



Florida State Horticultural Society

2004 Annual Meeting
June 6 - 8
Sheraton World Resort, Orlando

PRELIMINARY PROGRAM

Program at a Glance

Sunday - June 6

Afternoon Events

- 2:00** Executive Board Meeting
- 5:00** Awards Ceremony
- 6:00-7:00** Welcome Reception

Monday - June 7

Morning Events

- 7:00-8:00** Continental Breakfast
- 8:30-9:45** General Session
 - 8:30 Introduction and Welcome
 - 8:40 Presidential Address -Craig Campbell
 - 9:00 Principal Address - *"The Phytonutrients: Food Sources and Health Benefits"*
 Dr. Beverly Clevidence
 Research Leader of the Diet and Human Performance Laboratory,
 Beltsville Human Nutrition Research Center, USDA/ARS

10:00-noon Concurrent Technical Sessions - A

Afternoon Events

- 1:30-5:00** Concurrent Technical Sessions – B, C
- 6:00-7:00** Industry Reception

Tuesday – June 8

Morning Events

- 7:00-8:00** Horticultural Breakfast - Invited Speaker: Tim Blank, Horticulturist and Manager of Greenhouse Operations of The Land at Epcot. *"Epcot's Hydroponic Production of Crops from Around the World, IPM Strategies, Greenhouse Production Research, and the Epcot Advanced-Student Program"*
- 8:30-9:45** Annual Business Meeting
- 9:45-10:00** Break

10:00-noon Concurrent Technical Sessions - D

Special Afternoon Session

1:00-4:00 "Resistance Management"

End of Meeting

FSSHS Technical Session Schedules

Click on the Program Below

Special Programs

- 1) CEU Day
- 2) Master Gardener Program

Sectional Program Schedules

- 3) Citrus Section (Abstracts)
- 4) Handling & Processing Section (Abstracts)
- 5) Krome Memorial Institute (Abstracts)
- 6) Ornamental Section (Abstracts)
- 7) Garden & Landscape Section (Abstracts)
- 8) Vegetable Section (Abstracts)

UF/IFAS In-service Training Program

- 9) Resistance Management

Two Special Programs

CEU DAY at FSSHS - Richard Tyson, Presiding

Monday Morning 8:00 – Noon 4 CEUs

8:00 **General Standards/Core – The link between pesticide labels and IPM programs**
 Tom MacCubbin, Orange County and Richard Tyson, Seminole County

Two CEU's in the GS/Core Category

10:00 **Nematode Pest Management**
 Billy Crow, Entomology & Nematology Department, UF/IFAS

Two CEUs in Multiple Categories: Ornamental & Turf, Private Applicator Ag, Ag Row Crop, Ag Tree
 Crop Commercial Lawn & Ornamental, Limited Lawn & Ornamental, Limited Commercial
 Landscape Maintenance, Demonstration & Research, Forestry, Right of Way

Noon End of Program

1:30 – 5:00 pm Breakout Concurrent Sessions – check program for CEU's

Master Gardener Program – Tom Wichman, Presiding

Monday Morning 9:00 – noon 3 CEUs

9:00 **Edible Flowers**
 Karen Jewell, Marigolds and Marmalade, Winter Garden

10:00 Temperate Fruit Crops for the Home Landscape

Jeff Williamson, Horticultural Sciences Dept., UF/IFAS, Gainesville

11:00 Tropical Fruit Crops for the Home Landscape

Jonathan Crane, Tropical Research & Education Center, UF/IFAS, Homestead

Noon End of Program

1:30 – 5:00 pm *Breakout Concurrent Sessions – check program for CEU's*

Sectional Program Schedule

Citrus Sectional Program – Joby Sherrod, Presiding

Monday Morning Session A

10:00 Factors Affecting Brix and Other Quality Attributes of Indian River Grapefruit

L. G. Albrigo and W.S. Castle, Citrus Research and Education Center, UF/IFAS, University of Florida, Lake Alfred

10:15 Water Requirements for Flatwoods Citrus

Brian Boman, Indian River Research and Education Center, UF; and Sanjay Shukla, Southwest Florida Research and Education Center, UF.

10:30 Irrigation Templates for Florida Citrus

Chet Townsend, Agrilink Florida Inc., Alva, Florida

10:45 Root Systems of Healthy and Declining Citrus Trees Growing in Flatwoods Soils

Mace Bauer, Indian River Research and Education Center, UF; Brian Boman, Indian River Research and Education Center, UF; Bill Castle, Citrus Research and Education Center, UF; Tom Obreza, Soil and Water Science Department, UF; and Ed Stover, Indian River Research and Education Center, UF

11:00 Evaluating Variable Rate Fertilizer Technologies in Florida Citrus

W. M. Miller, A. W. Schumann, and J. D. Whitney, Citrus Research and Education Center, UF

11:15 A Solution for the Anionic/Cationic Balance Problem in Mineral Nutrition Studies

Randall P. Niedz and T.J. Evens. Agricultural Research Service, U.S. Horticultural Research Laboratory, Ft. Pierce, FL 34945

11:30 Improving Efficiency of Field Trials through Optimizing Experimental Design

Ed Stover , Indian River Research and Education Center, UF; and Ken Portier, Department of Statistics, UF

11:45 Preparing Trees for Citrus Mechanical Harvesting - Cost and Enhancing Harvesting Performance

F.M. Roka and R.E. Rouse, Southwest Research and Education Center, UF

LUNCH BREAK

Monday Afternoon Sessions

**1:30- 3:00 Concurrent Session B – Pest/Disease Management (6 papers)
1.5 CEU**

1:30 The History of Sulfur Use on Florida Citrus and its Effect on Scale Populations and the Environment

Paul J. Driscoll, Grove Manager, Fort Pierce, FL

1:45 Copper Toxicity on Florida Citrus – Why Did it Happen?

Paul J. Driscoll, Grove Manager, Fort Pierce, FL

2:00 The Use of Serenade® Biofungicide to Control Foliar Fungal Diseases of Florida Citrus

H. Brett Highland, AgraQuest, Inc, Nokomis, FL. and L. W. Timmer, University of Florida, Lake Alfred, FL

2:15 Efficacy of Envidor™, a New Acaricide from Bayer CropScience, Against Eriophyidae Mites on Florida Citrus

Marco A. Toapanta¹, John Bell², Joby Sherrod³, Roy Morris², and Richard Rudolph⁴, ¹Bayer CropScience, Tampa, ²Bayer CropScience, RTP, NC, ³A. Duda and Sons, LaBelle, ⁴Bayer CropScience, MO

2:30 Drift potential of citrus air-carrier sprayers

M. Salyani and M. Farooq, Citrus Research and Education Center, IFAS, UF

2:45 Preliminary Evaluation of Nonsynthetic Herbicides for Weed Management in Organic Orange Production

C. A. Chase, Horticultural Sciences Department; J. M. Scholberg and G. E. MacDonald, Agronomy Department, UF

3:00 Sectional Business Meeting

3:15 Break

3:30-5:00 Concurrent Session C - Pest/Disease Management (6 papers) 1.25 CEU

3:30 Effects of Soil Liming on Citrus Seedling Growth and Diaprepes Root Weevil Larval Survival

Hong Li, James P. Syvertsen, Clay W. McCoy, Robin J. Stuart, and Arnold W. Schumann, University of Florida, IFAS, Citrus Research and Education Center, Lake Alfred

3:45 Effect of Chemically Treated and Untreated Populations of *Diaprepes abbreviatus* on the Growth, Development and Survival of ‘Hamlin’ Orange Trees Budded to Five Rootstocks

C. W. McCoy, W. S. Castle, J. H. Graham, J. P. Syvertsen, A. W. Schumann, and R. J. Stuart, Citrus Research and Education Center, UF, IFAS.

4:00 Web-Based Reporting of Abundance of Adult Diaprepes Root Weevils from Six Sites in Florida Using Tedders Traps, 2001-2003

S. H. Futch, L. W. Duncan, Citrus Research & Education Center, U/IFAS, F, M. Zekri, Hendry County Extension Service, LaBelle

4:15 Soil, Rootstock, and Climatic Factors Affect Populations of *Phytophthora nicotianae* in South Florida Citrus Plantings

¹D. B. Bright, ²M. S. Irey, ²L. E. Baucum, and ¹J. H. Graham, ¹Citrus Research and Education Center, UF, Lake Alfred, and ²U.S. Sugar Corporation, Clewiston, FL

4:30 Status of The Citrus Canker Eradication Program In Florida And University of Florida

Citrus Canker Extension Program

H.L. Chamberlain, P.D. Roberts, Southwest Florida Research and Education Center, UF, L.W. Timmer, Citrus Research and Education Center, UF, and M. Zekri, Southwest Florida Multi-County Citrus Extension, Hendry County Extension Office, UF

4:45 **Organic Citrus Production in Florida: Results of a 2003-2004 Survey**
Kevin Athearn, Food and Resource Economics Dept., UF/IFAS (student paper)

5:00 End of Afternoon Session

Tuesday Morning Sessions

10:00-11:30 Concurrent Session D – Genetics (5 papers)

10:00 **Gene Promoters and Their use in Citrus and Other Horticulture Crops**
Michael G Bausher, US Horticultural Research Laboratory, USDA-ARS, Ft. Pierce

10:15 **Evaluation of New Citrus Rootstocks for 'Bearss' Lime Production in Southern Florida**
W.S. Castle, Citrus Research and Education Center (CREC), UF, IFAS, Lake Alfred, R.J. Schnell, USDA Subtropical Horticulture Research Station (SHRS), Miami, J.H. Crane, Tropical Research and Education Center, UF, IFAS, Homestead, J.W. Grosser, CREC, F.G. Gmitter Jr., CREC, T. Ayala-Silva, SHRS, and K.D. Bowman, USDA, Horticultural Research Laboratory, Fort Pierce.

10:30 **Importance of Post-harvest Evaluations in a Fresh Fruit Breeding Program: USDA 77-19 A Case In Point**
T.G. McCollum and J.X. Chaparro, USDA, ARS, USHRL, Ft. Pierce

10:45 **Comparison of Citrus Rootstock Performance upon artificial Infestation with Phytophthora**
U. Albrecht, K. D. Bowman, US Horticultural Research Laboratory, USDA, ARS, Fort Pierce

11:00 **Nursery Performance of New Citrus Rootstocks**
K. D. Bowman¹ and L. Faulkner², ¹United States Horticultural Research Laboratory, USDA, ARS, Ft. Pierce, ²Becker Citrus Nursery, Ft. Pierce

11:15-11:30 Discussion / End of Session

Handling & Processing Section – Mark Ritenour, Presiding

Monday Morning Session

10:00-12:00 Concurrent Session A (7 papers)

10:00 **Relocations in the Florida Fresh Fruit Industry**
David J. Hall, Fresh Mark Corporation, 622 E. Myers Blvd, Mascotte, FL 34753

10:15 **Degreening in the 1950s: Establishing Basic Principles**
Bill Grierson, 18 Golf View Circle N.E., Winter Haven, FL 33881

10:30 **Growth Conditions Affect Sheepnosing in Grapefruit**
J.P. Syvertsen¹, L. G. Albrigo¹, M.A. Ritenour², R. C. Vachon³, J.M. Dunlop¹, R.R. Pelosi² and M.S. Burton² UF, IFAS, ¹CREC, Lake Alfred, and ²IRREC, Ft. Pierce, ³The Packers of Indian River Ltd., Ft. Pierce

10:45 Preparation and Properties of Carnuba Wax Coatings Made with Ammonia Rather than Morpholine

R. D. Hagenmaier, Citrus and Subtropical Products Research Center, USDA/ARS

11:00 Postharvest Peel Pitting in Citrus is Induced by Changes in Relative Humidity

Fernando Alferez, Citrus Research and Education Center, UF, Lorenzo Zacarias, Instituto de Agroquímica y Tecnología de Alimentos (CSIC), Valencia, Spain, and Jacqueline K. Burns, Citrus Research and Education Center, UF/IFAS, Lake Alfred.

11:15 Granulation of Florida Citrus

Mark A. Ritenour¹, Gene Albrigo², and Jackie Burns². ¹Indian River Research and Education Center, UF/IFAS, Fort Pierce, ²Citrus Research and Education Center, UF/IFAS, Lake Alfred.

11:30 Postharvest Quality, Nutritional Benefit, and Acceptance of LB8-9 as a New Fresh Fruit Variety

Huating Dou (FDOC), Fred Gmitter (UF/IFAS), Gary Coates (FDOC), and Wendy Wei (FDOC). *Citrus Research and Education Center, 700 Experiment Station Road, Lake Alfred*

11:45 Discussion

LUNCH BREAK

Monday Afternoon Sessions

1:30- 3:00 Concurrent Session B (5 papers)

1:30 Influence of Ethylene on Natural Resistance of Citrus Fruit to Stem-End Rot Caused by *Diplodia natalensis* and Postharvest Control of this Decay

Jiuxu Zhang, Florida Department of Citrus, Citrus Research and Education Center, Lake Alfred

1:45 Effect of Exogenous Ethylene Exposure on the Postharvest Quality of Beit Alpha Cucumbers (*Cucumis sativus* 'Manar')

Alfredo M. Villalta and Steven A Sargent, Horticultural Sciences Department, UF/IFAS, Gainesville. **(student paper)**

2:00 Impact Thresholds to Maximize Postharvest Quality of Roma-Type Tomato

Eunhyung Lee, Adrian D. Berry, and Steven A. Sargent, Horticultural Sciences Department, UF/IFAS, Gainesville. **(student paper)**

2:15 Short-Duration, Hot Water Treatment for the Control of Chilling Injury and Postharvest Decay in Citrus

Karthik Joseph John Karupiah¹, Mark A. Ritenour¹, Jeffery K. Brecht², T. Greg McCollum³ and Michael S. Burton¹. ¹Indian River Research and Education Center, UF/IFAS, Fort Pierce, ²Horticultural Sciences Department, UF/IFAS, Gainesville and ³USDA ARS US Horticultural Research Laboratory, Fort Pierce. **(student paper)**

2:30 In Vitro Evaluation of Selected Essential Oils as Fungicides against *Penicillium digitatum*

David J. Hall and Y. Janet Fernandez, Fresh Mark Corporation, 622 E. Myers Blvd Mascotte, FL 34753

2:45 Discussion / Open

3:00 Sectional Business Meeting

3:15 Break

3:30-5:00 Concurrent Session C (5 papers)

3:30 **Delay in Color Changes and Softening of 'Florida 47' Tomato Fruit Treated with *SmartFresh*[®]**
B. M. Hurr and D.J. Huber, Horticultural Sciences Department, UF/IFAS, Gainesville.

3:45 **Differentiating Orange Juices Using Routine Analyses as Compared to Instrumental Methods**
K.L. Goodner, USDA-ARS Citrus and Subtropical Products Laboratory, Winter Haven, FL

4:00 **Microflorae of Orange Surfaces and Juice from Fruit in Processing Facilities and the Effect of Grading**
R. M. Goodrich and M.E. Parish, Citrus Research and Education Center, UF/IFAS, Lake Alfred.

4:15 **Features of the UF Worker Health and Hygiene Training Program for Fresh Produce in Florida**

Amy Simonne¹, Jeffrey K. Brecht², Mark A. Ritenour³, Steven A. Sargent², and Keith R. Schneider⁴; ¹Department of Family, Youth & Community Science, ²Horticultural Sciences Department, ³Indian River REC- Ft. Pierce, ⁴Food Science and Human Nutrition Department, University of Florida/IFAS.

4:30 **Characterization of Esterified Blocks in Pectin Homogalacturonan Regions After De-esterification with the Thermally Tolerant Pectin Methylsterase from Citrus Fruit**
R. G. Cameron, G. Luzio, S. W. Kauffman, K. Grohmann, U.S.D.A./ARS, Quality Improvement in Citrus and Subtropical Products Laboratory, Winter Haven, FL.

4:45 **In Vitro Response of *Penicillium digitatum* and *Geotrichum candidum* to Ultraviolet (UV-C) Exposure**
Y. Janet Fernandez and David J. Hall, Fresh Mark Corporation, Mascotte, FL

5:00 End of Afternoon Session

Tuesday Morning Session

10:00-11:30 Concurrent Session D (4 papers)

10:00 **The Development and Use of a Sensory Lexicon for the Evaluation of Coconut (*Cocos nucifera*) Water Beverage**
R. M. Goodrich, Citrus Research and Education Center, UF/IFAS, Lake Alfred, and R.P Bates and C.A. Sims, Food Science & Human Nutrition Department, UF/IFAS, Gainesville.

10:15 **Effect of Polysaccharide Coatings on Quality of Fresh Cut Mangoes (*Mangifera indica*)**
Anne Plotto, and Elizabeth Baldwin, USDA/ARS, Citrus & Subtropical Products Laboratory, Winter Haven, FL; Jinhe Bai, Oregon State University, Mid-Columbia Agricultural Research and Extension Center, Hood River, OR; Nithiya Rattanapanone, Department of Food Science and Technology, Chiang Mai University, Thailand.

10:30 **Pre- and Postharvest Application of ReTain[®] to 'Red Lady' Papaya: Effects on Harvest Maturity, Ripening and Quality**
Adrian D. Berry, Steven A. Sargent, Horticultural Sciences Department, University of Florida/IFAS, Gainesville, Craig A. Campbell, Valent BioSciences Corp., Orlando, and Carl W. Campbell,

Tropical Research & Education Center, Homestead

10:45 Drying Wildflower Seeds Using Tobacco Barns

Michael T. Talbot, Agricultural and Biological Engineering Department, UF/IFAS, Gainesville.

11:00 Determination of Galacturonic Acid Content of Pectin Using a Microtiter Plate Assay

Gary A. Luzio, USDA/ARS Citrus & Subtropical Products Lab., Winter Haven, FL

11:15 Development of Aroma Measurements by Electronic Nose and Gas Chromatography for Mango (*Mangifera indica*) Homogenate and Whole Fruit

Marc Lebrun and Marie-Noelle Ducamp, CIRAD, Montpellier, France, Anne Plotto, Kevin Goodner, and Elizabeth Baldwin, USDA/ARS, Citrus & Subtropical Products Laboratory, Winter Haven, FL

11:30 Discussion

11:45 End of session

Krome Memorial Institute - Richard Campbell, Presiding

Monday Morning Session

10:00-12:00 Concurrent Session A (8 papers)

10:00 The National Plant Germplasm Repository System: The Case of the Subtropical and Tropical Horticulture Research Stations Germplasm Repositories in Miami, FL, Mayaguez, PR and Hilo, HI

Tomas Ayala-Silva, Raymond Schnell, and Alan Meerow USDA, ARS, National Germplasm Repository, Subtropical Horticultural Research Station, Miami, FL.

10:15 How Much South Florida Consumers Know About the Availability of Florida Grown Lychee and Longan

A. R. Rafie, Carlos Balerdi, Miami-Dade County Cooperative Extension Service, UF, and Jonathan Crane, Tropical Research and Education Center, UF, Homestead

10:30 Sources of Continuous-Education and Training Utilized by Miami-Dade Growers and Golf Course Managers

R. Muñoz-Carpena, J.H. Crane, Tropical Research and Education Center, UF, G.D. Israel, Agricultural Education and Communication Dept., UF.

10:45 Breeding and Selection of Jackfruit for South Florida

Richard J. Campbell, S. El-Sawa, J. Wasielewski, N. Ledesma, Fairchild Tropical Garden, Coral Gables, FL and T. Ayala-Silva, USDA, ARS, National Germplasm Repository, Subtropical Horticultural Research Station, Miami, FL.

11:30 Genetic Variation Among Cultivated Selections of Mamey Sapote (*Pouteria* spp., Sapotaceae)

Susan Carrara, Florida International University, Richard Campbell, Fairchild Tropical Garden, Raymond Schnell, USDA-ARS (student presentation)

11:45 The 'Torbert' Mango

Campbell, C.W., Univ. of Florida, TREC/Fairchild Tropical Garden and R.J. Campbell, Fairchild Tropical Garden, Coral Gables, FL

12:00 Model for Community Outreach with the International Mango Festival at Fairchild Tropical

Garden, Miami, Florida

Noris Ledesma and Richard J. Campbell, *Fairchild Tropical Garden, Miami, FL*

12:15 A New Generation of Mangos for Florida

Richard J. Campbell, Fairchild Tropical Garden, Coral Gables, FL

LUNCH BREAK

Monday Afternoon Sessions

1:30- 3:00 Concurrent Session B (6 papers)

1:30 Increased Exposure to Cool Ambient Temperatures Increased Yield of 'Mauritius' Lychee (*Litchi chinensis* Sonn.) Fruit in Homestead, Florida

Jonathan H. Crane, Tropical Research and Education Center, UF, Homestead

1:45 Influence of Chemical and Organic Fertilization Programs on 'Keitt' Mango (*Mangifera indica*) Yield

Bielinski M. Santos, Gulf Coast Research and Education Center, UF.

2:00 Iron Nutrition, Flooding, and Growth of Pond Apple (*Annona glabra* L.)

M. G. Ojeda, Horticultural Sciences Department, UF/IFAS and Universidad Centroccidental "Lisandro Alvarado" Barquisimeto, Venezuela, B. Schaffer, Tropical Research and Education Center, and F. S. Davies, Horticultural Sciences Department, UF/IFAS (**student paper**)

2:15 Effect of Foliarly Applied Urea and Boron on Plant Nutrition and Yield of 'Booth 7' and 'Lula' Avocado Trees

J.H. Crane and Y. Li, Tropical Research and Education Center, University of Florida, IFAS, Homestead

2:30 Yield and Fruit Quality within the Tree Canopy of 'Arkin' Carambola (*Averrhoa carambola* L.)

M.P. Kohout and J.H. Crane, Tropical Research and Education Center, UF, Homestead

2:45 Growth of Purple Passion Fruit (*Passiflora edulis*) Transplants is Affected by Biostimulants

J. Pablo Morales-Payan and William M. Stall, Horticultural Sciences Department, University of Florida, Gainesville.

3:00 Sectional Business Meeting

3:15 Break

3:30 - 5:00 Concurrent Session C (6 papers)

3:30 Papaya (*Carica papaya*) Transplant Growth is Affected by a *Trichoderma*-based Stimulator

J. Pablo Morales-Payan and William M. Stall, Horticultural Sciences Department, University of Florida, Gainesville

3:45 Resistance to Papaya Ringspot Virus in Transgenic Papaya Breeding Lines

M. J. Davis, T. L. White, J. H. Crane, Tropical Research and Education Center, UF/IFAS, Homestead, Florida

4:00 Somatic Embryonic Line Establishment from Ovules of Muscadine and Seedless Bunch Grapes

Xia Xu, Jiang Lu, and Zhongbo Ren, Center for Viticulture and Small Fruit Research, Florida Agriculture and Mechanical University, Tallahassee

4:15 Effects of Rootstock on Yield and Fruit Soluble Solids Content (SSC) of Florida Hybrid Bunch Grapes

Z. Ren, J. Lu, S. Leong and X. Xu, Center for Viticulture, Florida A&M University

4:30 Influences of Pollinators on Fruiting and Fruit Qualities of Muscadine cv. 'Pam'

Z. Ren, J. Lu, X. Xu and S. Leong, Center for Viticulture, Florida A&M University, Tallahassee

4:45 A Method to Screen Weed-Suppressing Allelochemicals in Florida Biomass

James J. Ferguson, Bala Rathinasabapathi, and Mark Gal, Horticultural Sciences Department, UF, Gainesville

5:00 End of Afternoon Sessions

Tuesday Morning Session

10:00-11:30 Concurrent Session D (5 papers)

10:00 The Florida Blueberry Industry: A Decade of Growth

J.G. Williamson, P.M. Lyrene and E.P. Miller, Horticultural Sciences Department., UF, Gainesville

10:15 The Impact of Training/Trellis System and Canopy Management on Production Efficiency and Fruit Quality of Florida Grapes

V. Colova and S. Leong, Center for Viticulture & Small Fruit Research, CESTA, Florida A&M University, Tallahassee

10:30 'UFSun' Peach Released for Subtropical Central and South Florida

Robert E. Rouse, Southwest Florida Research and Education Center, UF, and Wayne B. Sherman, Department of Horticultural Sciences, UF

10:45 Discussion

11:00 End of Session

Ornamental Section – Robert McMillan, Presiding

Monday Morning Session: Joint with CEU Day and Master Gardner Programs

Monday Afternoon Sessions

1:30 - 3:00 Concurrent Session B (6 papers) PM 1.5 CCA CEUs, 1.5 Pvt Ag, D &R, O&T RUP-CEUs

1:30 Conventional vs. Alternative Methods of Weed Control in a Container Nursery

E. Duke, Ornamental Horticulture, FAMU/CESTA. G. Knox, North Florida REC UF/IFAS, A. Bolques, Gadsden County Extension, FAMU/CESTA, R. Mizell, North Florida REC UF/IFAS
PM: 1D, 2C .25 ceu

1:45 Impact of Soilborne Pest Problems on Field-Grown Snapdragon

Robert McSorley, Koon_Hui Wang, Department of Entomology and nematology, UF, Gainesville; Gregory Church, Nancy Kokalis-Burelle, USDA, ARS, US Horticultural Research Lab, Ft. Pierce
PM: 1F, 2A .25 ceu

2:00 Managing Newly Introduced Pests in the Nursery and Landscape

Catharine Mannion, Tropical Research and Education Center, University of Florida, IFAS
PM: 1 H, I, K .25 ceu

2:15 **Management of Cycad Aulacaspis Scale, *Aulacaspis yasumatsui***

C. Emshousen, Montgomery Botanical Center, Miami, C. Mannion, H. Glenn, Tropical Research and Education Center, University of Florida, IFAS
PM: 1 H, I, K .25 ceu

2:30 **Integrated Pest Management In Pinellas County Nurseries**

Alleyne J.C.¹ and M. Apgar, University of Florida, IFAS, Pinellas County Extension Largo, FL
PM: 1B, F, K .25 ceu

2:45 **Shade House And Green House Bromeliad Production, Pest And Diseases**

Jim Steele and Robert T. McMillan, Jr., Kerry's Bromeliad Nursery, Inc., Homestead
PM: 1 H, I, K .25 ceu

3:00 Sectional Business Meeting

3:15 Break

3:30 - 5:00 Concurrent Session C (6 papers) CM 1.5 CCA CEUs; 1.0 Pvt Ag, D&R, O&T RUP- CEUs

3:30 **Phytotoxicity Evaluation of Milbemectin on Ferns**

Robert H. Stamps, Annette L. Chandler and Diane K. Rock, University of Florida, IFAS, Environmental Horticulture Department, Mid-Florida Research and Education Center, Apopka
CM: 2G .25 ceu

3:45 **Investigating the Identity of Rose Varieties Utilizing Randomly Amplified Polymorphic DNA (RAPD) Analysis**

Angela Lewis, Mary Caroniti, and Nancy Morvillo, Florida Southern College, Lakeland (student paper)
CM 1A .25 ceu

4:00 ***Phytophthora nicotianae* Wilt of New Cultivars of *Cathranthus roseus***

Robert T. McMillan, Jr. University of Florida, IFAS, TREC and Joe F. Garofalo, University Florida, IFAS, Miami-Dade Extension, Homestead
CM: 1B .25 ceu

4:15 **Rhizoctonia Blight Of Impatiens And Its Control**

Robert T. McMillan, Jr. University of Florida/IFAS, TREC, Homestead
CM: 4A .25 ceu

4:30 **Propagation of *Delonix regia* RAF Royal Poinciana var. Yellow Kampong via Somatic Embryogenesis**

Alba R. Myers and Wagner A. Vendrame, University of Florida, IFAS, TREC, Homestead (student paper)
CM: 1A .25 ceu

4:45 **Response of *Rumohra adiantiformis* to a Combination of Calcium, Urea, Magnesium and Boron**

Dana M. Venrick, University of Florida, IFAS, Volusia County Extension Service, Deland
CM: 2G .25 ceu

5:00 End of Afternoon Session

Tuesday Morning Session

10:00-11:30 Concurrent Session D (4 papers) 1.0 CCA ceus

10:00 Thielaviopsis Diseases of Palms

Joe F. Garofalo, UF/IFAS Miami-Dade Extension and Robert T. McMillan, Jr., University of Florida, IFAS, TREC, Homestead
CM: 4A .25 ceu

10:15 The Response of Blood-lily, *Scadoxus multiflorus* ssp *katherinae*, to Daylength, Shade, and Other Production Practices

Joseph F. Garofalo, Cooperative Extension Service, Homestead, UF; and Wagner A. Vendrame, Tropical Research and Education Center, UF.
CM: 1E .25 ceu

10:30 Consumer Acceptance of an Organically-Grown Ornamental

A. Bolques, Gadsden County Extension, FAMU/CESTA, E. Duke, Ornamental Horticulture, FAMU/CESTA, G. Knox and T. Hewitt, North Florida Research and Education Center UF/IFAS
CM: 4F .25 ceu

10:45 Tea and China Roses as Own Root Specimen Shrubs in Extreme South Florida

John McLaughlin and Joe Garofalo, UF/IFAS, Miami-Dade Extension, Homestead
CM: 4A .25 ceu

11:00 Effects of Light Intensity on Flower Development in Blood Lily (*Scadoxus Multiflorus* L.)

W.A. Vendrame ¹, J.F. Garofalo ² and A. W. Meerow,³ ¹Tropical Research and Education Center Institute of Food and Agricultural Sciences Environmental Horticulture Dept. UF, Homestead, ² Miami-Dade County Cooperative Extension Service, UF/IFAS, Homestead,³ USDA-ARS-SHRS National Germplasm Repository Miami
CM: 4A .25 ceu

11:15 Fort Lauderdale Trial Garden – Year 2

W. Vendrame, UF/IFAS Tropical Research and Education Center, Homestead, Kimberly K. Moore, Eva C. Worden, UF/IFAS, Fort Lauderdale Research and Education Center, Fort Lauderdale
CM: 4A .25 ceu

11:30 Discussion / End of Session

Garden and Landscape – Carol Bailey, Presiding

Monday Morning Session: Joint with CEU Day and Master Gardener Programs

Morning Afternoon Sessions

1:30- 3:00 Concurrent Session B (6 papers)

1:30 Tropical Fruit Tree Size Control in the Backyards

C. Balerdi, Commercial Tropical Fruit Crops Agent, Miami-Dade Country Extension

1:45 Maintaining and Protecting the Estuarine Environment, an Educational Landscape Maintenance Program for Parks and Recreation Personnel

E. A. Skvarch, St. Lucie County Extension Service, UF, A.S Neal, St. Lucie County Extension Service, UF

2:00 A Prevocational Horticulture Program Serving Students with Special Education Needs

E. Duke, G. Leland, F. Lorenzo, Ornamental Horticulture Program, FAMU/CESTA, and J. Barnard, L.I.T. E. Program, Leon County Schools

2:15 Landscape Irrigation Evaluation as a Water Conservation Practice

J .B. Bargar, UF/IFAS Indian River County, D.F. Culbert, UF/IFAS Okeechobee County, and E. Holzworth, USDA/NRCS Vero Beach

2:30 Utilizing Biological Control Agents To Control *Melaleuca quinquenervia* In Florida's Natural And Man-made Landscapes

K T Gioeli, A S Neal, St. Lucie County Cooperative Extension, UF

2:45 Growing and Marketing Chinese Radishes and Turnips at Local Green Markets in Southeast, Florida

K. D. Shuler, S. J. S. Nie, and P-A. N. Shuler, Stephen's Produce, Jupiter

3:00 Sectional Business Meeting

3:15 Break

3:30 - 5:00 Concurrent Session C (6 papers)

3:30 Organizing Plant Materials in Designed Residential Landscapes Using CITYgreen

A.B. Lorenzo and G. Salazar, Landscape Design and Management and Ornamental Horticulture Program, Florida A&M University, Tallahassee

3:45 Growing and Marketing Arugula at Local Green Markets in Southeast, Florida

K. D. Shuler, S. J. S. Nie, and P-A. N. Shuler, Stephen's Produce, Jupiter

4:00 Do Designed Landscapes Deter Crime?

A. B. Lorenzo, D. Wims, and B. Davis. Ornamental Horticulture and Landscape Design and Management Program, Florida A&M University, Tallahassee (**Student Paper**)

4:15 Florida Native Ferns: Ptropical Pteridiphytes

Carol Alberts, Student, UF, Anita Neal, Director/Environmental Horticulture Agent, UF/IFAS- St. Lucie County Cooperative Extension and Sandy Wilson, Assistant Professor, University of Florida, Indian River Research & Education Center (**Student Paper**)

4:30 Developing A System To Produce Organic Plug Transplants For Organic Strawberry Production

Ashwin Paranjpe, Daniel J. Cantliffe, Rose Koenig. Horticultural Sciences Department. University of Florida, Gainesville, FL. 32611-0690

4:45 Effects of Aminolevulinic Acid and acetylthioprolin on Weed-free and Weed-infested St. Augustinegrass Turf

J. Pablo Morales-Payan and William M. Stall. Horticultural Sciences Department. University of Florida. Gainesville

5:00 End of Afternoon Session

Tuesday Morning Session

10:00-11:30 Concurrent Session D (4 papers)

10:00 Teaching Entomology to Youth Through a Bug's Life Summer Camp

A. S. Neal, E. A. Skvarch, St. Lucie County Extension, UF

10:15 An Overview of the Tree Trimmer Licensing Program in Broward County

H. Mayer, Commercial Horticulture Agent, Miami-Dade Country Extension, UF

10:30 Adopt A Drop: A Collaborative Environmental Water Quality Action Program

F. Burkey, Multi-County FYN, UF/IFAS and C. C. Bailey, Martin County Extension, UF

10:45 Establishing Perennial Peanut as a Landscape Groundcover

Robert E. Rouse, Southwest Florida Research and Education Center, UF, Elan M. Miavitz, Collier County Extension Service, UF, and Fritz M. Roka, Southwest Florida Research and Education Center, UF

11:00 Discussion

11:15 End of Session

Vegetable Section – Chad Hutchinson, Presiding

Monday Morning Session

10:00-12:00 Concurrent Session A (8 papers) 2.0 CEUs

10:00 A History of Commercial Vegetable Production in Central and Southern Florida

Alicia Whidden, Hillsborough County Cooperative Extension, UF; Mary Lamberts, Miami-Dade Cooperative Extension, UF; Elizabeth Lamb, Indian River REC, UF, Ft. Pierce; Richard Tyson, Seminole County Cooperative Extension, UF; Gene McAvoy, Hendry County Cooperative Extension, UF; Phyllis Gilreath, Manatee County Cooperative Extension, UF; and Kenneth Shuler, Stephen's Garden, FL

10:15 Effect of Mixed Populations of Yellow and Purple Nutsedges (*Cyperus esculentus* and *C. rotundus*) on Eggplant Yield

J. Pablo Morales-Payan and William M. Stall, Horticultural Sciences Department, UF, Gainesville

10:30 Effect of Mulch Types on 1,3-Dichloropropene + Chloropicrin Retention and Nutsedge (*Cyperus* spp.) Control

James P. Gilreath, Bielinski M. Santos, Timothy N. Motis, and Marcel von Hulten, Gulf Coast REC, UF, Bradenton

10:45 Soil Fumigant, Mulch Types, and Herbicide Treatments Affect Pepper (*Capsicum annuum*) Vigor and Yield, Purple Nutsedge (*Cyperus rotundus* L.), and Root Knot Nematodes (*Meloidogyne* spp.)

R.C. Hochmuth, W. L. Laughlin, S.S. Kerr, and L.L. Davis, North Florida REC, UF, Live Oak; E. H. Simonne, W.M. Stall, and C.A. Chase, Horticultural Sciences Department, UF, Gainesville; A.W. Weiss, J. Nance, and J. Mirusso, Dow AgroSciences, Indianapolis, IN

11:00 Purple Nutsedge (*Cyperus rotundus*) Control with Drip-Applied Metam Potassium

Bielinski M. Santos and James P. Gilreath, Gulf Coast REC, UF, Bradenton

11:15 Soilborne Disease and Weed Management with Methyl Bromide Alternatives in Fresh Market Tomato

James P. Gilreath and Bielinski M. Santos, Gulf Coast REC, UF, Bradenton

11:30 Effects of Augmenting Population of Predacious Insects on Aphid and Whitefly Pests of Muskmelon

Susan E. Webb, Entomology and Nematology Department, UF, Gainesville.

11:45 Protected Agriculture as a Methyl Bromide Alternative? Current Reality and Future Promise

Margaret L. Smither-Kopperl and Daniel J. Cantliffe, Horticultural Sciences Department, UF, Gainesville

LUNCH BREAK

Monday Afternoon Sessions 1.0 CEU

1:30- 3:00 Concurrent Session B (6 papers)

1:30 Economic Feasibility of Producing Strawberries in a Passively Ventilated Greenhouse in North Central Florida

Ashwin Paranjpe and Daniel J. Cantliffe, Horticultural Sciences Department, UF, Gainesville

1:45 Economic Feasibility of Producing Galia Muskmelons in Passive-Ventilated Greenhouses and Soilless Culture in North Central Florida

Juan C. Rodriguez, Daniel J. Cantliffe, Nicole L. Shaw, and Cecil E. Shine, Horticultural Sciences Department, UF, Gainesville

2:00 Hydroponically Grown 'Baby' Squash: Gourmet Appeal for the Greenhouse Grower

Nicole L. Shaw and Daniel J. Cantliffe, Horticultural Sciences Department, UF, Gainesville

2:15 What are the Best Selling Produce Items Imported from Overseas to Miami-Dade County? Can They Be Produced Here?

A.R. Rafie, Miami-Dade Cooperative Extension, UF; and Edward Evans, Tropical REC, UF/IFAS, Homestead

2:30 The Role of IFAS and Associations in Florida

Danny Raulerson, Florida Fruit and Vegetable Association, Tallahassee

2:45 The Role of Florida Farm Bureau in Florida Agriculture

Carolee Howe, Assistant Director, Agricultural Policy Division, Florida Farm Bureau, Gainesville

3:00 Sectional Business Meeting

3:15 Break

3:30 - 5:00 Concurrent Session C (6 papers) 1.5 CEU

3:30 The Influence of Calcium Thiosulfate on Yield and Postharvest Quality of 'Sweet Charlie' Strawberry

C.E. Esmel and J.R. Duval, Gulf Coast REC, UF, Dover; S.A. Sargent, Horticultural Sciences Department, UF, Gainesville (**student paper**)

3:45 Meristem Tip Culture Boosts Yield of Sweet Potato cv. Picadita in South Florida

David Q. Ying, Z. Ying, and T.L. Davenport, Tropical REC, UF, Homestead

4:00 Management of Nitrogen for Potato in the Suwannee Valley Area of Northern Florida

Justin Jones and George Hochmuth, North Florida REC, UF, Live Oak

4:15 Controlled Release Fertilizer Potato Production System for Florida

Chad M. Hutchinson, Horticultural Sciences Department, UF, Gainesville

4:30 Water Movement in Mulched Beds in a Rocky Soil of Miami-Dade County

Eric Simonne, Horticultural Sciences Department, UF, Gainesville; Teresa Olczyk, Miami-Dade Cooperative Extension, UF; Rafael Munoz-Carpena, Tropical REC, UF, Homestead; and David Studstill, Horticultural Sciences Department, UF, Gainesville

4:45 Reconciling Water Quality Parameters Impacting Nitrification in Aquaponics: pH

R.V. Tyson, Seminole County Cooperative Extension, UF, Sanford; E.H. Simonne, Horticultural Sciences Department, UF, Gainesville; J.M. White, Mid-Florida REC, UF, Apopka; F.A. Chapman, Fisheries and Aquatic Sciences, UF, Gainesville; M. Davis, Tropical REC, UF, Homestead; and E.M. Lamb, Indian River REC, UF, Ft. Pierce

5:00 End of Afternoon Session

Tuesday Morning Session

10:00-11:30 Concurrent Session D (5 papers) 1.5 CEU

10:00 The Horticultural History of the Cooperative Extension Service in Florida

Elizabeth Lamb, Indian River REC, UF, Ft. Pierce; Mary Lamberts, Miami-Dade Cooperative Extension, UF; Jack Hebb, St. Lucie County Cooperative Extension, UF; Ed Skvarch, St. Lucie County Cooperative Extension, UF; Phyllis Gilreath, Manatee County Cooperative Extension, UF; Gene McAvoy, Hendry County Cooperative Extension, UF; Richard Tyson, Seminole County Cooperative Extension, UF; Kenneth Shuler, Stephen's Garden, FL; Alicia Whidden, Hillsborough County Cooperative Extension, UF; Eva Worden, Ft. Lauderdale REC, Ft. Lauderdale, UF

10:15 Fruit Development Period in Strawberry Grown in a Winter, Annual Hill Production System

Craig K. Chandler, Gulf Coast REC, UF, Dover and Mark Herrington, Maroochy Research Station, Nambour, Queensland, Australia

10:30 Effect of Prohexidione-Ca on Establishment and Yield of Green-Top Bare-Root Strawberry Transplants

John Duval and Elizabeth Golden, Gulf Coast REC, UF, Dover; Julia Reekie, and Peter Hicklenton, Ag-Canada, Kentville, Nova Scotia

10:45 Summer Squash Yield and Fruit Size When Grown on Eight Mulch Colors in Central Florida

James M. White, Mid-Florida REC, UF, Apopka

11:00 New Bush Bean Cultivars for Miami-Dade County

Teresa Olczyk and Ruben Regalado, Miami-Dade County Cooperative Extension, UF; W. Klassen, M. Codallo, and G. Aleman, Tropical REC, UF, Homestead

11:15 Influence of In-Row Spacing on Potato (*Solanum tuberosum*) Seed Yield and Economic Feasibility

Bielinski M. Santos, Gulf Coast REC, UF, Bradenton; Persio R. Rodriguez, Dominican Institute for Agricultural and Forestry Research, Dominican Republic

11:30 Evaluation of Various Management Strategies for Controlling Melon Thrips, *Thrips palmi* Karny (Thysanoptera: Thripidae)

D. R. Seal, UF/IFAS Tropical Research and Education Center, Homestead

11:45 Discussion / End of Session

Tuesday Afternoon Session

**1:00 – 4:00 PM Special Session: “Resistance Management”
Mary Lamberts, Moderator**

Cosponsored by FSHS and University of Florida/IFAS Extension

This program is designed as an in-service training for county Extension faculty members, but is open to those attending FSHS. 3 CEUs Requested

1:00 – 1:25 General Resistance Management (using the IRAC table on modes of action of pesticides)

Susan Webb, UF-IFAS Entomology & Nematology Department, Gainesville, Gary Leibee, UF-IFAS Mid-Florida R. E.C., Apopka & Jerry Brust, Glades Crop Care, Jupiter

1:25 – 1:50 Whiteflies

Dave Schuster, UF-IFAS Gulf Coast REC, Bradenton, Scott Ferguson, Syngenta, Vero Beach & Roy Morris, Bayer, Lakeland

1:50 – 2:15 B.t.s

Marcus Adair, Valent BioSciences Corp., Memphis TN

2:15 – 2:30 Break

2:30 – 2:55 Thrips

Joe Funderburk, UF-IFAS North Florida REC, Quincy

2:55 –3:20 Mites

Lance Osborne, UF-IFAS Mid-Florida R.E.C., Apopka

3:20 – 4:00 Panel discussion & questions

END OF PROGRAM