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***WELCOME***  
**TO THE**  
**2007**  
**JOINT ANNUAL MEETING**  
**OF THE**  
**FLORIDA STATE**  
**HORTICULTURE SOCIETY**  
**AND THE**  
**SOIL AND CROP SCIENCE SOCIETY OF FLORIDA**

*June 3 to 5*

***PGA National Resort & Spa***  
***400 Avenue of the Champions***  
***Palm Beach Gardens, Florida***

**FLORIDA STATE HORTICULTURAL SOCIETY  
2006-2007  
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## **MEETING FACILITATORS**

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### ***Local Arrangement Coordinators***

Audrey Norman and Darrin Parmenter

### ***Sponsorships Coordinator***

Gene Albrigo

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### ***Continuing Education Units Coordinator***

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\* \* \* \* \*

## MEETING SPONSORS

The Societies truly appreciate the support of the following organizations to help make this meeting possible.

### ***Gold Level Sponsor (\$2,000–\$4,999)***

*Valent Biosciences*

### ***Silver Level Sponsor (\$1,000–\$1,999)***

*BASF Corporation*

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### ***Bronze Level Sponsor (\$250–\$999)***

*Chemical Dynamics*

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## DISPLAYS DURING THE MEETING

### **Citrus, Vegetable & Row Crop, and Container Nursery BMPs**

*Brian Boman, UF/IFAS Indian River Research & Education Center, Ft. Pierce*

### **Citrus Mechanical Harvesting and Abscission Program**

*Barbara Hyman, UF/IFAS Southwest Florida Research & Education Center, Immokalee*

### **Florida Plants of the Year 2007**

*Bill Schall and Christine Rainbolt, Palm Beach County Extension, West Palm Beach*

### **GrowSmart!**

*Bill Schall, Palm Beach County Extension*

### **IFAS Extension Bookstore**

*Renea Bohannon and Margie Haytock*

### **IPM Florida**

*Jennifer Gillett, UF/IFAS Entomology and Nematology, Gainesville*

### **Mounts Botanical Garden**

*Allen Sistrunk, Mounts Botanical Garden, West Palm Beach*

### **Oriental and Tropical Vegetables**

*Teresa Olczyk and Mary Lamberts, Miami-Dade County Extension, Homestead*

### **Palm Beach County Agriculture**

*Audrey Norman, Palm Beach County Extension, West Palm Beach*

### **Tropical Fruit**

*Gene Joyner, Palm Beach County Extension, West Palm Beach*

\* \* \* \* \*

## LOCAL ATTRACTIONS

### Parks, Gardens, and Natural Areas

#### **Mounts Botanical Garden**

Located 14 miles south of PGA National on Military Trail, Palm Beach County's oldest and largest public garden is associated with the county's Cooperative Extension Service.

See the registration desk to sign-up for a guided tour.

#### **Frenchman's Forest Natural Area**

A 158-acre natural area with walking trails. From I-95 take PGA Blvd. East to Prosperity Farms Rd. Turn North on Prosperity Farms Rd. The Natural Area is located on the west side of the road.

#### **Loggerhead Marinelife Center**

Located on the ocean in Palm Beach County, the sea turtle rehabilitation & education campus houses exhibits, live sea turtles and other coastal creatures. Located 200 yards from the Atlantic Ocean in Loggerhead Park at 14200 US Hwy 1, Juno Beach, FL.

#### **John D. MacArthur Beach State Park and Nature Center**

From the parking lot, take the tram across the 1600 foot long bridge over the estuary to one of Florida's finest beaches. Take PGA Blvd. east all the way to the ocean, veer south and go two miles.

### Shopping & Entertainment

#### **The Gardens Mall**

See 160 shops and restaurants located one mile to the east of I-95 on PGA Blvd.

#### **Downtown at the Gardens**

Over 50 boutique stores, renowned restaurants and entertainment venues. Located just north and west of The Gardens Mall.

#### **Legacy Place**

469,000 square foot mixed-use center, located on PGA Boulevard and A1A, directly across from The Gardens Mall.

#### **Eissey Campus Theatre**

Upcoming production: Char-Mar School of Dance presents "I Got Rhythm". Sunday, June 3 at 2 and 7 p.m. and Monday, June 4 at 7 p.m.

Tickets: \$18 Call (561) 369-1619.

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# PROGRAM OVERVIEW

**Registration Desk Hours** *Atrium Courtyard*

Sunday June 3 12:00 Noon – 7:00 PM  
 Monday June 4 7:00 AM – 6:00 PM  
 Tuesday June 5 7:00 AM – Noon

## Sunday Afternoon

2:00 - 4:00 FSHS Board of Directors Mtg. *Canterbury B*  
 3:00 - 5:00 SCSSF Board of Directors Mtg. *Canterbury A*  
 5:00 - 5:30 Awards Ceremony *British Open Ballroom*  
 6:00 - 7:00 Welcome Reception *Pool Deck*

## Monday Morning

7:00 - 8:00 Continental Breakfast *British Open Ballroom*  
 8:30 - 9:45 Joint General Session *British Open Ballroom*  
 8:30 Introduction and Welcome  
 8:40 Presidential Addresses:  
*Peter McLure, President, FSHS*  
*Thomas Obreza, President, SCSSF*  
 9:00 General Session Keynote Speaker  
 10:00 – Noon Concurrent Morning Sessions - A  
*(Continuing Education Units are approved)*

- Citrus *Masters A*
- Handling & Processing *Canterbury B*
- Krome Memorial Institute *Congressional Room*
- Ornamental, Gardening & Landscape *Canterbury A*
- Vegetable *Masters B*
- SCSSF Sessions *Legends B*

## Monday Afternoon

1:30 - 3:00 Concurrent Afternoon Sessions - B

- Citrus *Masters A*
- Handling & Processing *Canterbury B*
- Krome Memorial Institute *Congressional Room*
- Ornamental, Gardening & Landscape *Canterbury A*
- Vegetable *Masters B*
- SCSSF General Session *Legends B*

3:00 - 3:30 Sectional Business Meetings  
 3:30 - 5:00 Concurrent Afternoon Sessions - C

- Citrus *Masters A*
- Handling & Processing *Canterbury B*
- Krome Memorial Institute *Congressional Room*

- Ornamental, Gardening & Landscape *Canterbury A*
- Vegetable *Masters B*
- SCSSF General Session *Legends B*

5:15 - 6:15 Fruit/Vegetable Focus Team Mtg. *Masters B*  
 6:30 - 7:30 Industry Reception *British Open Ballroom*

## Tuesday Morning

7:00 - 8:30 Horticultural Breakfast *Ryder Cup Room\**  
 with Invited Speaker  
 8:30 - 9:45 Concurrent business meetings:  
 FSHS Annual Business Meeting *British Ballroom*

- Student Best Paper Competition Awards, *Rose Reyes*
- A History of the FSHS proceedings, *Ed Etxeberria*

SCSSF Annual Business Meeting *Legends B*  
 10:00 - Noon Concurrent Morning Sessions - D

- Citrus *Masters A*
- Handling & Processing *Canterbury B*
- Krome Memorial Institute *Congressional Room*
- Ornamental, Gardening & Landscape *Canterbury A*
- Vegetable *Masters B*
- SCSSF General Session *Legends B*

### **END OF JOINT MEETING**

## Tuesday Afternoon

### UF/IFAS EXTENSION IN-SERVICE TRAINING PROGRAM

*(Continuing Education Units are approved.)*

*Co-sponsored by*

*FSHS, SCSSF and UF/IFAS Cooperation Extension Service*

12:00 - 1:00 Extension Luncheon *Ryder Cup Room\**

Invited Speaker: *Ted Winsberg*, Retired bell pepper grower in Pam Beach County (and friend of Extension)

"Pepper Production in Palm Beach County from 1957 to 2000"

1:30 - 4:30 Biological Control of Insects and Mites in Vegetables In-Service Training Program

*Congressional Room*

### **END OF PROGRAM**

*\*Lower level*

# JOINT PROGRAM SCHEDULE

## FSHS PROGRAM

(\* = STUDENT COMPETITION PRESENTER)

### CITRUS SECTION

*Mongi Zekri, Presiding*

*Masters A*

**Monday Morning Session 10:00-12:00**

#### A- Harvesting, Fertigation, and Irrigation

- 10:00 **In-situ Measurement of the Actual Detachment Force of Oranges Harvested by a Canopy Shaker Harvesting Machine.** R. Ehsani, M. Hebel, Southern Illinois University, G. Bora and K. Lee, CREC, UF/IFAS. [C1]
- 10:15 **Daily Fluctuations in Fruit Detachment Force of Valencia Orange are Related to Temperature and Relative Humidity.** L. Pozo, A. Malladi, F. Alferrez, Y. Lluch, and J.K. Burns, CREC, UF/IFAS. [C2]
- 10:30 **Reconciling Grower and Processor Objectives when Deciding to Harvest Juice Oranges.** Jake Searcy\*, Fritz Roka and Thomas Spreen, Food and Resource Economics, UF/IFAS. [C3]
- 10:45 **Optimum Nitrogen Rate for Fertigated Young Navel Orange Trees in Arizona.** Avako Kusakabe\*, Scott A. White, James L. Walworth, Glenn C. Wright, and Thomas L. Thompson, Soil, Water and Environmental Sci., Univ. of Arizona, Tucson, AZ. [C4]
- 11:00 **Georeferenced Ground Photography of Citrus Orchards for Canopy Research and Variable Rate Technology.** A.W. Schumann, J.P. Syvertsen, and K.H. Hostler, CREC, UF/IFAS. [C5]
- 11:15 **Effect of Winter and Spring Foliar Urea, NPK or K-phosphite Sprays on Productivity of Citrus in Central Florida.** L.G. Albrigo, CREC, UF/IFAS. [C6]
- 11:30 **Citrus Water Requirements: Linking Irrigation Scheduling and Fertilizer Strategies.** K.T. Morgan, SWFREC, UF/IFAS. [C7]
- 11:45 **Effect of Water Management and Soil Application of Nitrogen Fertilizers, Petroleum Oils, and Lime on Inoculum Production by *Mycosphaerella citri*, the Cause of Citrus Greasy Spot.** S.N. Mondal, CREC, UF/IFAS, K.T. Morgan, SWFREC, UF/IFAS, and L.W. Timmer, CREC, UF/IFAS. [C8]
- 12:00 End of Session/LUNCH

#### Monday Afternoon Sessions

1:30- 3:00

#### B – Salinity and Rootstocks

- 1:30 **The Relative Salt Tolerance of ‘Rangpur Lime’ Seedlings and ‘Arbequina’ Olive Cuttings.** J.C. Melgar, J.P. Syvertsen, CREC, V. Martinez and F. Garcia-Sanchez, CEBAS-CSIC, Murcia, Spain. [C9]
- 1:45 **Shade Effects on Salinity Tolerance of ‘Valencia’ Orange Trees on Contrasting Rootstocks.** J.P. Syvertsen, F. García-Sánchez, CREC UF/IFAS, V. Martínez, CEBAS, CSIC Universitario de Espinardo, Murcia, Spain, and J.C. Melgar, Universidad de Córdoba, Spain. [C10]
- 2:00 **Performance of ‘Hamlin’ Orange Trees on Flying Dragon Trifoliate Orange, Changsha Mandarin, and Koethen Sweet Orange x Rubidoux Citrange Rootstocks at Three In-Row Spacings in a Flatwoods Site.** W.S. Castle, J.C. Baldwin, and R.P. Muraro, CREC, UF/IFAS. [C11]
- 2:15 **Field Performance of ‘Hamlin’ Orange on 27 Rootstocks in Lake County.** K.D. Bowman, G. McCollum, and U. Albrecht, USDA-ARS-USHRL, Ft. Pierce. [C12]
- 2:30 **Creating an Improved Sour Orange Rootstock.** K.D. Bowman and U. Albrecht, USDA-ARS-USHRL, Ft. Pierce 34945. [C13]
- 2:45 **Screening Citrus Rootstock Genotypes for Tolerance to Phytophthora-Diaprepes under Field Conditions.** J.H. Graham, CREC, UF/IFAS, K.D. Bowman, USDA-ARS-USHRL, Ft. Pierce, D.B. Bright CREC, UF/IFAS, and R.C. Adair, Jr., Florida Research Center for Agricultural Sustainability, Vero Beach. [C14]
- 3:00 Sectional Business Meeting
- 3:15 Break
- 3:30-5:00
- #### C-Rootstocks, Insect Pests, and Diseases
- 3:30 **Progress in the Development of New Rootstocks Tolerant of the *Diaprepes/Phytophthora* Complex.** J.W. Grosser, J.H. Graham, D. Bright, A. Hoyte, and H.M. Rubio, CREC, UF/IFAS. [C15]
- 3:45 **Use of Landscape Cloth to Manage Diaprepes Root Weevil in Citrus Groves.** L.W. Duncan, CREC, UF/IFAS, S.L. Lapointe, USDA-ARS, U.S. Horticultural Research Lab, Ft. Pierce, and R.J. Stuart, CREC, UF/IFAS. [C16]
- 4:00 **Integrated Approaches for Managing the Asian Citrus Psyllid (Homoptera: Psyllidae) in Florida.** Jawwad A. Qureshi and Philip A. Stansly, SWFREC, UF/IFAS. [C17]
- 4:15 **Effectiveness of Several Soil-applied Systemic Insecticides for Managing the Asian Citrus Psyllid, *Diaphorina citri* Kuwayama**

- (**Homoptera: Psyllidae**). Michael E. Rogers, CREC, UF/IFAS. [C18]
- 4:30 **Defoliation of Canker Infected Citrus Trees by Diquat.** Shiv D. Sharma, M. Singh, CREC, UF/IFAS, Eric K. Rawls and John B. Taylor, Jr., Syngenta Crop Protection, North Palm Beach. [C19]
- 4:45 **Severe Pruning for Control of Citrus Canker in São Paulo State Brazil.** J. Belasque, Jr., Luciane M. Ribeiro, Antonio J. Ayres, and Nelson Gimenes-Fernandes, Fundo de Defesa da Citricultura, Araraquara, São Paulo, Brazil. [C20]
- 5:00 End of Afternoon Session
- Tuesday Morning Sessions**
- 10:00-11:30**
- D - Citrus Greening, Citrus Canker**
- 10:00 **Citrus Leafminer Control and Copper Fungicide Sprays for Management of Citrus Canker on Lemon in Tucumán, Argentina.** B. Stein, J. Ramallo, L. Foguet, Estación Experimental Agroindustrial O. Colombres, Argentina, and J. H. Graham, CREC, UF/IFAS. [C21]
- 10:15 **The Impact of Citrus Greening and Canker on Florida Grove Care Management Practices and Costs.** Ronald P. Muraro, CREC, UF/IFAS, Thomas H. Spreen and Jordan C. Malugen, Food and Resource Economics, UF/IFAS. [C22]
- 10:30 **The Projected Impact of Citrus Greening in Sao Paulo and Florida on Processed Orange Production and Price.** Thomas H. Spreen, Food and Resource Economics, UF/IFAS, Mark G. Brown, FDOC Economic-Market Research, and Ronald P. Muraro, CREC, UF/IFAS. [C23]
- 10:45 **Culturing Fastidious Prokaryotes - Points to Consider When Working with Citrus Greening.** M.J. Davis and R.H. Brlansky, CREC, UF/IFAS. [C24]
- 11:00 **Characterization of Recently Introduced HLB and CTV Isolates** W. Dawson, S. Garnsey, C. Robertson, S. Godwit, S. Tatineni, M. Irey, P. Sieburth, and M. Hilf, CREC, UF/IFAS, US Sugar Corp., and USDA Horticultural Research Laboratory, Fort Pierce. [C25]
- 11:15 **Update on the Southern Gardens Diagnostic Laboratory and the Procedure for Submitting Diagnostic Samples for Huanglongbing.** M.S. Irey, P. Z. Mai, US Sugar Corp., T. Gast, Southern Gardens Citrus Corp., and J.H. Graham, CREC, UF/IFAS. [C26]
- 11:30 **Seasonal and Spatial Variability in the Titer of *Candidatus Liberibacter asiaticus* in Sweet Orange and the Asian Citrus Psyllid as it Relates to Sampling.** M.S. Irey, US Sugar Corp., D.G. Hall and T. R. Gottwald, USDA-ARS and T.

Gast, Southern Gardens Citrus Corp. [C27]

- 11:45 Discussion
- 12:00 End of Meeting

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## HANDLING & PROCESSING SECTION

### *Anne Plotto, Presiding*

*Canterbury B*

#### Monday Morning Session

**10:00-12:00**

#### A - Postharvest Physiology

- 10:00 **BASF FreshSeal® CHC Helps Keep Packed Tomatoes Firmer and Fresher Longer.** Mark P. Kohout, BASF Corporation, Sarasota, Mark A. Ritenour and James J. Salvatore, IRREC, UF/IFAS. [HP1]
- 10:15 **Effect of Edible Coatings and Other Surface Treatments on Pericarp Color of Thai Lychee Cultivars.** Nithiya Rattanapanone, Chiang Mai University, Chiang Mai, Thailand, Anne Plotto, and Elizabeth Baldwin, USDA/ARS Citrus & Subtropical Products Laboratory, Winter Haven. [HP2]
- 10:30 **Optimization of a HPMC, Bee's Wax and Shellac Edible Coating for 'Valencia' Oranges and 'Marisol' Tangerines.** Maria-Llanos Navarro-Tarazaga, M. Bernadita Pérez-Gago, Instituto Valenciano de Investigaciones Agrarias, Valencia, Spain, Anne Plotto and Kevin L. Goodner, USDA/ARS Citrus & Subtropical Products Laboratory, Winter Haven. [HP3]
- 10:45 **Relationship between Weight Loss and Visual Quality of Fruits and Vegetables.** Cecilia N. Nunes, Food Science and Human Nutrition, UF/IFAS, and Jean-Pierre Emond, Agricultural and Biological Engineering, UF/IFAS. [HP4]
- 11:00 **Changes in the Postharvest Quality of a 'Datil' Selection and 'Datil Dew' Hot Peppers as Affected by Storage Temperature.** Elena E. Lon Kan, Steven A. Sargent, Nicole L. Shaw, and Daniel J. Cantliffe, Horticultural Sciences, UF/IFAS; and, Amy Simonne, Family, Youth and Community Sciences, UF/IFAS. [HP5]
- 11:15 **A High Sensitivity Continuous Ethylene Monitoring Device for Postharvest Applications.** Reza Shekarriz, Fluid Analytics, Inc., Portland, Oregon (30 min). [HP6]
- 11:45 Discussion
- 12:00 End of Morning Session/LUNCH

#### Monday Afternoon Sessions

1:30- 3:00

**B. Student Presentations for Best Paper Competition**

- 1:30 **Harvesting Carambola at Different Ripeness Stages Affects Postharvest Quality.** Oren Warren\*, Marcio E. Pereira, Adrian D. Berry, and Steven A. Sargent, Horticultural Sciences, UF/IFAS. [HP7]
- 1:45 **Ripening of ‘Tainung 1’ Papaya Fruit Delayed by 1-Methylcyclopropene.** Marcio Eduardo Canto Pereira\*, Horticultural Sciences, UF/IFAS; Djalma Barbosa dos Santos, Aline Simoes da Rocha Bispo, Silvia Barbosa dos Santos, Embrapa Cassava & Tropical Fruits, Cruz das Almas, BA, Brazil. [HP8]
- 2:00 **Temperature Tracking Using RFID in the Pineapple Supply Chain.** C. Amador\* and J.P. Emond, Agricultural and Biological Engineering, UF/IFAS; C.N. Nunes, Food Science and Human Nutrition, UF/IFAS; and K.V. Chau, Center for Food Distribution and Retailing, UF/IFAS. [HP9]
- 2:15 **Visualization of Polyphenol Oxidase and Phenolics Distribution in Mesocarp of Fresh-Cut Mango (cv. Kent) During Storage.** Sharon Dea\*, Jeffrey K. Brecht, Horticultural Sciences, UF/IFAS, and Cecilia do Nascimento Nunes, Food Science and Human Nutrition, UF/IFAS. [HP10]
- 2:30 **Aroma Volatiles in Tangerine Hybrids.** Pauline Kerbiriou\*, Kevin Goodner, Anne Plotto, Elizabeth Baldwin, USDA/ARS Citrus & Subtropical Products Laboratory, Winter Haven, and Fred Gmitter, CREC, UF/IFAS. [HP11]
- 2:45 **Kinetics of Dissolved Oxygen and Vitamin C Consumption in Fresh Orange and Pineapple Juice.** Rosalia Garcia-Torres\*, Jose I. Reyes-De-Corcuera, and Russell Rouseff, CREC, UF/IFAS. [HP12]

3:00 Sectional Business Meeting

3:15 Break

**3:30-5:00**

**C. Pre- and Post-harvest Studies**

- 3:30 **Advances in Commercial Applications of the AgroFresh Technology (1-MCP) on Fruits and Vegetables.** Alvaro Ureña-Padilla, AgroFresh, Inc., San Pedro Montes Oca, Costa Rica. [HP13]
- 4:00 **A Simple Method to Test the Efficiencies of Postharvest Decay Control Treatments.** Jan A. Narciso, Anne Plotto, and Elizabeth Baldwin, USDA/ARS Citrus & Subtropical Products Laboratory. [HP14]
- 4:15 **Microbiological Evaluation of Mechanically-Harvested Citrus Fruit.** R. Goodrich-Schneider, Food Science and Human Nutrition, UF/IFAS, M.D. Danyluk, L.M. Friedrich and R. Ehsani, CREC, UF/IFAS. [HP15]

4:30 **Effectiveness of Different Preharvest Fungicide Applications at Controlling Postharvest Diseases of Florida Citrus.** James J Salvatore and Mark A. Ritenour, IRREC, UF/IFAS. [HP16]

4:45 **Update on the USDA, ARS Citrus Scion Improvement Project.** T.G. McCollum, USDA, ARS, USHRL, Fort Pierce. [HP17]

5:00 End of Afternoon Session

**Tuesday Morning Sessions**

**10:00-11:30**

**D- Quality and Uses of Citrus Products**

- 10:00 **Flavonoids in Grapefruit and Commercial Grapefruit Juice: Concentration, Distribution and Potential Health Benefits.** Jiuxu Zhang, Florida Department of Citrus, Lake Alfred. [HP18]
- 10:15 **Spectral Characteristics of Unknown Furanocoumarins and Coumarins from Grapefruit Oil Wax (GFW).** Thais Cesar and John Manthey, USDA/ARS Citrus & Subtropical Products Laboratory, Winter Haven. [HP19]
- 10:30 **Preliminary Investigation of Furanocoumarin Metabolism by *Aspergillus niger*.** Kyung Myung, Jan Narciso, and John Manthey, USDA/ARS Citrus & Subtropical Products Laboratory, Winter Haven. [HP20]
- 10:45 **Functional Analysis of Block Deesterified Citrus Pectins.** Gary Luzio and Randall Cameron, USDA/ARS Citrus & Subtropical Products Laboratory, Winter Haven. [HP21]
- 11:00 **Economic Analysis of Ethanol Production from Citrus Peel Waste.** Weiyang Zhou, Wilbur Widmer and Karel Grohmann USDA/ARS Citrus & Subtropical Products Laboratory, Winter Haven. [HP22]
- 11:30 Discussion
- 12:00 End of Meeting

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# KROME MEMORIAL INSTITUTE

## Noris Ledesma, Presiding

Congressional Room

### Monday Morning Session

#### 10:00-12:00 Concurrent Sessions – A

##### A- Genetic Resources

- 10:15 **Performance of 5 Plantain Cultivars at the Natural Germoplasm Repository on the Land Stone Condition.** Tomas Ayala, Ray Schnell, Alan Meerow, and Gaby Gordon, USDA SHRU, Miami. [K1]
- 10:30 **Assessment of Mango Diversity in Oman** Rashid Al-Yahyai, Zaher Al-Farei, Sulaiman Al-Khanjary, Michael Deadman, Crop Sciences, and Harith Al-Nabhani, College of Agricultural and Marine Sciences, Sultan Qaboos University, Sultanate of Oman. [K2]
- 10:45 **Florida Avocado Heritage Collection.** Carlos Balerdi, Miami-Dade County Extension, UF/IFAS, Homestead, and Noris Ledesma, Fairchild Tropical Botanic Garden, Miami. [K3]
- 11:00 **Performance of 'Gulf Beauty' and 'Gulf Blaze' Plum on *Prunus persica*, *P. salicina* and *P. umbulata*.** Paul Miller, Horticultural Sciences, UF/IFAS. [K4]
- 11:15 **Plant Exploration in Tropical Forests of Puerto Rico to Collect Ornamental Germplasm.** Tomas Ayala-Silva, USDA, ARS, National Germplasm Repository, Subtropical Horticulture Research Station, Miami, Alan W. Meerow, Ricardo Goenaga and Brian Iris, USDA, ARS, Tropical Agriculture Research Station, Mayaguez, PR. [K5]
- 11:30 **Quality Characteristics of Selected Muscadine (*Vitis rotundifolia* Michx.) Cultivars Grown in North Florida.** J.W. Breman, Union County Extension, UF/IFAS, A.H. Simonne, Family, Youth and Community Sciences, UF/IFAS, R.C. Hochmuth, L. Landrum, M. Taylor, K. Evans, NFREC-Suwannee Valley, UF/IFAS, C. Heykoop, D. Goode, Columbia County Extension, UF/IFAS. [K6]
- 11:45 **The Potential of New Mangifera Species in Florida.** Richard J. Campbell and Noris Ledesma, Fairchild Tropical Botanic Garden, Miami. [K7]
- 12:00 End of morning session/LUNCH

### Monday Afternoon Sessions

#### 1:30- 3:00 Concurrent Sessions B

##### B - Horticultural Techniques (I)

- 1:30 **The Inverted Root Graft: Applications for the Home Garden in Florida.** Noris Ledesma and Richard J. Campbell, Fairchild Tropical Botanic

Garden, Miami. [K8]

- 1:45 **Graft Interstocks for Wild Mangos.** Richard J. Campbell, Fairchild Tropical Botanic Garden, Miami. [K9]
- 2:00 **Pruning Systems for Tropical Fruits in Florida.** Carlos Balerdi, Miami-Dade County Extension, UF/IFAS, and Jonathan Crane, TREC, UF/IFAS. [K10]
- 2:15 **Carbon Sequestration in Oil Palm Crop System (*Elaeis Guineensis*) in The Caribbean Lowland of Costa Rica.** Humberto A. Leblanc and Ricardo O. Russo, Universidad Earth, Las Mercedes de Guacimo, Limon, Costa Rica. [K11]
- 2:30 **Hydrogen Cyanamide: A Potential Tool for Advancing Fruit Harvest of Blueberry in Florida.** Jeffrey G. Williamson and E.P. Miller, Horticultural Sciences, UF/IFAS. [K12]
- 2:45 **Effect of Foliarly Applied Ascorbic Acid Plus Ferrous Sulfate on Carambola Leaf Greeness.** J.H. Crane, B.A. Schaffer, Y. Li, and G. Evans, TREC, UF/IFAS. [K13]
- 3:00 Sectional Business Meeting
- 3:15 Break
- 3:30-5:00 Concurrent Sessions – C**
- ##### C – Horticultural Techniques (II)
- 3:30 **Effect of Low Temperature Storage on Mamey Sapote (*Pouteria sapota*) Fruit Quality.** J.H. Crane, TREC, UF/IFAS and S.A. Sargent, Horticultural Sciences, UF/IFAS. [K14]
- 3:45 **Developing a Linkage Mapping Population for Avocado.** Cecil Alano and Ray Schnell, USDA, SHRU, Miami. [K15]
- 4:00 **Phylogenetic Analysis of Aestivales, Planchon American Native Grapes by Nuclear Microsatellite Profiling as a Valuable Germplasm for Grape Improvement.** Tresia Walters, Lelan Parker, Patricia Bordallo and Violeta Colova (Tsolova), Center for Viticulture and Small Fruit Research, CESTA, Florida A & M University, Tallahassee. [K16]
- 4:15 **Self-incompatibility of 'Julie' Mango.** Gary Zill, High Performance Plants, Boyton Beach. [K17]
- 4:30 **Why aren't Tropical Fruits as Popular as Temperate Fruits? An Industry Perspective.** R. Rafie, Carlos Balerdi and Jonathan Crane, TREC, UF/IFAS. [K18]
- 4:45 **Development and Evaluation of Subtropical Stone Fruit Cultivars in Florida.** J.J. Ferguson, J.G. Williamson, J. Chaparro, Horticultural Sciences, UF/IFAS, R.E. Rouse, SWFREC, B.T. Scully, and C.A. Powell, IRREC, UF/IFAS. [K19]
- 5:00 **Internet-based Audio & Video (IAV): A New**

**Resource for Extension, Teaching, and Research.** Ian Maguire, TREC, UF/IFAS. [20]

5:15 End of Session

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## ORNAMENTAL, GARDEN AND LANDSCAPE SECTION *Ralph Mitchell, Presiding*

Canterbury A

### Monday Morning Session

10:00-12:00 Concurrent Sessions - A

#### A - Landscapes

- 10:00 **The Effect of Quality of Parks on Neighboring Property Values.** Christopher Rubottom\*, R. Gomez, F. Cosby, and A.B. Lorenzo, Landscape Design and Management Program, College of Engineering Sciences, Technology, and Agriculture, Florida A&M University, Tallahassee, FL. [GL1]
- 10:15 **Tree Damage and Restoration Following Hurricanes Katrina and Wilma at Miami Metrozoo.** H. Mayer, Miami-Dade County Extension, UF/IFAS, T. Trump, Miami Metrozoo, and F. Escobedo, School of Forest Resources and Conservation, UF. [GL2]
- 10:30 **Fort Lauderdale Trial Garden – Year 5 (2006-2007).** Kimberly K. Moore and Luci Fisher, FLREC, UF/IFAS. [GL3]
- 10:45 **Landscape Valuation of the Effect of Canopy Roads on Property Values in Tallahassee-Leon County, Florida.** Alfredo B. Lorenzo, Florida A&M University, Tallahassee, Y. Cao, Planning and Landscaping Division, PBS&J, T. Zhang, Department of Geography, Florida State University, Tallahassee, and L. Yu, Florida A&M University, Tallahassee. [GL4]
- 11:00 **Experiencing Sense of Place of Cultural Landscapes: A Suburban-Strip Chinatown Case Study.** Yun Cao, Planning and Landscaping Division, PBS&J, A. B. Lorenzo, R. Rome and M. Powers, Florida A&M University, Tallahassee. [GL5]
- 11:15 **Concordance Among Landscape Design Professionals on Ecological Design.** Cheryl Callender, Keith & Schnars, Fort Lauderdale, A.B. Lorenzo, R. Rome, and M. Powers, Florida A&M University, Tallahassee. [GL6]
- 11:30 **Construction of a Pergola in a Demonstration Garden.** D.B. Shibles, A.E. Yasalonis, Polk County Extension, UF/IFAS. [GL7]

11:45 **Challenges of Fertilizer Ordinances—Planning for an Ordinance.** D.P. Rainey, Sarasota County Extension, UF/IFAS. [GL8]

12:00 End of Morning Session/LUNCH

### Monday Afternoon Sessions

1:30- 3:00 Concurrent Sessions – B

#### B1 – Best Management Practices and Runoff Issues

- 1:30 **Effects of Modified Hoagland's Solution Nitrogen Concentration and Aeration on *Pteris vitatta* Production.** R.H. Stamps, MFREC, UF/IFAS. [GL9]
- 1:45 **Monitoring Nitrate Nitrogen and Phosphorus in Porous Nursery Containers and Adjacent Native Soil.** L. M. Miller, Hillsborough County Extension, UF/IFAS, T.H. Yeager and C.A. Larsen, Environmental Horticulture, UF/IFAS. [GL10]

#### B2 - Plants

- 2:00 **Camellias: New Scents and Seasons.** J. Popenoe, Lake County Extension, UF/IFAS, J. Conrad, and E. Camellias, Plymouth. [GL11]
- 2:15 **Identification of The Four Forms of *Plumeria rubra*.** Stephen H. Brown, Lee County Extension, UF/IFAS. [GL12]

#### B3 - Home Horticulture

- 2:30 **"Compost Happens" Workshop Results.** P.W. Brown, Pinellas County Extension, UF/IFAS. [GL13]
- 2:45 **Saint Lucie County Pond Appeal Series: Turning Your Pond into an Oasis.** R.L. Creswell, J.P. Gellermann, K.T. Gioeli, and E.A. Skvarch, St. Lucie County Extension, UF/IFAS. [GL14]
- 3:00 Sectional Business Meeting
- 3:15 Break

3:30-5:00 Concurrent Sessions C

#### C1 - Home Horticulture (continued)

- 3:30 **Rain Garden Installation: Site and Soil Conditions.** A. Bolques, Gadsden County Extension, UF/IFAS, S. Valentine, J. Cherrier, and M. Abazinge, Environmental Sciences Institute, Florida A&M University. [GL15]
- 3:45 **Horticultural Therapy: How Can it Make a Difference in Your Everyday Life?** P. Porchey, Sarasota County Extension, UF/IFAS. [GL16]

#### C2 - Pests

- 4:00 **Effect of Roguing on Erwinia Soft Rot In Commercial Production with Two Phalaenopsis Plants per Pot.** R.T. McMillan, Jr.,

- Kerry's Bromeliad Nursery, A. Palmateer, and W. Vendrame, TREC, UF/IFAS. [GL17]
- 4:15 **Chemical Control of the Palm Leaf Skeletonizer, *Homaledra sabaella* (Lepidoptera: Coleophoridae).** F.W. Howard and Bryan Steinberg, FLREC, UF/IFAS. [GL18]
- 4:30 **Biohistory Updates and Defoliation by a Climbing Cutworm, the Royal Poinciana Caterpillar (*Melipotis acontoides*) and an Inchworm, the Snowbush Spanworm (*Melanchroia chephise*) in Naples, Florida.** Douglas L. Caldwell, Collier County Extension, UF/IFAS. [GL19]
- 4:45 **Bees and Trees: Problems of Honeybee Nesting in Landscapes.** Adrian G. B. Hunsberger, Miami-Dade County Extension, UF/IFAS and Jude Plummer, Miami-Dade County General Services Administration, Miami. [GL20]
- 5:00 End of Afternoon Session

### Tuesday Morning Sessions

#### 10:00-11:30 Concurrent Sessions - D

##### D – Pests (Continued)

- 10:00 **Pathogenicity of *Pythium aphanidermatum* and *Fusarium oxysporum* on Snapdragon** K.-H. Wang, R. McSorley, and E.R. Malek, Entomology and Nematology, UF/IFAS. [GL21]
- 10:15 **Integrated Pest Management of *Apis mellifera scutellata* (Africanized Honey Bee): Bee-Proofing a Home and School.** J.D. Ellis, Entomology and Nematology, UF/IFAS, A.S. Neal, and E.A. Skvarch, St. Lucie County Extension, UF/IFAS. [GL22]
- 10:45 Discussion
- 11:00 End of Meeting/LUNCH

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## VEGETABLE SECTION

### Marco Taopanta, Presiding

Masters B

#### Monday Morning Session

##### 10:00-12:00 Concurrent Sessions – A

- 10:00 **Soilless Media, Growing Containers, and Plug Transplants Influence on Vegetative Growth and Fruit Yield of 'Sweet Charlie' Strawberry (*Fragaria x ananassa* Duch.) Grown Under Protected Agriculture.** Daniel J. Cantliffe, Ashwin V. Paranjpe, Horticultural Sciences, UF/IFAS, Peter J. Stoffella, IRREC, UF/IFAS, Elizabeth M. Lamb, New York Agricultural

- Experiment Station, Geneva, NY, and Charles A. Powell, IRREC, UF/IFAS. [V1]
- 10:30 **Growing and Marketing Cabbage at Local Green Markets in Southeast Florida.** Kenneth D. Shuler, Stephen J. Nie, Deanna V. Shuler, and Pei-Ann N. Shuler, Stephen's Produce, Jupiter. [V2]
- 10:15 **Performance of Strawberry Cultivars in Florida.** Bielinski M. Santos, Craig K. Chandler, GCREC, UF/IFAS, Stephen M. Olson, NFREC-Quincy, UF/IFAS, and Teresa W. Olczyk. Miami-Dade County Extension, UF/IFAS. [V3]
- 10:45 **Yield and Quality of Greenhouse Grown Strawberries as Affected by Nitrogen Level in Coco Coir and Pine Bark Media.** Daniel J. Cantliffe, Horticultural Sciences, UF/IFAS, Javier Z. Castellanos, Celaya, Mexico, and Ashwin V. Paranjpe, Pune, India. [V4]
- 11:00 **A Case Study – Diagnosis of Hydrogen Dioxide Toxicity to Greenhouse Tomatoes.** Luis Barquin, Yuncong Li, Teresa Olczyk, and Aaron Palmateer, TREC, UF/IFAS. [V5]
- 11:15 **Evaluation of Galia-type Melons (*Cucumis melo* L. var. *Reticulatus* Ser.) for Fruit Yield, Quality and Powdery Mildew (*Podosphaera xanthii*) Susceptibility.** Jeanmarie M. Mitchell\*, Daniel J. Cantliffe, Steven A. Sargent, Horticultural Sciences, UF/IFAS, Lawrence E. Datnoff, Plant Pathology, UF/IFAS, and Peter J. Stoffella, IRREC, UF/IFAS. [V6]
- 11:30 **The Future of the Florida Strawberry Industry from a Grower and Nurseryman's Perspective.** Allen Williford, Florida Strawberry Growers Association, Plant City. [V7]

#### LUNCH BREAK

#### Monday Afternoon Sessions

##### 1:30- 3:00 Concurrent Sessions - B

- 1:30 **Plectosporium Blight of Cucurbits.** G.K. England, Sumter County Extension, UF/IFAS, J.S. Strickland, Hernando County Extension, UF/IFAS, and R.J. McGovern, Plant Medicine Program, UF/IFAS. [V8]
- 1:45 **Comparative Effectiveness of New Insecticides in Controlling Armyworms and Leafminers on Tomato.** D.R. Seal, TREC, UF/IFAS and D.J. Schuster, GCREC, UF/IFAS. [V9]
- 2:00 **MOVENTO<sup>®</sup>, a New Broad-Spectrum Insecticide for Sucking Insect Pest Control.** Marco A. Taopanta, Bayer CropScience, Brandon, John Bell, Steve Krueger and Robert Steffens, Bayer CropScience, Research Triangle Park, NC. [V10]
- 2:15 **Miticides and Programs of Application for Control of Twospotted Spider Mite (*Tetranychus urticae* Koch (Acari: Tetranychidae)) on Strawberry in 2007.** J.F. Price, C.N. Nagle, GCREC, UF/IFAS, and E.

McCord, Jr., Natural Sciences Division, New College of Florida, Sarasota. [V11]

2:30 **Alverde® (Metaflumizone), a Novel New Insecticide for Control of Key Insect Pests in Vegetables.** Larry Newsom, Venkat Pedibhotla, Dawn Calibeo-Hayes, Joseph Mitchell, and Thomas Holt, BASF Corp. Research Triangle Park, NC. [V12]

2:45 **Barriers to Local Vegetable Production and Marketing in Florida: Challenges and Opportunities for Extension, Research, and Industry.** Nancy Roe, Farming Systems Research, Boynton Beach; Diane Cordeau and Carl Frost, Kai-Kai Farm and Grove, Stuart. [V13]

3:00 Sectional Business Meeting

3:15 Break

**3:30-5:00 Concurrent Sessions - C**

3:30 **Nutrient Management for Greenhouse Production of Container Grown Organic Herbs.** Teresa Olczyk, Miami-Dade County Extension, UF/IFAS, Y. Qian, Y.C. Li, TREC, UF/IFAS, G.J. Hochmuth, Horticultural Sciences, UF/IFAS, R.C. Hochmuth, NFREC-Suwannee Valley, UF/IFAS, E.H. Simonne, D.D. Treadwell, Horticultural Sciences, UF/IFAS, L.S. Osborne, MFREC, R.K. Sprenkel, NFREC-Quincy, UF/IFAS, and K.W. Migliaccio, TREC, UF/IFAS. [V14]

3:45 **eOrganic: A New Community of Practice in eXtension.** D.D. Treadwell, Horticultural Sciences, UF/IFAS. [V15]

4:00 **Effect of N Rate on Yield of Tomato Grown with Seepage Irrigation and Reclaimed Water.** Monica P. Ozores-Hampton, Eric Simonne, Phyllis Gilreath, Steven Sargent, Thomas Wilkes, Daniel C. McClure, Eugene McAvoy, Phil Stansly, Sanjay Shukla, Pam Roberts, Fritz Roka, Tom Obreza, Kent Cushman, and Darrin Parmenter. SWFREC, UF/IFAS. [V16]

4:15 **Comparing Nitrogen and Sulfur Fertilizer Sources for Tomato Production.** Camille E. Esmel, Bielinski M. Santos, GCREC, UF/IFAS, Humberto Moratinos, University Central of Venezuela, and Jack E. Rechcigl, GCREC, UF/IFAS. [V17]

4:30 **Analysis and Interpretation of On-farm Fertilizer Trials with Tomato.** Eric Simonne, Monica Ozores-Hampton, Kent Cushman, Phyllis Gilreath, Ramon Littell, Eugene McAvoy, Sanjay Shukla, Thomas Obreza, Darrin Parmenter, Pamela Roberts, Fritz Roka, and Philip Stansly, Horticultural Sciences, UF/IFAS. [V18]

4:45 **Financial Implications of Limiting N-fertilization on Fresh Market Tomatoes.** Fritz Roka, Monica Ozores-Hampton, Eric Simonne, Gene McAvoy, Sanjay Shukla, and Kent Cushman. SWFREC, UF/IFAS. [V19]

5:00 End of Afternoon Session

**Tuesday Morning Sessions**

**10:00-11:30 Concurrent Sessions - D**

10:00 **Effects of Pruning on 'Florida 47' and 'Sungard' Tomato.** Bielinski M. Santos, GCREC, UF/IFAS. [V20]

10:15 **Variability in Watermelon Flower Attractiveness to Insect Pollinators.** J.H. Freeman, Horticultural Sciences, UF/IFAS and S.M. Olson, NFREC-Quincy, UF/IFAS. [V21]

10:30 **Growing and Marketing Kohlrabi at Local Green Markets in Southeast Florida.** Kenneth D. Shuler, Stephen J. Nie, Deanna V. Shuler, and Pei-Ann N. Shuler. Stephen's Produce, Jupiter. [V22]

10:45 **Determining Optimum Planting Dates for Inter-Cropped Cucumber, Squash, and Muskmelon with Strawberry.** Bielinski M. Santos, GCREC, UF/IFAS. [V23]

11:00 **Pumpkin (*Cucurbita pepo*, *C. maxima*, *C. moschata*) as an Alternative Crop in a Northeast Florida Seepage-Irrigated Production System.** C.M. Worthington, D.M. Gergela, and C.M. Hutchinson, Horticultural Sciences, UF/IFAS. [V24]

11:15 **Growing Specialty Potatoes in Southeast Florida: Is it Feasible?** Darrin Parmenter, Palm Beach County Extension, UF/IFAS. [V25]

11:30 Discussion

12:00 End of Meeting/LUNCH

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**SCSSF PROGRAM**  
(\* = STUDENT COMPETITION PRESENTER)

**GRADUATE STUDENT FORUM I:  
WATER, NUTRIENTS, AND  
ENVIRONMENTAL QUALITY**  
*Thomas Obreza, Presiding*

*Legends B*

**Monday Morning Session**

**10:00-12:00 PM**

- 10:00    **Sensing Accuracy of Four Commercially Available Soil Moisture Irrigation Controllers.** B. Cardenas-Lailhacar\* and M.D. Dukes, Agricultural and Biological Engineering, UF/IFAS. [SC1]
- 10:15    **Tomato and Pepper Yield Response to Irrigation Management and Nitrogen Rates under Plastic Mulch Conditions.** L. Zotarelli\*, M.D. Dukes, J.M. Scholberg, J. Icerman, K. Le Femminella, and R. Muñoz-Carpena, Agricultural and Biological Engineering, UF/IFAS. [SC2]
- 10:30    **Evapotranspiration and Soil Moisture-based Irrigation Control on Turfgrass Compared to Theoretical Requirements.** M.L. Shedd\* and M.D. Dukes, Agricultural and Biological Engineering, UF/IFAS, and G.L. Miller, Crop Science, North Carolina State Univ. [SC3]
- 10:45    **Characterization of Sorption of Hydrophobic Organic Pesticides In Carbonatic and Non-Carbonatic Soils from Florida, Puerto Rico, and Uganda.** G. Kasozi\*, P. Nkedi-Kizza, Soil and Water Science, UF/IFAS, J.A. Dumas-Rodriguez, Crop Protection Dept., Univ. of Puerto Rico-Mayaguez, Y. Li, TREC, UF/IFAS, D. Hodell, Geology Dept., UF, W. Harris, Soil and Water Science, UF/IFAS, and D. Powell, Chemistry, UF. [SC4]
- 11:00    **Estimation of Release Properties of Slow-Release Fertilizer Materials.** L.C. Medina\*, J.B. Sartain, and T.A. Obreza, Soil and Water Science, UF/IFAS. [SC5]
- 11:15    **Determination of Soil Sorption Coefficient (Koc) of Strongly Hydrophobic Organic Chemicals (SHOCs) Using Mixed Solvents Systems and the Solvophobic Model.** A. Muwamba\*, P. Nkedi-Kizza, R.D. Rhue, Soil and Water Science, UF/IFAS, Jeffrey Keaffaber, Chemistry, UF, and Kafui Awuma, Soil and Water Science, UF/IFAS. [SC6]
- 11:30    **Evaluation and Demonstration of Evapotranspiration-Based Irrigation Controllers.** S. Davis\*, M.D. Dukes, Agricultural and Biological Engineering, UF/IFAS, Sudeep Vyapari, Environmental Horticulture, UF/IFAS, and

G.L. Miller, Crop Science, North Carolina State Univ. [SC7]

11:45    Discussion

12:00    End of morning session/LUNCH

**GRADUATE STUDENT FORUM II:  
AGRONOMY**  
*Thomas Obreza, Presiding*

*Legends B*

**Monday Afternoon Session**

**1:15- 3:15**

- 1:15    **Bahiagrass Yield, Nutritive Value and P uptake as Influenced by Cattle Manure Application Rate and Strategy.** A.K. Obour\*, M.B. Adjei, M.L. Silveira, RCREC, UF/IFAS, E. Valencia, Univ. of Puerto Rico-Mayaguez, and J.E. Rechcigl, GCREC, UF/IFAS. [SC18]
- 1:30    **Tifton-9 Bahiagrass Performance in a Silvopastoral System with Boer x Spanish Goats and Loblolly Pines.** N. Gordon-Bradley\* and O.U. Onokpise, Forestry and Natural Resources Conservation, Florida A & M Univ. [SC8]
- 1:45    **Type and Frequency of Excreta Application to Bahiagrass (*Paspalum notatum*) Swards Affects Plant Responses.** U.R. White\*, L.E. Sollenberger, K.R. Woodard, Agronomy, UF/IFAS, D.A. Graetz, Soil and Water Science, UF/IFAS, Y.C. Newman, Agronomy, UF/IFAS, and J.M.B. Vendramini, RCREC, UF/IFAS. [SC9]
- 2:00    **Use of Extracts from Native Grass Species for the Control of Cogongrass (*Imperata cylindrica* L.).** L.D. Reid\*, O.U. Onokpise, Florida A&M Univ., and J.L. Norcini, NFREC-Quincy, UF/IFAS. [SC10]
- 2:15    **Bahiagrass Genotype Responses to Defoliation Frequency and Intensity.** S.M. Interrante\*, L.E. Sollenberger, Agronomy, UF/IFAS, and A.R. Blount, NFREC-Quincy, UF/IFAS. [SC11]
- 2:30    **Effects of Nitrogen Fertilization on the Dynamics of Re-growth and Yield for Tifton 85 Bermudagrass.** P. D. Alderman\*, K.J. Boote, and L.E. Sollenberger, Agronomy, UF/IFAS. [SC12]
- 2:45    **The Extraction of Chitosan from *Callinectes sapidus* (Blue Crab) on the Germination of Sweet Corn Seeds Inoculated with *Pythium aphanidermatum*.** C. Webster\*, Environmental Sciences Institute, O.U. Onokpise, Forestry and Natural Resources Program, J.J. Muchovej, Ornamental Horticulture, M. Abazinge and E. Johnson, Environmental Sciences Institute, Florida A & M Univ. [SC13]

- 3:00 **Biocontrol of Cogongrass (*Imperata cylindrical L.*) Using Fungal Pathogens.** R.D. Smalls\*, O.U. Onokpise and J.J. Muchovej, College of Engineering Sciences and Technology, Florida A&M Univ. [SC14]
- 3:15 Break

## GENERAL SESSION: CROPS

### Thomas Obreza, Presiding

Legends B

#### 3:30-5:00

- 3:30 **Water Deficit and Vapor Pressure Difference Effects on Leaf Area Expansion and Transpiration of Soybean.** A.L. Fletcher and T.R. Sinclair, Agronomy, UF/IFAS. [SC15]
- 3:45 **Growing Scotch Bonnet Hot Peppers (*Capsicum chinense* Jacq.) in Shade Houses: Maximizing Production by Manipulating Light Intensity.** C. Gardner, G. Queeley and T. Hylton, College of Engineering Sciences, Technology and Agriculture, Florida A & M Univ. [SC16]
- 4:00 **Zinc Efficiency in Relation to Root Morphology, Ultrastructure and Antioxidative Enzymes in Rice (*Oryza sativa* L.).** W.R. Chen, MOE Key Lab of Environmental Remediation and Ecosystem Health, College of Natural Resources and Environmental Science, Zhejiang Univ., Z.L. He, IRREC, UF/IFAS, X.E. Yang and Y. Feng, MOE Key Lab of Environmental Remediation and Ecosystem Health, College of Natural Resource and Environment Science, Zhejiang Univ., China. [SC17]
- 4:15 **Using Growth Analysis to Select Radish Cultivars for Salad Crop Production Systems.** O. Monje, N.C. Yorio, S.L. Edney, G.W. Stutte, Dynamac Corp., and R. M. Wheeler, NASA, Applied Technology Directorate, Kennedy Space Center. [SC19]
- 4:30 **Determining Aerodynamic Conductance of SPAR Chambers from Energy Balance Measurements.** O. Monje, Dynamac Corp., Kennedy Space Center, L.H. Allen, Jr., USDA-ARS, and K.J. Boote, Agronomy, UF/IFAS. [SC20]
- 5:00 SCSSF Graduate Student Paper Awards

## GENERAL SESSION: NUTRIENTS, CROPS/CLIMATE, AND PEST MANAGEMENT

### Thomas Obreza, Presiding

Legends B

#### Tuesday Morning Sessions

#### 10:00-12:00

- 10:00 **A Review of Sugarcane Fertilizer Nutrient Requirements for Different South-Florida Production Environments.** K.T. Morgan, SWFREC, J.M. McCray, EREC, and R.W. Rice, Palm Beach County Extension, UF/IFAS. [SC21]
- 10:15 **Free-Air CO<sub>2</sub> Enrichment (FACE): Model Analysis of Gaseous Dispersion Arrays for Studying Rising Atmospheric CO<sub>2</sub> Effects on Vegetation.** L.H. Allen, Jr., USDA-ARS and S.E. Beladi, Agronomy, UF/IFAS. [SC22]
- 10:30 **Evapotranspiration: A Measurement System and Remote-Sensing Method for Regional Estimates.** K. F. Heimburg, Environmental Engineering Sciences, UF and Agronomy, UF/IFAS, L.H. Allen, Jr., USDA-ARS; and W. C. Huber, Environmental Engineering Sciences, UF. [SC23]
- 10:45 **2004 Nematode Survey of Peanut Fields in Columbia County: Findings, Implications and Follow-Up.** W.D. Thomas, Columbia County Extension, UF/IFAS, J.R. Rich and M. Barber, NFREC-Quincy, UF/IFAS. [SC24]
- 11:00 **Breeding for Root Knot Nematode Resistance in Peanut.** B.L. Tillman and D.W. Gorbet, NFREC-Marianna, J.R. Rich, NFREC-Quincy, and W.D. Thomas, Columbia County Extension, UF/IFAS. [SC25]
- 11:15 **Nature and Extent of Plant-Parasitic Nematode Problems in Florida Cotton and Peanut Production.** J.R. Rich, W.D. Thomas, H.E. Jowers, M.C. Donahoe, L. Johnson, C.L. Brasher, J.P. Bowden and C. Vann, NFREC-Quincy, UF/IFAS. [SC26]
- 11:30 **Methyl Bromide Transition Strategy for Florida Fruit and Vegetable Crops.** J.W. Noling, CREC, UF/IFAS. [SC27]
- 11:45 **The Importance of Fumigant Synergies with Chloropicrin.** J.W. Noling, CREC, UF/IFAS and J.P. Gilreath, formerly GCREC, UF/IFAS. [SC28]
- 12:00 End of Session

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**SPECIAL SESSION  
IN-SERVICE TRAINING**

**BIOLOGICAL CONTROL OF INSECTS  
AND MITES IN VEGETABLES**  
*Susan Webb, Presiding*

**2007 JOINT MEETING  
FACILITIES**  
**PGA NATIONAL**  
Site Map

*Congressional Room*

**Tuesday Afternoon Session**

1:30 **Introduction.** *Susan Webb, Entomology & Nematology, UF/IFAS.*

**Protected Agriculture**

1:35 **Augmented Biological Control of Insects Affecting Greenhouse Grown Vegetables.** *Daniel Cantliffe, Horticultural Sciences, UF/IFAS.*

2:05 **Banker Plants in Greenhouse Biological Control and Biological Control of Broad Mites in Pepper Production.** *Lance Osborne, Entomology, MFREC, UF/IFAS.*

2:35 **Biologically Based Management of *Bemisia tabaci* in Vegetable Greenhouse Production.** *Phil Stansly, Entomology, SWFREC, UF/IFAS.*

3:00-3:30 Break and Demonstrations

**Field-grown Vegetables**

3:35 **Using Biological Control in Field-grown Vegetables: A Brief Review.** *Susan Webb Entomology & Nematology, UF/IFAS.*

3:50 **Pirate Bugs as Biological Controls of Thrips in Pepper.** *Joe Funderburk, Entomology, NFREC-Quincy, UF/IFAS.*

4:20 **Results from Biological Control Studies of Twospotted Spider Mites using Predatory Mites.** *Oscar Liburd, Entomology & Nematology, UF/IFAS.*

4:45 Discussion

5:00 Adjourn

**END OF PROGRAM**

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