

PROGRAM
70th ANNUAL MEETING
Southern Region
American Society for Horticultural Science
srashs.org

February 6-8, 2010
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 400 to 500 active members. Membership is composed of research scientists, teachers and extension specialist from Universities, State, Federal and private research organizations, and industry. The Southern Region also contains a student section, the Association of Collegiate Branch, 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 national 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.

Officers and Committees

Jim Ballington, President

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Executive Committee

Chair	Richard L. Harkess
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Member	David L. Creech
Member	Janet C. Cole
Member	Charles H. Gilliam
Member	Dale M. Maronek
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ACB Officers

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ACB Rep	Rebecca Stokes
ACB Advisor	Leonardo Lombardini

Section Chairs

Childer & Barham Grad Comp.	Michael A. Arnold
Edmond Undergraduate Comp.	David L. Creech
Education	Richard L. Harkess
Extension	Robert T. Boozer
Floriculture, Orn. & Turf	Allen D. Owings
Fruit Crops	Elina Coneva
Poster	Gary Bachman

Postharvest/Biotechnology Donna A. Marshall
Vegetable Crops Annette Wszelaki

Working Groups Chairs

South. Blueberry & Small Fruit Elena Garcia
Cowpea Improvement Lynn Brandenberger
Curcubit Crop Germplasm James D. McCreight
Horticulture Administrators Douglas A. Bailey
Pecan Research Lenny Wells
Small Fruit Consortium Thomas J. Monaco
National Sweetpotato Collab. D. Michael Jackson
Vigna Crop Germplasm Richard L. Fery
Watermelon Research Elisabetta Vivoda

SPECIAL EVENTS AND SESSIONS

FRIDAY, February 5, 2010

8:00 am - 6:00 pm Sweet Potato SCRI Project
Presiding: Tara Smith
Room: Tangerine A

SATURDAY, February 6, 2010

7:00 am - 6:00 pm Registration

Presiding: Dave Reed
Room: Hotel Lobby

8:00 am - 5:00 pm Pecan Research and Extension Forum

Presiding: Lenny Wells
Room: Lime

8:00 am - 5:00 pm National Sweetpotato Collaborators

Presiding: Michael Jackson
Room: Tangerine A

8:00 am - 5:00 pm Southern Blueberry/Small Fruit Workers

Presiding: Elina Coneva
Room: Tangerine B

10:00 am - 11:30 pm ACB Program, Share Club Activities and Refreshments

Presiding: Stacy Bridges, ACB President
Room: Lemon

12:00 noon-1:30 pm ACB Group Lunch

Presiding: Stacy Bridges, ACB President
Room: Lemon or TBA

1:30 pm - 4:00 pm ACB Activities and/or Tour:

Presiding: Stacy Bridges, ACB President

- Room: Lemon or TBA
- 1:00 pm - 5:00 pm Horticulture Administrators**
 Presiding: Doug Bailey
 Room: Executive Boardroom
- 5:00 pm - until ACB Reception and Mixer**
 Presiding: Stacy Bridges, ACB President
 Room: Lemon or TBA
- 5:00 pm - 6:00 pm Executive Committee Meeting**
 Presiding: Richard Harkess, Chair, Executive Committee
 Room: Executive Boardroom
- SUNDAY, FEBRUARY 7, 2010**
- 7:00 am - 6:00 pm Registration**
 Presiding: Dave Reed
 Room: Floral Ballroom Foyer
- 8:00 am – 12:00 pm Set up Posters**
 Presiding: Gary Bachman
 Room: Palms Ballroom Salon E
- 8:00 am – 12:00 noon J. Benton Storey Horticulture Judging Contest Setup**
 Presiding: Leo Lombardini, ACB Advisor
 Room: Orange
- 8:00 am - 10:00 am Extension Section**
 Presiding: Robert Boozer
 Room: Azalea
- 8:00 am - 5:00 pm National Sweetpotato Collaborators**
 Presiding: Michael Jackson
 Room: Oleander A
- 8:00 pm - 5:00 pm Watermelon Research Group**
 Presiding: Elisabetta Vivoda
 Room: Magnolia
- 8:00 am - 9:15 am J. B. Edmond Undergraduate Student Paper Competition**
 Presiding: Stacy Bridges, ACB President
 Jim Ballington, SR-ASHS President
 David Creech, Section Chair & Judging Coordinator
 Room: Palms Ballroom Salon A
- 9:00 am – 12:00 noon Vigna Crops Germplasm Committee**
 Presiding: Richard Fery
 Room: Oleander B
- 9:15 am - 1:30 pm Norman F. Childers M.S. Student Paper Competition**
 Presiding: Mike Arnold, President Elect
 TBA, Judging Coordinator
 Room: Palms Ballroom Salon A

- 12:00 noon - 5:00 pm** **Poster Session Viewing**
Room: Palms Ballroom Salon E
- 1:00 pm - 5:00 pm** **National Cowpea Improvement Association**
Presiding: Lynn Brandenberger
Room: Oleander B
- 1:00 pm - 5:00 pm** **J. Benton Storey Horticulture Judging Contest**
Presiding: Leo Lombardini, ACB Advisor
Room: Orange
- 1:30 pm - 3:00 pm** **Warren S. Barham Ph.D. Student Paper Competition**
Presiding: Mike Arnold, President Elect
 TBA, Judging Coordinator
Room: Palms Ballroom Salon A
- 1:00 pm - 3:00 pm** **Poster Session - Authors at Posters**
1:00 pm - 2:00 pm even numbered posters
2:00 pm - 3:00 pm odd numbered posters
Room: Palms Ballroom Salon E
- 3:00 pm - 4:00 pm** **Poster Session - Students at posters for judging**
Presiding Gary Bachman, Judging Coordinator
Room: Palms Ballroom Salon E
- 3:00 pm - 5:00 am** **Education Section**
Presiding: Richard Harkess
Room: Azalea
- 3:00 pm - 5:00 pm** **Vegetable Crops Section**
Presiding: Annette Wszelaki
Room: Palms Ballroom Salon A
- SAAS Program**
- 4:00 pm - 6:00 pm** **SAAS General Session**
Presiding: Robert Whitson, President SAAS
Room: Jasmine
- 6:00 pm** **SAAS Reception**
Room: Poolside Pavilion/Gardenroom
- MONDAY, FEBRUARY 8, 2010**
- 7:00 am - 10:00 am** **Registration**
Presiding: Dave Reed
Room: Floral Ballroom Foyer
- 8:00 pm - 11:00 pm** **Poster Session Viewing**
Room: Palms Ballroom Salon E
- 8:00 am - 10:45 pm** **Vegetable Crops Section**
Presiding: Annette Wszelaki
Room: Oleander A

- 8:00 am - 10:30 pm Fruit Crops Section**
 Presiding: Elina Coneva
 Room: Oleander B
- 8:00 am - 10:30 am Floriculture, Ornamentals and Turf Section**
 Presiding: Allen Owings
 Room: Magnolia
- 8:00 am - 10:30 am Postharvest/Biotechnology/Plant Biology Section**
 Presiding: Donna Marshall
 Room: Largo
- 9:00 am - 10:45 am ACB Business Meeting**
 Presiding: Stacy Bridges, ACB President
 Room: Jasmine
- 11:00 am - 12:30 pm Annual Business Meeting and Award Program**
 Presiding: Jim Ballington, President
 Room: Jasmine
- 1:00 pm - 3:00 pm Vegetable Crops Section – Concurrent Session A**
 Presiding: Annette Wszelaki
 Room: Oleander A
- 1:00 pm - 2:00 pm Fruit Crops Section**
 Presiding: Elina Coneva
 Room: Oleander B
- 1:00 am - 2:30 am Postharvest/Biotechnology/Plant Biology Section**
 Presiding: Donna Marshall
 Room: Largo
- 1:00 pm - 4:00 pm Poster Session Take Down**

SECTION TITLES

SUNDAY, FEBRUARY 7, 2010

J. B. EDMOND UNDERGRADUATE STUDENT PAPER COMPETITION

Room: Palms Ballroom Salon A

Presiding: Stacy Bridges, President, ACB

Jim Ballington, President, SRASHS

David Creech, 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: (dcreech@sfasu.edu)

8:00 am –9:30 am Order of presentations determined by drawing at beginning of contest.

Acidifying hardwood bark for the production of acid-loving nursery crops. Mark Wilson*, Edward Bush, Daniel Wells, LSU AgCenter, 137 J. C. Miller Hall, Baton Rouge,

La. 70803.

Characterization and Inheritance Assessment of Fruit and Leaf Shape in Unique Vitis Seedlings. Paul Sandefur*, John R. Clark, and Douglas Karcher, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701 (psandefu@uark.edu)

Effect of vine cutback on disease resistance and Severity of Virus Titers on resistant and susceptible varieties. Maureen Thiessen^{1*}, Carly Gillett¹, Don LaBonte¹, Chris Clark², and Cecilia McGregor³, ¹School of Plant, Environmental, and Soil Sciences, Louisiana State University, Baton Rouge, LA 70803, ²Department of Plant Pathology and Crop Physiology, Louisiana State University, Baton Rouge, LA 70803, ³Department of Horticulture, University of Georgia, Athens, GA 30602. (mthies1@tigers.lsu.edu)

The Petty Residence: A Landscape Design Based on Principles of Sustainability. Erik J. Healy*, Renee K. Byrd, Mary T. Haque, Tyler Miller, and Karl Muzii, Department of Horticulture, Clemson University, Clemson, SC, 29634-0319. (ehealy@clemson.edu)

Timing of Application of Benzyladenine (6-BA) Affects Branching of Herbaceous Perennials. Margaret G. Tackett*, John R. Freeborn, Joyce G. Latimer, and Holly L. Scoggins, Department of Horticulture, Virginia Tech, Blacksburg, VA 24061 (mtack5@vt.edu)

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

Room: Palms Ballroom Salon A

Presiding: Mike Arnold, 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: (ma-arnold@tamu.edu)

9:30 am – 12:00 pm Order of presentations determined by drawing at beginning of contest.

Benzyladenine (6-BA) Promotes Branching of Herbaceous Perennials. William K. Harris*, John R. Freeborn, Joyce G. Latimer, and Holly L. Scoggins, Department of Horticulture, Virginia Tech, Blacksburg, VA 24061 (wkharris@vt.edu)

Cultivation and Nutraceutical Content of Virginia Grown Edamame. Luther C. Carson*¹, Josh Freeman², Kequan Zhou³ and Gregory Welbaum¹, ¹Department of Horticulture, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061, ²Virginia Polytechnic Institute and State University, Eastern Shore Agricultural Research and Extension Center, Painter, VA 23420, ³Department of Food Science, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061. (luther@vt.edu)

Determination of *Quercus* series *Virentes* heredity in Texas. Adam L. Purnell*, Cynthia McKenney, Robert Wright, and Thayne Montague, Department of Plant & Soil Science, Texas Tech University, M.S. 2122, Lubbock, TX 79409 (adam.l.purnell@ttu.edu)

Effect of parboiled rice hulls on physical and chemical properties of amended pine bark substrates and the growth of container grown ornamentals. Celina Gómez* and James Robbins, 316 Plant Science Building, Department of Horticulture, University of Arkansas, Fayetteville, 72701. (cgomezv@uark.edu)

Efficient asexual propagation of *Lindera glauca* (Siebold & Zucc.) Blume and *Lindera aggregata* (Sims) Kosterm. Andrea Schroeder* and Jeffrey A. Adkins, Department of Horticulture, Stephen F. Austin State University, Nacogdoches, TX 75962. (schroedeac@titan.sfasu.edu).

Evaluation of Sixteen Accessions of Sunn Hemp (*Crotalaria juncea*) for Seed Production Potential in Florida. Alyssa Cho^{1*}, Carlene A. Chase¹, Rosalie Koenig², and Danielle Treadwell¹, ¹Department of Horticultural Sciences, ²Department of Agronomy, University of Florida, Gainesville, FL 32611. (alycho@ufl.edu)

Screening ornamental peppers (*Capsicum spp.*) for high temperature tolerance using *in vitro* pollen germination, pollen tube length and cell membrane thermostability. Bandara Gajanayake, Brian W. Trader, K. Raja Reddy, Richard L. Harkess, Mengmeng Gu and Frank B. Matta, Department of Plant and Soil Sciences, 117 Dorman Hall, Box 9555, Mississippi State University, Mississippi State, MS 39762, USA

Using GIS Technology to Evaluate Transportation of Ornamental Crops in Georgia. Javier Mantilla^{1*}, Paul Thomas¹, Forrest Stegeline², Jack Houston², Matthew Chappel¹, ¹222 Hoke Smith Building, Department of Horticulture, University of Georgia, Athens, GA 30602, ²313 Conner Hall, University of Georgia, Department of Agricultural and Applied Economics, Athens, GA 30602. (javiermc@uga.edu)

Yield and quality characteristics of selected blueberry (*V. ashei*) cultivars. Richard Potter*, E. Coneva¹, J. Sibley¹, F. Woods, J. Spiers¹, B. Wilkins¹, E. Vinson¹, and A. Caylor², ¹Department of Horticultural Science, Auburn University, Auburn, AL 36830-7418, ²North Alabama Horticultural Experiment Station, 765 County Road 1466, Cullman, AL 35055. (potterj@auburn.edu)

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

Room: Palms Ballroom Salon A

Presiding: Mike Arnold, 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: (ma-arnold@tamu.edu)

1:00 pm – 3:00 pm Order of presentations determined by drawing at beginning of contest.

Determining the effect of ethylene on internal black marbling expression in sweetpotato. Peter J. Dittmar*, Katherine M. Jennings, David W. Monks, and Jonathan R. Schultheis. Department of Horticultural Science, North Carolina State University, Raleigh, NC 27695-7609. (pjdittma@ncsu.edu)

Establishing a transformation system for western-shipper and honey-dew melons (*Cucumis melo*). Yan Ren¹, Ian Curtis², Haejeen Bang¹, Jean Gould^{1,3}, Bhimanagouda S. Patil¹, and Kevin M. Crosby¹, ¹Vegetable and Fruit Improvement Center, Department of Horticultural Sciences, Texas A&M University, College Station, TX 77845, ²Texas AgriLife Research, Weslaco, TX 78596, ³Department of Ecosystem Science and Management, Texas A&M University, College Station, TX 77843. (kcrosby@ag.tamu.edu)

Evaluating the Genetic Diversity of Natural *C. leavenworthii* Populations and Gene Flow from *C. tinctoria*. Sarah M. Smith*, David M. Czarnecki II and Zhanao Deng, Department of Environmental Horticulture, Gulf Coast Research and Education Center, University of Florida, Wimauma, FL 33598. (smith04@ufl.edu)

Fresh market tomato irrigation management on sandy loam soils. Catherine Fleming^{1*}, Mark Reiter², and Joshua Freeman², ¹Department of Crop and Soil Environmental Sciences, Virginia Polytechnic Institute & State University, Blacksburg, VA 24061, ²Virginia Polytechnic Institute and State University Eastern Shore Agricultural Research and Extension Center, 33446 Research Drive, Painter, VA 23420. (cathy@vt.edu)

Mulch Type. Theodore McAvoy^{*1} and Josh H. Freeman², ¹Department of Horticulture, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061, ²Eastern Shore Agriculture Research and Extension Center, Painter, VA 23420. (mcavoy@vt.edu)

Polyploids in Lantana (*Lantana camara*): Possible Origins, Uses for Breeding and Association with Invasiveness. David M. Czarnecki II* and Zhanao Deng, Environmental Horticulture Department, Gulf Coast Research and Education Center, University of Florida, Wimauma, FL. 33598. (aggator@ufl.edu)

Soil Persistence of Dimethyl Disulfide Fumigant due to Application Rate, Chemical Formulation, and Plastic Mulch Type. Theodore McAvoy^{*1} and Josh H. Freeman², ¹Department of Horticulture, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061, ²Eastern Shore Agriculture Research and Extension Center, Painter, VA 23420. (mcavoy@vt.edu)

EXTENSION SECTION

Room: Azalea Room

Presiding: Robert Boozer

Abstracts: To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: (boozert@auburn.edu)

8:00 Formation of an eXtension Grape Community of Practice, Eric T. Stafne^{1*}, Ed Hellman², Keith Striegler³, and Kathleen Kelsey⁴, ¹358 Agricultural Hall, Department of Horticulture and Landscape Architecture, Oklahoma State University, Stillwater, OK 74078, ²Texas AgriLife Extension Service Agricultural Research and Extension Center, 1102 E. FM 1294 Lubbock, TX 79403-6603, ³Institute for Continental Climate Viticulture and Enology, Division of Food Systems and Bioengineering, College of Agriculture, Food, and Natural Resources, 108 Eckles Hall, University of Missouri – Columbia, Columbia, MO 65211-5140, ⁴Agricultural Education, Communications, & Leadership, Oklahoma State University, 466 Agricultural Hall, Stillwater, OK 74078. (eric.t.stafne@okstate.edu)

8:15 Development of the All about Blueberries eXtension CoP SCRI Proposal, Natalie Hummel*, LSU AgCenter, Department of Entomology, 404 Life Sciences Building, Louisiana State University, Baton Rouge, LA 70803-1710. (nhummel@agcenter.lsu.edu)

8:30 Urban Water Conservation through Rainwater Harvesting: Evaluation of

Knowledge Gains and Behavioral Changes, Tony A. Glover^{1*}, Sallie Lee¹, Cathy Sabota² and Kerry Smith³, ¹Alabama Cooperative Extension System, C. Beaty Hanna Horticulture Center, 2612 Lane Park Road, Birmingham, AL 35223, ²Alabama Cooperative Extension System, Urban Affairs, Alabama A&M University, P.O. Box 69, Normal, AL 35762, ³Auburn University, Department of Horticulture, 101 Funchess Hall, Auburn University, AL 36849. (gloveta@aces.edu)

8:45 Sweetpotatoes as an alternative crop for small farms in East Kentucky, Timothy Coolong*, Department of Horticulture, University of Kentucky, Lexington, KY 40546. (timcoolong@uky.edu)

9:00 Establishing Priorities for Pest Management Research and Extension Activities for Vegetable Production in Miami-Dade County through Grower / Supplier Surveys Mary Lamberts¹, Dakshina Seal² and Shouan Zhang², ¹UF Miami-Dade County Extension, 18710 SW 288th Street, Homestead, FL 33030, ²UF Tropical Research & Education Center, 18905 SW 280th Street, Homestead, FL 33031 (lamberts@ufl.edu)

9:15 Break

9:30 The Green Industries: A Horticulture Course to Improve Professionalism. Adrian Hunsberger* and Henrique Mayer, University of Florida Miami-Dade County Extension, 18710 SW 288th Street, Homestead, FL 33030 (aghu@ufl.edu)

9:45 Programmatic Teams for State Extension Professionals: Experiences since 2006 at Clemson University, Desmond R. Layne*, 165 Poole Agricultural Center, Box 340375, Department of Horticulture, Clemson University, Clemson, SC, 29634-0319. (dlayne@clemson.edu)

10:00 Increasingly blurred state boundaries in Small Fruit Crop Extension and How the Southern Region Small Fruit Consortium is Helping from a State Specialist's Perspective, Barclay Poling*¹, Tom Monaco¹, Gina Fernandez¹, Bill Cline², Powell Smith³, ¹Department of Horticulture Science, Kilgore Hall, Box 7609, North Carolina State University, Raleigh, NC 27695-7609, ²Horticultural Crops Research Station, 3800 Castle Hayne Road, Castle Hayne, NC 28429, ³CUCES-Lexington County, 605 W. Main Street Ste. 109, Lexington, SC 29072. (barclay_poling@ncsu.edu)

10:15 Peach Germplasm Evaluation Program at Clemson University: An Overview Desmond R. Layne*, 165 Poole Agricultural Center, Box 340375, Department of Horticulture, Clemson University, Clemson, SC, 29634-0319. (dlayne@clemson.edu)

10:30 Preliminary Findings from the Alabama Insect Pest Survey using Pheromone Traps, Ayanava Majumdar^{1*}, Henry Fadamiro², and Robert Boozer³, ¹Gulf Coast Research and Extension Center, 8300 State Hwy 104, Fairhope, AL 36532, ²Department of Entomology and Plant Pathology, 346 Funchess Hall, Auburn University, Auburn, AL 36849, ³Chilton Research and Extension Center, 120 County Road 756, Clanton, AL 35045. (bugdoctor@auburn.edu)

EDUCATION SECTION

Room: Azalea Room

Presiding: Richard Harkess

Abstracts: To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: (rharkess@pss.msstate.edu)

3:00 Horticulture Career and Professional Development: A seminar course to talk about the “real world”. Curt R. Rom* Department of Horticulture, PTSC 316, University of Arkansas, Fayetteville, AR 72701. (crom@uark.edu)

3:15 History and Analysis of the Environmental Education Program at SFA Gardens. David Creech* and Elyce Rodewald, College of Forestry and Agriculture, PO Box 13000, Stephen F. Austin State University, Nacogdoches, TX 75962-3000. (dcreech@sfasu.edu)

3:30 Horticulture Summer Seminar: A Tool for Increasing Horticulture Awareness in High School Students. Richard L. Harkess*, Department of Plant and Soil Sciences, Mississippi State University,

VEGETABLE CROPS SECTION

Room: Palms Ballroom Salon A

Presiding: Annette Wszelaki

Abstracts: To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: r (awszelak@utk.edu)

Solanaceous Crops

3:00 Utilization of Grafted Tomato Seedlings for Open Field Production. Josh H. Freeman*¹, Theodore McAvoy², Steve Rideout¹, Adam Wimer¹, Virginia Polytechnic Institute and State University, Eastern Shore Agricultural Research and Extension Center, 33446 Research Drive, Painter, VA 23420. Department of Horticulture, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061. (joshfree@vt.edu)

3:15 Fresh Market Tomato Irrigation Management on Sandy Loam Soils. Catherine Fleming^{1*}, Mark Reiter², and Joshua Freeman², ¹Department of Crop and Soil Environmental Sciences, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061, ²Virginia Polytechnic Institute and State University, Eastern Shore Agricultural Research and Extension Center, 33446 Research Drive, Painter, VA 23420. (cathy@vt.edu)

3:30 Water Movement below Drip-irrigated Tomatoes Grown in Sandy Soil. Bee Ling Poh*, Aparna Gazula and Eric H. Simonne, Horticultural Sciences Dept, University of Florida, 1228 Fifield Hall, PO Box 110690, Gainesville, FL 32611-0690. (pohbeeling@ufl.edu)

3:45 Quality and Yield of Hybrid and Heirloom Tomatoes Grown for the Early Market Using Season Extension Structures. Annette L. Wszelaki* and Mary Rogers, Department of Plant Sciences, University of Tennessee, 252 Ellington Plant Sciences Building, 2431 Joe Johnson Dr., Knoxville, TN 37996. (annettew@utk.edu)

4:00 Break**4:15 Effects of Shoot Pruning on Bacterial Spot Infection on Tomato Cultivars.**

Bielinski M. Santos* and Gary E. Vallad. Gulf Coast Research and Education Center, IFAS, University of Florida. (bmsantos@ufl.edu).

4:30 Earth-Kind Tomato Production. Joseph G. Masabni* and Patrick Lillard, Department of Horticultural Sciences, Texas A&M University, College Station, TX 77843-2134. (jmasabni@ag.tamu.edu)

4:45 Height Control in Three Pepper Varieties Using Exogenous ABA Applications, Christopher J. Biai*, Jose Garzon and Chris Gunter, Department of Horticultural Science, North Carolina State University, 230 Kilgore Hall, Box 7609, Raleigh, NC 27695-7609. (cjbai@ncsu.edu)

POSTERS

Room: Palms Ballroom Salon E

Presiding: Gary Bachman

Abstracts: To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: (gbachman@ext.msstate.edu)

Set-Up: Sunday, 8:00 am –12:00 pm

Poster Viewing Sunday noon to Monday 11:00 am

Authors at Poster:

Sunday, 1:00 - 2:00 pm even numbered posters

Sunday, 2:00 - 3:00 pm odd numbered posters

Students in Competition at Poster:

Sunday, 3:00 - 4:00 pm all students at posters

Take-down: Monday, after Business Meeting

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 posters Sunday, 3:00 - 4:00 pm.

1G A Bioassay To Determine Potential Phytotoxicities In Aged And Fresh Whole Tree.

Whitney Griffin, G.B. Fain, D.J. Eakes, C.H. Gilliam, and J.L. Sibley. Department of Horticulture, Auburn University, Auburn, AL 36849. (griffwn@auburn.edu)

2G Drought Tolerance of *Quercus* series *Virentes* accessions in Texas.

Adam L. Purnell*, Cynthia McKenney, and Thayne Montague, Department of Plant & Soil Science, Texas Tech University, M.S. 2122, Lubbock, TX 79409 (adam.l.purnell@ttu.edu)

3G Impact of Post-establishment Applied Organic Mulch on Gas Exchange and Growth of Landscape Tree Species. Kaylee Whitehurst*, Thayne Montague, Cynthia McKenney, Department of Plant and Soil Science, Texas Tech University, Lubbock, Texas, U.S.A. 79409-2122 (thayne.montague@ttu.edu)

- 4G Survey of white-tailed deer impacts on ornamental plants in Alabama.** L. Ashley Baker^{1*}, D. Joseph Eakes¹, Christine H. Coker², Carolyn W. Robinson¹, Glenn B. Fain¹, Stephen S. Ditchkoff³, ¹101 Funchess Hall, Department of Horticulture, Auburn University, Auburn University, AL 36849, ²1815 Popp's Ferry Rd., Coastal Research and Extension Center, Biloxi, MS 39532, ³3301 Forestry and Wildlife Science Building, School of Forestry and Wildlife Sciences, Auburn University, Auburn University, AL 36849. (bakerl3@auburn.edu)

Floriculture, Ornamentals and Turf

- 5) Developing Cell Membrane Thermostability and Triphenyl Tetrazolium Chloride Cell Viability Tests for Assessing Heat Tolerance in Ivy Geraniums.** Mingshu Zhang* and Richard L. Harkess, Department of Plant and Soil Science, Mississippi State University, Mississippi State, MS 39762. (rharkess@pss.msstate.edu)
- 6) Efficacy of Biofungicides for Control of Pythium root rot in Poinsettia (*Euphorbia pulcherrima* Willd. ex Klotzsch).** Mengmeng Gu^{1*}, and Maria Tomaso-Peterson², ¹BOX 9555, Department of Plant and Soil Sciences, Mississippi State University, Mississippi State, MS 39762, ²BOX 9655, Department of Entomology and Plant Pathology, Mississippi State University, Mississippi State, MS 39762. (mgu@pss.msstate.edu)
- 7) Evaluation of Oxyfluorfen + Prodiamine Herbicide Combination for Safety in Woody Ornamentals.** B. W. Trader*, M. Gu, A. May, K. Gajanayake, D. Cochran, and S. Huff. Department of Plant and Soil Sciences, Mississippi State University, Mississippi State, MS 39762. (btrader@pss.msstate.edu)
- 8) Home gardening workshop demographics of South Mississippi.** Gary R. Bachman, Christine Coker, Nancy Freeman. Mississippi State University, Coastal Research and Extension Center, Biloxi, MS 39532. (gbachman@ext.msstate.edu)

Fruit Crops

- 9) Lack of nut production in a potentially sterile, late-flowering ornamental tung oil tree (*Aleurites fordii*.)** Timothy A. Rinehart and Ned Edwards. USDA-ARS-MSA, Southern Horticultural Laboratory, 810 Highway 26 West, Poplarville, MS 39470. (tim.rinehart@ars.usda.gov)
- 10) A New Blueberry Variety for Home Gardeners.** D. Scott NeSmith*, Dept. of Horticulture, 1109 Experiment Street, University of Georgia, Griffin, GA 30223-1797 (snesmith@griffin.uga.edu)
- 11) A Time-course of Fruit Deterioration of 'Martinez' Spanish Lime (*Melicoccus bijugatus*) in Post-harvest.** J. Pablo Morales-Payan* & Bryan Brunner, 010-A Pinero Hall, Department of Crops and Agro-Environmental Sciences. University of Puerto Rico, Mayaguez Campus. Mayaguez, PR 00681 (morales.payan@upr.edu)
- 12) Discovering Raspberries: Molecular Markers For *Rubus idaeus* Fruit And Fruiting Traits.** Jessica Spencer, Gina Fernandez and Bryon Sosinski. NC State University, Dept of Horticultural Science. Raleigh, NC 27695. (yenchez@nc.rr.com)
- 13) Effect of growing location on fruit quality of muscadine grape cultivars.** Elina

Coneva^{1*}, J. Burkett², J. Pitts³, and E. Vinson¹. ¹101 Funchess Hall, Department of Horticulture, Auburn University, Auburn, AL 36849, ²Alabama Agricultural Experiment Station, 4725 County Rd. 40, Shorter, AL 36075, ³Alabama Agricultural Experiment Station, 120 County Rd. 756, Clanton, AL 35045. (edc0001@auburn.edu)

- 14) Effects of an *Ascophyllum nodosum* Extract on Coffee Plants.** Nehyra Toro and J. Pablo Morales-Payan*, 010-A Pinero Hall, Department of Crops and Agro-Environmental Sciences. University of Puerto Rico, Mayaguez Campus. Mayaguez, PR 00681 (morales.payan@upr.edu)
- 15) Fruiting Characteristics of Ten Fig Cultivars for the Gulf South Region.** R.A. Mirabello, Jr*, C.E. Johnson and J.E. Boudreaux, School of Plant, Environmental and Soil Sciences, Louisiana State University, Baton Rouge, LA 70803. (RMirabello@agcenter.lsu.edu)
- 16) Influence of Biostimulants on Growth and Systemic Acquired Resistance in Avocado and Citrus in the Nursery Stage.** J. Pablo Morales-Payan*, 010-A Pinero Hall, Department of Crops and Agro-Environmental Sciences. University of Puerto Rico, Mayaguez Campus. Mayaguez, PR 00681 (morales.payan@upr.edu)
- 17) Influence of Rootstocks on Physiology of Merlot Grapevines on the Texas High Plains.** Thayne Montague*, Edward Hellman, and Keith Jenkins, Texas AgriLife Research and Extension Center, Lubbock, Texas, U.S.A. 79403-6603, Department of Plant and Soil Science, Texas Tech University, Lubbock, Texas, U.S.A. 79409-2122 (thayne.montague@ttu.edu)
- 18) Postharvest Evaluation of Prime-Ark® 45 Primocane-Fruiting Blackberry.** Sandra Sleezer and John. R. Clark, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701 (ssleezer@uark.edu)
- 19) Suziblue: A New Early Ripening Southern Highbush Blueberry.** D. Scott NeSmith*, Dept. of Horticulture, 1109 Experiment Street, University of Georgia, Griffin, GA 30223-1797 (snesmith@griffin.uga.edu)
- 20) Three New Fig Cultivars for the Gulf South.** C.E. Johnson*, R.A. Mirabello, Jr. and J.E. Boudreaux, School of Plant, Environmental and Soil Sciences, Louisiana State University, Baton Rouge, LA 70803. (CEJohnson@agcenter.lsu.edu)

Vegetable Crops

- 21) ClO₂ as a Sanitizer for Closed Loop Irrigation Systems in Bell Pepper.** Libby Davies,* Danielle Treadwell, and Michael Alligood, Department of Horticultural Sciences, University of Florida. PO Box 110690, Gainesville, FL 32611-0690. (libbydavies@ufl.edu)
- 22) Effect of Cultural Practices on Pumpkin, Gourd, and Squash Production.** G.D. Hoyt and R.J. Gehl, Department of Soil Science, North Carolina State University, Mountain Horticultural Crops Research and Extension Center, Mills River, NC 28759. (greg_hoyt@ncsu.edu)
- 23) Hydraulic conductance characteristics of common rootstocks for watermelon grafting.** John L. Jifon^{1*} ¹Texas AgriLife Research and Extension Center, Weslaco, TX

78596. (jljifon@ag.tamu.edu).

24) Hydraulic Conductance Characteristics of Common Rootstocks for Watermelon Grafting. John L. Jifon^{1*} ¹Texas AgriLife Research and Extension Center, Weslaco, TX 78596. (jljifon@ag.tamu.edu)

25) Investigating Flavonoid and Capsaicin Levels in Various Texas A&M Habanero (*Capsicum chinense*) Breeding Lines When Grown in Multiple Locations in Texas. Justin Butcher¹, Kevin Crosby¹, Daniel Leskovar², and Kil Sun Yoo¹, ¹Vegetable and Fruit Improvement Center, Dept. of Horticultural Sciences, Texas A&M University, College Station, TX 77845, ²Texas AgriLife Experiment Station, Texas A&M University, 1619 Garner Field Rd., Uvalde, TX 78801

26) Response of Mustard Greens to Gypsum in Sulfur Deficient Light and Heavy Textured Soils. D.J. Makus, USDA, ARS, Weslaco, TX 78596. (Donald.Makus@ars.usda.gov)

27) Row Arrangements, Seeding Rates, and Gibberellic Acid Treatments to Improve Yield of Machine-Harvested Cilantro. Brian A. Kahn* and Niels O. Maness, Department of Horticulture and Landscape Architecture, Oklahoma State University, Stillwater, OK 74078-6027. (brian.kahn@okstate.edu)

28) Soil Changes after Four Years of Organic Vegetable Production. Warren Roberts*, Jim Shrefler, and Merritt Taylor. Wes Watkins Agricultural Research and Extension Center, Oklahoma State University, PO Box 128, Lane, OK 74555. (wroberts@lane-ag.org)

29) The Effects of Daminozide on Flower Production and Sex Ratios in Hydroponic Greenhouse Cucumbers (*Cucumis sativus*). Daniel C. Messick* and Nathan C. Phillips, School of Agribusiness and Agriscience, Middle Tennessee State University, Murfreesboro, TN 37132. (dcm3r@mtsu.edu)

30) Yield of Watermelon and Suppression of Purple Nutsedge as Affected by Mulching with Polyethylene and Selected Plant Materials Available in Puerto Rico. Jorge Fuentes-Fuster, Jose Pablo Morales-Payan*, Pedro Marquez-Mendez and Sonia Martinez-Garrastazu. 010-A Pinero Hall, Department of Crops and Agro-Environmental Sciences. University of Puerto Rico, Mayaguez Campus. Mayaguez, PR 00681 (morales.payan@upr.edu)

31) Yield Response of Okra to Transplanting. James Shrefler¹, Lynn Brandenberger², Merritt Taylor^{1*} and Warren Roberts¹, ¹Wes Watkins Agricultural Research and Extension Center, Oklahoma State University, PO Box 128, Lane, OK 74555, ²Department of Horticulture and L.A., 360 Ag Hall, Stillwater, OK 74078. (jim.shrefler@okstate.edu)

Other

32) Multiple Comparisons of Treatment Means Using the Simulation-Stepdown Method in SAS. Eugene K. Blythe*, Coastal Research and Extension Center, Mississippi State University, South Mississippi Branch Experiment Station, Poplarville, MS 39470. (blythe@pss.msstate.edu)

Monday, February 8, 2010

POSTERS

Room: Palms Ballroom Salon E

Presiding: Gary Bachman

Abstracts: To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: (gbachman@ext.msstate.edu)

Poster Viewing Monday 8:00-11:00 am

Take-down: Monday, after Business Meeting

ANNUAL BUSINESS MEETING AND AWARDS PROGRAM

Room: Jasmine

Time: 11:00 – 12:30

Presiding: Jim Ballington, President

VEGETABLE CROPS SECTION

Room: Oleander A

Presiding: Annette Wszelaki

Abstracts: To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: (awszelak@utk.edu)

Morning Session

8:00 Cultivation and Nutraceutical Content of Virginia Grown Edamame. Luther C. Carson*¹, Josh Freeman², Kequan Zhou³ and Gregory Welbaum¹, ¹Department of Horticulture, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061, ²Virginia Polytechnic Institute and State University, Eastern Shore Agricultural Research and Extension Center, Painter, VA 23420, ³Department of Food Science, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061. (lutherc@vt.edu)

8:15 Control of Spring Weed Populations in Mustard (*Brassica juncea*) Utilizing Preemergence Herbicides. Lynn Brandenberger* and Lynda Carrier. Department of Horticulture and Landscape Architecture, Oklahoma State University, Stillwater, OK 74078-6027. (lynn.brandenberger@okstate.edu)

8:30 Breeding Disease Resistant Pumpkins for Georgia. George E. Boyhan*, Suzanne Tate, and Ryan McNeill. Department of Horticulture, University of Georgia, 1111 Miller Plant Science Bldg., Athens, GA 30602. (gboyhan@uga.edu)

8:45 Three-year Study Examining Storability of Sweet Onions Using Various Harvest Methods and Cultivars at Vidalia, Georgia. B. G. Mullinax^{1*}, B. W. Maw², D. Dales², and C. Welsh², ¹Texas A&M University – Lubbock, 1102 East FM 1294 Road, Lubbock, TX 79403, ²University of Georgia – Tifton, P.O. Box 748, Tifton, GA 31793-0748. (bgmullinax@ag.tamu.edu)

- 9:00 Snap Bean Nitrogen Management in the Mid-Atlantic.** Mark Reiter* and Joshua Freeman, Virginia Polytechnic Institute and State University, Eastern Shore Agricultural Research and Extension Center, 33446 Research Drive, Painter, VA 23420. (mreiter@vt.edu)
- 9:15 Break**
- 9:30 Rootstock Selection Effects Grafted Melons by Impacting Yield and Fruit Quality.** Richard L. Hassell, Department of Environmental Horticulture, Clemson University CREC, 2700 Savannah Highway, Charleston, South Carolina 29424. (rhassel@clemson.edu)
- 9:45 Evaluation of Reflex in Watermelon, Squash, and Pepper.** Joseph G. Masabni* and Patrick Lillard, Department of Horticultural Sciences, Texas A&M University, College Station, TX 77843-2134. (jmasabni@ag.tamu.edu)
- 10:00 Developing Cantaloupe Lines with Resistance to Multiple Vine Decline Pathogens.** Kevin M. Crosby¹* and Daniel I. Leskovar² ¹Vegetable and Fruit Improvement Center, Dept. of Horticultural Sciences, Texas A&M University, College Station, TX 77845 ²Texas AgriLife Research and Extension Center, 1619 Garner Field Rd., Uvalde, TX 78801. (kcrosby@ag.tamu.edu)
- 10:15 Effects of Chlorflurenol and an *Ascophyllum nodosum* Extract on Watermelon J.** Pablo Morales-Payan*, 010-A Pinero Hall, Department of Crops and Agro-Environmental Sciences. University of Puerto Rico, Mayaguez Campus. Mayaguez, PR 00681. (morales.payan@upr.edu)
- 10.30 Maturity Date and Transplant Stage Influence Productivity of Transplanted Sweet Corn.** Timothy Coolong*, Darrell Slone, and Janet Pfeiffer, Department of Horticulture, University of Kentucky, Lexington, KY 40546. (timcoolong@uky.edu)
- Break to attend SR-ASHS Business Meeting at 11:00-12:30 and lunch**
- Afternoon Session**
- 1:00 Efforts to Improve Sulfur Nutrition in Sandy Soils,** Camille E. Esmel¹*, Bielinski M. Santos¹, John E. Rechcigl¹, Guralp Toor¹, Eric H. Simonne², Joseph W. Noling³, Department of Horticultural Sciences, University of Florida, ¹14625 CR 672 Wimauma, FL 33598, ²P.O. Box 110220 Gainesville, FL 32611, ³700 Experiment Station Rd., Lake Alfred, FL33580. (cami13@ufl.edu)
- 1:15 Soil Persistence of Dimethyl Disulfide Fumigant due to Application Rate, Chemical Formulation, and Plastic Mulch Type.** Theodore McAvoy*¹ and Josh H. Freeman², ¹Department of Horticulture, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061, ²Eastern Shore Agriculture Research and Extension Center, Painter, VA 23420. (mcavoy@vt.edu)
- 1:30 The Relative Abundance of Weeds in Reduced-Till, Organic Broccoli Utilizing Living Mulches.** Sarah E. Broughton* and Annette L. Wszelaki, Department of Plant Sciences, University of Tennessee, 252 Ellington Plant Sciences Building, 2431 Joe Johnson Dr., Knoxville, TN 37996. (sbroughton@utk.edu)
- 1:45 Performance of Strawberry Cultivars in High Tunnel Culture.** Teresa P. Salame*,

Bielinski M. Santos, Craig K. Chandler, and Steven A. Sargent. Gulf Coast Research and Education Center, IFAS, University of Florida. (bmsantos@ufl.edu).

2:00 Break

2:15 Effects of Irrigation Volumes and Frequencies on the Growth, Yield and Postharvest Quality of Strawberry. Maricruz Ramirez-Sanchez*, Bielinski M. Santos, Craig K. Chandler, and Steven A. Sargent. Gulf Coast Research and Education Center, IFAS, University of Florida. (bmsantos@ufl.edu).

2:30 Effects of Planting Density and Apical Removal on the Performance of *Crotalaria juncea* for Horticultural Systems Jacqueline Halbrendt*, J. Pablo Morales-Payan, Sonia Martínez Garrastazú, Bryan Brunner, Luisa Flores & Juan Toro. 010-A Pinero Hall, Department of Crops and Agro-Environmental Sciences. University of Puerto Rico, Mayaguez Campus. Mayaguez, PR 00681. (morales.payan@upr.edu)

2:45 Effects of Irrigation Rates on Plant Growth and Fruit Yield in Seedless Watermelon, Juan Diaz-Perez¹, Ji Pingsheng², and Dan MacLean¹, ¹Department of Horticulture, ²Department of Plant Pathology, University of Georgia, Plant Sciences Building, Coastal Plain Experiment Station, Tifton, GA 31793. (jcdiaz@uga.edu)

FRUIT CROPS SECTION

Room: Oleander B

Presiding: Elina Coneva

Abstracts: To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: (edc0001@auburn.edu)

Morning Session

8:00 Survey of Dehydrin Genes in Peach Germplasm. Ksenija Gasic^{1*}, Nannan Yang¹, Carole L. Bassett², Chris Dardick² and Vladislav Ognjanov³, ¹Department of Environmental Horticulture, Clemson University, E-143 Poole, Clemson, SC, 29634, ²USDA-AFRS, 2217 Wiltshire Rd., Kearneysville, WV 25430, ³ Department of Pomiculture and Viticulture, University of Novi Sad, Faculty of Agriculture, Sq. Dositej Obradovic 8, 21000 Novi Sad, Serbia. (kgasic@clemson.edu)

8:15 Mechanical Flower Thinning of Peach Trees trained to a Quad-V System. Gregory L. Reighard* and W. Henderson, 170 Poole Ag Center, Department of Horticulture, Clemson University, Clemson, SC, 29634-0319. (grghrd@clemson.edu)

8:30 Preharvest application of ethephon to enhance quality of 'Alred' peach. F.M. Woods^{1*}, E. Coneva¹, E.L. Vinson, III¹, J. Pitts², B.D. Blasius¹, and B. S. Wilkins¹. ¹101 Funchess Hall, Department of Horticulture, Auburn University, AL 36849, ²Alabama Agriculture Experiment Station, 120 County Rd. 756, Clanton, AL 35045. (woodsfm@acesag.auburn.edu).

8:45 The Effects of Girdling and Benefit® Application on Fruit Growth of New Kiwifruit Cultivars. Jay D. Spiers^{1*}, William Dozier¹, Bryan Wilkins¹, and Jim Pitts². ¹Department of Horticulture, Auburn University, 101 Funchess Hall, Auburn, AL 36849, ²Alabama Agricultural Experiment Station, Chilton Research and Extension

Center, 120 Co. Rd. 756, Clanton, AL 35045. (jds0017@auburn.edu).

9:00 Physiological Differences of Cool, Warm, and Hot Climate Grapevine Varieties on the Texas High Plains. Thayne Montague*, Edward Hellman, and Keith Jenkins. Texas AgriLife Research and Extension Center, Lubbock, Texas, U.S.A. 79403-6603, Department of Plant and Soil Science, Texas Tech University, Lubbock, Texas, U.S.A. 79409-2122. (thayne.montague@ttu.edu)

9:15 Break

9:30 Using High Tunnels and Day-neutrals for 9 Months of Continuous Strawberry Fruiting in the Upper Mountains of North Carolina. E. Barclay Poling*¹, Rocco Schiavone¹, and Larry Wohlers², ¹Department of Horticultural Science, NC State University, Raleigh, NC 27695-7609, ² Upper Mountain Research Station (NCDA), Laurel Springs, NC 28644-9406. (barclay_poling@ncsu.edu)

9:45 Timing of bloom and harvest for autumn production of primocane fruiting blackberries for high tunnels. Curt R. Rom*, Heather Friedrich, and Elena Garcia, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701. (crom@uark.edu)

10:00 Prospects for Midas as an Alternative to Methyl Bromide in North Carolina. E. Barclay Poling*, and Rocco Schiavone, Department of Horticultural Science, NC State University, Raleigh, NC 27695-7609. (barclay_poling@ncsu.edu)

10:15 Impacts of temperature on node formation and bloom date of primocane-fruiting blackberry genotype APF-52 under hightunnel and ambient conditions and multiple mowing treatments. Christopher I. Vincent* and M. Elena Garcia, 316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701. (civince@uark.edu)

Break to attend SR-ASHS Business Meeting at 11:00-12:30 and lunch

Afternoon Session

1:00 Regional influence on antioxidant properties of selected rabbiteye blueberry cultivars in Alabama. F. M. Woods¹, E. Coneva¹, E. Vinson, III¹, A. Caylor², and B.D. Blasius¹. ¹101 Funchess Hall, Department of Horticulture, Auburn University, AL 36849, ²Alabama Agriculture Experiment Station, 765 County Rd. 1466, Cullman, AL 35055. (woodsfm@acesag.auburn.edu).

1:15 Survey of Commercial Blueberry Farms in Arkansas. M. Elena Garcia^{1*}, Christopher I. Vincent¹, Donn T. Johnson², Ioannis Tzanetakis³, ¹316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701, ²310 Agriculture, Department of Entomology, University of Arkansas, Fayetteville, AR 72701, ³216 Plant Science, Department of Plant Pathology, University of Arkansas, Fayetteville, AR 72701. (megarcia@uark.edu)

1:30 Brushy Weed Control in Blueberries. Stephen Stringer* and Ned Edwards. USDA-ARS Southern Horticulture Laboratory, Poplarville, MS, 39470. (Stephen.Stringer@ars.usda.gov)

1:45 Effect of irrigation on fruit production and quality of rabbiteye blueberry. Elina

Coneva^{1*}, T. Tyson², R. Boozer³, N. Kelly³, and E. Vinson¹. ¹101 Funchess Hall, Department of Horticulture, Auburn University, Auburn, AL 36849, ²200 Corley Building, Department of Biosystems Engineering, Auburn University, Auburn, AL 36849, ³ACES, 104 Duncan Hall, Auburn University, Auburn, AL (edc0001@auburn.edu)

FLORICULTURE, ORNAMENALS AND TURF SECTION

Room: Magnolia

Presiding: Allen Owings

Abstracts: To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: (aowings@agctr.lsu.edu)

- 8:00 Effect of three pruning techniques on flowering of Natchez Crapemyrtles (*L. indica* x *L. fauriei* ‘Natchez’).** Gary L. Wade*, Department of Horticulture, The University of Georgia, 221 Hoke Smith Bldg, Athens, GA 30602. (gwade@uga.edu)
- 8:15 Growth retardant use on herbaceous perennials grown under night interrupted lighting outdoors in the southern United States.** J. Raymond Kessler, Jr.* and Gary J. Keever, Department of Horticulture, Auburn University, Auburn, AL 36849. (kessljr@auburn.edu)
- 8:30 *Taxodium* genotype performance at the SFA gardens.** David Creech* and Lijing Zhou, College of Forestry and Agriculture, P. O. Box 13000, Stephen F. Austin State University, Nacogdoches, TX 75962. (dcreech@sfasu.edu)
- 8:45 Multi-faceted strategies to train south Florida’s nursery and landscape industries to implement integrated pest management techniques.** Teresa Olczyk* and Henry Mayer, University of Florida/IFAS, Miami-Dade County Extension, Homestead, FL 33030. (twol@ufl.edu)
- 9:00 Break**
- 9:15 Cutting propagation of two perennial species in whole pine tree substrates.** Anthony Witcher^{1*}, Eugene Blythe², Glenn B. Fain⁴, Kenneth J. Curry³, and James M. Spiers¹. ¹USDA-ARS Southern Horticultural Laboratory, 8210 Hwy 26 W, Poplarville, MS 39470; ²Mississippi State University/MAFES, South MS Branch Experiment Station, Poplarville, MS 39470; ³University of Southern Mississippi, Department of Biological Sciences, Hattiesburg, MS 39401; ⁴Department of Horticulture, Auburn University, Auburn, AL 36849. (anthony.witcher@ars.usda.gov)
- 9:30 Evaluation of two perennials (*Agastache* ‘Red Fortune’ and *Penstemon digitalis* ‘Huskers Red’) in low-input nursery production systems.** Nathan C. Phillips*, Jesse R. Traub, and Justin G. Gardner, School of Agribusiness and Agriscience, Middle Tennessee State University, Murfreesboro, TN 37132. (nphillip@mtsu.edu)
- 9:45 Initial evaluation of Griffith Buck rose cultivars under Louisiana growing conditions.** Allen Owings, LSU AgCenter, Hammond Research Station, 21549 Old Covington Highway, Hammond, LA 70403. (aowings@agcenter.lsu.edu)
- 10:00 Alternative media substrates for seasonal crops.** Ed Bush*, Jeff Kuehny, Wanda

Ellis and Leslie Moree-Kerin LSU AgCenter, 137 J. C. Miller Hall, Baton Rouge La. 70803 (ebush@agcenter.lsu.edu)

- 10:15 Magnesium fertilizer sources for woody ornamental container production.** Ed Bush*, Daniel Wells, Allen Owings and Steve Borst, LSU AgCenter, 137 J. C. Miller Hall, Baton Rouge, La. 70803, (ebush@agcenter.lsu.edu)

POST HARVEST/PLANT BIOTECHNOLOGY SECTION

Room: Largo

Presiding: Donna Marshall

Abstracts: To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: (Donna.Marshall@ars.usda.gov)

Morning Session

- 8:00 Tracking water absorption in split-susceptible blueberries.** Donna A. Marshall^{1*}, Kenneth J. Curry², and James M. Spiers¹. ¹USDA-ARS, Southern Horticultural Laboratory, 810 Highway 26 West, Poplarville, MS 39470 ²118 College Drive, #5018, Department of Biological Sciences, University of Southern Mississippi, Hattiesburg, MS 39406 (Donna.Marshall@ars.usda.gov)
- 8:15 Blueberry Fruit Development and Splitting.** Carrie L. Witcher^{1*}, Kenneth J. Curry¹, Donna A. Marshall², and James M. Spiers², ¹118 College Drive, #5018, Department of Biological Sciences, University of Southern Mississippi, Hattiesburg, MS 39406, ²USDA-ARS, Southern Horticultural Laboratory, 810 Highway 26 West, Poplarville, MS 39470. (carrie.witcher@usm.edu)
- 8:30 Developing a protocol for evaluation of fresh market raspberries.** Penny Perkins-Veazie*, G. Fernandez, Jim Ballington. North Carolina State University, Plants for Human Health Institute, Suite 1329, 600 Laureate Way, Kannapolis, NC 28081 (penelope_perkins@ncsu.edu)
- 8:45 Effect of plastic mulch color and row cover on yield and quality of sweet potato.** D. M. Sullen^{1*}, F.M. Woods¹, J. R. Kessler¹, J. E. Brown¹, B.D. Blasius¹, E. L. Vinson, III¹, and J.E. Burkett². ¹101 Funchess Hall, Department of Horticulture, Auburn University, AL 36849, ²Alabama Agriculture Experiment Station, 4725 County Rd. 40, Shorter, AL 36075. (woodsfm@acesag.auburn.edu).
- 9:00 Break**
- 9:15 Effect of Laser Labeling on Survival of *Salmonella* spp. on Tomato Surfaces during postharvest storage.** Lenin O. Interiano Villeda, Loretta M. Friedrich, Keith Schneider, Ed Etxeberria and Michele Danyluk. University of Florida, Citrus Research and Education Center. 700 Experiment Station Rd. Lake Alfred, FL 33850. (eje@crec.ifas.ufl.edu)
- 9:30 Response of the ascorbate-glutathione cycle to storage temperature in carambola fruit.** Jinhe Bai, Y. Imahori and Elizabeth Baldwin. USDA-ARS, Citrus & Subtropical Products Lab, 600 Avenue S, NW, Winter Haven, FL 33881 (Jinhe.Bai@ars.usda.gov)

9:45 Evaluation of the antimicrobial capacity and phenolics of extracts from different section of various muscadine cultivars. Chen, Weiwei¹, Taejo Kim¹, Juan L. Silva¹, Donna Marshall², Stephen Stringer². ¹Mississippi State University ² USDA-ARS Thad Cochran Southern Horticultural Laboratory Poplarville, MS 39470 (JSilva@foodscience.msstate.edu)

10:00 A study on aromatic profiles of *Thymus hyemalis* and Spanish *T. vulgaris* essential oils at five physiological stages. Francisco-Ernesto Loayza-Davila¹, Anne Plotto², Kanjana Mahattanatawee³, Kevin Goodner⁴, and María J. Jordán⁵. ¹ University of Florida, Department of Horticulture, Fifield Hall, Gainesville, FL 32611, ² USDA-ARS, Citrus & Subtropical Products Laboratory, 600 Avenue 'S', NW, Winter Haven, FL 33881, ³ Siam University, 235 Petchkasem Road, Phasi-charoen, Bangkok 10160, Thailand, ⁴ Sensus, LLC, 7255 Hamilton Enterprise Park Dr., Hamilton, OH 45011, ⁵ IMIDA, Departamento de Recursos Naturales y Desarrollo Rural. C./ Mayor s/n, 30150 La Alberca Murcia, Spain (Anne.Plotto@ars.usda.gov)

10:15 Facile removal of ascorbate interference when measuring total phenolics in orange juice with Folin-Ciocalteu method. Brian Ford, Jinhe Bai., Elizabeth A. Baldwin. USDA-ARS Citrus and Subtropical Products Laboratory, 600 Avenue "S" Northwest, Winter Haven FL 33881 (Brain.Ford@ars.usda.gov)

Break to attend SR-ASHS Business Meeting at 11:00-12:30 and lunch

Afternoon Session

1:00 Invited talk on Food Safety in Fresh Fruits and Vegetables

Dynamics between fruit cuticles and surface microflora can affect sanitizing methods Jan Narcisco USDA-ARS Citrus and Subtropical Products Laboratory 600 Avenue S, NW, Winter Haven, FL, 33881 (Jan.Narciso@ars.usda.gov)

1:30 Reduced O₂ and elevated CO₂ tolerance limits of fresh-cut 'Kent' mango during storage. Sharon Dea^{1*}, Jeffrey .K. Brecht², Cecilia do Nascimento Nunes³, Elizabeth A. Baldwin¹, ¹USDA-ARS Citrus & Subtropical Products Laboratory. 600 Ave. S N.W., Winter Haven, FL 33881, ² IFAS Horticultural Sciences Department, University of Florida, 1301 Fifield Hall, Gainesville, FL 32611, ³ IFAS Food Science & Human Nutrition Department, University of Florida, SW 23rd Dr., Bldg. 685, Gainesville, FL 32611. (Sharon.Dea@ars.usda.gov)

1:45 Sanitization treatments of blueberries for the frozen/processing market. Melody Corbitt, Taejo Kim, Juan L. Silva. Department of Food Science, Nutrition and Health Promotion, Mississippi State University, Miss. State, MS 39762 (jsilva@foodscience.msstate.edu)

2: 00 Kiwi fruit quality and antioxidant properties as affected by preharvest application of plant growth stimulating compounds. Floyd M. Woods^{1*}, D.A. Burnie¹, J.R. Kessler¹, W.A. Dozier¹, C. Wall¹, J. Pitts², B.D. Blasius¹ and B. Wilkins¹. ¹101 Funchess Hall, Department of Horticulture, Auburn University, AL 36849, ²Alabama Agriculture Experiment Station, 120 County Rd. 756, Clanton, AL 35045. (woodsfm@acesag.auburn.edu).

2:15 The Fate of *E. coli* O157:H7 and *Salmonella* on Fresh and Frozen Cut Pineapples.

Laura Strawn^{1*} and Michelle Danyluk². ¹Cornell University, Department of Food Science, 410B Stocking Hall, Ithaca, NY 14850 ²University of Florida, Citrus Research and Education Center, 700 Experiment Station Rd. Lake Alfred, FL 33850 (lks67@cornell.edu)

Instructions for Submission of Abstracts for Publication in *HortScience* To Publish Your Abstract in *HortScience*:

- 1) One of the authors must be an active member (dues paid) of the Southern Region ASHS
- 2) The abstract must be submitted as a document file in the proper format.
- 3) 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 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

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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.