

WELCOME

TO THE 2009

JOINT ANNUAL MEETING

OF THE

**FLORIDA STATE
HORTICULTURAL SOCIETY**

AND

**SOIL AND CROP SCIENCE
SOCIETY OF FLORIDA**

FEATURING

PRODUCER WORKSHOPS ON:

Economical Opportunities,

Canning for Fun and Profit,

and Biofuels

June 7 to 9

**Wyndham Jacksonville Riverwalk
1515 Prudential Drive
Jacksonville, FL 32207**



2009 PROGRAM CONTENTS

| | Page |
|--|------|
| Program overview | 3 |
| 2009 FSHS Board of directors | 6 |
| 2009 SCSSF Officers | 6 |
| 2009 Meeting facilitators | 6 |
| Displays during the meeting | 7 |
| Meeting sponsors | 8 |
| FSHS Patron members | 8 |
| FSHS publication and submission guidelines | 9 |
| 2009 New FSHS student competitions and awards | 10 |
| Horticultural attractions in the Jacksonville area | 11 |
| Citrus section, FSHS | 12 |
| Handling & processing section, FSHS | 15 |
| Krome Memorial Institute, FSHS | 19 |
| Ornamental, garden & landscape section, FSHS | 21 |
| Vegetable section, FSHS | 24 |
| Joint symposium on biofuels, SCSSF | 28 |
| Graduate student competition, SCSSF | 29 |
| Scientific research papers, SCSSF | 29 |
| In-service training and producer workshop on Economical Opportunities | 31 |
| 2009 Joint meeting facts | 31 |
| Notes | 32 |
| Wyndham Jacksonville Riverwalk site map | 34 |

MARK YOUR CALENDARS!

THE 2010 JOINT FSHS-SCSSF ANNUAL MEETING

WILL BE HELD

June 6 to 10, 2010

at the Plantation Gold Resort & Spa
9301 West Fort Island Trail
Crystal River, FL 34429

<http://www.plantationinn.com>

Information: (352) 795-4211



PROGRAM OVERVIEW

| Registration Desk Hours | Sail Foyer |
|--------------------------------|-------------------|
| Sunday June 7 | 2:00 PM – 7:00 PM |
| Monday June 8 | 7:00 AM – 6:00 PM |
| Tuesday June 9 | 7:00 AM - Noon |

Sunday Afternoon

| | | |
|-------------|---|--|
| 1:00 - 5:00 | Certified Horticulturist Examination | <i>Compass</i> |
| 2:00 - 4:00 | FSHS Board of Directors Mtg. | <i>Anchor</i> |
| 3:00 - 5:00 | SCSSF Board of Directors Mtg. | <i>Tug</i> |
| 5:00 - 6:00 | Awards Ceremony, <i>Jim Syvertsen</i> | <i>Starboard</i> |
| 6:00 - 7:00 | Welcome Reception | <i>Topsider (5th floor)</i> |
| | Silent Auction, <i>George Fitzpatrick</i> | |
| | <i>(Included in paid conference registration)</i> | |

Monday Morning

| | | |
|-------------|--|------------------|
| 7:00 - 8:15 | Continental Breakfast | <i>Compass</i> |
| | Professional development seminar | |
| | <i>Sabine Grunwald, Associate Professor</i> | |
| | <i>UF/IFAS Soil and Water Science Dept.</i> | |
| | “Shared Experiences with Distance Education Learning and Instruction” | |
| | <i>(Included in paid conference registration)</i> | |
| 8:30 - 9:45 | Joint General Session | <i>Starboard</i> |
| 8:30 | Introduction and Welcome | |
| 8:40 | Presidential Addresses: | |
| | <i>Mary Lamberts, President, FSHS</i> | |
| | <i>Tom Obreza for Robert McGovern, President, SCSSF</i> | |
| 9:00 | General Session Keynote Speaker: | |
| | <i>USDA ARS National Program Leader for Biosecurity</i> | |
| | <i>Dr. Robert L. Fireovid, Beltsville, MD</i> | |
| | “From Biomass to Biofuel: The Technologies and the Production Potentials” | |
| | Questions and answers | |
| 9:45 | End of joint General Session | |
| 9:50 - Noon | Concurrent Morning Sessions | |
| | <i>(Continuing Education Units are approved)</i> | |
| | - Citrus | <i>Starboard</i> |
| | - Handling & Processing | <i>Tug</i> |

- Krome Memorial Institute *Admiralty*
 - Ornamental, Gardening & Landscape *Anchor*
 - Vegetable *Sail*
 - SCSSF Sessions *Compass*
- 12:00 Lunch (on your own)

Monday Afternoon

12:45 – 5:00

- Handling & Processing *Duval County Canning Center*
 Canning and Food Preservation Workshop
 (Transportation provided – meet at hotel front door)
(Event ticket required; lunch included)

1:20 - 5:00 Concurrent Afternoon Sessions

- Citrus *Starboard*
 - Krome Memorial Institute *Admiralty*
 - Ornamental, Gardening & Landscape *Anchor*
 - Vegetable *Sail*
 - SCSSF Sessions *Compass*
- 5:15 - 6:00 Vegetable/Fruit Focus Team Meeting *Sail*
- 6:00 - 7:00 Industry Reception *Topsider (5th floor)*
(Included in paid conference registration)

Tuesday Morning – FSHS Program

7:00 - 8:15 Horticultural Breakfast *Topsider (5th floor)*

Invited Speaker: *Dr. Nicholas Comeford,*
Professor and Center Director, NFREC, Quincy

“Challenges and Opportunities for Small Farms In North Florida: How UF can Help?”

(Event ticket required)

- 8:30 - 9:45 FSHS Annual Business Meeting: *Starboard*
- Student Competition Awards, *Carlene Chase*
 - Historical Perspectives: *Ed Etxeberria, FSHS Editor*

“A History of the FSHS proceedings (III): Volumes 50 to 75 (1963 to 1985)”

9:50 - Noon Concurrent Morning Sessions

- Citrus *Starboard*
- Handling & Processing *Tug*
- Ornamental, Gardening & Landscape *Anchor*
- Vegetable *Sail*

Tuesday Morning – SCSSF Program

- 7:50-11:00 Scientific research papers *Compass*
- 11:05-12:15 SCSSF Business Meeting *Compass*

Tuesday Afternoon

12:00 - 1:15 Extension Luncheon *Topsider (5th floor)*

Invited Speaker: *Dr. Jim Horne, President, The Kerr Center for Sustainable Agriculture and Southern Regional Manager for the Professional Development Program for SARE*

“Improving the Competitive Edge with Shared Knowledge”

(Event ticket required)

1:30 - 5:00 In-service training and producer Workshop *Compass*

Thinking Cooperatively: Strategies for Enhancing the Economical Opportunities of Horticultural Producers

Fritz Roka and Al Wysocki

(Continuing Education Units are approved)

Co-sponsored by

FSHS, SCSSF and UF/IFAS Cooperative Extension Service

END OF 2009 MEETING

EXTENSION LUNCHEON SPEAKERS SERIES

Dr. Jim Horne, 2009
Mr. Armando Campos, 2008
Mr. Ted Winsberg, 2007
Mr. Chuck Obern, 2006
Dr. Larry Arrington, 2005

ATTENTION FSHS AUTHORS! DID YOU KNOW?

Did you know that 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 and figures, and videos are included **FREE** of charge

in the electronic version of the Proceedings.

Take advantage of this possibility and pass the word!



FLORIDA STATE HORTICULTURAL SOCIETY 2008-2009 BOARD OF DIRECTORS

| | |
|---|----------------|
| Chairman of the Board | Jim Syvertsen |
| President | Mary Lamberts |
| Sectional Vice-Presidents: | |
| <i>Citrus</i> | Chris Oswalt |
| <i>Krome Memorial Institute</i> | Mongi Zekri |
| <i>Ornamental, Garden and Landscape</i> | Henrique Mayer |
| <i>Handling & Processing</i> | Jinhe Bai |
| <i>Vegetable</i> | Gene McAvoy |
| Secretary and Treasurer | Jeff Brecht |
| Editor | Ed Etxeberria |
| Sectional Editors: | |
| <i>Citrus</i> | Jim Syvertsen |
| <i>Handling & Processing</i> | John Manthey |
| <i>Krome Memorial Institute</i> | Ed Etxeberria |
| <i>Ornamental, Garden and Landscape</i> | Doug Caldwell |
| <i>Vegetable</i> | Sal Locascio |
| Marketing Coordinator/Webmaster | Mark Ritenour |
| Members At-Large | Fritz Roka |
| | David Hall |
| Program Coordinator | Eric Simonne |

SOIL AND CROP SCIENCE SOCIETY OF FLORIDA 2009 OFFICERS

| | |
|----------------------------|-----------------|
| President | Robert McGovern |
| President-Elect | Samira Daroub |
| Secretary-Treasurer | Tom Obreza |
| Director (2009) | Billy Crow |
| Director (2010) | Jacque Breman |
| Director (2011) | -- vacant -- |
| Proceedings Editor | Ken Boote |

2009 MEETING FACILITATORS

| | |
|---------------------------------------|----------------|
| Meeting Coordinator | Tracy Shawn |
| Local Arrangement Coordinators | Mike Sweat |
| | Brad Burbaugh |
| | Terry DelValle |
| | Gene Albrigo |
| Sponsorship Coordinator | |
| Student Best Paper Competition | |
| Coordinator | Carlene Chase |
| Continuing Education Units | |
| Coordinator | Aparna Gazula |



DISPLAYS DURING THE MEETING

2009 FSHS Meeting in Cristal River, FL. *Jim Syvertsen, UF/IFAS CREC,*
Lake Alfred

ARL/ESTL Analytical Services. *Rao Mylavarapu, UF/IFAS Soil and Water*
Sciences Department

Citrus Mechanical Harvesting and Abscission Program. *Barbara Hyman,*
UF/IFAS Southwest Florida Research & Education Center, Immokalee

Duval County Extension Programs, *Mike Sweat, Jacksonville*

IFAS Extension Bookstore, *Audry Pettit and Jenny Mooney, Gainesville*

Florida Small Farms and Alternative Enterprise Conference. *Robert*
Hochmuth, NFREC-SV, Live Oak

Marrone Bio Innovations, *Jason Osborne and David Warman, Davis CA*

UF/IFAS Protected Agriculture Project. *Daniel Cantliffe, UF/IFAS Horticultural*
Sciences Department, Gainesville

* * * * *

VOLUNTEERS NEEDED!

FSHS and SCSSF are volunteer-run organizations.
Make a difference, and volunteer your time,
leadership, service and talents!

THANK YOU STUDENT HELPERS!

Citrus: Ayako Kusakabe

(ayako8@ufl.edu; advisor: Dr. Syvertsen, UF)

Ornamental, Garden & Landscape: Zakiya Ross

(zakiya_o@hotmail.com; Dr. Hacisalihoglu,
FAMU)

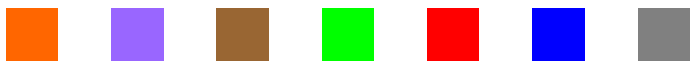
Handling & Processing: Sambahv

(Sambhav@ufl.edu; Dr. Ritenour, UF)

Krome MI: Mildred Makani

(mmakani@ufl.edu; Dr. Sargent, UF)

Vegetable: Bee Ling Poh (pohbeeling@ufl.edu; Dr.
Simonne, UF)



The Societies truly appreciate the support of the following organizations and individuals in helping make this meeting possible.

2009 MEETING SPONSORS

Gold Level Sponsor (above \$2,000)

*Florida Citrus Production
Research Advisory Council*

Silver Level Sponsor (\$1,000–1,999)

Bayer CropScience

Helena

Marrone Bio Innovations

UF/IFAS Soil and Water Science Department

Bronze Level Sponsor (\$250–\$999)

BASF Corporation (Freshseal & Crop Protection)

Syngenta Crop Protection

2008-2009 FSHS PATRON MEMBERS

Ed Etxeberria

David Hall

Albert Hendry

Peter McClure

Mary Lamberts

Jim Syvertsen

PLEASE VISIT

www.fshs.org



FSHS PRESENTATION, PUBLICATION, AND SUBMISSION GUIDELINES

Full payment of page charges from past years (<http://shop.ashs.org/home.php?cat=270>) 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 are highly encouraged and preferred. Manuscripts should be delivered in FINAL electronic form (1) at the time of meeting to the appropriate section VP or (2) no later than two weeks after the meeting at fshsproc@ashs.org.

Manuscripts to be considered as "refereed" have to be submitted electronically at the time of the meeting for proper review.

For refereed and non-referred submissions, see complete Manuscript Preparation Guide for the Proceedings of the Florida State Horticultural Society at:
<http://www.fshs.org/Proceedings/FSHS%20Author%20Instructions.pdf>

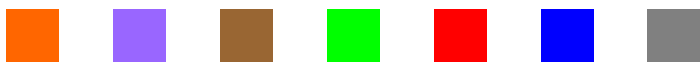
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**REMINDER TO FSHS AUTHORS:
E-MAIL FULL-LENGTH MANUSCRIPTS AT
FHSPPROC@ASHS.ORG**

BY JUNE 23, 2009

FSHS requires that reviewed and submission-ready manuscripts are submitted on-line during the meeting at fshsproc@ashs.org. Also copy the submission e-mail to the sectional VP:

Citrus: Chris Oswalt, wcoswalt@ufl.edu
OGL: Henrique Mayer, hmayer@ufl.edu
HP: Jinhe Bai, Jinhe.Bai@ars.usda.gov
Krome MI: Mongi Zekri, maz@ufl.edu
Vegetable: Gene McAvoy, gmcavoy@ufl.edu



2009 NEW FSHS STUDENT BEST ORAL PRESENTATION AND BEST PAPER AWARDS

Beginning with the 2009 meeting, the Florida State Horticultural Society (FSHS) will have separate competitions for student oral presentations and student papers. Awards for the Best Oral Presentation Competition will be presented during the Annual Business Meeting at the 2009 FSHS annual meeting. The Student Best Paper Competition awards will be announced at the 2010 FSHS annual meeting. Awardees will receive cash prizes and will be recognized in the Proceedings of the Florida State Horticultural Society. Students may participate in either or both competitions.

Best Oral Presentation Competition

In 2009, all students who submitted abstracts for the Graduate Student Competition are automatically enrolled in the Best Oral Presentation Competition. These entries are marked in blue in the conference program.

Beginning in 2010, the number of entries in the Best Oral Presentation Competition will be limited to 15 and must be submitted jointly to the sectional VP and the Student Competitions Coordinator. Acceptance in the competition will be on a first-come, first-serve basis. Participants will be judged on importance to Florida horticulture, scientific merit, organization, awareness of current literature, fluency, clarity of presentation, effective use of figures and tables, report of conclusions, completeness, timing, and response to questions.

Best Paper Competition

To participate in the Best Paper Competition, students must submit a manuscript (use author guidelines for the Proceedings of the FSHS) via email with the subject "Student Best Paper Award" to fshsproc@ashs.org by June 9, 2009. Student papers will be published in the Proceedings of the Florida State Horticultural Society. Entries will be judged on relevance to Florida horticulture, scientific merit, experimental design rigor, literature review, completeness, and clarity.

For more information, contact FSHS Student Competitions Coordinator Carlene Chase at cachase@ufl.edu.





HORTICULTURAL ATTRACTIONS IN THE JACKSONVILLE AREA

The **Cummer Museum of Art & Gardens** is located on the St. Johns River in the Riverside/Avondale historic district and is just minutes from the host hotel. As the largest museum in Northeast Florida and the second largest art museum in the state, it is noted for its collection of more than 6,000 masterworks of American and European paintings; two acres of beautiful, historic gardens in the European style; and an outstanding collection of Meissen porcelain. Art Connections is the museum's nationally renowned interactive learning center and the museum recently unveiled the Thomas H. Jacobsen Gallery of American Art, the first new gallery to open since 1992. Visit www.cummer.org to see what's coming up at the museum.

The Jacksonville Zoo and Gardens, with more than 1,000 exotic animals, is fun for the whole family. The zoo includes the Range of the Jaguar exhibit; the Australian Adventure featuring koalas, wallabies and kangaroos; the Seronera exhibit featuring an elephant pool, a herptile house and a new giraffe exhibit. The Zoo also developed three major garden zones in its Botanical Garden Concept Plan including The Primary Gardens, a 12-acre site that will showcase beautiful native water-edge plants and spectacular panoramic views. For more information, please visit: <http://www.jaxzoo.org/>.

Other Attractions

The **Museum of Science & History (MOSH)** offers fun for the whole family with the area's only planetarium, an award-winning Northeast Florida history exhibit, a live animal area, daily interactive programs and much more. The MOSH is also a short distance from the host hotel. Learn more at www.themosh.org.

Nowhere else can you ride a Segway on **Florida's state park trails**. Explore two of the most scenic islands in protected chain between Amelia Island and Jacksonville aboard a silent, battery-powered cross-terrain Segway, you will follow sandy paths woven throughout the lush vegetation of a sub-tropical paradise, with colorful butterflies, fascinating tortoises, ancient dunes, and waterside bluffs. For more information visit: <http://www.ecomotiontours.com/>.

St. Johns Town Center is Jacksonville's newest and most talked about shopping destination. Shop, dine, live and entertain in one beautifully designed life-style center. St. Johns Town Center offers 1.1 million square feet of unique shopping and dining including many new stores you won't find anywhere else in Jacksonville. For more information visit: <http://www.simon.com/mall/default.aspx?ID=857>.

One hour scenic trail ride. A scenic horseback ride around a working cattle ranch. For more information visit: <http://www.diamonddranchinc.com>



JOINT PROGRAM SCHEDULE

FSHS PROGRAM



= STUDENT BEST ORAL PRESENTATION ENTRY

CITRUS SECTION

Chris Oswalt, Presiding

wcoswalt@ufl.edu

Starboard

Monday Morning Session 9:50-11:45

A. Citrus Water Use


- 9:50 **Welcome and Introductions**, Chris Oswalt.
- 10:00 **Assessment of Soil Variability and its Effect on Florida Citrus Production: A Statistical Approach.** K. Mann, A. Schumann, UF/IFAS Citrus REC, Lake Alfred, FL and T. Obreza, UF/IFAS Soil and Water Science Dept., Gainesville, FL. [C1]
- 10:15 **Partial Root Zone Drying with and without Salinity Affects Water Use Efficiency of Citrus.** Ayako Kusakabe, Juan Carlos Melgar, Jill Dunlop, and J. P. Syvertsen, UF/IFAS Citrus REC, Lake Alfred, FL. [C2]
- 10:30 **Alternative Methods for Determining Crop Water Status for Irrigation of Citrus Groves.** L. Waldo and A. Schumann, UF/IFAS Citrus REC, Lake Alfred, FL. [C3]
- 10:45 **Effect of Cold Acclimation on Growth and Water Uptake of Hamlin Citrus.** Smita Barkataky, Kelly Morgan and Robert Ebel UF/IFAS Southwest Florida REC, Immokalee, FL. [C4]
- 11:00 **Irrigation Regime and Exogenous ABA Affect Freeze Tolerance in 'Valencia' Trees.** J.C. Melgar, J. Dunlop and J.P. Syvertsen UF/IFAS Citrus REC, Lake Alfred, FL. [C5]
- 11:15 **Imidacloprid has Little Effect on Growth or Drought Tolerance of Citrus Rootstock Seedlings Without Pests.** J.P. Syvertsen and J.M. Dunlop, UF/IFAS Citrus REC, Lake Alfred, FL. [C6]
- 11:30 Discussion
- 11:45 End of session/Lunch on your own

Monday Afternoon Sessions 1:20-500

B. Citrus Production Systems and Economics

- 1:20 **Welcome and Introductions**, Chris Oswalt.
- 1:30 **Cultivar-dependent Gene Transfer into Citrus using Agrobacterium.** M. Dutt and J.W. Grosser, UF/IFAS Citrus REC, Lake Alfred, FL. [C7]

- 1:45 **Demonstration of a Sustainable Approach to Citriculture within a National Wildlife Refuge in the Indian River Area.** R. C. Adair, Jr., B. A. Norquist and G. K. Ross, Florida Research Center for Agricultural Sustainability, Inc., Vero Beach, FL. [C8]
- 2:00 **Implementing Advanced Citrus Production Systems in Florida – Early Results.** A. Schumann, J. Syvertsen, UF/IFAS Citrus REC, Lake Alfred, FL and K. Morgan, UF/IFAS, Southwest Florida REC, Immokalee, FL. [C9]
- 2:15 **Short-Term Fruit Price Effects Resulting from High Retail Orange Juice Prices and Accumulated Inventories.** Robert A. Morris, UF/IFAS Citrus REC, Lake Alfred, FL; Thomas H. Spreen, Food and Resource Economics Dept., Gainesville, FL, and Mark G. Brown, Florida Department of Citrus, Maitland, FL. [C12]
- 2:30 **Citrus Production Systems to Survive Greening – Economic Thresholds.** Fritz Roka, UF/IFAS Southwest Florida REC, Immokalee, FL; Ron Muraro, Allen Morris, UF/IFAS Citrus REC, Lake Alfred, FL; Pete Spyke, Arapaho Citrus Mgt. Ft. Pierce; Kelly Morgan, UF/IFAS Southwest Florida REC, Immokalee, FL, Arnold Schumann, Bill Castle, UF/IFAS Citrus REC, Lake Alfred, FL; and, Ed Stover, USDA/ARS Ft. Pierce, FL. [C11]
- 2:45 **Citrus Production Systems to Survive Greening – Horticultural Practices.** Kelly Morgan, UF/IFAS Southwest Florida REC, Immokalee, FL; Arnold Schumann, Bill Castle, UF/IFAS Citrus REC, Lake Alfred, FL; Ed Stover, USDA/ARS Ft. Pierce, FL; Pete Spyke, Arapaho Citrus Mgt., Ft. Pierce; Fritz Roka, UF/IFAS Southwest Florida REC, Immokalee, FL; and, Ron Muraro and Allen Morris UF/IFAS Citrus REC, Lake Alfred, FL. [C10]
- 3:00 Citrus section business meeting
- 3:15 Break
- C - Huanlongbing Cultural Practices**
- 3:30 **Interaction of CMNP Concentration and Canopy Shaker Setting on Fruit Removal of Sweet Orange.** Robert C Ebel, UF/IFAS Southwest Florida REC, Immokalee, FL; Jackie Burns, UF/IFAS Citrus REC, Lake Alfred, FL; Kelly Morgan and Fritz Roka, UF/IFAS Southwest Florida REC, Immokalee, FL. [C13]
- 3:45 **Elimination of HLB-infected Trees through Application of Herbicides.** L.G. Albrigo, UF/IFAS Citrus REC, Lake Alfred, FL. [C14]
- D - Huanlongbing Detection**
- 4:00 **Real-Time PCR Increases Efficiency and Sensitivity for Testing Citrus Budwood Source Trees.** Peggy J. Sieburth, Karen Nolan, Rick Dexter and Steve Alderman. Bureau of Citrus Budwood Registration, Division of Plant Industry, Florida Department of Agriculture and Consumer Services, Winter Haven, FL. [C15]
- 4:15 **Potential Applications of VIS-NIR Spectroscopy and Hyperspectral Imaging for Detecting HLB Infected Citrus Trees.** A. Mishra, D. Karimi, R. Ehsani, W. S. Lee, G. Albrigo, UF/IFAS Citrus REC, Lake Alfred, FL [C16]

- 4:30  **Detection of Citrus Greening Using Color Texture Features and Digital Microscopic Imaging.** D.G. Kim, T.F. Burks, UF/IFAS, ABE, Gainesville, FL, and A.W. Schumann, UF/IFAS, CREC, Lake Alfred, FL. [C17]
- 4:45 **Determining Greening Infection Levels Using Multiple Survey Methods In Florida Citrus.** S. H. Futch, UF/IFAS Citrus REC, Lake Alfred, FL; S. Weingarten, Orange Co. Arcadia, FL; and, M. Irey, US Sugar Corp. Clewiston, FL. [C18]
- 5:00 End of Afternoon Sessions/Industry Reception

Tuesday Morning Session – 9:50-12:00

D - Huanlongbing Cultural Practices (continued)

- 9:50 **Welcome and Introductions**, Chris Oswalt.
- 10:00 **Detection of Greening in Sprouts from Citrus Tree Stumps.** S. H. Futch, R. Brlansky, UF/IFAS Citrus REC, Lake Alfred, FL; M. Irey, US Sugar Corp. Clewiston, FL; and, S. Weingarten, Orange Co. Arcadis, FL. [C19]
- 10:15 **Plant Growth Regulators and Hedging to Manage Citrus Tree Growth: A Strategy for Reducing Psyllid Feeding and Huanglongbing Infection.** Timothy M. Spann, Antonios E. Tsagkarakis and James P. Syvertsen UF/IFAS Citrus REC, Lake Alfred, FL. [C20]
- 10:30 **Evaluation of Anti-oxidant Metabolism in Commercially Grown Citrus Cultivars in Florida.** Naveen Kumar, Robert C. Ebel, and Pamela Roberts UF/IFAS, SWFREC, Immokalee, FL. [C21]
- 10:45 **The Role of Plant Nutrients in Disease Development: A Case Study of Citrus and Huanglongbing.** Timothy M. Spann and Arnold W. Schumann UF/IFAS Citrus REC, Lake Alfred, FL. [C22]

E - Asian Citrus Psyllid Control

- 11:00 **Insecticidal Control of Asian Citrus psyllid *Diaphorina citri* (Hemiptera: Psyllidae).** Jawwad A. Qureshi and Philip A. Stansly, UF/IFAS, SWFREC, Immokalee, FL. [C23]
- 11:15 **Chemical Control of Asian Citrus Psyllid, *Diaphorina citri* Kuwayama.** Dhana Raj Boina, Masoud Salyani and Lukasz L. Stelinski, UF/IFAS Citrus REC, Lake Alfred, FL. [C24]
- 11:30 **Spot Spraying of Citrus Tree Canopies for Controlling Psyllid.** Joe Mari Maja, Masoud Salyani, and Reza Ehsani, UF/IFAS Citrus REC, Lake Alfred, FL. [C25]
- 11:45 **Comparison of Ground and Aerial Applications for Control of Adult Asian Citrus Psyllid, *Diaphorina citri* Kuwayama.** Arevalo, H. A. and P.A. Stansly. UF/IFAS Southwest Florida REC, Immokalee, FL. [C26]
- 12:00 End of Meeting/Extension Luncheon (*Event ticket required*)




HANDLING & PROCESSING SECTION

Elizabeth Baldwin, Presiding for Jinhe Bai
(Jinhe.Bai@ars.usda.gov)

Tue

Monday Morning Session 9:50-12:15

A - Quality and Uses of Citrus Products

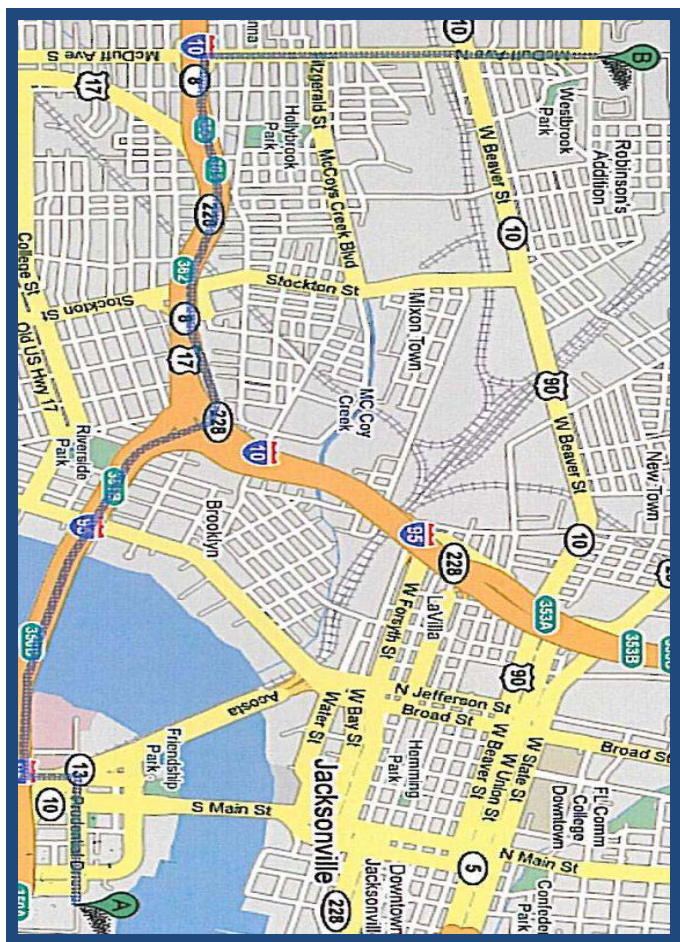
- 9:50 **Welcome and Introductions**, Jinhe Bai
- 10:00 **Digestion Patterns of Two Commercial Endopolygalacturonases on Polygalacturonate Oligomers with a Degree of Polymerization from 7 – 21.** Randall G. Cameron, Kevin Goodner, Gary A. Luzio, USDA, ARS, Citrus and Subtropical Products Laboratory, Winter Haven, FL; and Brett J. Savary, Arkansas State University, Arkansas Biosciences Institute, Jonesboro, AR [HP1]
- 10:15 **Variations of Total Phenol, Carotenoid, in vitro Antioxidant Contents, and Phenolic Profiles of the Pulp of Five Commercial Varieties of Mango (*Mangifera indica* L.).** Penelope Perkins-Veazie, Plants for Human Health Institute, North Carolina State University, Kannapolis, NC; and, John A. Manthey, USDA-ARS, Citrus and Subtropical Products Laboratory, Winter Haven, FL. [HP2]
- 10:30 **Influence of Harvest Time on Flavor in ‘Valencia’ Orange.** E.A. Baldwin, A. Plotto, J.A. Manthey, J. Bai, USDA-ARS, Citrus and Subtropical Products Laboratory, Winter Haven, FL; T.G. McCollum, USDA-ARS, Horticultural Research Laboratory, Ft. Pierce, FL; and, M. Irey, U.S. Sugar Corp., Clewiston, FL. [HP3]
- 10:45 **Ethanol Production from Citrus Processing Waste: SSF of High-Matter-Containing Substrates.** Weiyang Zhou, Wilbur Widmer, USDA-ARS Citrus and Subtropical Products Lab, Winter Haven, FL; and, Karel Grohmann, Renewable Spirit, LLC, Delray Beach, FL. [HP4]
- 11:00 Handling and processing business meeting
- 11:15 **Evaluation of Aromatic Volatiles in a Population of Tangerine Hybrids.** Takayuki Miyazaki, Fred Gmitter, UF/IFAS Citrus REC, Lake Alfred, FL; Anne Plotto and Elizabeth Baldwin, USDA/ARS, Citrus and Subtropical Products Lab, Winter Haven, FL. [HP5]
- 
- 11:30 **Proteins Interact Differentially with Grapefruit Furanocoumarins.** K. Myung, and J.A. Manthey, USDA-ARS Citrus and Subtropical Products Lab, Winter Haven, FL. [HP6]
- 11:45 **Citrus Production and Packing Operation in China.** Guiwen ‘Alvin’ Cheng, Fresh Produce Technologies, JBT FoodTech, Lakeland, FL. [HP7] (30 min)
- 12:15 End of morning session/Go to Canning Center for lunch and afternoon program (round-trip transportation provided; *event ticket required; includes lunch*)
- 12:20 Shuttle departs from hotel lobby to canning center (1 trip)

Monday Afternoon 12:45-5:00

B - Canning and Food Preservation Workshop: Canning for Fun and profit. A workshop focusing on small-scale value added processing for growers

Co-organizers: Terry Delvalle and Brad Burbaugh, Duval county Extension Office, Amarat Simonne, UF/IFAS Department of Family, Youth and Community Sciences; and, Jinhe Bai, USDA/ARS, Citrus and Subtropical Products Lab, Winter Haven, FL.

Location: The Canning Center, Institute of Food & Agricultural Sciences, University of Florida, 1010 N. McDuff Ave Jacksonville, FL.



A= Wyndham Hotel B= Canning Center

12:45-1:15: **Lunch/Introduction/Ice-Breaking**, Terry DelValle

Two concurrent sessions (attendees divided into two groups of 15 each)

Group A

1:15-3:00 **Hands-on canning experience**, Terry DelValle and Master Gardeners volunteers. Room: Canning center.

Group B

1:15 -3:00 **Classroom teaching.** Conference room

1:15 **Gardening/trends, Terry Delvalle.**

1:30 **Principles of canning, Amy Simonne.**

2:00 Break

2:10 **Regulations, Brad Burbaugh.**

2:35 **Dos and Don'ts for canning-Trouble shooting, Muriel Turner,** Levy County Extension, Bronson, FL.

3:05 End of session; Groups change room

Group B

3:10 - 5:00 **Hands-on canning experience, Terry DelValle** and Master Gardeners volunteers. Room: Canning center. Room: Canning center.

Group A

3:10 - 5:00 **Classroom teaching.** Conference room

3:10 **Gardening/trends, Terry DelValle.**

3:25 **Principles of canning, Amy Simonne.**

3:55 Break

4:05 **Regulations, Brad Burbaugh.**

4:30 **Dos and Don'ts for canning-Trouble shooting, Muriel Turner,** Levy County Extension, Bronson, FL .

5:00 End of session

5:15 Shuttle returns to the hotel (1 trip)

6:00 Industry Reception

Tuesday Morning 9:50-12:00

Tug

C - Postharvest Physiology

9:50 **Welcome and Introductions, Jinhe Bai**

10:00 **The Method of Washing Citrus Influences the Rate of Subsequent Degreening. Mark A. Ritenour,** UF/IFAS Indian River REC, Fort Pierce, FL. [HP8]

10:15 **Effect of Canopy Cover and Harvest Maturity on Blueberry (*Vaccinium corymbosum*) Fruit Quality. Steven A. Sargent,** Paul M. Lyrene, Abbie J. Fox and Adrian D. Berry, UF/IFAS Horticultural Sciences Dept., Gainesville, FL. [HP9]

10:30 **Use of an Electronic Nose to Classify Avocado Pulp by Maturity Stage. Marcio Eduardo Canto Pereira,** Steven A. Sargent and Adrian D. Berry, UF/IFAS Horticultural Sciences Dept., Gainesville, FL. [HP10]

10:45 **Harvest Maturity and Post-processing Dip to Improve Quality of Fresh-cut Carambola Fruit. Jinhe Bai, Jan Narciso, Anne Plotto and Elizabeth Baldwin,** USDA-ARS Citrus and Subtropical Products Laboratory, Winter Haven, FL. [HP11]

11:00 **Surface Treatments and Coatings to Maintain Fresh-cut**

Mango Quality in Storage. Anne Plotto, Elizabeth A. Baldwin, Jan A. Narciso, Jinhe Bai, USDA-ARS, Citrus and Subtropical Products Lab., Winter Haven, FL; and, Nithiya Rattanapanone, Chiang Mai University, Thailand. [HP12]

D – Fruit Quality and Pathology

- 11:15 **Influence of Mechanical Harvesting System and Abscission Agent on Microflora of Citrus Fruit.** L.M. Friedrich, T.M. Spann, R. McEgan, R.C. Ebel, and M.D. Danyluk, UF/IFAS Citrus REC, Lake Alfred, FL. [HP13]
- 11:30 **Laser Labeling, a Safe Technology to Label Produce.** Preeti Sood, Ed Etxeberria, UF/IFAS Citrus REC, Lake Alfred, FL; Chris Ference and Jan Narcoiso, USDA/ARS, Citrus and Subtropical Products Lab, Winter Haven, FL. [HP14]
- 11:45 **Evaluation for the Potential of a New Fungicide Pyrimethanil for Postharvest Disease Control of Florida Citrus Fruit.** Jiuxu Zhang, Florida Department of Citrus, Lake Alfred, FL. [HP15]
- 12:00 End of morning session/Extension luncheon

(Event ticket required)



KROME MEMORIAL INSTITUTE
Mongi Zekri, Presiding
(maz@ufl.edu)

Admiralty

A - Avocados

- 9:50 **Welcome and Introductions**, Mongi Zekri
- 10:00 **Evaluation of Potassium Silicate and Yucca Juice Compared to Phosphorous acid for the Control of *Phytophthora cinnamomi* in Avocado.** Gary S. Bender¹, Akif Eskalen², and Gary Tanizaki¹. ¹ University of California Cooperative Extension, San Diego, CA; ² Department of Plant Pathology, University of California, Riverside, CA. [K1]
- 10:15 **Effect of Propiconazole on Laurel wilt Development in *Persea americana* Mill. (Avocado) Trees.** Tomas Ayala-Silva, Raymond Schnell, Alan W. Meerow, Michael Winterstein, USDA, ARS, National Germplasm Repository, Subtropical Horticulture Research Station, Miami, FL; and, Francis Zee, USDA, ARS Pacific Basin Tropical Plant Genetic Resources Management Unit, HI. [K2]
- 10:30 **Foliar Applications of Aliette and Prophyt on Avocado (*Persea americana*) Are not Phytotoxic.** Jonathan Crane, Aaron Palmateer, and Edward Evans, UF/IFAS Tropical REC, Homestead, FL. [K3]

B - Blueberries

- 10:45 **Performance of Ten Cultivars of Rabbiteye Blueberries in North Florida.** Peter C. Andersen, UF/IFAS North Florida REC, Quincy, FL; Jeffrey G. Williamson, E. Paul Miller, and Paul M. Lyrene, UF/IFAS Horticultural Sciences Dept., Gainesville, FL. [K4]
- 11:00 **New and Potential Herbicides for Blueberries.** Gary K. England, UF/IFAS Sumter County Extension, Bushnell, FL; W. M. Stall, UF/IFAS Horticultural Sciences Dept., Gainesville, FL; A.W. MacRae, UF/IFAS Gulf Coast REC, Balm, FL; and, K. R. Muzyk, Gowan Company, Brandon, FL. [K5]
- 11:15 **Growth and Yield of Southern Highbush Blueberry in Pine Bark Culture under Varying Fertilizer Regimes.** J.G. Williamson and E.P. Miller, UF/IFAS Horticultural Sciences Dept., Gainesville, FL. [K6]

C - Peaches

- 11:30 **Eastern U.S. Market Potential for Florida Sub-Tropical Peaches.** L. Harrison, Leon County Extension, Tallahassee, FL; E. Harrison, Florida Department of Agriculture and Consumer Services, Tallahassee, FL; J.X. Chaparro, and J.G. Williamson, UF/IFAS Horticultural Sciences Dept., Gainesville, FL. [K7]
- 11:45 **Changes in respiration and ethylene production of low-chill subtropical peaches harvested at different maturities.** Ming-Wei "Sherry" Kao, Jeffrey Williamson and Jeffrey Brecht, UF/IFAS Horticultural Sciences Dept., Gainesville, FL. [K17]
- 12:00 End of Morning Session/Lunch on your own

Monday Afternoon Session 1:20-4:30.

D - Grapes

- 1:20 **Welcome and Introductions**, Mongi Zekri
- 1:30 **Investigations into the Origin of 'Norton' Grape using SSR Markers.** Ed Stover, USDA/ARS, USHRL, Ft. Pierce, FL; Gerald Dangl and Judy Yang, Foundation Plant Services, University of California, Davis, CA; John Bautista and Malli Aradhya, USDA/ARS NCGR, University of California, Davis, CA. [K8]
- 1:45 **The Inheritance of Flower Types and F1 Survivals in a Complex Advanced Breeding Line of "N18-6" Grape.** Z. Ren, J. Lu, X. Xu, Center for Viticulture, Florida A&M University, Tallahassee, FL 32317. [K9]
- 2:00 **Screening for Crown Gall Disease Resistance in Grapes using Green and Dormant Cuttings.** Xia Xu¹, Jeong Ho Roh^{1,2}, Jiang Lu^{1*}, ¹Center for Viticulture and Small Fruit Research, Florida Agriculture and Mechanical University, Tallahassee, FL; ² National Horticultural Research Institute, Suwon, Korea. [K10]
- 2:15 **Investigation into Uneven Ripening Problem in Muscadine Grape for Enhancing their Enological Characteristics.** Hemanth KN. Vasanthaiah, Ramesh Katam, Devaiah K. and Sheikh M. Basha, Center for Viticulture and Small Fruit Research, Florida A & M University, Tallahassee, FL. [K11]
- 2:30 **Comparative Leaf Proteomics Studies in Vitis Species.** Sheikh M Basha, Ramesh Katam, and Hemanth KN. Vasanthaiah, Center for Viticulture and Small Fruit Research, Florida A & M University, Tallahassee, FL. [K12]
- 2:45 **Identification and Characterization of Xylem Components Associated with Pierce's Disease Tolerance in Grape.** Ramesh Katam, Sheikh M Basha, Hemanth Vasanthaiah, and Hifza Mazhar, Center for Viticulture and Small Fruit Research, Florida A & M University, Tallahassee, FL. [K13]
- 3:00 Krome Memorial Institute section business meeting
- 3:15 Break

E - Other Crops and Topics

- 3:30 **The Effect of K-phite and Salicylic Acid on Container Grown Citrus Graft Inoculated with HLB Budwood.** R.A. Atwood, UF/IFAS Lake County Extension, Tavares, FL; and, R.H. Bransky, UF/IFAS Citrus REC, Lake Alfred, FL. [K14]
- 3:45 **Postharvest Fludioxonil Dip Protects 'Arkin' carambola (*Averrhoa carambola* L.) from *Dothiorella* Fruit Rot.** Aaron Palmateer and Jonathan Crane, UF/IFAS Tropical REC, Homestead, FL. [K15]
- 4:00 **Using Polycom for Distance Education Statewide.** J.V. Morse, UF/IFAS Pinellas County Extension, Largo, FL. [K16]
- 4:15 Discussion
- 4:30 End of afternoon session and end of Krome Memorial Institute program /Industry reception

ORNAMENTAL, GARDEN AND LANDSCAPE SECTION

Henrique Mayer, Presiding
(hmayer@ufl.edu)

Anchor

Monday Morning Session 9:50 – 12:00

A - International Experiences and Opportunities

- 9:50 **Welcome and Introductions**, Henrique Mayer
- 10:00 **Education and Extension Opportunities for Biofuel Careers in Florida and Latin America.** John C. Alleyne, UF/IFAS Highlands County Extension, Sebring, FL; and L. E. Baucum, UF/IFAS Hendry County Extension, LaBelle, FL. [OGL1]
- 10:15 **Natural Resources: Analyzing Extension Needs of Spanish-speakers in Florida.** Cesar Asuaje, UF/IFAS Palm beach County Extension, Palm Beach, FL; M. Wyman, and F. Escobedo, UF School of Forest Resources and Conservation, Gainesville, FL; H. Mayer, UF/IFAS Miami-Dade County Extension, Homestead, FL; M. Swisher, UF/IFAS Dept. of Family, Youth and Community Sciences, Gainesville, FL; and, A. Delgado, UF/IFAS Horticulture Sciences Dept., Gainesville, FL. [OGL2]
- 10:30 **Preparing and Transporting Palm Trees to Exhibit at an International Plant Show in Essen Germany.** Edward A. Skvarch, UF/IFAS St. Lucie County Extension, Ft. Pierce, FL. [OGL3]
- 10:45 **The Landscapes and Gardens of China: From Beijing to Guangzhou.** Teresa Olczyk, UF/IFAS Miami-Dade County Extension, Homestead, FL; T. Friday, UF/IFAS Santa Rosa County Extension, Milton, FL; P. Vergot, UF/IFAS North Florida REC, Quincy, FL; L. Buss, UF/IFAS Entomology and Nematology Dept., Gainesville, FL; and, J. Xin, UF Office of Information Technologies, Gainesville, FL. [OGL4]

B - Irrigation Management

- 11:00 **Laboratory Accuracy of Soil Moisture Sensor Irrigation Controllers.** B. Cardenas-Lailhacar and M. D. Dukes, UF/IFAS Agricultural and Biological Engineering Dept., Gainesville, FL. [OGL5]
- 11:15 **Testing of Climate-based Irrigation Controllers In Florida.** Stacia L. Davis and Michael D. Dukes, UF/IFAS Agricultural and Biological Engineering Dept., Gainesville, FL. [OGL6]
- 11:30 **Efficacy of Paclobutrazol Drench Treatments to Petunia and Impatiens Is Affected by Application Method and Irrigation Method.** J.T. Watson, C.A. Bartuska and J.E. Barrett, UF/IFAS Environmental Horticulture Dept. Gainesville, FL. [OGL7]



11:45 **Determinating Seasonal Water Use and Crop Coefficients for Central Florida Turfgrasses.** B. Wherley and T. Sinclair, UF/IFAS Agronomy Dept., Gainesville, FL; M. Dukes, UF/IFAS Agricultural and Biological Engineering Dept.; and, G. Miller, NC State University Crop Science Dept. [OGL8]

12:00 End of morning session/Lunch on your own

Monday Afternoon Sessions 1:20 – 5:15

C - Best Management Practices and Soils

1:20 **Welcome and Introductions,** Henrique Mayer

1:30 **Influence of Mowing Height and Nitrogen Rate on Nitrate Leaching in St. Augustinegrass.** Laurie E. Trenholm , S. Shweta, J.B. Unruh, and J.B. Sartain. UF/IFAS Environmental Horticulture Dept., Gainesville, FL. [OGL9]

1:45 **The Value of the Best Management Practices Outreach Education Program.** D.P. Rainey, Sarasota County Extension, Sarasota, FL; and L. Trenholm, UF/IFAS Environmental Horticulture Dept. Gainesville, FL. [OGL10]

2:00 **Role of Nitrogen Rate and Clipping-Return on Nitrate Leaching and Turf Quality in Empire Zoysiagrass.** J. Bea and L.E. Trenholm, UF/IFAS Environmental Horticulture Dept., Gainesville, FL. [OGL11]

2:15 **Fertilization Requirements of 'Empire' Zoysiagrass and Bahiagrass.** L.E. Trenholm and J.B. Unruh, UF/IFAS Environmental Horticulture Dept. Gainesville, FL. [OGL12]

2:30 **Structural Pruning and Root Remediation: Tools for Building Sustainable Urban Tree Canopy.** Michael Orfanedes, UF/IFAS Broward County Extension, Davie, FL; C.W. Hoyt, Tree Trimmers and Associates, Oakland Park, FL; and, E. Gilman, UF/IFAS Environmental Horticulture Dept., Gainesville, FL. [OGL13]

2:45 **Effects of Organic Matter and Irrigation Frequency on Shrub Growth during Establishment.** Kimberly K. Moore UF/IFAS Fort Lauderdale REC, Davie, FL; and Amy L. Shober, UF/IFAS Gulf Coast REC, Wimauma, FL. [OGL14]

3:00 **Comparison of Four Types of Southwest Florida Soils.** Stephen H. Brown, UF/IFAS Lee County Extension, Ft. Myers, FL. [OGL15]

3:15 Ornamental, garden and landscape section business meeting

3:30 Break

D - Cultivars and Production

3:45 **Effect of Root Pruning and Planting Depth on Growth and Root Ball Quality in Container Production of Royal Poinciana *Delonix regia*.** Michael Orfanedes, UF/IFAS Broward County Extension, Davie, FL; and E. Gilman, UF/IFAS Environmental Horticulture Dept., Gainesville, FL [OGL16]

4:00 **Fort Lauderdale Trial Garden – Year 7 (2008-2009).** Luci E. Fisher and Kimberly K. Moore, UF/IFAS Fort Lauderdale REC, Davie, FL. [OGL17]

- 4:15 **Selected Daffodils for Central Florida Gardens.** Bobbi Jo Jarvis and Wilma Hayes, UF/IFAS Pasco County Extension, Dade City, FL. [OGL18]
- 4:30 **2008 Survey of Caladium Growers in Florida.** John C. Alleyne, UF/IFAS Highlands County Extension, Sebring, FL; and Z. Deng, Gulf Coast REC, Balm, FL. [OGL19]
- 4:45 **Sugarcane Eye Propagation for back yard production in North Florida.** L. Muralles, A. Bolques, FAMU/CESTA Gadsden County Extension; and, H. Grant, UF/IFAS Gadsden County Extension, Quincy, FL. [OGL20]
- 5:00 **Utilization of Farmed Algal Mats for Nutrient Scrubbing and Biofuel Production in Florida Horticultural Operations.** T.J. Evens and J.P. Albano, USDA-ARS, US Horticultural Research Laboratory, Ft. Pierce, FL. [OGL21]
- 5:15 End of afternoon session/Industry reception

Tuesday Morning Session 9:50 – 12:00

D - Cultivars and Production (ctd.)

- 9:50 **Welcome and Introductions,** Henrique Mayer
- 10:00 **Effectiveness of Seed Matriconditioning on Germination and Storability Parameters of Creeping Bentgrass.** Zakiya Ross and Gokhan Haciasalihoglu, Biology Department, Florida A&M University, Tallahassee, FL. [OGL22]
- 10:15 **Evaluation of Seed Treatments for Improved Germination of Starry Rosinweed, *Silphium asteriscus*.** J.A. Mangandi and S. Park-Brown, UF/IFAS Gulf Coast REC, Balm, FL. [OGL23]

E - Pests and Integrated Pest Management

- 10:30 **Rules for a Successful IPM Program.** Sylvia A. Shives, and K.Oliver, UF/IFAS Manatee County Extension, Palmetto, FL. [OGL24]
- 10:45 **Possibilities for Biological Control of Root-knot Nematodes by Natural Predators in Florida Soils.** Robert McSorley, UF/IFAS Entomology and Nematology Dept., Gainesville, FL; Koon-Hui Wang, Department of Plant and Environmental Protection Sciences, University of Hawaii at Manoa, Honolulu, HI. [OGL25]
- 11:00 **Problems in Controlling *Phytophthora cactorum* on Cattleya Orchids.** Robert T. McMillan, Jr., Kerry's Nursery, Inc, Homestead, FL. [OGL26]
- 11:15 **Effects of Pesticides on the Arthropod Community in the Agricultural Areas near the Everglades National Park.** D.M. Amalin, J.E. Peña, R. Duncan, UF/IFAS Tropical REC, Homestead, FL; J. Leawengood, Division of Plant Industry, Gainesville, FL; and, S. Koptur Department of Biology, Florida International University, University Park, Miami, FL. [OGL27]
- 11:30 **Tracking the Spread of Pink Hibiscus Mealybug (*Maconellicoccus hirsutus* Green) and its Parasitoids in Miami-Dade County, Florida using GPS/GIS Mapping System.** D.M. Amalin, UF/IFAS Tropical REC, Homestead, FL; L.R. Nieves, Dept. of Interior, Baker City, Oregon; A. Roda, USDA-ARS-SHRS, Miami, FL; and, C. Mannion, UF/IFAS Tropical REC, Homestead, FL. [OGL28]

11:45 **A Survey of Irrigation Water Quality in Florida**, Van Donnan, Keith Santner and Fred Hulme, The Scotts Company, Marysville, OH. [OGL29]

12:00 End of meeting/Extension luncheon (*Event ticket required*)

VEGETABLE SECTION

Gene McAvoy, Presiding

[\(gmcavoy@ufl.edu\)](mailto:gmcavoy@ufl.edu)

Sail


Monday Morning Session 9:50 – 12:15


A – Production

- 9:50 **Welcome and Introductions**, Gene McAvoy
- 10:00 **Using a Float System to Grow Hydroponic Lettuce for Sale 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, FL. [V1]
- 10:15 **The Market Gardening Project – An Agriculture Extension Program in Diversified, Small Scale Horticultural Production.** Robert Kluson, Sarasota County Extension, Sarasota, FL. [V2]
- 10:30 **Growing and Marketing Hydroponic Lettuce 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, FL. [V3]

B – Irrigation and Water Management

- 10:45 **Influence of Irrigation Programs on Strawberry Cultivar Growth and Yield.** Maricruz Ramirez, Bielinski M. Santos, Craig K. Chandler and Steve A. Sargent. UF/IFAS Gulf Coast REC, Balm, FL. [V4]
- 11:00 **Influence of Mulches, Fumigants, and Irrigation Programs on Tomato Performance.** Bielinski M. Santos, UF/IFAS Gulf Coast REC, Balm, FL. [V5]
- 11:15 **Real-Time Drip-Irrigation Scheduling of Watermelon Grown with Plasticulture.** Francesco Di Gioia, Eric Simonne, Diane Jarry, Michael Dukes, Bob Hochmuth, and David Studstill, UF/IFAS Horticultural Sciences Dept., Gainesville, FL. [V6]
- 11:30 **Use of Soil Moisture Sensor-Based Irrigation on Vegetable Crops: Pitfalls, Failures and Successes.** L. Zotarelli and M.D. Dukes, UF/IFAS Agricultural and Biological Engineering Dept., Gainesville, FL. [V7]

11:45  **Effect of Splitting Drip Irrigation on the Depth and Width of the Wetted Zone in a Sandy Soil.** Bee Ling Poh, E.H. Simonne, Horticultural Sciences Dept., Gainesville, FL; R.C. Hochmuth, UF/IFAS North Florida REC-Suwannee Valley, Live Oak, FL; A. Gazula, Alachua County Extension, Gainesville, FL, and D.W. Studstill, Horticultural Sciences Dept. [V8]


12:00  **Correlation between Lab Color Space Values and Carotenoid Content in Pumpkins and Squash (*Cucurbita* spp.).** Rachel A. Itle and Eileen A. Kabelka, UF/IFAS Horticultural Sciences Dept., Gainesville, FL. [V9]


12:15 Lunch


Monday Afternoon Sessions 1:20-5:15

C – Fertilization and Nutrition

1:20 **Welcome and introductions,** Gene McAvoy

1:30  **Characterization of In-row Movement of Nitrogen during a Simulated Rain Event and its Impact on Northeast Florida Potato Production.** Zhiwei Chen and Chad M. Hutchinson, UF/IFAS Horticultural Sciences Dept., Gainesville, FL. [V10]

1:45  **Effects of Sulfur Rates and Drip-Irrigation Volumes on Tomato.** Camille E. Esmel, Bielinski M. Santos, Jack E. Rechcigl, Eric H. Simonne, and Joseph W. Noling, UF/IFAS Gulf Coast REC, Balm, FL. [V11]

2:00  **Response to Cadmium as a Potential Hydroponic Screening Tool for Zinc Efficiency in Common Beans.** Gokhan Hacisalihoglu and Aja Lampley. Biology Dept., Florida A&M University, Tallahassee, FL. [V12]

2:15 **Preliminary Data on Phosphorus Soil Test Index Validation in Southwest Florida.** Kelly Morgan, Shinjiro Sato, and Gene McAvoy, UF/IFAS Southwest Florida REC, Immokalee, FL. [V13]


2:30 **Effects of Diverse Preplant Nitrogen Fertilizer Sources on Strawberry Growth and Yields.** Bielinski M. Santos. UF/IFAS Gulf Coast REC, Balm, FL. [V14]


2:45 **Potential for Sunn Hemp (*Crotalaria juncea* L.) to Utilize Soil Potassium.** Danielle D. Treadwell, Carlene Chase, Alyssa Cho, Michael Alligood, and Joseph Elsagr, UF/IFAS Horticultural Sciences Dept., Gainesville, FL. [V15]


3:00 Vegetable section business meeting

3:15 Break

D - Pest Management

3:30  **Characterizing Cucurbit Powdery Mildew in North Central Florida.** Gabriella Maia and Amanda J. Gevens. UF/IFAS Plant Pathology Dept., Gainesville, FL. [V16]

3:45  **Evaluating Rootstock Effects on Grafting Vigor and Yield of Tomato under Greenhouse Conditions.** Desire Dijdonou and Xin Zhao, UF/IFAS Horticultural Sciences Dept., Gainesville, FL. [V17]

4:00  **Prospects for Biological Control of *Microtheca ochroloma* Stål.** Cecil O. Montemayor and Ronald D. Cave. UF/IFAS Indian River REC, Ft. Pierce, FL. [V18]

- 4:15 **Control of Broad Mite, *Polyphagotarsonemus Latus* and the Whitefly *Bemisia Tabaci* in Open Fields of Pepper and Eggplant with Predaceous Mites.** Phil Stansly and Jose Castillo, Southwest Florida REC, Immokalee, FL. [V19]
- 4:30 **Bacterial-Spot Resistant Pepper Trials in Florida.** Gene McAvoy, UF/IFAS Hendry County Extension, LaBelle, FL; Russell Nagata and Ken Pernezny, Everglades REC, Belle Glade, FL; Jeff Jones, Plant Pathology Dept., Gainesville, FL; Nikol Havranek, Everglades REC; and, Darrin Parmenter, Colorado State University Extension, La Plata County, Durango, CO. [V20]
- 4:45 **Determining Metham Sodium Lethal Dosage for Sting Nematode Control in Grower Field Microplots.** Joe Noling, Citrus REC, Lake Alfred, FL. [V21]
- 5:00 **Comparing Relative Strawberry Yield Using Differential Counts of Plant Sizes among Fumigant Treatments.** Joe Noling, Citrus REC, Lake Alfred, FL. [V22]
- 5:15 **Vegetable Focus Team Meeting,** Gene McAvoy and Chad Hutchinson, G1C6 focus team co-leaders
- 6:00 End of program/Industry reception

Tuesday Morning Session 9:50 – 12:15

D - Pest Management (ctd)

- 9:50 **Welcome and Introductions,** Monica Ozores-Hampton
- 10:00 **Efficacy of Regalia™ SC for Control of Bacterial Leaf Spot and Powdery Mildew on Tomato in Florida.** Jason Osborne, T. Johnson, M. Martinez, H. Su, M.E. Koivunen, P.G. Marrone, Marrone Bio Innovations, Davis, CA. [V23]
- 10:15 **Biological Parameters of Chilli Thrips, *Scirtothrips dorsalis* Hood (Thysanoptera: Thripidae) under Various Regimes of Insecticides.** Dak R. Seal. UF/IFAS Tropical REC, Homestead, FL. [V24]
- 10:30 **Diel Periodicity of Chilli thrips (Thysanoptera: Thripidae) Dispersion and Occurrence on Selected Host in South Florida.** Vivek Kumar, Dakshina R. Seal, UF/IFAS Tropical REC, Homestead, FL; David J. Schuster, UF/IFAS Gulf Coast REC, Balm, FL; and, Garima Kakkar, UF/IFAS Tropical REC. [V25]

E - Cultivars

- 10:45 **Evaluation of Strawberry Cultivars in Florida: 2007-2009.** Teresa P. Salame, Bielinski M. Santos and Craig K. Chandler, UF/IFAS Gulf Coast REC, Balm, FL. [V26]
- 11:00 **An Evaluation of Three Pigeon Pea (*Cajanus cajan*) Cultivars in North Florida: Timing of Planting, Crop Growth, Grain Development and Composition.** C.S. Gardner, Gilbert L. Queeley, B.G. Brown and K.T. Grant, Cooperative Extension Services, College of Engineering Sciences, Technology and Agriculture (CESTA), Florida A & M University, Tallahassee, FL. [V27]

11:15 **UF's "Tasti-Lee" Competes with Indeterminate, Greenhouse Tomato Cultivars for Yield, Fruit Quality, and Sensory Analysis when Produced Hydroponically.** Nicole L. Shaw, Daniel J. Cantliffe, Steven A. Sargent, Adrian Berry, Elena Lon Kan, UF/IFAS Horticultural Sciences Dept., Gainesville, FL; Charles A. Sims, Lorenzo Puentes, UF/IFAS Food Science and Human Nutrition Dept. Gainesville, FL; and, J.W. Scott, Gulf Coast REC, Balm, FL. [V28]

11:30 **Greenhouse Production of Charentais-type Cantaloupes (*Cucumis melo* L. var. *cantaloupensis*).** Daniel J. Cantliffe, Jeanmarie M. Harty, Nicole L. Shaw, Steven A. Sargent, UF/IFAS Horticultural Sciences Dept., Gainesville, FL; and, Peter J. Stoffella, UF/IFAS Indian River REC, Ft. Pierce, FL. [V29]

F - Biofuels and Bioenergy

11:45 **Sorghum for Biofuel Instead of Vegetable Cover Crop - Hastings Partnership Update.** Jacque Breman, Union County Extension, Lake Butler, FL. [V30]

12:00 **Integrating Biodiesel Production into Florida Horticultural Production Systems.** D.O. Chellemi, USDA, ARS, U.S. Horticultural Research Laboratory, Ft. Pierce, FL; and R. von Wedel, CytoCulture International, Point Richmond, CA. [V31]

12:15 End of program/Extension luncheon

(Event ticket required)

**WELCOME 2010 FSHS
SECTIONAL VICE-PRESIDENTS!**

Citrus: [Robert Ebel](#), SWFREC, Immokalee
OGL: [Ed Skvarch](#), St. Lucie County Extension,
Ft. Pierce

HP: [Cecilia Nunes](#), UF/IFAS Food Science and
Human Nutrition, Gainesville

Krome Memorial Institute: [Pete Andersen](#), NFREC,
Quincy

Vegetable: [Monica Ozores-Hampton](#), SWFREC,
Immokalee



SCSSF PROGRAM



= Graduate Student Competition Entry

Samira Daroub, Presiding
(sdaroub@ufl.edu)

Compass

Monday Morning Session 9:50 -12:05

9:50 **Welcome and Introductions**, Samira Daroub

Session 1 - SCSSF and FSHS Joint Symposium on Biofuel Production in the US: Status and Future Prospects

10:00 **Cellulosic Biofuels in the United States: Current Status and Future Prospects.** D. Bransby, Dept. of Agronomy and Soils, Auburn Univ., AL. [SC1]

10:25 **The Prospects of a Cellulosic Biofuels Industry in Florida.** G. Philippidis, Applied Research Center, Florida International Univ., Miami, FL. [SC2]

10:50 **Use of Sugarcane and Energy Canes for Florida Bioenergy.** R. Gilbert, Agronomy Dept., and Everglades REC, Univ. of Florida, Belle Glade, FL. [SC3]

11:15 **Bioenergy Feedstock from Grasses in Florida: Candidate Species and Production Challenges.** L. Sollenberger, Agronomy Dept., Univ. Florida, Gainesville, FL. [SC4]

11:40 **Utilization of Forest Biomass for Bioenergy.** G. Peter, School of Forest Resources and Conservation, Univ. of Florida, Gainesville, FL. [SC5]

12:05 End morning session / Lunch on your own

Monday Afternoon Session 1:20–5:15

Session 2 - SCSSF and FSHS Joint Symposium on Biofuel Production in the US: Status and Future Prospects

1:20 **Welcome and Introductions**, Samira Daroub

1:30 **Biofuel Production from Jatropha.** W. Vendrame, Env. Horticulture & Tropical REC, Univ. of Florida. [SC6]







1:50 **Cultivating Non-Native Plants in Florida for Biomass Production: Hope or Harm?** J. P. Cuda¹, and D.R. Gordon², ¹Entomology & Nematology Dept., ²The Nature Conservancy, Univ. of Florida. [SC7]

2:10 **Invasives to Bioenergy: A Potential “Win-Win” for the Florida Environment.** J. M. Evans and A. C. Wilkie, Soil and Water Science Dept., Univ. of Florida/IFAS. [SC8]

2:30 **Simulated Biomass Production of Bioenergy Crops Relative to Seasonal Rainfall, Temperature, and Solar Radiation in Florida.** K.J. Boote¹ and J. W. Jones², ¹Agronomy Dept., Univ. of Florida/IFAS, ²Agric. & Biol. Engr. Dept., Univ. of Florida/IFAS. [SC9]

2:50 End of session/Break

Session 3 - Graduate Student Competition

- 3:00**  **Seasonal Dynamics of Phosphorus in Sulfur-amended Organic Soils of South Florida.** R. Ye¹, A. L. Wright², M. McCray², and K.R. Reddy¹. ¹Soil and Water Science Dept., ²Everglades Research & Education Center, Univ. of Florida/IFAS. [SC10]
- 3:15**  **Determination of Soil Organic Matter Using Loss on Ignition Method.** K. Hines and R. Mylavarapu, Soil and Water Science Dept., Univ. of Florida/IFAS. [SC11]
- 3:30**  **Evaluation of Fungicides for Reduction of Leaf Spot, Rust and White Mold Diseases of Peanut (*Arachis hypogaea*), 2008.** S. Glucksman¹, C. R. Semer IV¹, and A. J. Gevens², ¹Plant Medicine Program, Clinical Trials, ²Dept. of Plant Pathology, Univ. of Florida/IFAS. [SC12]
- 3:45** **Break**
- 4:00**  **Evaluation of Fungicide Products and Application Timing for Control of Asian Soybean Rust (*Phakopsora pachyrhizi*) on Soybean (*Glycine max*) 2008.** A. Barbaglia¹, C. R. Semer IV¹, S. Glucksman¹, C. Harmon², and P. F. Harmon². ¹Plant Medicine Program, Clinical Trials, ²Dept. of Plant Pathology, Univ. of Florida/IFAS. [SC13]
- 4:00** **Break**
- 4:15**  **Predicting Bahiagrass Response to Phosphorus Fertilization Using Tissue Phosphorus.** A. K. Obour¹, M. L. Silveira², J. M. B. Vendramini², L. E. Sollenberger³, and G. A. O'Connor¹. ¹Soil and water Science Dept., ²Range Cattle Research and Education Center, Univ. of Florida, ³Agronomy Dept., Univ. of Florida/IFAS. [SC14]
- 4:30**  **Differential Orthophosphate Leaching in Empire Zoysiagrass and Floratam St. Augustinegrass.** R. F. González and Jerry B. Sartain, Soil and Water Science Dept., Univ. of Florida/IFAS. [SC15]
- 5:00** Graduate student awards presentation
- 5:15** End of program

Tuesday Morning Session 7:50 – 12:15

Session 3 – Scientific Research Papers

- 7:50** **Welcome and Introductions**, Samira Daroub
- 8:00** **Water Use by St. Augustinegrass in a Sub-Tropical Florida Environment.** J.E. Erickson, D.M. Park², J.L. Cisar³, and G.H. Snyder⁴. ¹Agronomy Dept., Univ. of Florida/IFAS ²Horticulture Dept., Clemson University, Pee Dee Research and Education Center, Florence, SC ³Environmental Horticulture, Univ. of Florida/IFAS, ⁴Soil and Water Science, Univ. of Florida/IFAS. [SC16]
- 8:20** **Review of Nitrogen and Phosphorus Fertilization of Florida Turfgrass: A White Paper from the UF-IFAS Turfgrass Fertilization Task Force.** T. Obreza¹, L. Trenholm², J. Sartain¹, J. Cisar⁵, B. Unruh⁴, J. Dettman-Kruse², K. Kenworthy³, B. Boman⁶, and E. Simonne⁷. ¹Soil and Water Science Dept, ²Environmental Horticulture Dept., ³Agronomy Dept., ⁴ West Florida Research and Education Center, ⁵Ft.

Lauderdale Research and Education Center, ⁶Indian River Research and Education Center, ⁷Horticultural Sciences Dept., Univ. of Florida/IFAS. [SC17]

- 8:40 **Comparative Maintenance of Paspalum and Bermuda Grasses** I. M. Vargas, J. B. Sartain, T. A. Obreza and Jason Kruse, Soil and Water Science Dept., Univ. of Florida/IFAS. [SC18]
- 9:00 **NPK Spatial and Temporal Distributions in Sandy Soils Cropped with Tomatoes under Seepage Irrigation.** S. Sato¹, Kelly T. Morgan¹, M. Ozores-Hampton¹, and E. H. Simonne², ¹Southwest Florida Research and Education Center, ²Horticultural Sciences Dept., Univ. of Florida/IFAS. [SC19]
- 9:20 Break
- 9:40 **Sugarcane Leaf Analysis as a Nutrient Management Tool.** M. McCray, Everglades Research and Education Center, Univ. of Florida/IFAS. [SC20]
- 10:00 **Sugarcane Response to High Water Tables and Intermittent Flooding** J. D. Ray ¹and T. R. Sinclair², ¹ARS-USDA, Stoneville, MS, ²Agronomy Physiology Laboratory, Agronomy Dept., Univ. of Florida/IFAS. [SC21]
- 10:20 **Sustainable Agriculture in Space – Simplifying Salad Crop Production Systems.** O. Monje, Dynamac Corp, Space Life Sciences Laboratory, Kennedy Space Center, FL 32980. [SC22]
- 10:40 **Alternatives to Methyl Bromide Studies in Gainesville 2001-2008: Summary of Emissions Reduction Studies of Pre-plant Soil Fumigants** L. H. Allen, Jr¹, J. C.V. Vu¹, J. E. Thomas², Li-Tse Ou², and D. W. Dickson³. ¹U.S. Dept. of Agriculture, Agricultural Research Service, Center for Medical, Agricultural, and Veterinary Entomology, Gainesville, FL 32608 ²Soil and Water Science Dept., Univ. of Florida/IFAS, ³Entomology-Nematology Dept., Univ. of Florida/IFAS. [SC23]
- 11:00 End of session
- 11:05 SCSSF Business Meeting
- 12:15 End of meeting/ Extension luncheon (*Event ticket required*)

SCSSF Manuscript Submissions

SCSSF authors are requested to submit their manuscripts by August 10, 2009, to the SCSSF Proceedings Editor, K. J. Boote, Agronomy Dept, PO 110500, University of Florida, Gainesville, FL 32611-0500. Please send a WORD file to kjboote@ufl.edu.



IN-SERVICE TRAINING AND PRODUCER WORKSHOP

THINKING COOPERATIVELY: STRATEGIES FOR ENHANCING THE ECONOMICAL OPPORTUNITIES OF HORTICULTURAL PRODUCERS

Fritz Roka and Al Wysocki, Organizers
(fmroka@ufl.edu and wyssocki@ufl.edu)

Compass

- 1:20 **Welcome and workshop agenda**, Fritz Roka and Al Wysocki
- 1:30 **Cooperatives and networks – Similarities and differences**, Al Wysocki, UF/IFAS Food and Resource Economics
- 1:50 **Experience with networks to facilitate marketing and purchases of crop inputs and services.**
Speakers:
 - Vonda Richardson, Florida A&M University
 - Nancy Roe, Farming Systems Research Inc
 - Jim Horne, Kerr Center for Sustainable Agriculture
 - Glyen Holmes, New North Florida Cooperative
 - Charles Thompson, Farm Credit
- 2:50 **What we can learn from enterprise budgets and strategies to get a profitable price.**
Speakers:
 - Ken Shuler, Stephen's Produce
 - Fritz Roka, UF/IFAS Southwest REC
 - Al Wysocki, UF/IFAS Food and Resource Economics
- 3:50 Discussion and workshop evaluation
- 4:00 Adjourn

END OF IST PROGRAM AND PRODUCER WORKSHOP

| 2009 FSHS/SCSSF JOINT MEETING FACTS | | |
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| Presentation Numbers | | |
| * | FSHS total | 123 |
| | Invited/featured speaker | 5 |
| | Citrus | 26 |
| | Handling and Processing | 15 |
| | Krome Memorial institute | 20 |
| | Ornamental, Gardening & Landscape | 29 |
| | Vegetables | 31 |
| | (FSHS Graduate Student Competition 15) | |
| * | SCSSF total | 23 |
| | (SCSSF Graduate Student Competition 6) | |
| * | In-service training | 7 |
| * | Canning workshop | 5 |
| ** | Joint meeting total | 158 |



NOTES



NOTES



2009 JOINT MEETING FACILITIES

WYNDHAM JACKSONVILLE RIVERWALK

Site Map

