# **PROGRAM**



# 73rd ANNUAL MEETING

# **Southern Region**

of the American Society for Horticultural Science

February 1-5, 2013 Orlando, FL

#### **Southern Region ASHS**

The Southern Region ASHS is a regional scientific society of the American Society for Horticultural Science. The Southern Region encompasses the 14 southern states of Texas, Louisiana, Oklahoma, Arkansas, Mississippi, Georgia, Alabama, Florida, South Carolina, North Carolina, Virginia, West Virginia, Kentucky and Tennessee. Membership varies over the years from about 300 to 500 active members. Membership is composed of research scientists, teachers and extension specialists from Universities, State, Federal and private research organizations, and industry. The Southern Region also contains a student section, the Association of Collegiate Branches, which is composed of student clubs from departments of horticulture and plant science across the region. The main focus of the Southern Region is the Annual Meeting, which is held every February in conjunction with the Southern Association of Agricultural Scientists (SAAS). The Annual Meeting consist of presentations of scientific papers, student paper competitions and judging contest, commodity group meetings, and awards presentations.

#### **Goals:**

- Encourage and facilitate the mutual exchange of ideas and information concerning horticultural research, extension, education, and industry in the south
- Promote stronger bonds among horticulturists in the southern regions
- Encourage participation in the international society of the American Society for Horticultural Science

The Southern Region ASHS is recognized widely as the strongest and most active Region of the American Society for Horticultural Science, and has a history that goes back to 1920! Join us and become a part of the Tradition.

## President

#### **David Creech**

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# **PROGRAM**

## 73rd ANNUAL MEETING

## **Southern Region**

# **American Society for Horticultural Science**

Orlando, FL February 1-4, 2013

#### SPECIAL EVENTS AND SESSIONS

#### FRIDAY, February 1, 2013

8:00 am - 5:00 pm Sweet Potato SCRI

Room: Oleander B

#### SATURDAY, February 2, 2013

7:00 am -	6:00 pm	Registration											
	<b>F</b>	Room: Hotel Lobby											
8:00 am -	5:00 pm	National Sweet Potato Collaborators											
	•	Room: Oleander B											
8:00 am -	5:00 pm	Pecan Research and Extension Forum											
	_	Room: Largo											
8:00 am -	5:00 pm	Southern Blueberry/Small Fruit Workers											
	_	Room: Tangerine B											
10:00 am -	11:30 am	ACB Program, Share Club Activities and Refreshments											
		Room: Lime											
12:00 noon	5:00 pm	ACB Group Lunch and/or Tour											
		Room: TBA											
1:00 pm -	5:00 pm	Horticulture Administrators											
		Room: Longboat											
5:00 pm -	6:00 pm	Executive Committee Meeting											
		Room: Longboat											
6:00 pm -	until	ACB Reception and Mixer											

Room: Lime

#### **SUNDAY, FEBRUARY 3, 2013**

7:00 am -	4:00 pm	Registration											
		Room: Citrus Ballroom Foyer											
8:00 am –	12:00 pm	Set up Posters											
		Room: Palms Ballroom Salon E											
8:00 am –	12:00 noon	J. Benton Storey Horticulture Judging Contest Setup											
		Room: Palms Ballroom Salon I											
8:00 am -	10:00 am	<b>Extension Section</b>											
		Room: Palms Ballroom Salon C											
8:00 am -	5:00 pm	National Sweet Potato Collaborators											
		Room: Oleander											
8:00 am -	4:00 pm	Watermelon Research Group											
		Room: Lime											
8:00 am -	10:30 am	J. B. Edmond Undergraduate Student Paper Competition											

	Room:	Lemon									
9:00 am –	12:00 noon	Vigna Crop Germplasm Committee									
		Room: Orange									
10:00 am -	12:00 pm	<b>Education Section</b>									
		Room: Palms Ballroom Salon C									
10:30 am -	2:30 pm	Norman F. Childers M.S. Student Lemon									
		Lemon									
12:00 noon -	4:00 pm	Poster Session Viewing									
		Room: Palms Ballroom Salon E									
12:00 pm -	4:00 pm	J. Benton Storey Horticulture Judging Contest									
		Room: Palms Ballroom Salon I									
1:00 pm -	4:00 pm	National Cowpea Improvement Association									
		Room: Orange									
2:30 pm -	4:00 pm	Warren S. Barham Ph.D. Student Paper Competition									
		Room: Lemon									

#### **SAAS Program**

4:00 pm - 4:30 pm SAAS Business Meeting
Room: Jasmine Ballroom
4:00 pm - 5:00 pm SAAS Graduate Student Mixer
Room: Poolside Pavilion
6:00-pm - 10:00 pm Super Bowl Party
NASCAR Sports Grille (University City Walk)
Shuttle starts at 5:00

## **MONDAY, FEBRUARY 4, 2013**

7:00 am -	10:30 am	Registration
		Room: Citrus Ballroom Foyer
8:00 am -	10:30 pm	Poster Session Viewing
		Room: Palms Ballroom Salon E
8:00 am -	10:45 am	Vegetable Crops Section
		Room: Biscayne
8:00 am -	10:30 am	Fruit Crops Section
		Room: Lime
8:00 am -	10:30 am	Floriculture, Ornamentals and Turf Section
		Room: Siesta
8:00 am -	9:30 am	Postharvest/Biotechnology/Plant Biology Section
		Room: Executive Boardroom
9:00 am -	10:30am	ACB Business Meeting
		Room: Lemon
11:00 am -	12:30 pm	Annual Business Meeting and Award Program
		Room: Lemon
1:00 pm -	3:00 pm	Vegetable Crops Section
		Room: Biscayne
1:00 pm -	2:30 pm	Fruit Crops Section
		Room: Lime
1:00 pm -	2:15 pm	Floriculture, Ornamentals and Turf Section
		Room: Siesta
1:00 pm -	4:00 pm	Poster Session Take Down
		Room: Palms Ballroom Salon E

#### **SECTION TITLES**

#### **SUNDAY, FEBRUARY 3, 2013**

#### J. B. EDMOND UNDERGRADUATE STUDENT PAPER COMPETITION

Room: Lemon

**Presiding:** Alaina Tobbe, President, ACB

David Creech, President, SRASHS John Clark, Section Chair and Judging Coordinator

**Abstracts:** To publish abstract in *HortScience*, see

instructions at end of program. Submit on disk at meeting or email to Chair:

(jrclark@uark.edu).

8:00 am -10:30 am Order of presentations determined by drawing at beginning of contest.

Assessing the Effects of Horticulture Therapy on School-Aged Children. Clotivel Hernandez\*<sup>1</sup>, Nathan Phillips<sup>1</sup>, and Debra H. Sullivan<sup>2</sup>, School of Agribusiness and Agriscience, Middle Tennessee State University, Murfreesboro, TN 37132, <sup>2</sup>School of Nursing, Middle Tennessee State University, Murfreesboro, TN, 37132. (ch4a@mtmail.mtsu.edu)

Cool Season Bedding Plant Leaf Tissue Content In Relationship to Lime Rates. Ben Agnew<sup>\*</sup> and Ed Bush, 137 J. C. Miller Hall, LSU Ag Center, Baton Rouge LA, 70803. (ebush@agctr.lsu.edu)

Descriptive Sensory Analysis and Composition of Blackberry Genotypes. Bethany Sebesta<sup>1\*</sup>, John R. Clark<sup>1</sup>, Renee T. Threlfall<sup>2</sup>, and Luke R. Howard<sup>2</sup>, <sup>1</sup>316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701, <sup>2</sup>Department of Food Science, University of Arkansas, Fayetteville, AR 72701. (bmstone@uark.edu)

Effect of 4-CPA on Fruit Set and Yield of Heat Tolerant Tomato Cultivars. Shamali Dennery and Dilip Nandwani, Agricultural Experiment Station, University of the Virgin Islands, Kingshill VI 00850. (dnandwa@live.uvi.edu)

Evaluation of Cover Crops in High Tunnel Vegetable Production Rotation. Tyler A. Patrick and Curt. R. Rom, Department of Horticulture, 316 Plant Science, University of Arkansas, Fayetteville, AR 72701. (txp004@email.uark.edu)

Influence of Nitrogen Source and Rate on Growth

and Leaf Nutrient Content of a Taxodium Clone. Spence Simmons\* and D. L. Creech, Agriculture Department, Stephen F. Austin State University, Nacogdoches, TX 75962-3000. (spence32188@yahoo.com)

Influence of Organic Groundcovers on Mycorrhizal Colonization and Symbiosis of Organically Managed Fruit Crops. Raven A. Bough\* and Curt R. Rom. Department of Horticulture, University of Arkansas, Fayetteville, AR 72701. (rbough@uark.edu)

Release Curves of Calcium and Magnesium Fertilizers in Nursery Production. Lee Rouse\* and Ed Bush, 137 J. C. Miller Hall, LSU Ag Center, Baton Rouge LA, 70803. (ebush@agctr.lsu.edu)

**Substitution of a Soilless Medium with Yard Waste Compost for Basil Transplant Production.** Courtney D. DeKalb<sup>1\*</sup>, Brian A. Kahn<sup>1</sup>, Allen V. Barker<sup>2</sup>, and Bruce L. Dunn<sup>1</sup>, <sup>1</sup> 358 Agricultural Hall, Oklahoma State University, Stillwater, OK 74078, <sup>2</sup> 202 Bowditch Hall, University of Massachusetts, Amherst, MA 01003. (brian.kahn@okstate.edu)

#### NORMAN F. CHILDERS M.S. GRADUATE STUDENT PAPER COMPETITION

Room: Lemon

Presiding: Curt Rom, President-Elect,

**Southern Region ASHS** 

**Abstracts:** To publish abstract in *HortScience*, see

instructions at end of program. Submit on disk at meeting or email to Chair:

(crom@uark.edu).

10:30 am – 2:30 pm Order of presentations determined by drawing at beginning of contest.

A new grafting procedure decreases grafting cost and increases grafting efficiency by eliminating rootstock re-growth. Shawna Daley\* and R.L. Hassell, School of Agriculture, Forest, and Environmental Sciences, Clemson University Coastal REC, Charleston, SC 29414. (sdaley@clemson.edu)

A Physiological Comparison of Heat Tolerance Between Two Cultivars of Ivy Geranium (*Pelargonium peltatum*). Anna M. Horton<sup>1</sup> \*, Richard L. Harkess<sup>1</sup>, David Chevalier<sup>2</sup>, Guihong Bi<sup>3</sup> and Cetin Yuceer<sup>4</sup>, <sup>1</sup>Department of Plant and Soil Sciences, Mississippi State University, Starkville, MS 39759, <sup>2</sup>Department of Biological Sciences, Mississippi State University, Starkville, MS 39759,

<sup>3</sup>Truck Crop Experiment Station, Mississippi State University, Crystal Springs, MS 39059, <sup>4</sup>Department of Wildlife Fisheries and Aquaculture, Mississippi State University, Starkville, MS 39759. (rharkess@pss.msstate.edu)

Comparing Phenotypical Variation Among Echinacea purpurea and Echinacea angustifolia Varieties Grown as Medicinal Herbs in Two Environments. Jennifer Crumley<sup>1\*</sup>, Lijing Zhou<sup>1</sup>, John Balles<sup>2</sup>, and Jeanine Davis<sup>1</sup>. Dept. of Horticultural Science, NC State University, Mountain Horticultural Crops Research and Extension Center, 455 Research Drive, Mills River, NC 28759, <sup>2</sup> Nutrition Product Development, Amway Corporation, 19600 6<sup>th</sup> St., Lakeview, CA 92567. (Jennifer Crumley@ncsu.edu)

**Determining Salinity Tolerance of Three High Plains Bedding Plant Species in a Hydroponics Setting.** Rebecca Grubbs<sup>1</sup>\*, C.B. McKenney<sup>1</sup>, D.T. Montague<sup>1</sup>, & S. Oswalt<sup>2</sup>, <sup>1</sup>Department of Plant and Soil Science, Texas Tech University, Lubbock, TX 79409-2122, <sup>2</sup> Bayer Crops Science Trait Development, 1301 East 50<sup>th</sup> St., Lubbock, TX 79404. (rebecca.grubbs@ttu.edu)

Effects of Cover Crops and Reduced Tillage on Yield and Weed Population in Organic Lettuce Production Yushen Huang\*, Xin Zhao, Carlene A. Chase, and Jason M. Neumann, Horticultural Sciences Department, University of Florida, Gainesville, FL 32611. (zxin@ufl.edu)

Evaluation of an Organic Nitrogen Source in a Yellow Squash - Collard Rotation. C.Z. Ogles<sup>1\*</sup>, J.M. Kemble<sup>1</sup>, A.N. Wright<sup>1</sup>, and E.A. Guertal<sup>2</sup>, Auburn University, <sup>1</sup> Dept. of Horticulture, 101 Funchess Hall, Auburn, AL 36849, <sup>2</sup> 201 Funchess Hall, Dept. of Agronomy & Soils, Auburn, AL., 36849, (kembljm@auburn.edu)

Evaluation of Salinity Effects on Four Texas Native Plants Using a Hydroponics System. Jessica Poole\*, C.B. McKenney, and D.T. Montague, Department of Plant and Soil Science, Texas Tech University, Lubbock, TX 79409-2122. (jessica.poole@ttu.edu)

Implementing Irrigation on Small-Scale Farms: An Economic Feasibility Study Using Sweet Potato Irrigation. Rockiell Woods\*1, Gretchen F. Sassenrath², John Halloran³, and Wesley Whittaker⁴, ¹Alcorn State Experiment Station, Mound Bayou, MS, 38762, ²USDA-ARS Crop Production Systems Research Unit, Stoneville, MS 38776, ³USDA-ARS New England Plant, Soil and Water Research Laboratory, University of Maine, Orono, ME, 04469,

<sup>4</sup>Alcorn State University, Department of Agriculture Education, Alcorn State, MS 39096. (rwoods@alcorn.edu)

Influence of Planting Density on Growth and Fruit Yield of Grafted Tomatoes Ruhiyyih Dyrdahl-Young<sup>1</sup>\*, Xin Zhao<sup>1</sup>, Stephen M. Olson<sup>2</sup>, and Jason M. Neumann<sup>1</sup>, <sup>1</sup>Horticultural Sciences Department, University of Florida, Gainesville, FL 32611, <sup>2</sup>North Florida Research and Education Center, Quincy, FL 32351. (zxin@ufl.edu)

Optimizing Sweetpotato Seed Bed Density for Plant Production. Susan L. Barkley\*, Jonathan R. Schultheis, Katie M. Jennings, Department of Horticultural Sciences, North Carolina State University, Raleigh, NC 27695-7609. (slweiss2@ncsu.edu)

Phosphorus uptake by two southeastern native plant species in flooded and non-flooded bioretention substrates. Amanda Meder\* and A.N. Wright, Department of Horticulture, Auburn University, Auburn, AL, 36849. (alm0040@auburn.edu)

Planting/Population Density and Its Effects on Yield and Quality of Sweet Corn (*Zea Mays.*) Kyle Schmitt<sup>1</sup>\*, Jonathan Schultheis<sup>1</sup>, and Chris Gunter<sup>1</sup>, Department of Horticultural Science, North Carolina State University, Raleigh, NC 27606, Ron Heiniger<sup>2</sup>, Vernon G. James Research & Extension Center 207 Research Station Road, Plymouth, NC 27962. (kcschmit@ncsu.edu)

Response of Hydroponic Bibb Lettuce (*Lactuca sativa*) to Salt Additives in Integrated Aquaponic Systems W. Robert Beauchamp\*<sup>1</sup>, Jeff L. Sibley<sup>1</sup>, Jesse A. Chappell<sup>2</sup>, N. Rob Martin<sup>3</sup>, and Jeremy M. Pickens<sup>1</sup>. <sup>1</sup>Department of Horticulture, Funchess Hall; <sup>2</sup>Department of Fisheries and Allied Aquacultures, Swingle Hall; <sup>3</sup>Emeritus Professor, Department of Agricultural Economics and Rural Sociology, Comer Hall; Auburn University, AL 36849. (wrb0007@auburn.edu)

Saline Irrigation of Selected Annual Bedding Plants for the Southeastern United States. Judson S. LeCompte<sup>1</sup>\*, Amy N. Wright<sup>1</sup>, J. Raymond Kessler<sup>1</sup>, Charlene Lebleu<sup>2</sup>, <sup>1</sup>Department of Horticulture, 101 Funchess Hall, Auburn University, AL 36849, <sup>2</sup>Department of Landscape Architecture, 305 Dudley Hall, Auburn University, AL 36849. (jsl0009@auburn.edu).

Utilization of Pigeon Pea (*Cajanus cajan* L.) and Sorghum Sudangrass [*Sorghum bicolor* (L.) Moench var. *sudanense* (Piper) Hitchc.] Summer

Cover Crops to Improve Yield of Fall Cabbage. Dakson Sanon<sup>1\*</sup>, Danielle D. Treadwell<sup>1</sup>, Lincoln Zotarelli<sup>1</sup>, and Oscar E. Liburd<sup>2</sup>, <sup>1</sup> Department of Horticultural Sciences, University of Florida, P.O. Box 110690, Gainesville, FL 32611, <sup>2</sup>Department of Entomology and Nematology, University of Florida, Bldg.970, Natural Area Dr., Gainesville, FL 32611 (dsanon@ufl.edu)

# WARREN S. BARHAM Ph.D. GRADUATE STUDENT PAPER COMPETITION

Room: Lemon

Presiding: Curt Rom, President-Elect,

**Southern Region ASHS** 

**Abstracts:** To publish abstract in *HortScience*, see

instructions at end of program. Submit on disk at meeting or email to Chair:

(crom@uark.edu).

2:30 pm – 4:00 pm Order of presentations determined by drawing at beginning of contest.

Anthocyanin profile of organically grown blackberries Moo Jung Kim<sup>1</sup>, Penelope Perkins-Veazie<sup>2</sup>, and Gina Fernandez<sup>1</sup> <sup>1</sup>Department of Horticulture Sciences, North Carolina State University, Raleigh NC 27695; <sup>2</sup>Plants for Human Health Institute, NC Research Campus, North Carolina State University, Kannapolis, NC 28081 (mkim10@ncsu.edu)

Effects of Nitrogen Rates on Reblooming Iris. Xiaojie Zhao<sup>1\*</sup>, Guihong Bi<sup>2</sup>, and Richard L. Harkess<sup>1</sup>. <sup>1</sup>Department of Plant and Soil Sciences, Mississippi State University, Starkville, MS 39759, <sup>2</sup>Truck Crop Experiment Station, Mississippi State University, Crystal Springs, MS 39059, (gb250@msstate.edu)

Evaluation of Irrigation Scheduling Regimes for Drip Irrigated Sweetpotatoes in Eastern North Carolina. Robert L. Vick, Jr. 1\*, Jonathan R. Schultheis², and Garry L. Grabow¹, ¹Department of Biological and Agricultural Engineering, North Carolina State University, Raleigh, NC 27695, ²Department of Horticultural Science, North Carolina State University, Raleigh,

Grafting Specialty Melons for Root-knot Nematode Management Wenjing Guan<sup>1\*</sup>, Xin Zhao<sup>1</sup>, Donald W. Dickson<sup>2</sup>, and Judy Thies<sup>3</sup>, <sup>1</sup>Horticultural Sciences Department, <sup>2</sup>Entomology and Nematology Department, University of Florida, Gainesville, FL 32611, <sup>3</sup>USDA, ARS, U.S. Vegetable

Laboratory, 2700 Savannah Highway, Charleston, SC 29414. (zxin@ufl.edu)

Irrigation and tillage regime affects soil quality and yield of bell pepper (*Capsicum annuum* L.). Zheng Wang\* and Timothy Coolong, Department of Horticulture, University of Kentucky, Lexington, KY 40546-0091. (zheng.wang@uky.edu)

Soil Type and Cultivar Effect on Root Growth and Stomatal Conductance of Muskmelon (*Cucumis melo* L.). Sat Pal Sharma1<sup>1\*</sup>, Daniel Leskovar<sup>1</sup>, Kevin M.Crosby<sup>2</sup>, A.M.H Ibrahim<sup>3</sup> and Astrid Volder<sup>2</sup>, <sup>1</sup>Texas A&M AgriLife Research and Extension Center, 1619 Garner Field Rd, Uvalde, TX 78801, <sup>2</sup>Department of Horticultural Sciences, Texas A&M University, College Station, TX 77843, <sup>3</sup>Department of Soil and Crop Sciences, Texas A&M University, College Station, TX 77843 (sharma145@neo.tamu.edu)

#### **EXTENSION SECTION**

Room: Palms Ballroom Salon C

**Presiding: Kathryn Fontenot** 

**Abstracts:** To publish abstract in *HortScience*, see

instructions at end of program. Submit on disk at meeting or email to Chair: (kkfontenot@agcenter.lsu.edu).

- 8:00 Teaching and Demonstration of Urban Nano Farm Techniques. Gary R. Bachman\*, Coastal Research and Extension Center, Mississippi State University, Biloxi, MS 39532. (gbachman@ext.msstate.edu)
- 8:15 Timely Communication to Nursery and Landscape Industry Clientele: Facebook, E-News Updates and Trial Garden Reports.

  Allen Owings\*, LSU AgCenter, Hammond Research Station, 21549 Old Covington Hwy, Hammond, LA 70403. (aowings@agcenter.lsu.edu)
- 8:30 Promoting The Crosby Arboretum
  Through Social Media. Richelle Stafne\*,
  Mississippi State University Extension
  Service P.O. Box 1639, 370 Ridge Road,
  Picayune, MS 39466.
  (rstafne@ext.msstate.edu)
- 8:45 Twitter for the Extension Specialist. Eric T. Stafne\*, Coastal Research and Extension Center, Mississippi State University Poplarville, MS 39470. (estafne@ext.msstate.edu)
- 9:00 Break

- 9:15 Integrating Teaching, Research and Community Outreach Using Coastal Roots
  Nursery Program. Edward Bush<sup>1</sup>\* and Pam Blanchard<sup>2</sup>, <sup>1</sup>LSU AgCenter, School of Plant, Environmental and Soil Sciences Louisiana State University 147 JC Miller Hall, Baton Rouge, LA 70803, <sup>2</sup> Louisiana State University Curriculum and Instruction 223-D Peabody Hall, Baton Rouge, LA 70803. (ebush@agcenter.lsu.edu)
- 9:30 Using Electronic Newsletters to
  Communicate with the School Garden
  Community. Kathryn Fontenot\*, LSU
  AgCenter, School of Plant, Environmental and
  Soil Sciences 155 JC Miller Hall, Baton
  Rouge, LA 70803.
  (kkfontenot@agcenter.lsu.edu)
- 9:45 Horticulture Extension in China: 2 Case Studies. Mengmeng Gu <sup>1\*</sup>, Yan Chen<sup>2</sup>, Guihong Bi<sup>3</sup>, Genhua Niu<sup>4</sup>, and James A. Robbins<sup>5</sup>. <sup>1</sup> Texas A&M Agrilife Extension, College Station, TX, 77843, <sup>2</sup>LSU AgCenter, Hammond Research Station, 21549 Old Covington Hwy, Hammond, LA, 70403, <sup>3</sup>Mississippi State University, Truck Crops Expt. Sta., Crystal Springs, MS, 39059, <sup>4</sup> Texas A&M Agrilife Research, El Paso, TX 79927, <sup>5</sup>Univ. of Arkansas, Little Rock, AR 72204. (mgu@tamu.edu)

#### **EDUCATION SECTION**

Room: Palms Ballroom Salon C

**Presiding: Garry McDonald** 

Abstracts: To publish abstract in HortScience, see

instructions at end of program. Submit on disk at meeting or email to Chair:

(gmcdonal@uark.edu).

- 10:00 Experiences Teaching Plant Growth and Development Online. Richard L. Harkess, Dept. Plant and Soil Sciences, Mississippi State University, Mississippi State, MS 39762. rharkess@pss.msstate.edu
- 10:15 Where Did All the Students Go? Cynthia B. McKenney\* and Thayne Montague, Department of Plant and Soil Science, Texas Tech University, Lubbock TX 79409-2122 (cynthia.mckenney@ttu.edu)
- 10:30 Extending the International Experience nto the Horticulture Classroom: The Creation and Use of Reusable Learning Objects (RLOs). M'Randa Sandlin\*, Theresa Pesl

Murphrey, Kim Dooley, James Lindner, Leo Lombardini, and Dan Lineberger, Department of Agricultural Leadership, Education, and Communications, Ag and Life Sciences Building, 600 John Kimbrough Boulevard, Room 128J, Texas A&M University, College Station, TX 77843-2116 (m-sandlin@tamu.edu)

10:45 Use of Interaction and Chat Platforms to Bring Connections to an On-line Class. C.R. Rom\*, Department of Horticulture, Plant Sciences 316, University of Arkansas, Fayetteville, AR 72701 (crom@uark.edu)

#### 11:00 Bread

- 11:15 Teaching a Greenhouse Management Laboratory On-Line. Michael R. Evans\* Department of Horticulture, Plant Sciences 316, University of Arkansas, Fayetteville, AR 72701(mrevans@uark.edu)
- 11:30 Using Blogs to Communicate Student International Experiences Mengmeng Gu<sup>1\*</sup>, Xin Zhao<sup>2</sup>, Guihong Bi<sup>3</sup>, and James A. Robbins<sup>4</sup>, <sup>1</sup>Texas Agrilife Extension, College Station, TX 77843, <sup>2</sup>Horticultural Sciences Department, 1235 Fifield Hall, University of Florida, P.O. Box 110660, <sup>3</sup>Mississippi State University, Truck Crops Expt. Sta., Crystal Springs, MS 39059, <sup>4</sup>Division of Agriculture, University of Arkansas System, Little Rock, AR 72204. (mgu@tamu.edu)
- 11:45 Opportunities and Challenges Internationalizing Organic Agriculture **Education.** Xin Zhao<sup>1\*</sup>, Charlene A. Chase<sup>1</sup>, Marilyn E. Swisher<sup>2</sup>, and Teresa Briz<sup>3</sup>, <sup>1</sup>Horticultural Sciences Department, <sup>2</sup>Department Youth of Family, and Community Sciences, University of Florida, <sup>3</sup>Agricultural Gainesville, FL 32611, **Economics** Polytechnic Department, University of Madrid, Madrid Spain 28040. (zxin@ufl.edu)

#### **VEGETABLE CROPS SECTION**

Room: Largo

**Presiding: Chris Gunter** 

**Abstracts:** To publish abstract in *HortScience*, see

instructions at end of program. Submit on disk at meeting or email to Chair:

(cgunter@ncsu.edu).

1:00 Sensory Attributes of Tomato and

- Muskmelon Fruits as Affected by Grafting Xin Zhao<sup>1</sup>\*, Charles A. Sims<sup>2</sup>, Charles E. Barrett<sup>1</sup>, and Eric Q. Dreyer<sup>2</sup>, <sup>1</sup>Horticultural Sciences Department, <sup>2</sup>Food Science and Human Nutrition Department, University of Florida, Gainesville, FL 32611. (zxin@ufl.edu)
- 1:15 Influence of Planting Density on Growth and Fruit Yield of Grafted Tomatoes Ruhiyyih Dyrdahl-Young<sup>1</sup>\*, Xin Zhao<sup>1</sup>, Stephen M. Olson<sup>2</sup>, Robert McSorley<sup>3</sup>, and Jason M. Neumann<sup>1</sup>, <sup>1</sup>Horticultural Sciences Department, University of Florida, Gainesville, FL 32611, <sup>2</sup>North Florida Research and Education Center, Quincy, FL <sup>3</sup>Entomology and Nematology Department, University of Florida, Gainesville, FL 32611. (zxin@ufl.edu)
- 1:30 Nitrogen Rates Effects on Yields and Profitability of Tomato with Subsurface Irrigation in Florida. Monica Ozores-Hampton<sup>1\*</sup>, Eric Simonne<sup>2</sup>, Fritz Roka<sup>1</sup>, Kelly Morgan<sup>1</sup>, Steven Sargent<sup>2</sup>, Crystal Snodgrass<sup>3</sup> and Eugene McAvoy<sup>4</sup>. <sup>1</sup>University of Florida, Institute of Food and Agricultural Sciences, South West Florida Research and Education Center, Immokalee, FL. <sup>2</sup>University of Florida, Institute of Food and Agricultural Sciences, Horticultural Sciences Department, Gainesville, FL.<sup>3</sup>Manatee County Extension Service, Palmetto, FL. <sup>4</sup>Hendry County Extension Service, LaBelle, FL. ozores@ufl.edu.
- 1:45 Effect of Plant Population and Pruning on Grafted Tomatoes for Open Field Production. Joshua H. Freeman\* and Theodore P. McAvoy, Virginia Tech, Eastern Shore Agricultural Research and Extension Center, Painter, VA 23420. (joshfree@vt.edu)
- 2:00 Evaluation of Colored Shade Cloth in Tomato Production in Oklahoma. Joshua W. Chaney\*, Charles T. Rohla and Steve D. Upson, The Samuel Roberts Noble Foundation, Ardmore, OK 73401. (jwchaney@noble.org)
- 2:15 Break
- 2:30 Nitrogen Rate Effect Using a Hybrid Controlled-Release and Soluble Fertilizer Program on Tomato Production in South Florida. Luther C. Carson\*, Monica Ozores-Hampton, and Kelly T. Morgan, Southwest Florida Research and Education Center,

- University of Florida, Immokalee, FL 34142. (ozores@ufl.edu).
- 2:45 Influence of a Soil Surfactant on the Lateral Movement and Control of Nutsedge (Cyperus spp.) Populations with Metam Potassium in Tomato and Pepper. Bielinski M. Santos\*, Gulf Coast Research and Education Center, IFAS, University of Florida, Wimauma, FL 33598 (bmsantos@ufl.edu).
- 3:00 Methods for controlling soil moisture-based irrigation in field-grown vegetables.
  Timothy Coolong\* and Zheng Wang,
  Department of Horticulture, University of
  Kentucky, Lexington, KY 40546-0091.
  (timcoolong@uky.edu)
- 3:15 Irrigation and tillage regime affects soil quality and yield of bell pepper (*Capsicum annuum L.*). Zheng Wang\* and Timothy Coolong, Department of Horticulture, University of Kentucky, Lexington, KY 40546-0091.
- 3:30 Implementing Irrigation on Small-Scale Farms: An Economic Feasibility Study Using Sweet Potato Irrigation. Rockiell Woods\*1, Gretchen F. Sassenrath², John Halloran³, and Wesley Whittaker⁴, ¹Alcorn State Experiment Station, Mound Bayou, MS, 38762, ²USDA-ARS Crop Production Systems Research Unit, Stoneville, MS 38776, ³USDA-ARS New England Plant, Soil and Water Research Laboratory, University of Maine, Orono, ME, 04469, ⁴Alcorn State University, Department of Agriculture Education, Alcorn State, MS 39096. (rwoods@alcorn.edu)
- 3:45 Inheritance of pericarp thickness and fruit shape traits of consumer interest in Capsicum annuum. Denee K. Salazar\*1, Ann M. Greene¹, Lucianne Vilharinho¹.², and Bala Rathinasabapathi¹ 1Horticultural Sciences Department, University of Florida, Gainesville, FL 32611-0690, 2Universidade Federal de Roraima, Aeroporto-Boa Vista 69304220, Brazil

#### **POSTERS**

Room: Palms Ballroom Salon E

**Presiding: Bodie Pennisi** 

Abstracts: To publish abstract in HortScience, see

instructions at end of program. Submit on disk at meeting or email to Chair:

(bpennisi@uga.edu).

**Set-Up:** Sunday, 8:00 am –12:00 pm

**Poster Viewing** Sunday noon to Monday 10:30 am **Authors at Poster:** 

Sunday, 1:00 - 2:30 pm even numbered posters Sunday, 2:30 - 4:00 pm odd numbered posters **Students in Competition at Poster:** 

Sunday, 1:00 - 2:30 pm even numbered posters Sunday, 2:30 - 4:00 pm odd numbered posters

**Take-down:** Monday, 1:00 pm - 4:00 pm

#### **Student Poster Competition**

"G" or "U" following the poster number indicates graduate and undergraduate poster, respectively, for the National Cowpea Poster Competition. Undergraduate and Graduate students in the poster competition must be by their poster at the appointed time listed above.

#### Floriculture, Ornamentals and Turf

- 1) Salinity Tolerance of Lantana X 'Luscious Citrus', Buddleia davidii 'Nanho Blue', and Artemesia schmidtiana 'Silver Mound' Genhua Niu<sup>1</sup>, Youping Sun<sup>1</sup>, and Pedro Osuna<sup>2</sup>, <sup>1</sup>Texas A&M AgriLife Research Center at El Paso, 1380 A&M Circle, El Paso, TX 79927, <sup>2</sup>Universidad Autónoma de Cd. Juárez, Chihuahua, México
- 2) Effect of Ethylene on Adventitious Root Formation in Abelia. Bodie Pennisi\* and C. Robacker. University of Georgia, Dept. of Horticulture, 1109 Experiment St. Griffin, GA 30223 (bpennisi@uga.edu)

#### **Fruit Crops**

- **3U)** Characterization of Seediness Attributes of Blackberry Genotypes. Bethany Sebesta<sup>1</sup>\*, John R. Clark<sup>1</sup>, Renee T. Threlfall<sup>2</sup>, and Luke R. Howard<sup>2</sup>, <sup>1</sup>316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701, <sup>2</sup>Department of Food Science, University of Arkansas, Fayetteville, AR 72701. (bmstone@uark.edu)
- **4U)** Papaya: The Influence of Sex on Plant Height and Production. Tyrone Pascal\* and Thomas W. Zimmerman, Agricultural Experiment Station, University of the Virgin Islands, RR#1 Box 10,000, Kingshill, VI 00850. (tzimmer@live.uvi.edu)
- 5G) Characterization and Lineage Verification of

- NC Raspberry Germplasm Using Microsatellite Markers Christine Bradish\*, Nahla Bassil, April Nyberg, Gina Fernandez; Department of Horticultural Science; North Carolina State University, Campus Box 7609 Raleigh, NC 27695 (cmbradis@ncsu.edu)
- 6) Blueberry Cultivar Trial in Central Mississippi: 2012 Yield and Fruit Quality Update. William B. Evans<sup>1</sup>\* Sarah Reynolds<sup>1</sup> and Donna Marshall<sup>2</sup>. 1MAFES Truck Crops Branch, P.O. Box 231, Crystal Springs, MS 39059-0231; USDA Thad Cochran Southern Horticultural Laboratory, 810 Highway 26 West (P. O. BOX 287) Poplarville MS 39470 (bill.evans@msstate.edu)
- 7) Evaluation of Antioxidant Potential of Selected Georgia-grown Banana Cultivars: An Underutilized Fruit Crop. F.M. Woods\*1. E.G. Fonsah², E. Coneva¹, E.L. Vinson¹ and J.S. Parker³. ¹101 Funchess Hall, Department of Horticulture, Auburn University, AL 36849, ²230 Rainwater Road, Department of Agricultural and Applied Economics, University of Georgia, Tifton, GA 31793. ³Coastal Botanic Garden, 2 Canebrake Road Savannah, GA31419
- 8) Response of Muscadine Grape (Vitis rotundifolia Michx) Cultivars to Cane Pruning. Stephen J. Stringer\*, Donna A. Marshall and Blair J. Sampson. USDA ARS Thad Cochran Southern Horticultural Laboratory, Poplarville, MS, 39466. Stephen.Stringer@ars.usda.gov
- 9) Storage retention of Stilbene, Ellagic Acid, Flavonol, and Phenolic Content of Muscadine Grape (Vitis rotundifolia Michx.) Cultivars Donna A. Marshall, and Stephen J. Stringer. USDA-ARS Thad Cochran Southern Horticultural Laboratory, Poplarville, MS 39470, USA; Address correspondence to this author at USDA-ARS Thad Cochran Southern Horticultural Laboratory, Poplarville, MS 39470, USA; E-mail: Donna.Marshall@ars.usda.gov
- 10) Growth of Seedling Vaccinium arboreum Influenced by Provenance and Substrate pH. Jonathan Meador<sup>1</sup>, James Spiers\*<sup>1</sup>, Elina Coneva<sup>1</sup>, Jeff Sibley<sup>1</sup>, and Rebecca Darnell<sup>2</sup>, <sup>1</sup>101 Funchess Hall, Department of Horticulture, Auburn University, Auburn, AL 36849, <sup>2</sup>1131 Fifield Hall, Department of Horticultural Sciences, University of Florida,

- Gainesville, FL 32611. (jds0017@auburn.edu)
- 11) Pitaya (Hylocereus sp.) Cultivation in the CNMI. Dilip Nandwani<sup>1\*</sup> and Anthony Tudela, \* Plant Science Laboratory, Agricultural Experiment Station, University of the Virgin Islands, Kingshill, VI 00850, <sup>2</sup>Cooperative Research, Extension and Education Service (CREES), Northern Marianas College, Saipan MP 96950 (dilipnandwani@yahoo.com)

#### **Vegetable Crops**

- 12U) Differences in Phenotype, Growth, and Maturation among Five Accessions of Mucuna pruriens (Velvetbean) Grown in Middle Tennessee. Ethan M. Swiggart, Bryan Sallman, and Nathan C. Phillips, School of Agribusiness and Agriscience, Middle Tennessee State University, Murfreesboro, TN 37130. (Eswiggart@gmail.com)
- 13G) Use of Fatty Alcohol Treatments to Control Rootstock Regrowth in Grafted Watermelon (Citrullus lanatus [Thunb.]. Shawna Daley\* and R.L. Hassell, School of Agriculture, Forest, and Environmental Sciences, Clemson University Coastal REC, Charleston, SC 29414. (sdaley@clemson.edu)
- 14G) Pigeon Pea (*Cajanus cajan* L.) and Sorghum Sudangrass [*Sorghum bicolor* (L.) Moench var. *sudanense* (Piper) Hitchc.] Management Changes Populations of Pest and Beneficial Insects in Cabbage. Dakson Sanon<sup>1\*</sup>, Dr. Danielle D. Treadwell<sup>1</sup>, Dr. Lincoln Zotarelli<sup>1</sup>, and Dr. Oscar E. Liburd<sup>2</sup>, <sup>1</sup> Department of Horticultural Sciences, University of Florida, P.O. Box 110690, Gainesville, FL 32611, <sup>2</sup> Department of Entomology and Nematology, University of Florida, Bldg.970, Natural Area Dr., Gainesville, FL 32611 (dsanon@ufl.edu)
- **15**) Growth of **Tomato** (Lycopersicon Seedlings in esculentum) Commercial **Substrate** Amended with Dewatered **Aquaculture Effluent.** Jason J. Danaher<sup>1</sup>\*, Jeffrey L. Sibley<sup>2</sup>, Jesse A. Chappell<sup>1</sup>, Jeremy M. Pickens<sup>2</sup>, Terrill R. Hanson<sup>1</sup>, Claude E. Boyd<sup>1</sup>, <sup>1</sup> Auburn University, Department of Fisheries and Allied Aquaculture, 203 Swingle Hall, Auburn, AL 36849, <sup>2</sup> Auburn University, Department of Horticulture, 101 Funchess Hall, Auburn, AL 36849. (jjd0011@auburn.edu)
- 16) Can Exogenous Abscisic Acid Application Improve Survival Rate and Quality of

- **Grafted Tomato Transplants?** Shuan Hao Teo<sup>1</sup>\*, Xin Zhao<sup>1</sup>, Craig Campbell<sup>2</sup>, and Stephen M. Olson<sup>3</sup>, <sup>1</sup>Horticultural Sciences Department, University of Florida, Gainesville, FL 32611, <sup>2</sup>Valent Biosciences Corporation, Ocoee, FL 34761, <sup>3</sup>North Florida Research and Education Center, Quincy, FL 32351. (zxin@ufl.edu)
- 17) Responses of Bioactive Compounds in Jalapeño Peppers to Potassium Fertilization
  John Jifon<sup>1</sup>\*, Gene Lester, Kevin Crosby,
  Daniel Leskovar; <sup>1</sup>Texas A&M AgriLife
  Research and Extension Center, Weslaco, TX
  78596. (jljifon@ag.tamu.edu).
- 18) Economics of Growing Microgreens for the Local Food Market. Gary R. Bachman\*, Coastal Research and Extension Center, Mississippi State University, Biloxi, MS 39532 (gbachman@ext.msstate.edu)
- **19)** Grower Trials for Heat-Set Capabilities in Tomato. Lynn Brandenberger<sup>1\*</sup>, Brian Kahn<sup>1</sup>, and Jim Shrefler<sup>2</sup>, <sup>1</sup>358 Agriculture Hall, Stillwater, OK 74078, <sup>2</sup>P.O. Box 749, Durant, OK 74702, (lynn.brandenberger@okstate.edu)
- 20) Heavy Pest Pressure in 2012 Pumpkin Variety Trial. George E. Boyhan<sup>1\*</sup>, Suzzanne C. Tate<sup>1</sup>, Ryan D. McNeil<sup>1</sup>, and William A. Mills<sup>2</sup>, <sup>1</sup>Department of Horticulture, University of Georgia, 1111 Miller Plant Science Bldg., Athens, GA 30602, <sup>2</sup>Attapulgus Research & Education Center, PO Box 189, Attapulgus, GA 39815. (gboyhan@uga.edu)
- 21) Comparison of Tomato Varieties Under Organic Production Practices. George E. Boyhan\*, Jeffrey McConnaughey, Suzzanne C. Tate, and Ryan D. McNeil, Department of Horticulture, University of Georgia, 1111 Miller Plant Science Bldg., Athens, GA 30602. (gboyhan@uga.edu)
- Cool Season Organic Vegetable Rotation for the Southeast: A Wholistic Assessment. George E. Boyhan<sup>1</sup>\*, Julia W. Gaskin<sup>1</sup>, Elizabeth L. Little<sup>1</sup>, E. Greg Fonsah<sup>2</sup>, Sam K. Tshikala<sup>1</sup>, Suzzanne Tate<sup>1</sup>, and Ryan McNeil<sup>1</sup>, Department of Horticulture, University of Georgia, 1111 Miller Plant Science Bldg., Athens, GA 30602, <sup>2</sup>Agricultural Economics, PO Box 1209, Tifton, GA 31793. (gboyhan@uga.edu)
- 23) Effect of Preemergence Herbicide on Weed Control in Eggplant (Solanum melongena L.)

Dilip Nandwani, Plant Science Laboratory, Agricultural Experiment Station, University of the Virgin Islands, Kingshill, VI 00850 (dnandwa@live.uvi.edu)

24) Evaluation of Reflex (fomesafen) Herbicide for Watermelon in Oklahoma. James Shrefler<sup>1</sup>, Taylor<sup>1</sup>, Merritt Lynn Brandenberger<sup>2</sup> and Charles Webber III<sup>3</sup>, <sup>1</sup>Wes Watkins Agricultural Research and Extension Center, Oklahoma State University, P O Box 128, Lane, OK 74555, <sup>2</sup>Department of Horticulture and Landscape Architecture, Oklahoma State University, Stillwater, OK 74078 and Sugarcane Research Unit, United States Department of Agriculture, Agricultural Research Service, 5883 USDA Road, Houma, LA 70360. (jim.shrefler@okstate.edu)

#### **Cross Commodity**

- 25U) Hibiscus sabdariffa Breeding for Plant Improvement. Kalunda Cuffy\*, Khalid Matthew, Kenya Emanuel and Thomas W. Zimmerman, Agricultural Experiment Station, University of the Virgin Islands, RR#1 Box 10,000, Kingshill, VI 00850. (tzimmer@live.uvi.edu)
- 26) Freezing Characteristics of Soils with Various Moisture Content. Bodie Pennisi\*1, O. Lindstrom¹, and M. Habtessellassie². University of Georgia, Dept. of Horticulture, 1109 Experiment St. Griffin, GA 30223; ² University of Georgia, Dept. of Crop and Soil Sciences (bpennisi@uga.edu)
- 27) Overview of the ASHS Local Foods Working Group. Christine Coker, Coastal Research and Extension Center, Mississippi State University, Biloxi, MS 39532. (ccoker@ra.msstate.edu)
- 28) The Role of Universities in Local Food Systems. Christine Coker, Coastal Research and Extension Center, Mississippi State University, Biloxi, MS 39532. (ccoker@ra.msstate.edu)

#### Monday, February 6, 2012

#### **POSTERS**

**Room:** Palms Ballroom Salon E

**Presiding: Bodie Pennisi** 

**Abstracts:** To publish abstract in *HortScience*, see

instructions at end of program. Submit on disk at meeting or email to Chair:

(bpennisi@uga.edu).

**Set-Up:** Sunday, 8:00 am -12:00 pm

Poster Viewing Sunday noon to Monday 10:30 am

#### ANNUAL BUSINESS MEETING AND AWARDS PROGRAM

Room: Lemon

Time: 11:00 – 12:30

Presiding: David Creech, President

#### **VEGETABLE CROPS SECTION**

Room: Biscayne Presiding: Chris Gunter

**Abstracts:** To publish abstract in *HortScience*, see

instructions at end of program. Submit on disk at meeting or email to Chair:

(cgunter@ncsu.edu).

#### **Morning Session**

- 8:00 Microgreens: Specialty Crop for the Local Food Market. Gary R. Bachman\*, Coastal Research and Extension Center, Mississippi State University, Biloxi, MS 39532 (gbachman@ext.msstate.edu)
- 8:15 Comparison of In-row Distances of
  Determinate and Indeterminate Colored
  Bell Pepper (Capsicum annuum) under
  High Tunnel Culture. Emmanuel A.
  Torres-Quezada\* and Bielinski M. Santos,
  Gulf Coast Research and Education Center,
  IFAS, University of Florida, Wimauma, FL
  33598 (bmsantos@ufl.edu).
- 8:30 Conducting Variety Trials for an Emerging Southeastern Hops Industry.

  Jeanine Davis<sup>1\*</sup>, Scott King<sup>2</sup>, and Robert Austin<sup>2</sup>. <sup>1</sup>Dept. of Horticultural Science, NC State University, Mountain Horticultural Crops Research and Extension Center, 455 Research Drive, Mills River, NC 28759, <sup>2</sup>Dept. of Soil Science, NC State University, Box 7619, Raleigh, NC 27695. (jeanine\_davis@ncsu.edu)
- 8:45 Studies in Support of Western NC
  Mountain Broccoli Production. Jeanine
  Davis\* and Emily Bernstein, Dept. of
  Horticultural Science, NC State University,

Mountain Horticultural Crops Research and Extension Center, 455 Research Drive, Mills River, NC 28759. (Jeanine\_Davis@ncsu.edu)

9:00 Comparing Phenotypical Variation
Among Echinacea purpurea and
Echinacea angustifolia Varieties Grown
as Medicinal Herbs in Two
Environments. Jennifer Crumley<sup>1\*</sup>, Lijing
Zhou<sup>1</sup>, John Balles<sup>2</sup>, and Jeanine Davis<sup>1</sup>.
Dept. of Horticultural Science, NC State
University, Mountain Horticultural Crops
Research and Extension Center, 455
Research Drive, Mills River, NC 28759,
Nutrition Product Development, Amway
Corporation, 19600 6<sup>th</sup> St., Lakeview, CA
92567. (Jennifer\_Crumley@ncsu.edu)

#### 9:15 Break

- 9:30 Phytoremediation of Aquaculture
  Effluent Using Beit Alpha Cucumber
  Production. Jeremy M. Pickens1, Jeff L.
  Sibley1, Jesse A. Chappell2, Jason J.
  Danaher2, Terrill R. Hanson2, Claude E.
  Boyde2. 1101 Funches Hall, Department of
  Horticulture, Auburn University, AL, 36849,
  2203 Swingle Hall, Department of Fisheries
  and Allied Aquaculture, Auburn University,
  AL, 36849 (pickejm@auburn.edu)
- 9:45 Micropropagation of Artemisia annua, a Medicinal Plant with Anti-malarial and Anti-cancer Activities. Theophilus M. Mutui<sup>1</sup>, Jorge F.S. Ferreira<sup>2</sup>, and Hazel Y. Wetzstein<sup>3\*</sup>, <sup>1</sup>Department of Seed, Crop and Horticultural Sciences, Chepkoilel University College (Moi University), P.O. Box 1125-30100, Eldoret, Kenya, <sup>2</sup>US Salinity Laboratory, USDA/ARS, 450 W. Big Springs Rd., Riverside, CA 92507-4617, <sup>3</sup>Department of Horticulture, 1111 Plant Science Building, University of Georgia, Athens, GA 30602-7273. (hywetz@uga.edu)
- 10:00 Evaluation of Pollenizer Varieties for Triploid Watermelon (Citrullus lanatus) Production in Southwestern Indiana.

  Shubin K. Saha<sup>1\*</sup> and Dan Egel<sup>2</sup>,

  <sup>1</sup>Horticulture and Landscape Architecture Department, <sup>2</sup>Botany and Plant Pathology Department, Southwest Purdue Ag Program, Purdue University, Vincennes, IN 47591. (ssaha@purdue.edu)
- 10:15 Degradeable Mulches May Have a Place

in Southern Vegetable Farming. William B. Evans\*, Richard G. Snyder, and Vasile Cerven. MAFES Truck Crops Branch, P.O. Box 231, Crystal Springs, MS 39059-0231. (bill.evans@msstate.edu)

10:30 High Tunnel Vegetable Update From Mississippi: Crops, Fertilizers, and Production techniques. William B. Evans\*, Guihong Bi and Vasile Cerven. MAFES Truck Crops Branch, P.O. Box 231, Crystal Springs, MS 39059-0231. (bill.evans@msstate.edu)

#### **Afternoon Session**

- 1:00 Soil Type and Cultivar Effect on Root Growth and Stomatal Conductance of Muskmelon (Cucumis melo L.). Sat Pal Sharma1<sup>1\*</sup>, Daniel Leskovar<sup>1</sup>, Kevin M.Crosby<sup>2</sup>, A.M.H Ibrahim<sup>3</sup> and Astrid Volder<sup>2</sup>, <sup>1</sup>Texas A&M AgriLife Research and Extension Center, 1619 Garner Field Rd, Uvalde, TX 78801, <sup>2</sup>Department of Horticultural Sciences, Texas A&M University, College Station, TX 77843, <sup>3</sup>Department of Soil and Crop Sciences, Texas A&M University, College Station, TX 77843 (sharma145@neo.tamu.edu)
- 1:15 Plant Spacing Affects Number and Weight of Small Paintable Pumpkins.

  Greg D. Hoyt<sup>1\*</sup> and Liz A. Driscoll<sup>2</sup>,
  Departments of Soil Science and
  Horticultural Science, North Carolina State
  University, <sup>1</sup> Mountain Horticultural Crops
  Research & Extension Center, 455 Research
  Drive, Mills River, NC 28759, <sup>2</sup> Department
  of Horticulture, 218 Kilgore Hall, Raleigh,
  NC 27695-7609. (greg\_hoyt@ncsu.edu)
- 1:30 Growth and Yield Response of Okra
  (Abelmoschus esculentus) in the island of
  St. Croix Dilip Nandwani, Plant Science
  Laboratory, Agricultural Experiment Station,
  University of the Virgin Islands, Kingshill,
  VI 00850 (dnandwa@live.uvi.edu)
- 1:45 Selected Insecticides for Soil Insect
  Control in Sweetpotato. Shaun A. Francis\*,
  James O. Garner and Obadiah M. Njue,
  Department of Agriculture, University of
  Agriculture at Pine Bluff, 1200 North
  University Drive, Mail Slot
  4913, Pine Bluff, AR 71601
  (francis5739@uapb.edu)

2:00 Grafting Specialty Melons for Root-knot Nematode Management Wenjing Guan<sup>1\*</sup>, Xin Zhao<sup>1</sup>, Donald W. Dickson<sup>2</sup>, and Judy Thies<sup>3</sup>, <sup>1</sup>Horticultural Sciences Department, <sup>2</sup>Entomology and Nematology Department, University of Florida, Gainesville, FL 32611, <sup>3</sup>USDA, ARS, U.S. Vegetable Laboratory, 2700 Savannah Highway, Charleston, SC 29414. (zxin@ufl.edu)

#### 2:15 Break

2:30 Effects of Cover Crops and Reduced
Tillage on Yield and Weed Population in
Organic Lettuce Production. Yushen
Huang\*, Xin Zhao, Carlene A. Chase, and
Jason M. Neumann, Horticultural Sciences
Department, University of Florida,
Gainesville, FL 32611. (zxin@ufl.edu)

2:45 Opportunities to produce broccoli in Florida. Monica Ozores-Hampton<sup>1\*</sup>, Lincoln Zotarelli<sup>2</sup> and Gene McAvoy<sup>3</sup>. <sup>1</sup>University of Florida, Institute of Food and Agricultural Sciences, South West Florida Research and Education Center, Immokalee, FL. <sup>2</sup>University of Florida, Institute of Food and Agricultural Sciences, Horticultural Sciences Department, Gainesville, FL. <sup>3</sup>Hendry County Extension Service, LaBelle, FL. ozores@ufl.edu.

3:00 Evaluation of Three Foliar Fertility
Programs in Bell Pepper in North
Carolina. Christopher C.
Gunter\*<sup>1</sup>, Christopher J. Biai<sup>1</sup>, Jose G.
Garzon<sup>1</sup>, Jonathan R. Schultheis<sup>1</sup>, Ronald J.
Gehl<sup>2</sup>. Department of Horticultural Science,
North Carolina State University, Raleigh,
NC<sup>2</sup>Department of Soil Science, North
Carolina State University, Mills River, NC
(cgunter@ncsu.edu).

3:15 Poblano Pepper (Capsicum annum L.)
Cultivars as Affected by Color of Plastic
Film Mulch. Juan Carlos Díaz-Pérez,
Department of Horticulture, University of
Georgia, Tifton, GA 31793.
(jcdiaz@uga.edu)

#### FRUIT CROPS SECTION

Room: Lime Presiding: Elena Garcia

**Abstracts:** To publish abstract in *HortScience*, see

instructions at end of program. Submit

on disk at meeting or email to Chair: (megarcia@uark.edu).

#### **Morning Session**

- 8:00 Amoore Sweet' and 'Bowden' Nectarines and 'Souvenirs' Peach Offer New Options for Mid-South Growers. John R. Clark and Paul Sandefur, 316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701. (jrclark@uark.edu)
- 8:15 'Correlating fruit maturity at harvest with fruit quality in peach by Ksenija Gasic\* and G.L. Reighard, School of Agricultural, Forestry and Environmental Sciences, Clemson University, Clemson, SC 29634. (kgasic@clemson.edu)
- 8:30 'Osage' Thornless Blackberry and 'Hope', Faith', 'Joy', and 'Gratitude' Table Grapes. John R. Clark and James. N. Moore, 316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701. (jrclark@uark.edu)
- 8:45 Investigations to Determine the Performance of Recently Released Seedless Table Grapes and Advanced Selections from the University of Arkansas Breeding Program. Elina D. Coneva\*<sup>1</sup>, Y. Hu<sup>1</sup>, J.R. Clark<sup>2</sup>, R. Kessler<sup>1</sup>, J. Spiers<sup>1</sup>, E. Vinson<sup>1</sup>, and A.W. Caylor<sup>3</sup>, <sup>1</sup>101 Funchess Hall, Department of Horticulture, Auburn University, AL 36849, <sup>2</sup>316 Plant Science Bldg., Department of Horticulture, University of Arkansas, Fayetteville, AR 72701, <sup>3</sup>765 County Road 1466, North Alabama Horticulture Research Center, Cullman, AL35055. (edc0001@auburn.edu)
- 9:00 Preliminary Results of Performance of Three Arkansas Seedless Table Grape Cultivars ('Faith', 'Hope', and 'Mars') under High Tunnel Conditions. M. Elena Garcia\*, D. Dickey, and S. Frey, Dept. of Horticulture, University of Arkansas, Fayetteville, AR 72701 (megarcia@uark.edu).

#### 9:15 Break

9:30 Assessing the Crop Potential and Vigor of Selected Pierces Disease Tolerant Bunch Grape Cultivars in North Alabama's Environment During the Years of Vineyard Establishment. Elina D. Coneva\*\(^1\), Y. Hu\(^1\), R. Kessler\(^1\), J. Spiers\(^1\), E. Vinson\(^1\), and J. Ducar\(^2\), \(^1\)01 Funchess Hall, Department of Horticulture, Auburn University, AL 36849,

- <sup>2</sup>13112 Highway 68, Crossville, AL 35962.(edc0001@auburn.edu)
- 9:45 Is it Feasible to Grow Pierces Disease Resistant 87% Vitis vinifera Grapes within the High Disease Pressure Southeastern Region? Elina D. Coneva\*1, E. Vinson1, and J. Pitts2, 1101 Funchess Hall, Department of Horticulture, Auburn University, AL 36849, 2 Chilton Research and Extension Center, 120 Co. Rd. 756, Clanton, AL, 35045. (edc0001@auburn.edu)
- 10:00 An Improved and Efficient Micropropagation System for Grapevine (Vitis sp.) Kyung-Hee Kim\*, Zhijian T. Li, Jonathan R. Jasinski and Dennis J. Gray Mid-Florida Research & Education Center, University of Florida/IFAS, 2725 Binion Road, Apopka, FL 32703. (djg@ufl.edu)
- 10:15 Evaluation of Freeze Protection Methods for Strawberry (Fragaria x ananassa)
  Production in Florida. Ixchel M. Hernandez-Ochoa\* and Bielinski M. Santos, Gulf Coast Research and Education Center, IFAS, University of Florida, Wimauma, FL 33598. (bmsantos@ufl.edu).
- 11:00 12:30 Attend Business Meeting and Awards Program

#### **Afternoon Session**

- 1:00 Influence of Late Nitrogen and Potassium Rates on Fruit Yield and Quality of Strawberry (Fragaria x ananassa) Cultivars. Bielinski M. Santos\* and Vance M. Whitaker, Gulf Coast Research and Education Center, IFAS, University of Florida, Wimauma, FL 33598. (bmsantos@ufl.edu).
- 1:15 Comparison of Population Densities of Strawberry (Fragaria x ananassa) Cultivars Growing in High Tunnels and in Open Fields. Bielinski M. Santos\* and Vance M. Whitaker, Gulf Coast Research and Education Center, IFAS, University of Florida, Wimauma, FL 33598. (bmsantos@ufl.edu).
- 1:30 Chestnut Gall Wasp Susceptibility of Castanea Cultivars and Seedlings. Gregory L. Reighard, SAFES, Clemson University, Clemson, SC 29634. (grghrd@clemson.edu).
- 1:45 Iternative Flood Irrigation Strategies That Improve Water Conservation in Citrus Production. Shad D. Nelson\*<sup>1</sup>, Juan Enciso<sup>2</sup>, Hugo Perea<sup>2</sup>, Lou Beniken<sup>3</sup>, Mamoudou

- Setamou<sup>4</sup>, Mac Young<sup>5</sup>, and Clinton F. Williams<sup>6</sup>. <sup>1</sup>700 University Blvd, MSC 228, Department of Agriculture, Agribusiness and Environmental Sciences, Texas A&M University, Kingsville, TX 78363, <sup>2</sup>Texas University, Texas Agricultural Experiment Station, Weslaco, TX 78596, <sup>3</sup>N.E. Borlaug Fellow Visiting Scientist, Institut National De La Researche Agronomique (INRA), Morocco, <sup>4</sup>312 N International Blvd, TAMU-Kingsville Citrus Center, Weslaco, TX 78596, <sup>5</sup>Texas A&M University, Texas Agricultural Experiment Station, Corpus Christi, TX 78410, <sup>6</sup>United States Department of Agriculture-Agricultural Research Service, Maricopa, 85238. AZ(shad.nelson@tamuk.edu)
- 2:00 Effects of Irrigation Regime on Gas Exchange of Field Grown Olea Europeaea L. Staci Parks\*, Thayne Montague, C.B. McKenney. Department of Plant and Soil Science, Texas Tech University, Lubbock, TX 79409-2122. (staci.parks@ttu.edu)

#### FLORICULTURE, ORNAMENALS AND TURF SECTION

Room: Siesta

Presiding: Raymond Kessler

**Abstracts:** To publish abstract in *HortScience*, see instructions at end of program. Submit

instructions at end of program. Submit on disk at meeting or email to Chair: (kessljr@auburn.edu).

#### **Morning Session**

- 8:00 Easy Elegance roses Landscape
  Observations on Cultivars Recommended
  for the South. Allen Owings\*, Roger
  Rosendale and Regina Bracy. LSU AgCenter,
  Hammond Research Station, 21549 Old
  Covington Hwy, Hammond, LA 70403.
- 8:15 The Gardens at the LSU AgCenter Hammond Research Station. Allen Owings\*, Regina Bracy, Yan Chen, Roger Rosendale and Joey Quebedeaux. LSU AgCenter, Hammond Research Station, 21549 Old Covington Hwy, Hammond, LA 70403.
- 8:3 Landscape Evaluation of Acalypha (Copper Plant) Cultivars. Allen Owings\* and Roger Rosendale. LSU AgCenter, Hammond

- Research Station, 21549 Old Covington Hwy, Hammond, LA 70403.
- 8:45 Determining the Carbon Footprint of a Field-grown Colorado Spruce Tree using Life Cycle Assessment. Dewayne L. Ingram\*. Department of Horticulture, University of Kentucky, N-318 ASN, Lexington, KY 40546-0091.
- 9:00 Landscape Performance of Caladiums in Full Sun in Southern Louisiana. Yan Chen\*, Regina Bracy, and Allen Owings LSU AgCenter, Hammond Research Station, 21549 Old Covington Hwy, Hammond, LA 70403.

#### 9:15 Break

- 9:30 Effects of TopflorG on KnockOut rose Growth in Container Production. Yan Chen\*, Regina Bracy, and Allen Owings LSU AgCenter, Hammond Research Station, 21549 Old Covington Hwy, Hammond, LA 70403.
- 9:45 Finding a Fit in Floriculture: A Qualitative Study on why Graduate Students Struggle to Find Floriculture as a Career Path. Lauri M. Baker<sup>1</sup>\*, Quisto Settle<sup>2</sup>, and Tracy Irani<sup>2</sup>, <sup>1</sup>Kansas State University, Department of Communications and Agricultural Education, 307 Umberger Hall, Manhattan, KS, 66506, <sup>2</sup>University of Florida, Agricultural Education and Communication Department, 121E Bryant Hall Gainesville, FL 32611.
- 10:00 Use of Artificial Shade for Heliconia Cut-Flower Production. Alma R. Solis-Perez<sup>1,2</sup>, Raul I. Cabrera<sup>2\*</sup>, and Edgardo Zalazar-Marcial<sup>1</sup>, <sup>1</sup>Colegio de Postgraduados, Carr. Fed. Cordoba-Veracruz km. 348, Amatlan de los Reyes, Veracruz, 94946 (Mexico), <sup>2</sup>Department of Horticultural Sciences, Texas A&M AgriLife Research, 1619 Garner Field Road, Uvalde, TX 78801.
- 10:15 Alternative Irrigation Sources for Urban Landscape Water Conservation. Raul I. Cabrera\* and Daniel I. Leskovar, Department of Horticultural Sciences, Texas A&M AgriLife Research, 1619 Garner Field Road, Uvalde, TX 78801.
- 11:00 12:30 Attend Business Meeting and Awards Program

#### **Afternoon Session:**

1:00 Rooting Response of Cuttings from Three Woody Ornamentals Using Water-Soluble

- **Forms of IBA.** Eugene K. Blythe\*, Coastal Research and Extension Center, Mississippi State University, South Mississippi Branch Experiment Station, Poplarville, MS 39470.
- 1:15 Field and GIS-based Surveys Implicate
  Anthropomorphic Causes for Population
  Losses and Decline of Georgia plume,
  Elliottia racemosa, a Rare Endemic Tree.
  Justin A. Porter\*, David Berle, and Hazel Y.
  Wetzstein, Department of Horticulture, 1111
  Plant Science Building, University of Georgia,
  Athens, GA 30602-7273.
- 1:30 Gas Exchange and Growth of Field Grown,
  Ornamental Landscape Tree Species to
  Post Establishment Applied Organic Mulch
  and Drought. Thayne Montague\*, C.B.
  McKenney, K. Decker, and S. Parks.
  Department of Plant and Soil Science, Texas
  Tech University, Lubbock, TX 79409-2122.
- 1:45 Timing Effects of Growth Retardants
  Applied to Herbaceous Perennials Grown
  Under Night- interrupted Lighting
  Outdoors in the Southern United States. J.
  Raymond Kessler\* and Gary J. Keever. 101
  Funchess Hall, Auburn University, AL 36849.

#### POST HARVEST/PLANT BIOTECHNOLOGY SECTION

Room: Executive Boardroom
Presiding: Cecilia McGregor

- Abstracts: To publish abstracts in *HortScience*, see instructions at the end of the program. Submit on disk at meeting or email to Chair: (cmcgre1@uga.edu).
- 8:00 Postharvest Curing, Treatment and Storage of Short-Day Onions. George E. Boyhan<sup>1</sup>\*, Manish K. Bansal<sup>1</sup>, Daniel MacLean<sup>2</sup>, Anthony G. Bateman<sup>3</sup>, and Suzzanne Tate<sup>1</sup>, <sup>1</sup>Department of Horticulture, University of Georgia, 1111 Miller Plant Science Bldg., Athens, GA 30602, <sup>2</sup>Agrofresh, 620 Cantrill Drive, Davis, CA 95618, Vidalia Onion Research Laboratory, 2360 Rainwater Road, Tifton, GA 31793. (gboyhan@uga.edu)
- 8:15 Effectiveness of Ethephon for De-greening Satsuma (*Citrus unshiu*). James D. Spiers<sup>1</sup>\*, Bryan S. Wilkins<sup>2</sup>, David H. Picha<sup>3</sup>, and William A. Dozier, Jr<sup>1</sup>., <sup>1</sup>101 Funchess Hall, Department of Horticulture,

Auburn University, Auburn, AL 36849, 
<sup>2</sup>Gulf Coast Research and Extension Center, Fairhope, AL, <sup>3</sup>School of Plant, 
Environmental and Soil Sciences, Louisiana 
State University Agricultural Center, Baton 
Rouge, LA 70803. (jds0017@auburn.edu)

- 8:30 Evaluation of Peach Browning in North Carolina Yellow and White Fleshed Selections. Penelope Perkins-Veazie\*, Shawn Beam, Joyce O'Neal, PHHI, NC State University, Kannapolis NC 28081. (penelope\_perkins@ncsu.edu)
- 8:45 Anthocyanin Composition in Organically Produced Blackberries after Storage. Moo Jung Kim<sup>1</sup>\*, Penelope Perkins-Veazie<sup>1</sup>, Guoying Ma<sup>1</sup>, Gina Fernandez<sup>2</sup>, <sup>1</sup> PHHI, NC State University, Kannapolis NC 28081, <sup>2</sup> Department of Horticultural Sciences, Raleigh, NC 27695. (mkim10@ncsu.edu)
- 9:00 Fresh Market Muscadines: Evaluation of New Selections and Postharvest Treatments for Longer Shelf life. Penelope Perkins-Veazie<sup>1</sup>\*, Jim Ballington<sup>2</sup>, Joyce O'Neal<sup>1</sup>, <sup>1</sup> PHHI, NC State University, Kannapolis NC 28081, <sup>2</sup>Department of Horticultural Sciences, Raleigh, NC 27695. (penelope\_perkins@ncsu.edu)
- 9:15 Genetic Factors Associated with Seed Oil Percentage in Watermelon. Geoffrey Meru<sup>1\*</sup>, Jason Prothro<sup>2</sup>, Katherine C. Sandlin<sup>2</sup>, Rattandeep Gill<sup>2</sup>, Cecilia McGregor<sup>1</sup>, Department of Horticulture, University of Georgia, Athens GA, 30602, Institute of Plant Breeding, Genetics and Genomics, University of Georgia, Athens GA, 30602. (merujeff@uga.edu)
- 11:00 12:30 Attend Business Meeting and Awards Program

### WORKING GROUPS

(Contact Chairs for Agenda)

#### **Sweet Potato SCRI Project**

Presiding: Tara Smith

(tsmith@agcenter.lsu.edu)

**Friday:** 8:00 am – 5:00 pm **Oleander B** 

#### National Sweet Potato Collaborators Group

Presiding: Arnold Caylor (cayloaw@auburn.edu)

**Saturday:** 8:00 am – 5:00 pm **Oleander B** 

Sweetpotato Insect, Disease, and Weed Management

- 9:00 Sweetpotato tip and end rot incidence in response to pathogen inoculations and preharvest foliar applications of ethephon.

  Ramón Arancibia1, Chris Clark2, Lori Grelen1 Washington da Silva2, and Jeff Main1. 1Pontotoc Ridge-Flatwoods Branch Experiment Station, North Mississippi Research and Extension Center, Mississippi State University, Pontotoc, MS 38863; 2Department of Plant Pathology & Crop Physiology, LSU AgCenter, Baton Rouge 70803-1720.
- 9:15 End rots, tip rot, and internal necrosis: investigations into cause and resistance. Chris Clark<sup>1</sup>, Washington da Silva<sup>1</sup>, Ramón Arancibia<sup>2</sup>, Jeff Main<sup>2</sup>, Jonathan Schultheis<sup>3</sup>, Zvezdana Pesic van-Esbroeck<sup>3</sup>, and Chen Jiang<sup>3</sup>. <sup>1</sup>Department of Plant Pathology & Crop Physiology, LSU AgCenter, Baton Rouge 70803-1720; <sup>2</sup>Pontotoc Ridge-Flatwoods Branch Experiment Station, North Mississippi Research and Extension Center, Mississippi State University, Pontotoc, MS 38863; <sup>3</sup>North Carolina State University, Department of Horticultural Science, Box 7609, 2721 Founders Drive, Raleigh, NC 27695-7609
- 9:30 Lenticel proliferation and flooding associated soft rot in sweetpotato. Chris Clark<sup>1</sup>, Washington da Silva<sup>1</sup>, and Arthur Villordon<sup>2</sup>. <sup>1</sup>Department of Plant Pathology & Crop Physiology, LSU AgCenter, Baton Rouge 70803-1720; <sup>2</sup> LSU AgCenter Sweet Potato Research Station, Chase, LA 71324.
- 9:45 Response of Sweetpotatoes To Weed Interference and Clomazone H.F. Harrison, Jr. and D.M. Jackson, U.S. Vegetable Laboratory, ARS-USDA, Charleston, SC.
- 10:00 Evaluation of Various Insecticides in Sweetpotato Production for Control of Wireworms in the Mid-South, 2012. Larry Adams1, Randall Luttrell1 and Tara Smith2,

1USDA, ARS, SIMRU, Stoneville, MS 38776, 2LSU AgCenter, Chase, LA 70803

10:15 Evaluation of Selected Insecticides Regimes for Management of Sugarcane Beetle in Sweetpotato. T.P. Smith\*1, J. Beuzelin², T. Arnold¹. \*¹LSU Agricultural Center: Sweet Potato Research Station, Chase, LA, \*² LSU Agricultural Center: Dean Lee Research Station, Alexandria, LA.

#### 10:30 Break

- 10:45 Optimizing insecticide applications for management of white grubs and wireworms in Ontario sweetpotato Melanie Filotas and Jason Deveau, Ontario Ministry of Agriculture, Food and Rural Affairs, OMAFRA-Simcoe Resource Centre, Simcoe, ON, Canada N3Y 4K3
- 11:00 Field survey and detection of sweetpotato viruses in North Carolina. Christie V Almeyda, Tamara Abernethy and Zvezdana Pesic-VanEsbroeck, Department of Plant Pathology, NCSURaleigh, NC 27695-7616
- 11:15 Evaluation of weed control and sweet potato tolerance to alternative herbicides.
  D. K. Miller, T. P. Smith, and M. S. Mathews, LSU AgCenter, Baton Rouge, La.
- 11:30 'Covington Sweetpotato Tolerance to Dual Magnum Applications Followed by Simulated Rainfall. Stephen L. Meyers, Katie M. Jennings, and David W. Monks, NCSU, Raleigh, NC.

#### **NSCG Student Contest**

#### PhD Papers

- 1:00 S-metolachlor, rainfall and temperature on sweetpotato storage root development. Issah A. Abukari<sup>1\*</sup>, Mark W. Shankle<sup>2</sup>, K. Raja Reddy<sup>1</sup>, and Ramon A. Arancibia<sup>2</sup>. <sup>1</sup>Plant and Soil Sciences Dept. Mississippi State University, 117 Dorman Hall, Mississippi State, MS 39762; <sup>2</sup>Pontotoc Ridge-Flatwoods Branch Experiment Station, North Mississippi Research and Extension Center, Mississippi State University, Pontotoc, MS 38863 (iaa20@msstate.edu)
- 1:15 Changes in the level of lignification/suberization in sweetpotato skin with preharvest defoliation and ethephon induced stress by confocal microscopy.

  Nestor Bonilla<sup>1</sup>\*, Ramon A. Arancibia<sup>2</sup>, Frank Matta<sup>1</sup>, Mark Shankle<sup>2</sup>, K. Raja Reddy<sup>1</sup>, Juan

Silva<sup>3</sup>, and Don LaBonte<sup>4</sup>. <sup>1</sup>Plant and Soil Sciences Dept. Mississippi State University, 117 Dorman Hall, Mississippi State, MS 39762; <sup>2</sup>Pontotoc Ridge-Flatwoods Branch Experiment Station, North Mississippi Research and Extension Center, Mississippi State University, Pontotoc, MS 38863; <sup>3</sup>Food Sciences, Nutrition and Health Promotion, Mississippi State University, Miss. State, MS; <sup>4</sup>School of Plant, Environmental, and Soil Louisiana University Sciences, State Agricultural Center, Baton Rouge, LA 70803 (njb13@msstate.edu)

- 1:30 Effect of Cultivar, Curing, and Preparation Method on Water-soluble Vitamin Content in Sweetpotatoes. Wilmer Barrera\* and David Picha, School of Plant, Environmental and Soil Sciences, Louisiana State University, Baton Rouge, LA 70803 (wbarre1@tigers.lsu.edu)
- 1:45 Modeling Respiration Rate of Five Sweetpotato Varieties (*Ipomoea batatas* (L) Lam) at Different Temperature Ranges by Applying the Mass Balance Principle. José G. Garzon\* and Michael D. Boyette. Department of Biological and Agricultural Engineering, North Carolina State University, Raleigh, NC 27695. (jggarzon@ncsu.edu) 4:15
- 2:00 Evaluation of Irrigation Scheduling Regimes for Drip Irrigated Sweetpotatoes in Eastern North Carolina. Robert L. Vick, Jr.<sub>1</sub>\*, Jonathan R. Schultheis<sub>2</sub>, and Garry L. Grabow<sub>1</sub>, <sub>1</sub>Department of Biological and Agricultural Engineering, North Carolina State University, Raleigh, NC 27695, <sub>2</sub>Department of Horticultural Science, North Carolina State University, Raleigh, NC 27695. (rlvick@ncsu.edu)

#### 2:15 Break

#### MS Papers

- 2:30 Development of a Mechanical Undercutting
  System to Minimize Sweetpotato Skinning
  during Harvest. Bradley H. Hayes<sup>1\*</sup>, Jason K.
  Ward<sup>1</sup>, John W. Lowe<sup>1</sup> Jeremiah D. Davis<sup>1</sup>,
  Mark W. Shankle<sup>2</sup>, Ramon A. Arancibia<sup>2</sup>,
  Agricultural and Biological Engineering,
  Mississippi State University, Mississippi State,
  MS 39762, <sup>2</sup>Pontotoc Ridge-Flatwoods Branch
  Experiment Station., 8320 Hwy 15 S.,
  Pontotoc, MS 38863 (bhh27@msstate.edu)
- 2:45 Selected Insecticides for Soil Insect Control in Sweetpotato. Shaun A. Francis\*, James O.

Garner and Obadiah M. Njue, Department of Agriculture, University of Agriculture at Pine Bluff, 1200 North University Drive, Mail Slot 4913, Pine Bluff, AR 71601 (francis5739@uapb.edu)

- 3:00 Optimizing Sweetpotato Seed Bed Density for Plant Production. Susan L. Barkley\*, Jonathan R. Schultheis, Katie M. Jennings, Department of Horticultural Sciences, North Carolina State University, Raleigh, NC 27695-7609. (slweiss2@ncsu.edu)
- 3:15 Implementing Irrigation on Small-Scale Farms: An Economic Feasibility Study Using Sweet Potato Irrigation. Rockiell Woods\*1, Gretchen F. Sassenrath², John Halloran³, and Wesley Whittaker⁴, ¹Alcorn State Experiment Station, Mound Bayou, MS, 38762, ²USDA-ARS Crop Production Systems Research Unit, Stoneville, MS 38776, ³USDA-ARS New England Plant, Soil and Water Research Laboratory, University of Maine, Orono, ME, 04469, ⁴Alcorn State University, Department of Agriculture Education, Alcorn State, MS 39096. (rwoods@alcorn.edu)
- 3:30 Internal Necrosis in 'Covington' Sweetpotato; its Occurrence and Severity in the Commercial Industry and in Response to Various Chemistries. Chen Jiang¹\*, Mike D. Boyette², Sylvia M. Blankenship¹, and Jonathan R. Schultheis¹, ¹ Department of Horticultural Science, ² Department of Biological & Agricultural Engineering, North Carolina

#### Poster presentation:

5:00` Simultaneous Analysis of Thiamine and Riboflavin in Sweetpotato by HPLC. Wilmer Barrera\* and David Picha, School of Plant, Environmental and Soil Sciences, Louisiana State University, Baton Rouge, LA 70803 (wbarre1@tigers.lsu.edu)

2012 USDA, ARS, Southern Insect Management Research Unit Sweetpotato Demonstration Study, Chris Johnson and Larry Adams USDA, ARS, SIMRU, Stoneville, MSDuring the 2012 growing season USDA, ARS, Southern Insect Management Research Unit transplanted sweetpotato demonstration plots to illustrate the value in taking soil samples for nematode populations and applying a preplant incorporated insecticide to control insects attacking the developing sweetpotato roots. Three Mississippi Delta locations, Sanders Farm, Mound Bayou, MS, Alcorn State University Research Farm, Mound Bayou, MS and Livingston Farm, Elizabeth, MS were transplanted with Beauregard 14 slips in mid May. Treatments were applied approximately two weeks prior to transplanting and included Lorsban, K-Pam, Lorsban and K-Pam, a grower field and an untreated control. Soil samples were taken preplant, mid season and preharvest to determine nematode populations. All locations were harvested at ~115 days. Yield, quality and insect damage were recorded and analyzed

**Presiding:** Arnold Caylor (cayloaw@auburn.edu)

**Sundayy:** 8:00 am – 5:00 pm **Oleander B** 

# Sweetpotato Production, Physiology, and Plant/Seed Production

Presiding: C. Scott Stoddard (University of California) (csstoddard@ucdavis.edu)

- 8:00 Sweetpotato variety evaluation and development in California. C. Scott Stoddard (1)\* and Don La Bonte (2). (1) University of California Cooperative Extension, 2145 Wardrobe Ave., Merced, CA 95341; (2) Louisiana State University, 131 J.C. Miller Hall, Baton Rouge, LA 70803. (csstoddard@ucanr.edu
- 8:15 Diversity and density indices of the pathogenic microbial community present in tip/end rot disease of sweetpotato. C. Elizabeth Stokes<sup>1</sup>\*, Richard E. Baird<sup>1</sup>, and Ramon Arancibia<sup>2</sup>, <sup>1</sup> Department of Biochemistry, Molecular Biology, Entomology, and Plant Pathology, 32 Creelman St., Mail Stop 9655, Mississippi State University, Mississippi State, MS 39762, <sup>2</sup> North Mississippi Research and Extension Center, Pontotoc Ridge-Flatwoods Branch Experiment Station, 8320 Highway 15 South, Pontotoc, MS
- 8:30 Comparison of light-emitting diode, fluorescent, and ambient light treatments for sweetpotatoes grown in greenhouse conditions. Arnold, Theresa\*, Tara Smith, and Arthur Villordon
- 8:45 Influence of nitrogen rates on lateral root development in 'Beauregard' sweetpotato adventitious roots. Arthur Villordon<sup>1\*</sup>, Don LaBonte<sup>2</sup> and Nurit Firon<sup>3</sup>. <sup>1</sup>LSU AgCenter

Sweet Potato Research Station, Chase, La 71324 USA; <sup>2</sup>LSU AgCenter School of Plant, Environmental, and Soil Sciences, 137 J.C. Miller Hall, Baton Rouge, LA 70803-2120 USA; <sup>3</sup>Institute of Plant Sciences, The Volcani Center, Agricultural Research Organization, P.O. Box 6, Bet Dagan, 50250, Israel

- 9:00 Yield response to potassium sidedressing in sweetpotato under drip irrigation. Ramon A. Arancibia\* and Jeff L. Main. Pontotoc Ridge-Flatwoods Branch Experiment Station, North Mississippi Research and Extension Center, Mississippi State University, Pontotoc, MS 38863. (raa66@msstate.edu
- 9:15 Use of confocal microscopy to determine skin characteristics and the degree of lignification/suberization in sweetpotato. Ramon A. Arancibia<sup>1</sup>\*, Nestor Bonilla<sup>2</sup>, Don LaBonte<sup>3</sup>, and Jeff L. Main. <sup>1</sup>Pontotoc Ridge-Flatwoods Branch Experiment Station, North Mississippi Research and Extension Center, Mississippi State University, Pontotoc, MS 38863; <sup>2</sup>Plant and Soil Sciences Dept. Mississippi State University, 117 Dorman Hall, Mississippi State, MS 39762; <sup>3</sup>School of Plant, Environmental, and Soil Sciences, Louisiana State University Agricultural Center, Baton Rouge, LA 70803 (raa66@msstate.edu)
- 9:30 Three years of winter cover crops effect on soil characteristics and sweetpotato production in North Mississippi. Jeff L. Main\*, Xiang Wang, Lori B, Grelen, and Ramon A. Arancibia, Pontotoc Ridge-Flatwoods Branch Experiment Station, North Mississippi Research and Extension Center, Mississippi State University, Pontotoc, MS 38863. (jmain@ra.msstate.edu)
- 9:45 Three years sweetpotato production with winter cover crops and stale beds in North Mississippi. Jeff L. Main\* and Ramon A. Arancibia, Pontotoc Ridge-Flatwoods Branch Experiment Station, North Mississippi Research and Extension Center, Mississippi State University,

#### **Watermelon Research Group**

**Presiding:** Jonathan Schultheis, Chair

(jonr@ncsu.edu)

**Sunday:** 8:00 am – 5:00 pm

**Room:** Lime

#### **Morning Program**

- 8:00 Welcome: Jonathan Schultheis, Chair, WRDWG
- **8:10** Introductions: All in attendance

#### **Regional Watermelon Production Updates**

8:20 California & Arizona – James Brusca Carolinas – Allan Thornton / Gilbert Miller DelMarva – Gordon Johnson Georgia – George Boyhan Indiana & Midwest – Shubin Saha Texas – Juan Ansico

# **International Updates from Seed Company Representatives**

8:50 Snapshot of the Australian watermelon industry. Jérôme Bernier, Watermelon Breeder, Monsanto Vegetable Seeds, 37437 State Highway 16, Woodland, CA, 95695, USA (jerome.bernier@monsanto.com) Other Updates, dependent on availability of Seed Company representatives, TBA

#### **Updates from Seed Companies**

9:20 agroGene – Peter Mes Monsanto – Jerome Bernier Syngenta – James Brusca

# Issues Affecting National Watermelon Industry

9:50 Bob Morrissey, National Watermelon Association, Executive Director, Lakeland, FL Funding, Immigration Reform, New Farm Bill, Other NWA Activities

#### **Hot Topic Issues**

**10:10** Shaker Kousik, Research Scientist, USDA, Charleston, SC

#### 10:25 Break

#### **Research Reports:**

#### **Cultivar Considerations**

10:45 Texas Statewide Watermelon Trials for 2012. Juan R. Anciso1\*, Larry Stein2, Joseph Masabni, and Russ Wallace4, Department of Horticultural Sciences, Texas A&M University, <sup>1</sup>Weslaco TX, <sup>2</sup> Uvalde TX, 3 College Station TX, 4 Lubbock TX. (j-anciso@tamu.edu).

# 11:00 Delaware Triploid Watermelon Cultivar Evaluations. Gordon C. Johnson and Emmalea G. Ernest\*, University of Delaware, Carvel REC, 16483 County Seat Highway, Georgetown, DE 19947 (emmalea@udel.edu)

- 11:15 2012 Evaluation of Triploid Watermelon
  Varieties in Southwestern Indiana. Shubin
  K. Saha\* and Larry Sutterer, Horticulture and
  Landscape Architecture Department,
  Southwest Purdue Ag Program, Purdue
  University, Vincennes, IN 47591.
  (ssaha@purdue.edu)
- 11:30. Comparison of staminate flower production and Fusarium wilt reaction in diploidcultivars used as pollenizers for triploid watermelon. Chris Gunter<sup>1\*</sup> and Daniel S. Egel<sup>2</sup>, <sup>1</sup> Department of Horticultural Science, 230 Kilgore Hall, Box 7609, North Carolina State University, Raleigh, NC 27695-7609 (chris\_gunter@ncsu.edu), <sup>2</sup>Department of Botany and Plant Pathology, 4369 North Purdue Road, Purdue University, Vincennes, IN 47591 (egel@purdue.edu)

#### 11:45 LUNCH BREAK

#### Afternoon Program

1:00 Update promotion activities National Watermelon Promotion Board in 2012

Mark Arney, Exec. Director, Orlando, FL

**Research Reports (continued)** 

Flowering and Pollination

- 1:15 Flowering Time in Watermelon. Cecilia McGregor\* and V. Waters, Department of Horticulture, University of Georgia, Athens, GA 30602. (cmcgre1@uga.edu)
- 1:30 Evaluation of Pollenizer Varieties for Triploid Watermelon (Citrullus lanatus)
  Production in Southwestern Indiana.
  Shubin K. Saha<sup>1</sup>\* and Dan Egel<sup>2</sup>,

  <sup>1</sup>Horticulture and Landscape Architecture Department, <sup>2</sup>Botany and Plant Pathology Department, Southwest Purdue Ag Program, Purdue University, Vincennes, IN 47591. (ssaha@purdue.edu)

#### **Disease**

- 1:45 North Carolina Triploid Watermelon Cultigen Evaluations for 2012. Jonathan R. Schultheis\* and Bradfred Thompson, Dept. of Horticultural Science, North Carolina State University, Box 7609, 2721 Founders Drive, Raleigh,NC 27695-7609.(jonathan\_schultheis@ncsu.edu)
- 2:00 Use of SqVYV resistant germplasm line 39291-VDR as a pollenizer for managing watermelon vine decline in Florida. C.S.

- Kousik<sup>1\*</sup>, S. Adkins<sup>2</sup>, W.W. Turechek<sup>2</sup>, C. G. Webster<sup>2</sup> and P.D. Roberts<sup>3</sup>, <sup>1</sup> U.S. Vegetable Laboratory, USDA, ARS, 700 Savannah Highway, Charleston, SC 29414, USA, <sup>2</sup>U.S. Horticultural Research Laboratory, USDA, ARS, Fort Pierce, FL 34945, <sup>3</sup>SWFREC, University of Florida, Immokalee, FL 34142 (Shaker.Kousik@ars.usda.gov)
- 2:15 Exploiting genetic resources of Citrullus spp. to enhance disease or pest resistance in watermelon cultivars. A. Levi\*, J. A. Thies, W. P. Wechter, H. Harrison, A. Simmons, K. Ling, and C. Kousik. USDA, ARS, U.S. Vegetable Laboratory 2700 Savannah Highway, Charleston, South Carolina 29414, USA. (Amnon.Levi@ARS.USDA.GOV)
- 2:30 Response of Citrullus lanatus var. citroides
  Rootstocks for Grafted Watermelon to
  Root-knot Nematodes. Judy A. Thies<sup>1</sup>,
  Sharon Buckner<sup>1</sup>, Richard Hassell<sup>2</sup>, and
  Amnon Levi<sup>1</sup>. <sup>1</sup>U.S. Vegetable Laboratory,
  USDA, ARS, 2700 Savannah Highway,
  Charleston, SC, 29414-5334; <sup>2</sup>Clemson
  University, 2700 Savannah Highway,
  Charleston, SC, 29414-5334
  Judy.Thies@ARS.USDA.GOV)
- 2:45 MelCast Fungicide Application Scheduling for mid-Atlantic Watermelons: A Reevaluation. Kathryne L. Everts\* and Mason J. Newark, Department of Plant Science and LARC, University of Maryland College Park, LESREC-Salisbury, 21801(keverts@umd.edu)

#### 3:05 Break

#### **Hot Topic Issues**

**3:30** Shaker Kousik, Research Scientist, USDA, Charleston, SC

#### **Research Reports (continued)**

# Research Methods and Cultural Management

- 3:45 Optimum Plot Size and Number of Replications for Watermelon Trials and 2012 Watermelon Trial Results. George E. Boyhan\*, Suzzanne C. Tate, and Ryan D. McNeil, Department of Horticulture, University of Georgia, 1111 Miller Plant Science Bldg., Athens, GA 30602. (gboyhan@uga.edu)
- 4:00 Grafting Methods: What Makes Each Acceptable and Unacceptable. Richard L.

Hassell, Clemson University CREC, 2700 Savannah Highway, Charleston, SC (rhassel@clemson.edu)

4:15 The Effect of Particle Films, Growth Regulators, and a Bacterial Inoculant on Stress Indicators, Fruit Yield, and Fruit Quality in Triploid Watermelons. Gordon C. Johnson\*, Emmalea G. Ernest, and D. Janine Sherrier University of Delaware, Carvel REC, 16483 County Seat Highway, Georgetown, DE 19947 (gcjohn@udel.edu)

4:30 Health Comparison of Watermelon and Gatorade on Exercise-Induced Oxidative Inflammation, and Immune Dysfunction in Masters Cyclists. Penelope Perkins-Veazie\*, Plants for Human Health Institute, Department of Horticultural Sciences, Kannapolis, NC 28081 and R. Andrew Shanley, Human Performance Laboratory, Appalachian State University, North Carolina Research Campus, Kannapolis, NC 28081 (penelope\_perkins@ncsu.edu)

4:45 Watermelon Group Business

5:00 Adjourn

#### **National Cowpea Improvement Assoc.**

Presiding: J. Trachta, Chair

(john@ctsmithco.com)

**Sunday:** 1:00 pm - 4:00 pm

Room: Orange

#### **Horticulture Administrators**

**Presiding:** Wayne Mackay, Chair

(wmackay@ufl.edu)

**Saturday:** 1:00 pm – 4:00 pm

**Room:** Longboat

#### Vigna Crop Germplasm Committee

**Presiding:** Jeff Ehlers

(jeff.ehlers@ucr.edu)

**Sunday:** 9:00 am – 12:00 pm

Room: Orange

#### **Pecan Research and Extension Forum**

Presiding: Charles Rohla, Chair

(ctrohla@noble.org)

**Saturday:** 8:00 am – 5:00 pm

Room: Largo

#### S. Blueberry/Small Fruit Workers

**Presiding:** Elina Coneva, Chair

(edc0001@auburn.edu)

**Saturday:** 8:00 am - 5:00 pm

**Room:** Tangerine B

# Instructions for Submission of Abstracts for Publication in *HortScience*

#### To publish your abstract in *HortScience*:

- 1) One of the authors must be registered for the conference.
- 2) The title of the abstract must appear in the published conference program.
- 3) The abstract must be submitted as a document file in the proper format.
- 4) The abstract must be submitted to the Chair of the session by the deadline.

#### **Submission of Abstract**

File Format: Each abstracts must be submitted as a separate Word (.doc) file. If you use another word

processing language, submit abstract in rich text format (.rtf).

**Deadline:** 1) At meeting: Give disk with file to the Chair of the session.

2) Email abstracts as an attached file to the Chair of the session before the meeting or within a few days after the meeting. See the Section Program for the Chair's email address.

#### **Abstract Format**

**Length:** Limit the abstract body to about 2000 characters.

Font: 12 point, Times New Roman or similar

**Format:** Format abstract as below. Asterisk denotes presenting author.

#### **Example Format**

# Molecular Marker-Derived Genetic Similarity Analysis of a Segregating Blackberry Population

Eric T. Stafne\*<sup>1</sup>, John R. Clark<sup>1</sup>, and Kim S. Lewers<sup>2</sup>

<sup>1</sup>316 Plant Sciences, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701, <sup>2</sup>USDA-ARS Fruit Lab, 10300 Baltimore Ave., BARC-West Bldg. 010A, Beltsville, MD 20705

A tetraploid blackberry population that segregates for two important morphological traits, thornlessness and primocane fruiting, was tested with molecular marker analysis. Both randomly amplified polymorphic DNA (RAPD) and simple sequence repeat (SSR) markers were used to screen a population of 98 genotypes within the population plus the two parents, 'Arapaho' and 'Prime-Jim'® (APF-12). RAPD analysis averaged 3.4 markers per primer, whereas SSR analysis yielded 3.0 markers per primer pair. Similarity coefficient derived from the Dice index averaged over all individuals was 63% for RAPD markers, 73% for SSR markers, and 66% for RAPD and SSR markers together. The average similarity coefficients ranged from a high of 72% to a low of 38% for RAPD markers, 80% to 57% for SSR markers, and 73% to 55% for both. Comparison of the parents indicated a similarity of 67% for RAPD markers, 62% for SSR markers, and 67% for both. This is similar to a previous study that reported the similarity coefficient at 66%. Although inbreeding exists within the population, the level of heterozygosity is high. Also, evidence of tetrasomic inheritance was uncovered within the molecular marker analysis. This population will be used to identify potential markers linked to both morphological traits of interest. Further genetic linkage analysis and mapping is needed to identify any putative markers.

# 2013 Program at a Glance

Wyndham Orlando	Friday February 1																																					
Room	8:00			9:00				10:00			11	:00				12:00				1:00		2:0	0			3:00				4:00				5:00				
Oleander B											Sweetpotato SCRI Project																											
	Saturday February 2																																					
Room	8:00			9:00				10:00			11	:00				12:00				1:00		2:0	0			3:00				4:00				5:00				
Hotel Lobby	7:00 op	en																		Registration																		
Largo														F	Pecai	n Resea	rch & E	xtens	sion I	Forum																		
Tangerine B		Southern Blueberry/Small Fruit Workers  National Sweet Potato Collaborators																																				
Oleander B														1	Natio	nal Swe	et Pota	to Co	llabo	rators																		
Longboat		Horticulture Administrators																	Executiv																			
Lime	ACB Club Share ACB Group Lunch ACB Activities or Tour																	ACB Reception																				
	Sunday February 3																																					
Room	8:00			9:00				10:00			11	:00				12:00				1:00		2:0	0			3:00				4:00				5:00				
Citrus Ballroom Foyer	7:00 open Registration																	S																				
Palms Ballroom Salon E		Poster Session Set-Up													Poster Session Viewing, Authors at Posters & Judging																	U						
Palms Ballroom Salon I		Judging Contest Set-Up													J. Benton Storey Horticulture Judging Contest																	Р	Р					
Lime													Wat	erme	lon R	Researc	Group	)																		E	Α	
Orange						,	Vign	a Crop (	Germpl	asm Co	ommit	tee								National Cowpea Improvement Association																R	R	
Oleander B												N	lationa	I Swe	eet Po	otato Co	llabora	tors																			Т	
Palms Ballroom Salon C			Exten	sion Sect	ion					Edu	cation	Sect.																								В	Υ	
Largo																					Vegetable Crops Section														0			
Lemon	Edmo	nd UG	Paper	Comp.										Chil	ders	M.S. Pa	per Cor	npeti	tion				Barham Ph.D. Paper Comp.													w		
Poolside Pavilion																															Gradua	ate St	uden	nt Mixer L				
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Room	8:00			9:00				10:00			11	:00				12:00				1:00		2:0	0			3:00				4:00	$\Box$			5:00				
Citrus Ballroom Foyer	7:00 op	en			Reg	istratio	n																															
Palms Ballroom Salon E	Poster Session Viewing																Poster Take Down																					
Lemon		ACB Business Meeting									В	usines	ss Mee	ting/ <i>l</i>	Awar	ds Prog																						
Biscayne	Vegetable Crops Section																Vegetable Crops Section																					
Siesta		Floric	ulture,	Ornament	tals &	Turf Se	ctio	n												Flori, Orn &	ori, Orn & Turf Section																	
Lime			Fr	uit Crops	Section	on														Fru	it Crop	ps Secti	on									Ш						
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Note: Super Bowl Party, NASCAR Sports Grille (University City Walk), Shuttle starts at 5:00

# **Meeting Room Locations**









