural Sciences Department, Gainesville, FL. (sarkhosha@ufl.edu) [K-25]
- 11:15 Fruit thinning effects on subtropical peach 'UFSun' on fruit weight, size, and dry matter content. Yuru Chang*, and Ali Sarkhosh. UF/IFAS Department of Horticultural Sciences, University of Florida, Gainesville, FL. (changyuru@ufl.edu) [K-26]
- 11:30 End of Sections. See you next year!
- 12:00 Extension Luncheon (Ticket Required)

Vegetable Section

Shinsuke Agehara Presiding (sagehara@ufl.edu)

Monday Morning Session

(9:50 – 12:00) Oscar Wilde 1

9:50 Welcome and Introduction, Shinsuke Agehara

A – Student Presentations

- 10:00 Genotypic Variability in Phosphorus Use Efficiency by Hydroponically-grown Tomato. Mary Dixon^{1*}, Harry Klee¹, Eric Simonne¹, Thomas Obreza² and Guodong Liu¹. ¹UF/IFAS Horticultural Sciences Department, Gainesville, FL, ²UF/IFAS Soil and Water Sciences Department, Gainesville, FL. (guodong@ufl.edu) [V-1]
- 10:15 Genomic Prediction of Sweet Sorghum Agronomic Performance under Drought and Irrigated Environments in Haiti. Marie D. Dorval^{1*}, Geoffrey Meru¹ and Gael Pressoir². ¹UF/ IFAS Tropical Research and Education Center, Homestead, FL, ²Research Center on Bio-Energy and Sustainable Agriculture, University of Quisqueya, Port-au-Prince, Haiti. (dorval.m@ufl.edu) [V-2]
- 10:30 Why Fertigation Works for Potato Production in Florida? Xiangju Fu^{1*}, Guodong Liu¹, Lincoln Zotarelli¹, Steve Sargent¹, Crystal Snodgrass² and Alan Jones³. ¹UF/IFAS Horticultural Sciences Department, Gainesville, FL, ²UF/IFAS Extension Manatee County, Palmetto, FL, ³Jones Potato Farm, Parrish, FL. (guodong@ufl.edu) [V-3]
- 10:45 Lettuce Performance in Two Types of Soil in Florida. Gustavo F. Kreutz*, Germán V. Sandoya and Jesse Murray. UF/IFAS Everglades Research and Education Center, Belle Glade, FL. (gsandoyamiranda@ufl.edu) [V-4]
- 11:00 Legume Cover Crops for Eggplant Production in Haiti.

Jean-Maude Louizias¹*, Carlene A. Chase¹, Ludger Jean Simon², Zane Grabau³ and Wesly Jeune⁴. ¹UF/IFAS Horticultural Sciences Department, Gainesville, FL, ²American University of the Caribbean, Les Cayes, Haiti, ³UF/IFAS Entomology and Nematology Department, Gainesville, FL, ⁴Faculté des Sciences de l'Agriculture et de l'Environnement, Universite Quisqueya, Portau-Prince, Haiti. (<u>ilouizias@ufl.edu</u>) [V-5]

- 11:15 Inheritance of Resistance to Phytophthora Crown Rot in *Cucurbita pepo*. Vincent Njung'e Michael*, Yuqing Fu and Geoffrey Meru. UF/IFAS Tropical Research and Education Center, Homestead, FL. (gmeru@ufl.edu) [V-6]
- 11:30 Strawberry Response to Heat Stress Mitigation Differs with Cultivar. Trequan McGee*, Carlene A. Chase, Rebecca L. Darnell and Ali Sarkhosh. UF/IFAS Horticultural Sciences Department, Gainesville, FL. (trequanmcgee@ufl.edu) [V-7]

B – **Production Systems**

11:45 Best Management Practice Adoption by Florida Vegetable and Agronomic Crop Producers. Moonwon Soh*, Tara Wade, Syed Shah and Tatiana Borisova. UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL. (tara.wade@ufl.edu) [V-8]

12:00 Lunch (on your own)

Monday Afternoon Session

(1:20 – 5:00) Oscar Wilde 1

1:20 Welcome and Introductions, Shinsuke Agehara

B – Production Systems (continued)

1:30 Advanced Cabbage Production Trial in Northeast Florida.

Wendy Mussoline^{1*}, Bonnie Wells², Gary England³ and Lincoln Zotarelli⁴. ¹UF/IFAS Extension Flagler/Putnam County, Bunnell, FL. ²UF/IFAS Extension St. Johns County, St. Augustine, FL. ³UF/IFAS Hasting Agriculture Extension Center, Hastings, FL. ⁴UF/IFAS Horticultural Sciences Department, Gainesville, FL. (wmussoli@ufl.edu) [V-9]

- 1:45 Northeast Florida Artichoke Demonstration. Gary K. England^{1*} and Shinsuke Agehara². ¹UF/IFAS Hastings Agriculture Extension Center, Hastings, FL, ²UF/IFAS Gulf Coast Research and Education Center, Wimuama, FL. (gke@ufl.edu) [V-10]
- 2:00 Statewide Hydroponic Program: Challenges and Opportunities. Francisco Rivera^{1*}, Jonael Bosques², and E. Vanessa Campoverde³, German Sandoya⁴, Lorna Bravo⁵ and Jiangxiau Qiu⁶. ¹UF/IFAS Extension Hillsborough County, Seffner, FL, ²UF/IFAS Extension Hardee County, Wauchula, FL, ³UF/IFAS Extension Miami-Dade County, Homestead, FL, ⁴UF/IFAS Everglades Research and Education Center, Belle Glade, FL, ⁵UF/IFAS Extension Broward County, Davie, FL, ⁶UF/IFAS Fort Lauderdale Research and Education Center, Davie, FL. (friveramelendez@ufl.edu) [V-11]
- 2:15 Building a Successful Hop Yard in Florida: Plant Materials, Hop Yard Designs, and Management Practices. Aleyda Acosta Rangel¹*, Zhanao Deng¹, Tia Silvasy¹, Jack Rechcigl¹, Simon Bollin² and Shinsuke Agehara¹. ¹UF/IFAS Gulf Coast Research and Education Center, Wimauma, FL, ²Agriculture Industry Development, Hillsborough County Economic Development Department, Tampa, FL. (sagehara@ufl.edu) [V-12]
- 2:30 Seed Piece Spacing for Table Stock Potatoes. Luis E. Gomez^{1*}, Lincoln Zotarelli¹, Mario H.M. L. Andrade¹, and Gary K. England².
 ¹UF/IFAS Horticultural Sciences Department, Gainesville, FL, ²UF/ IFAS Hastings Agriculture Extension Center, Hastings, FL. (lzota@ufl.edu) [V-13]
- 2:45 Low Cost High Tunnel versus Open Field Production of Organically Grown Strawberries in North Florida: Second Year Evaluation. Alex Bolques^{1*}, Gilbert Queeley², and Fanny Ospina¹. ¹Research and Extension Center, Florida A&M University Extension, Quincy, FL, ²Florida A&M University, Tallahassee, FL. (alejandro.bolques@famu.edu) [V-14]

C – Nutrient Management

3:00 Optimizing Nitrogen Fertilization for Winter Strawberry Production in Central Florida. Dante Pinochet^{1*} and Shinsuke Agehara². ¹Austral University of Chile, Institute of Agriculture

Engineering and Soil Science, Campus Isla Teja, Valdivia, Chile, ²UF/IFAS Gulf Coast Research and Education Center, Wimauma, FL. (<u>dpinoche@uach.cl</u>) [V-15]

3:15 Effect of Calcium Sulphate and Ammonium Sulphate on Soil pH, Electrical Conductivity, Sodium and Nutrient Availability. Gustavo Franco de Castro^{1,2*}, Guilherme Bossi Buck¹, and Lincoln Zotarelli¹. ¹UF/IFAS Horticultural Sciences Department, Gainesville, FL, ²Department of Soils, Universidade Federal de Viçosa, Viçosa, Brazil. (<u>Izota@ufl.edu</u>) [V-16]

3:30 Economic Feasibility of Irrigation Methods and Nitrogen Fertilizer Strategies for Potato Production in Florida. Rodrick Z. Mwatuwa^{1*}, Lincoln Zotarelli¹, Tara Wade², Kelly Morgan², and Balasubramani Rathinasabapathi¹. ¹UF/IFAS Horticultural Sciences Department, Gainesville, FL, ²UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL. (<u>Izota@ufl.edu</u>) [V-17]

- 3:45 Vegetable Section Business Meeting Shinsuke Agehara
- **4:00** Method, Timing and Rate of Phosphorus Application in Cabbage. Luis E. Gomez^{1*}, Lincoln Zotarelli¹, Mario H.M.L. Andrade¹, and Gary K. England². ¹UF/IFAS Horticultural Sciences Department, Gainesville, FL, ²UF/IFAS Hastings Agriculture Extension Center, Hastings, FL. (<u>Izota@ufl.edu</u>) [V-18]
- 4:15 A Six-year Study on Effects of Gypsum Application on Potato Production in Northeast Florida. Muhammad Shahid¹, Guodong Liu^{1*}, David Dinkins², and Danny Johns². ¹ UF/IFAS Horticultural Sciences Department, Gainesville, FL, ²Blue Sky Farms, Elkton, FL. (guodong@ufl.edu) [V-19]
- 4:30 Using Super-sorbent Polymer and Biostimulants to Improve Nitrogen Management for Potato Production in Northeast Florida. Muhammad Shahid* and Guodong Liu. UF/IFAS Horticultural Sciences Department, Gainesville, FL. (guodong@ufl.edu) [V-20]
- 4:45 Seasonal Dynamics of Soil Phosphorus in Large-scale Potato Trials in Northeast Florida. Fernando R. Bortolozo¹, Muhammad A. Shahid¹, Kelly Morgan², David Dinkins³, Gary England⁴, Wendy Mussoline⁵, Mark Clark⁶, James Fletcher⁷ and Guodong Liu^{1*}. ¹UF/

IFAS Horticultural Sciences Department, Gainesville, FL, ²UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL, ³UF/IFAS Extension Putnam County, East Plataka, FL, ⁴UF/IFAS Hastings Agricultural Extension Center, Hastings, FL, ⁵UF/IFAS Extension Flagler County, Bunnell, FL, ⁶UF/IFAS Soil and Water Science Department, Gainesville, FL. (guodong@ufl.edu) [V-21]

5:00 End of the Monday Session

Tuesday Morning Session 1

(9:50 – 11:45) Oscar Wilde 1

9:50 Welcome and Introduction, Shinsuke Agehara

D- Agricultural Engineering and Precision Agriculture

- 10:00 Demonstration of Drone Technology to Improve Crop Management in Vegetable Production. Qingren Wang*. UF/IFAS Extension Miami-Dade County, Homestead, FL. (<u>qrwang@ufl.edu</u>) [V-22]
- 10:15 A Scanner-based Rhizotron System and Simple Image Analysis Techniques to Evaluate Root Development in Vegetable Seedlings. Atsushi Sanada^{1*} and Shinsuke Agehara². ¹Tokyo University of Agriculture, Tokyo, Japan, ²UF/IFAS Gulf Coast Research and Education Center, Wimauma, FL. (sagehara@ufl.edu) [V-23]
- 10:30 Strawberry Yield Prediction Using Ground-based Imagery and Automated Fruit and Flower Identification. Weining Wang*, Amr Abd-Elrahman, Katie Britt, Feng Wu, and Shinsuke Agehara. UF/IFAS Gulf Coast Research and Education Center, Wimauma, FL. (sagehara@ufl.edu) [V-24]
- 10:45 Smart Sprayer for Precision Weed Management Utilizing Machine Vision and Artificial Intelligence. Yiannis Ampatzidis* and Victor Partel. UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL. (i.ampatzidis@ufl.edu) [V-25]
- 11:00 A Precision Herbicide Sprayer for Vegetables and Strawberry Arnold Schumann¹*, Shaun Sharpe², and Nathan Boyd². ¹UF/IFAS Citrus Research and Education Center, Lake Alfred, FL, ²UF/IFAS

Gulf Coast Research and Education Center, Wimauma, FL. (schumaw@ufl.edu) [V-26]

E-Alternative and Specialty Crops

- 11:00 Development of Management Practices for Winter Artichoke Production in Florida. Tiare Silvasy* and Shinsuke Agehara. UF/ IFAS Gulf Coast Research and Education Center, Wimauma, FL. (sagehara@ufl.edu) [V-27]
- 11:30 Management of Relay-cropped Strawberry, Pepper, Eggplant, and Cantaloupe to Maximize Yield and Economic Return. Ravneet K Sandhu* and Nathan Boyd. UF/IFAS Gulf Coast Research and Education Center, Wimauma, FL. (rsandhu@ufl.edu) [V-28]
- 11:45 Using Plant Growth Regulators to Reduce Bolting in Cilantro (*Coriandrum sativum*). Bo Meyering*, Adam Hoeffner, and Ute Albrecht. UF/IFAS Southwest Florida Research and Education Center, Immokalee, FL. (<u>ualbrecht@ufl.edu</u>) [V-29]
- 12:00 End of the Tuesday Morning Session 1 Adjourn
- **12:00** Extension Luncheon (Ticket required)

Tuesday Morning Session 2

- (9:50 11:45) Swift
- 9:50 Welcome and Introduction, Germán Sandoya

F-Crop Physiology and Genetics

- 10:00 Discovering the Genes That Are Involved in Postharvest Senescence in Broccoli (Brassica oleracea). Mingxi Zhou, Jeffery Brecht, and Tie Liu*. UF/IFAS Horticultural Sciences Department, Gainesville, FL. (tieliu@ufl.edu) [V-30]
- 10:15 Breaking Tuber Dormancy in Accessions of Solanum chacoense. Christian T. Christensen¹, Lincoln Zotarelli^{1*}, Kathleen G. Haynes², and Charles Ethan Kelly¹. ¹UF/IFAS Horticultural Sciences Department, Gainesville, FL, ²USDA-Agricultural Research Service, Beltsville, MD. (Izota@ufl.edu) [V-31]
- 10:30 Agronomic Performance and Genetic Diversity among Common Bean (*Phaseolus vulgaris*) Varieties in Haiti.

Riphine Mainviel^{1*}, Geoffrey Meru¹, Edouardo C. Vallejos², and Raphael Colbert³. ¹UF/IFAS Tropical Research and Education Center, Homestead, FL, ²UF/IFAS Horticultural Sciences Department, Gainesville, FL, ³Panamerican Agricultural University, Zamorano, Valley of the Yeguare River, Honduras. (<u>riphinemainviel@ufl.edu</u>) [V-32]

G-Pest Management

- 10:45 Effect of Halosulfuron and Surfactant Rate on Pickling Cucumber Yield and Shape. Peter J. Dittmar^{1*} and Robert C. Hochmuth². ¹UF/IFAS Horticultural Sciences Department, Gainesville, FL, ²UF/IFAS Extension North Florida Research and Education Center-Suwanne Valley, Live Oak, FL. (pdittmar@ufl.edu) [V-33]
- 11:00 Management of Diamondback Moth, *Plutella xylostella* (Lin.) (Lepidoptera: *Plutellidae*) Using Integrated Management Program. Dakshina Seal*, Catherine Sabines, and Shawbeta Seal. UF/IFAS Tropical Research and Education Center, Homestead, FL. (dseal3@ufl.edu) [V-34]
- 11:15 The Current Status of Fungicidal Control of Foliar Blights of Sweet Corn. Christian F. Miller^{1*}, Eugene McAvoy², and Richard N. Raid³. ¹UF/IFAS Extension Palm Beach County, West Palm Beach, FL, ²UF/IFAS Extension Hendry County, LaBelle, FL, ³UF/IFAS Everglades Research and Education Center, Belle Glade, FL. (cfmiller@ufl.edu) [V-35]
- 11:30 Population Dynamics and Management of the Pepper Weevil, Anthonomus eugenii Cano Using Biorational Insecticides and Aggregation Pheromone. Victoria Adeleye^{1*} and Dakshina Seal². UF/IFAS Tropical Research and Education Center, Homestead, FL. (vadeleye@ufl.edu) [V-36]
- 11:45 Genetic Loci Associated with Resistance to Phytophthora Crown Rot in Squash. Geoffrey Meru*, Alexis Ramos, Yuqing Fu, and Vincent Michael. UF/IFAS Tropical Research and Education Center, Homestead, FL. (gmeru@ufl.edu) [V-37]
- 12:00 End of the Tuesday Morning Session 2—Adjourn
- **12:00** Extension Luncheon (Ticket Required)

In-Service Training-Agriculture

Tuesday Afternoon Session

Sheraton Orlando North Hotel, Maitland, FL

1:00 P.M.-5:00 Swift

"Use of Soil Moisture Sensors and Weather Data in Irrigation Scheduling for Best Management Practices"

Organizers: **Lincoln Zotarelli**¹, **and Charles Barrett**² ¹UF/FAS, Horticultural Sciences Department, Gainesville, FL, ²UF/IFAS Extension, Water Resources RSA, (<u>lzota@ufl.edu</u> and <u>cebarrett@ufl.edu</u>)

Agenda

- 1:00 Welcome and Introduction, pre-testing, background
- 1:15 Basic concepts in irrigation management: soil and plant water relations, water holding capacity and ET, Dr. Johnny Ferrarezi, UF/IFAS IRREC
- 1:45 Irrigation scheduling for selected irrigation systems, Dr. Andre da Silva, UGA-Tifton
- 2:15 Building an irrigation schedule Workshop with the agents and grower's perspective, Dr. Charles Barrett, UF/ IFAS Extension
- 3:00 Break
- 3:15 Irrigation scheduling tools and practices for improving performance of orange trees affected by HLB, Dr. Davie Kadyampakeni, UF/IFAS CREC
- 3:45 Use of ET and soil moisture sensor data for irrigation decision of trees and row crops, Dr. Kelly Morgan, UF/IFAS SWFREC
- **4:20** Types of sensors and their application and cost, Dr. Kelly Morgan, UF/IFAS SWFREC
- 4:45 Conclusion: questions, discussions, post-testing
- 5:00 Adjourn

In-Service Training-Residential Horticulture

Tuesday Afternoon Session

Sheraton Orlando North Hotel, Maitland, FL

1:00 P.M.-5:00 Beaufort

"Residential Irrigation and Landscape Management" (In-Service Training 2019—IST #31711) Register at <u>www.pdec.ifas.ufl.edu</u>).

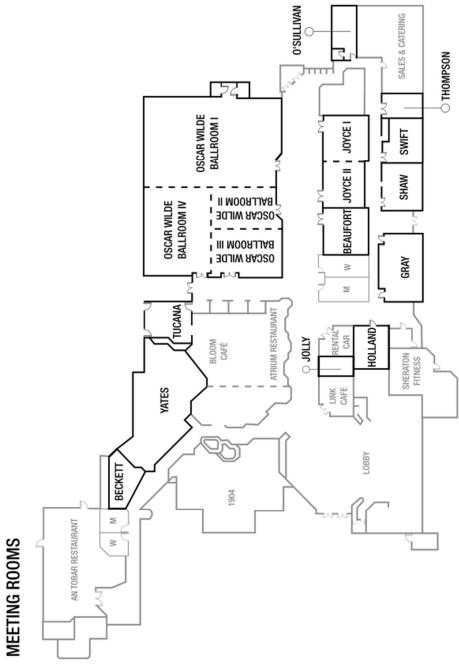
Organizer: A.J. Reisinger, UF/IFAS, Soil and Water Sciences Department, Gainesville, FL (reisingera@ufl.edu)

Instructors: Dr. Eban Bean, Dr. Adam Dale, Dr. Lisa Krimsky, Gisele Nighswander, Dr. A.J. Reisnger, Tom Wichman.

Agenda

- 1:00 Welcome and Introduction, Dr. A.J. Reisinger
- 1:15 Plant, soil, and water relationship in urban landscapes, Dr. Eban Bean
- 1:35 Irrigation scheduling for urban landscapes, Dr. Eban Bean
- 1:55 Florida Friendly Landscaping, Tom Wichman
- 2:20 Source and concentrations of surface water nutrients from residential waterfrom homes in Brevard County, FL, Dr. Lisa Krimsky
- 3:00 Break
- 3:15 Using organic amendments to improve soil health, Dr. AJ Reisinger
- 3:45 Integrated Pest Management, Dr. Adam Dale
- 4:15 Landscape effects on biodiversity, Dr. Giselle Nighswander
- **4:45 Conclusion:** questions, discussion, post-testing, Dr. A.J. Reisinger
- 5:00 Adjourn

Sheraton Orlando North Hotel Map



43



FHS