

PROGRAM



2017 Annual Meeting

February 3-5, 2017

Mobile, AL

81st Year

Southern Region

American Society for Horticultural Science

97th Year

Horticulture Section

Southern Association of Agricultural Scientists

History of the Southern Region of ASHS and the Horticulture Section of SAAS

In 1899, the State Commissioners of Agriculture in several southern states founded “The Cotton States Association of the Commissioners of Agriculture”, which had horticulture involved in its very beginning. This is the founding organization that evolved into the modern day Southern Association of Agricultural Scientists (SAAS). In 1920, SAAS (which at that time was called Association of Southern Agricultural Works, ASAW) formalized the affiliation with horticulture by founding the Horticulture Section. In 1936, the American Society for Horticultural Sciences approved the Southern States Section, which is now termed the Southern Region of ASHS. In 1937, SAAS accepted the affiliation between the Southern States Section of ASHS with the Horticulture Section of SAAS. Thus, the Southern Region jointly has been a part of both ASHS (with a founding date of 1936) and SAAS (with a founding date 1920). This rich history is detailed in publications by Andy Anderson, 1982, and Paul Smeal, 1999 (available at srashs.org). 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 200 to 500 active members. Membership is composed of professors, 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 consists of presentations of scientific papers, student papers and judging competition, 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 throughout the southern regions.**
- **Encourage participation in the national society of the American Society for Horticultural Science.**

Join us and become a part of the Tradition.

President

Ed Bush

Louisiana State University
School Plant, Environ & Soil Sci.
257 J.C. Miller Hall
Baton Rouge, LA 70803-2120
Phone: 225-578-2158
ebush@agcenter.lsu.edu

President-Elect

Tim Davis

Dept. of Horticultural Sciences
Texas A&M University
College Station, TX
77843-2133
Phone: 979-458-2048
t-davis5@tamu.edu

Secretary-Treasurer

David Wm. Reed

Dept. of Horticultural Sciences
Texas A&M University
College Station, TX
77843-2133
Phone: 979-458-0710
dwreed@tamu.edu

Web Site srashs.org Visit It

PROGRAM

2017 ANNUAL MEETING

Southern Region

American Society for Horticultural Science

Mobile, AL
February 3-5, 2017

FRIDAY*

| | |
|--------------------|--|
| 7:00 am - 6:00 pm | Registration Room: Hotel Lobby |
| 8:00 am - 5:00 pm | Pecan Research and Extension Forum Room: Mobile Bay Ballroom I & II |
| 8:00 am - 5:00 pm | Southern Blueberry/Small Fruit Workers Room: Mobile Bay Ballroom III |
| 8:00 am - 5:00 pm | National Sweetpotato Collaborators Room: Schooner Suite |
| 10:00 am - 1:00 pm | ACB Club Share and Networking Room: Bon Secour I |
| 1:00 pm - 5:00 pm | ACB Group Activities, Tour, and Meal Room: Bon Secour I |
| 1:00 pm - 6:00 pm | Watermelon Research Group Room: Bon Secour II |
| 1:00 pm - 5:00 pm | Horticulture Administrators Room: Jubilee Suite |
| 5:00 pm - 6:00 pm | Executive Committee Meeting Room: Jubilee Suite |
| 5:00 pm - 6:00 pm | ACB Mixer Room: Bon Secour I |

SATURDAY*

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|--------------------|--|
| 7:00 am - 6:00 pm | Registration Room: Ballrooms Center Foyer |
| 8:00 am - 12:00 pm | Set-up Posters Room: Ballrooms Center Foyer |
| 8:00 am - 12:00 pm | J. Benton Storey Horticulture Judging Contest Setup Room: Bon Secour I |
| 8:00 am - 5:00 pm | National Sweetpotato Collaborators Room: Schooner Suite |
| 8:00 am - 6:00 pm | Watermelon Research Group Room: Bon Secour II |
| 8:00 am - 10:15 am | Extension Section Room: Grand Bay Ballroom I |
| 8:00 am - 9:30 am | J. B. Edmond Undergraduate Student Paper Competition. Room: Clipper |
| 9:00 am - 12:00 pm | Vigna Crop Germplasm Committee Room: Windjammer Suite |
| 10:00 am - 2:30 pm | Norman F. Childers M.S. Student Room: Clipper |

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|---------------------|---|
| 10:30 am - 12:00 am | Education Section Room: Grand Bay Ballroom I |
| 1:00 pm - 2:30 pm | Floriculture, Ornamentals and Turf Section Room: Mobile Bay Ballroom I & II |
| 1:00 pm - 3:30 pm | Fruit Crops Section Room: Grand Bay Ballroom I |
| 12:00 pm - 5:00 pm | Poster Session Viewing Room: Ballrooms Center Foyer |
| 12:00 pm - 5:00 pm | J. Benton Storey Horticulture Judging Contest Room: Bon Secour I |
| 1:00 pm - 5:00 pm | National Cowpea Improvement Association Room: Windjammer Suite |
| 3:00 pm - 4:30 pm | Vegetable Crops Room: Mobile Bay Ballroom I & II |
| 3:00 pm - 5:00 pm | Warren S. Barham Ph.D. Student Paper Competition Room: Clipper |

SUNDAY*

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|---------------------|--|
| 7:00 am - 10:45 am | Registration Room: Ballrooms Center Foyer |
| 8:00 am - 10:45 pm | Poster Session Viewing Room: Ballrooms Center Foyer |
| 8:00 am - 10:45 am | Vegetable Crops Section Room: Mobile Bay Ballroom I & II |
| 8:00 am - 10:45 am | Floriculture, Ornamentals and Turf Section Room: Mobile Bay Ballroom III |
| 8:00 am - 10:45 am | Fruit Crops Section Room: Grand Bay Ballroom I |
| 8:00 am - 9:30 am | Postharvest & Biotechnology Section Room: Riverboat Suite |
| 9:00 am - 10:45am | ACB Business Meeting Room: Bon Secour I |
| 11:00 am - 12:30 pm | Annual Business Meeting and Award Program Room: Bon Secour I |
| 1:00 pm - 3:00 pm | Poster Session Take Down Room: Ballrooms Center Foyer |

*All SRASHS meeting rooms are in the Riverview Plaza Hotel

SAAS Program

| | |
|-------------------|--|
| 2:30 pm - 3:30 pm | SAAS Board Meeting Room: Mobile Convention Center Room 203B |
| 4:00 pm - 4:15 pm | SAAS General Business Meeting Room: Mobile Convention Center Room 203B |

SAAS Super Bowl Party

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|--------------|---|
| 4:15 - until | Room: Mobile Convention Center East/West Ballroom |
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TUESDAY

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| 7:30 am - 9:30 pm | SAAS Board Breakfast Meeting Room: Riverview Plaza Hotel Riverboat Suite |
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REGISTRATION

Friday 7:00 am - 6 pm,
Hotel Lobby
Saturday 7:00 am - 6 pm,
Ballroom Central Foyer
Sunday 7:00 am – 10:30 am,
Ballrooms Central Foyer

FRIDAY, February 3, 2017

ACB Activities

Room: Bon Secour I
Riverview Plaza Hotel
Time: 10:00 - 12:00 Club Share
12:00-6:00 Activity/Tour/M meal TBA
Presiding: Andrew Thomas, ACB-President
Jay Spiers, ACB Advisor

SRASHS Executive Committee Meeting

Room: Jubilee Suite
Riverview Plaza Hotel
Time: 5:00 - 6:30
Presiding: Jim Robbins, Chair

Working Groups

Listed at end of program

SATURDAY, February 4, 2017

STUDENT COMPETITIONS

J. BENTON STOREY UNDERGRADUATE JUDGING CONTEST

Room: Bon Secour I
Riverview Plaza Hotel
Time: 8:00 - 12:00 Judging Contest Set-Up
12:00-5:00 Judging Contest
Presiding: Preston Smith, ACB President-Elect
Jay Spiers, ACB Advisor

J. B. EDMOND UNDERGRADUATE STUDENT PAPER COMPETITION

Room: Clipper
Riverview Plaza Hotel
Presiding: Andrew Thomas, ACB-President,
Moderator
Ed Bush, SRASHS President,
Introduce Session
Chris Marble, Section Chair &
Judging Coordinator
Abstracts: To publish abstract in *HortScience*, see
instructions at end of program. Submit
on disk at meeting or email to Chair:
marblesc@ufl.edu

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

**Efficacy of Growth Regulators on the Prevention
of Lodging of Grasses.** Nathaniel Turner* and
Cynthia B. McKenney, Department of Plant and Soil
Science, Texas Tech University, Lubbock, TX
79409-2122. (Nathaniel.Turner@ttu.edu)

**Emergence of a New Leaf Spot Disease on
Hamelia patens cultivars caused by *Xanthomonas*
*sp.*** Crystal J. Conner*, S. Christopher Marble, Aftab
Khan, and David J. Norman. Mid-Florida Research
and Education Center, University of Florida, Apopka,
FL 32703. (c.conner@ufl.edu)

**Growth and Physiology of Three Native
Landscape Plant Species in Two Southeastern
U.S. Soil Types.** Avery Lamb¹*, Amy Wright²,
Raymond Kessler², Eve Brantley¹, and Julie Howe¹.
¹Department of Crop, Soil and Environmental
Sciences, ²Department of Horticulture, Auburn
University, Auburn, AL 36849.
(awright@auburn.edu)

**Rooting Attempts in Stern's Medlar *Mespilus
canescens* J.B. Phipps, a Critically Endangered
Arkansas Endemic Plant Species.** Blake W.
Hawkins¹* and Garry V. McDonald¹, 1316 Plant
Science Building, Department of Horticulture,
University of Arkansas, Fayetteville, AR 72701.
(gmcdonal@uark.edu)

**Texture Evaluations of Southern Highbush and
Rabbiteye Blueberry Varieties.** Mary K. Sutton*,
Rachel A. Itle, and D. Scott NeSmith, Department of
Horticulture, University of Georgia, 1109 Experiment
Street, Griffin, GA 30223. (ritle@uga.edu)

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

Room: Clipper
Riverview Plaza Hotel
Presiding: Tim Davis, Chair
Abstracts: To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: t-davis5@tamu.edu

10:00 am – 2:30 pm Order of presentations determined by drawing at beginning of contest.

Bell pepper shoot and root growth responses to humic substances and deficit irrigation in a controlled environment. Kuan Qin* and Daniel I. Leskovar, Texas A&M AgriLife Research, Department of Horticultural Sciences, Texas A&M University, Uvalde, TX 78801

Cold Hardiness of Peach: Is DTA a Game Changer? Jun Liu^{1*}, Orville Lindstrom¹, Anish Malladi², Erick Smith³, Mercy Olmstead⁴, and Dario Chavez¹, ¹Department of Horticulture, University of Georgia, Griffin Campus, Griffin, GA 30223, ²Department of Horticulture, University of Georgia, Athens, GA 30602, ³Department of Horticulture, University of Georgia, Tifton Campus, Tifton, GA 31793, ⁴Horticultural Sciences Department, University of Florida, Gainesville, FL 32611. (jl79606@uga.edu)

Development of a Standardized Phenotyping Protocol for Blackberry and Evaluation of its Effectiveness in Characterizing Seedling Populations. Melinda H. Yin^{1*}, Melissa Clark², Mary Peterson², Chad E. Finn², and John R. Clark¹, ¹316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701, ²USDA-ARS HCRU, 3420 NW Orchard Ave., Corvallis, OR 97330. (mhyin@email.uark.edu)

Effect of LED Lighting on Growth and Flowering of Greenhouse-Produced Cut Flowers Taylor Mills* and B.L. Dunn, Department of Horticulture & Landscape Architecture, Oklahoma State University, Stillwater, OK 74074. (tsmills@okstate.edu)

Enabling Breeding for Brown Rot (*Monilinia* spp.) Resistance in Peach. Wanfang Fu*, Ralph Burrell, Ksenija Gasic, Department of Plant & Environmental Sciences, Clemson University, Clemson, SC 29630. (wfu@g.clemson.edu)

Essential Oil Yield and Characterization of *Ocimum tenuiflorum* Varieties. Noelle Fuller*, D. Berle, R.B. Pegg, Department of Horticultural Sciences, University of Georgia, Athens, GA 30602-7274. (njfuller@uga.edu)

Evaluation of Rootstocks for Grafted Plants as a Strategy to Manage Southern Blight in Tomato (*Solanum lycopersicum*). Roy Langlois^{1*}, Joe Kemble¹, Elina Coneva¹, Edward Sikora², ¹101 Funchess Hall, Department of Horticulture, Auburn University, Auburn, AL 36849, ²153 ALFA Services Building, Plant Pathology Extension, Auburn University, Auburn, AL 36849. (rwl0011@auburn.edu)

Fruit Bagging for the Production of Peaches in Conventional and Organic Orchards. Jaine Allran^{1*}, Guido Schnabel, and Juan Carlos Melgar¹, ¹ Department of Plant and Environmental Sciences, Clemson University, Clemson, SC 29634. (jallran@g.clemson.edu)

Impact of Harvest Maturity on Consumer Preference, Fruit Quality, and Postharvest Longevity of Two Kiwifruit Cultivars (*Actinidia chinensis* Planch.). Lingbo Xie^{1*}, James D. Spiers¹, Leonard N. Bell², J. Raymond Kessler, Jr.¹, and Floyd M. Woods¹, ¹Department of Horticulture, Auburn University, Auburn, AL 36849, ²Department of Food Science, Auburn University, Auburn, AL 36849. (lzx0013@auburn.edu)

Microscopic Analysis of Southern Highbush Blueberry (*Vaccinium corymbosum* L. interspecific hybrid) Floral Buds from Dormancy to Budswell. Lauren E. Redpath^{1*}, Erick Smith², Anish Malladi¹, Dario Chavez³, Jeremy Taylor⁴, Mercy Olmstead⁵, ¹1111 Plant Sciences Bldg., Department of Horticulture, University of Georgia, Athens, GA 30602, ²2360 Rainwater Rd. Department of Horticulture, University of Georgia, Tifton, GA 31793, ³Stress Physiology Bldg, Department of Horticulture, University of Georgia, Griffin, GA, 30223, ⁴162 W. Thigpen Ave., University of Georgia Extension, Lakeland, GA, 31635, ⁵2135 Fifield Hall, University of Florida, Department of Horticulture, Gainesville, FL, 32611. (redpath.lauren@uga.edu)

Peaches in Georgia: Finding out what Consumer Want. Catherine Belisle^{1*}, Uyen Thuy Xuan Phan², Dario J Chavez¹, and Koushik Adhikari², ¹Department of Horticulture, University of Georgia, Griffin, GA 30223, ²Department of Food Science, University of Georgia, Griffin, GA 30223. (cebelisle1@uga.edu)

Performance of the Smart Irrigation App. for Tomato Yield and Quality. Luke Miller^{1*}, George Vellidis², Wesley Porter², Erick Smith¹, and Timothy Coolong¹, ¹ 2360 Rainwater Road, Department of Horticulture, University of Georgia, Tifton, GA 31793, ²2360 Rainwater Road, Crop and Soil Sciences Department, University of Georgia, Tifton, GA 31793. (luke.miller25@uga.edu)

Pinching Effects on Cut Sunflower (*Helianthus annuus*) Production in East Texas. Rebecca B. Burnett* and M.A. Maurer, Department of Agriculture, Stephen F. Austin State University, Nacogdoches, TX 75962. (rebeccaburnett3@gmail.com)

Suitability of Pecan Shell Mulch for Rabbiteye Blueberry Establishment. Ashley Hoppers*, J.D. Spiers, J. Raymond Kessler, Jr., A.N. Wright, and A.A. Powell, Department of Horticulture, Auburn University, Auburn, AL 36849-7350. (aah0020@auburn.edu)

The Effects of Growing Season, Stage of Development, and Media Drench Applications of Paclobutrazol as Compared to a Daminozide Standard on Growth and Flowering of *Gerbera jamesonii* 'Bright Red with Light Eye'. Yanyu Chen*, J. Raymond Kessler, Jr., G. J. Keever, and G. B. Fain, Department of Horticulture, Auburn University, Auburn, AL 36849-7350. (yzc0059@auburn.edu)

The Effects of Low Tunnels on Yield and Survival of Swiss Chard (*Beta vulgaris* var. *cicla*) Cultivars in East Texas. Chanelle E. Angeny* and Jared Barnes, Department of Agriculture, Stephen F. Austin State University, Nacogdoches, Tx 75961. (chanelle.angeny@gmail.com)

Using Sensory Evaluation to Assess Consumer Preferences for Hydroponically-grown Lettuce. Sydney C. Holmes^{1*}, Daniel E. Wells¹, Joseph M. Kemble¹, Jeremy M. Pickens¹, Geraldine L. Santos-Norris², S. Jean Weese², ¹101 Funchess Hall, Department of Horticulture, Auburn University, Auburn, AL 36849, ²260 Lem Morrison Drive, Department of Poultry Science, Auburn University, Auburn, AL 36849. (wellsda@auburn.edu)

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

Room: Clipper
Riverview Plaza Hotel

Presiding: Tim Davis, Chair

Abstracts: To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: t-davis5@tamu.edu

3:00-5:00 pm Order of presentations determined by drawing at beginning of contest.

Assessing the Scientific Basis of the Food Safety Modernization Act Produce Safety Rule. Janet A. Gradl^{1*}, Michelle R. Worosz², and Patricia A. Curtis¹, ¹559 Devall Drive, Food Systems Institute, Auburn University, Auburn, AL, 36832, ²308A Comer Hall, Department of Agricultural Economics and Rural Sociology, Auburn, AL, 36849. (mrw0016@auburn.edu)

Early Season Crop Development, Yield, and Fruit Quality of Standard and Mini Watermelons Grafted to Several Cucurbit Rootstocks. Matthew B. Bertucci, Kathryn M. Jeninngs, Davis W. Monks, Jonathan R. Schultheis, W. Bradfred Thompson, Frank M. Louws, David L. Jordan, Nicholas A. Basinger, Stephen C. Smith, Matthew D. Waldschmidt, North Carolina State University, Department of Horticultural Science, Room 227 Kilgore Hall, Box 7609. Raleigh NC 27696. (mattber2c@gmail.com)

Effects of a Single Phosphorus Band Application over Two Growing Seasons in Pecan (*Carya illinoensis* (Wangenh.) K. Koch) Production. Michael F Polozola II*, Daniel E. Wells, Wheeler G. Foshee, J. Raymond Kessler and Amy N. Wright, Department of Horticulture, Auburn University, Auburn, AL 36849 (mfp0012@auburn.edu)

Rootstock-imparted Water Use Efficiency in Grafted Heirloom Tomatoes. David H Suchoff^{*1}, Frank J. Louws², Jonathan R. Schultheis¹, Matthew D. Kleinhenz³, Christopher C. Gunter¹, ¹Department of Horticultural Science, NC State University, Raleigh, NC, 27695, ²Department of Plant Pathology/NSF CIPM, NC State University, Raleigh, NC 27695, ³Department of Horticulture and Crop Science, The Ohio State University, Wooster, OH, 44691. (dhsuchof@ncsu.edu)

Sensory and volatile compounds relationship in coffee cup quality (*Coffea arabica*). Fabian Echeverria¹, Seth Murray¹, Patricia Klein², Rhonda Miller³, Chris Kerth³, Leonardo Lombardini², and Benoit Bertrand⁴. ¹Dept. of Soil and Crop Sciences, Texas A&M University, College Station, Texas, TX 77843, ²Dept. of Horticultural Sciences, Texas A&M University, College Station, Texas, TX 77843; ³Dept. of Animal Science, Texas A&M University, College Station, Texas, TX 77843; ⁴World Coffee Research, College Station, Texas, TX 77845. (fabiane@tamu.edu)

The Impact of Weeding, Planting Density and Growth Habit on Watermelon Yield in an Organic System. Suzanne Stone^{1*}, George Boyhan¹, and W. Carroll Johnson, III², 1111 Miller Plant Science Bldg., Department of Horticulture, University of Georgia, Athens, GA 30602, ²USDA-ARS, Tifton Campus, P.O. Box 748, Tifton, GA 31793-0748. (sstone2@uga.edu)

Weed Management Practices for Tea Production. Judson S. LeCompte^{1*}, Guihong Bi¹, Zhi Yu², Tongyin Li¹, ¹Department of Plant and Soil Sciences, Mississippi State University, Miss. State, MS 39762, ²College of Horticulture and Forestry Sciences, Huazhong Agricultural University, Wuhan City, Hubei, 430070, China. (JSL279@msstate.edu)

SECTION TITLES

EXTENSION SECTION

Room: Grand Bay Ballroom I
Riverview Plaza Hotel

Presiding: Bodie Pennisi, Chair

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

8:00 Perceived Landscape Benefits Inform Home Irrigation Users' Water Conservation Behaviors. Laura A. Warner*, Amanda D. Ali, and Anil Kumar Chaudhary, Department of Agricultural Education and Communication, University of Florida, Gainesville, FL, 32611. (lsanagorski@ufl.edu)

8:15 Fruits and Berry Nursery Management Training in Central Europe. Dilip Nandwani and Sochinwechi Nwosisi. Department of

Agriculture and Environmental Sciences, Tennessee State University, Nashville, TN 37209 (dnandwan@Tnstate.edu)

8:30 Working with the Georgia Blueberry Industry. Rachel A. Itle^{1*}, Renée M. Allen^{2*}, and D. Scott NeSmith¹, ¹Department of Horticulture, University of Georgia, 1109 Experiment Street, Griffin, GA 30223, ²University of Georgia Extension, 203 South Dixon Street, Suite 3, Alma, GA 31510. (ritle@uga.edu) (reneemh@uga.edu)

8:45 Train-of-Trainers in Agricultural Extension Services Delivery and Monitoring in Nigeria. Dilip Nandwani and Sochinwechi Nwosisi. Department of Agriculture and Environmental Sciences, Tennessee State University, Nashville, TN 37209 (dnandwan@Tnstate.edu)

9:00 Break

9:15 Informing Extension Programs Focused on Nursery and Greenhouse Growers' Adoption of Water Conservation Technologies. Alexa J. Lamm^{1*} & Laura A. Warner², Department of Agricultural Education and Communication, ¹UF/IFAS Center for Public Issues Education, ²UF/IFAS Center for Landscape Conservation and Ecology, University of Florida, Gainesville, FL 32611-0260. (alamm@ufl.edu)

9:30 Social Media Intervention: Using Facebook as an advertising tool to promote Arkansas Agricultural Experiment Station fruit variety videos on YouTube. Lesley Smith^{1*}, Catherine W. Shoulders¹, and John R. Clark², ¹205 Agriculture Building, Department of Agricultural Education, Communications and Technology, University of Arkansas, Fayetteville, AR 72701; ²316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701. (cshoulde@uark.edu)

9:45 It Started in the Garden: The Griffin African American Oral History Project. Ellen M. Bauske^{1*}, J.L. Cruickshank and B.W. Hutcheson. ¹*Center for Urban Agriculture, University of Georgia-Griffin Campus, 1109 Experiment St BAE, Griffin GA 30223 (ebauske@uga.edu)

10:00 Critical Evaluation of Green Industry Certification Programs in Georgia. Bodie V. Pennisi^{1*} and Greg Huber², ¹*Department

of Horticulture, ²Center for Urban Agriculture, University of Georgia-Griffin Campus, 1109 Experiment St BAE, Griffin GA 30223 (bpennisi@uga.edu)

and Urban Planning, Texas A&M University, College Station, TX 77843-3137, ³Department of Civil Engineering, Texas A&M University, College Station, TX 77843-3136. (ma-arnold@tamu.edu)

EDUCATION SECTION

Room: Grand Bay Ballroom I
Riverview Plaza Hotel
Presiding: Garry McDonald, Chair
Abstracts: To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: gmcdonal@uark.edu

10:30 Efficacy of Pre-lab Quizzes in Undergraduate Laboratory Performance. Russell D. Plowman and C.B. McKenney, Department of Plant and Soil Sciences, Texas Tech University, Lubbock, TX 79409-2122. (russell.d.plowman@ttu.edu)

10:45 Increasing Horticulture Enrollment at the University of Arkansas Through Innovative Recruitment and Outreach Activities. Shannon C. Mason¹ and Garry V. McDonald^{1*}, ¹316 Plant Science Building, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701. (gmcdonal@uark.edu)

11:00 Outcome Based Student Assessment Development for Horticulture Students at the University of Arkansas. Garry V. McDonald^{1*}, Shannon C. Mason¹, Douglas E. Karcher¹, Wayne A. Mackay¹, Curt Rom¹, ¹316 Plant Science Building, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701. (gmcdonal@uark.edu)

11:15 Comparison of Online and Hybrid Woody Plant Identification Classes. Thayne Montague* and Cynthia McKenney. Department of Plant and Soil Science, Texas Tech University, Lubbock, TX 79409-2122. (thayne.montague@ttu.edu)

11:30 A Simple Rain Garden Serves as a Catalyst to Multi-Disciplinary Teaching and Campus Community Engagement. Michael A. Arnold^{1*}, Galen Newman², Jun-Hyun Kim², Ming-Han Li², and Kung-Hui Chu³, ¹Department of Horticultural Sciences, Texas A&M University, College Station, TX 77843-2133, ²Department of Landscape Architecture

FRUIT CROPS SECTION

Room: Grand Bay Ballroom I
Riverview Plaza Hotel
Presiding: Dario Chavez, Chair
Abstracts: To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: dchavez@uga.edu

1:00 ‘Opportunity’ and ‘Enchantment’, New Wine Grapes from Arkansas. John R. Clark^{1*} and Renee T. Threlfall², ¹1316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701, ²2650 North Young Avenue Institute of Food Science and Engineering, University of Arkansas Fayetteville, AR 72704. (jrclark@uark.edu)

1:15 Wine Characteristics and Profiles of ‘Opportunity’ and ‘Enchantment’ Wine Grapes. Renee T. Threlfall^{1*} and John R. Clark², ¹2650 North Young Avenue Institute of Food Science and Engineering, University of Arkansas Fayetteville, AR 72704, ²1316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701. (rthrelf@uark.edu)

1:30 Crop Forcing of Two Southern Hybrid Grape Cultivars in Mississippi. Eric T. Stafne. Associate Extension and Research Professor, 810 Hwy 26 West, Coastal Research and Extension Center, Mississippi State University, Poplarville, MS 39470. (eric.stafne@msstate.edu)

1:45 Determining How Sweetness and Sourness Perception Impacts Consumer Sensory of Fresh-market Blackberries. Renee T. Threlfall^{1*}, Daniela M. Segantini², and John R. Clark², ¹2650 North Young Avenue Institute of Food Science and Engineering, University of Arkansas Fayetteville, AR 72704. ²1316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701. (rthrelf@uark.edu)

2:00 Enabling breeding for brown rot resistance in peach. Wanfang Fu, Ralph Burrell and Ksenija Gasic. Department of Plant & Environmental Sciences, Clemson University, Clemson, SC 29630 (wfu@g.clemson.edu)

2:15 Break

2:30 Plant Growth Regulator (PGR) Use for Fruit Set in Rabbiteye Blueberry ‘Premier’. Erick Smith^{1*} and James Jacobs², ¹2360 Rainwater Rd. Department of Horticulture, University of Georgia, Tifton, GA 31793, ²705 College Ave., Extension, University of Georgia, Blackshear, GA 31516

2:45 Southern Highbush Blueberry (*Vaccinium corymbosum* L. interspecific hybrid.) Response to Shading as Fruit Quality and Plant Growth. Erick Smith^{1*} and Anish Malladi², ¹2360 Rainwater Rd. Department of Horticulture, University of Georgia, Tifton, GA 31793 ²1121 Miller Plant Sciences, Department of Horticulture, University of Georgia, Athens, GA 30602

3:00 Annual Strawberry Cultivar Performance in Central Mississippi. W.B. Evans* and M. Bates. Mississippi Agriculture and Forestry Experiment Station, Truck Crops Branch, P.O. Box 231, Crystal Springs, MS 39059-0231. (bill.evans@msstate.edu)

3:15 Effect of Irrigation Method on Pecan Nut Quality and Growth of Young Trees. Abby M. Biedenbach^{1*}, B. Wade Brorsen¹, Jon T. Biermacher² and Charles T. Rohla², ¹308 Agricultural Hall, Department of Agricultural Economics, Oklahoma State University, Stillwater, OK 74078, ²The Samuel Roberts Noble Foundation, 2510 Sam Noble Pkwy, Ardmore, OK 73401. (ctrohla@noble.org)

FLORICULTURE, ORNAMENALS AND TURF SECTION

Room: Mobile Bay Ballroom I & II
Riverview Plaza Hotel

Presiding: Allen Owings, Chair

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

1:00 Landscape Trials of Crape Myrtle Bark

Scale (*Acanthococcus lagerstroemiae*) in Texas. Haijie Dou¹, Mengmeng Gu^{1*}, Erfan Vafaie², and Michael Merchant³, Department of Horticultural Sciences¹, Texas A&M AgriLife Extension Service, College Station, TX 77843, Texas A&M AgriLife Research and Extension Center², 1710 FM 3053 North, Overton, TX 75684, Texas A&M AgriLife Extension Service³, 17360 Coit Rd | Dallas, TX 75252-6599. (mgu@exchange.tamu.edu)

1:15 Observations from the First Year of an Olive Varietal Evaluation in Louisiana. Jason Stagg, Hammond Research Station, LSU AgCenter, Hammond, LA 70403 (jstagg@agcenter.lsu.edu)

1:30 I Have a Drone, Now What? James Robbins, Univ. of Arkansas Cooperative Extension Service, Little Rock, AR 72204. (jrobbins@uaex.edu)

1:45 Southern Living Plant Collection Observations at the LSU AgCenter’s Hammond Research Station. Allen Owings, Hammond Research Station, LSU AgCenter, Hammond, LA 70403 (aowings@agcenter.lsu.edu)

2:00 Evaluation of Phytotoxicity of Preemergent Herbicides in Container Grown Windmill Palm (*Trachycarpus fortunei*). Jeremy M. Pickens^{1*} and Stephen C. Marble², ¹Auburn University, Ornamental Horticulture Research Center, PO Box 8276, Mobile, AL, 36608, ²University of Florida, Mid Florida REC, 2725 South Benion Rd, Apopka, FL 32703. (pickejm@auburn.edu)

2:15 Nursery Irrigation Application Distribution in Overhead Irrigation. Mark A. Wilson and Edward Bush, Louisiana State University, School of Plant, Environmental and Soil Sciences, Baton Rouge, LA 70803 (mwilso7@lsu.edu)

VEGETABLE CROPS SECTION

Room: Mobile Bay Ballroom I & II
Riverview Plaza Hotel

Presiding: Katie Jennings, Chair

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

3:00 The Level and Composition of a Liquid Fertility Program Affects Productivity of Bell Pepper. Timothy Coolong^{1*} and Kalen Fleming², ¹2360 Rainwater Road, Department of Horticulture, University of Georgia, Tifton, GA 31793, ²Agriculture Science Bldg., Abraham Baldwin Agricultural College, Tifton, GA 31793. (tcoolong@uga.edu)

3:15 Performance of the Smart Irrigation App. for Tomato Yield and Quality. Luke Miller^{1*}, George Vellidis², Wesley Porter², Erick Smith¹, and Timothy Coolong¹, ¹2360 Rainwater Road, Department of Horticulture, University of Georgia, Tifton, GA 31793, ²2360 Rainwater Road, Crop and Soil Sciences Department, University of Georgia, Tifton, GA 31793. (luke.miller25@uga.edu)

3:30 Trellis and Train Eggplants for Improved Yield in High Tunnel. Sanjun Gu*, John E. Beck and John E. Kimes. Cooperative Extension, North Carolina Agricultural and Technical State University, Greensboro, NC 27410. (sgu@ncat.edu)

3:45 The Future of Applied Research and Extension-Will it Exist in the Future? Lynn Brandenberger, Department of Horticulture and Landscape Architecture, Oklahoma State University, Stillwater, OK 74078. (lynn.brandenberger@okstate.edu)

4:00 Rootstock-imparted Water Use Efficiency in Grafted Heirloom Tomatoes David H. Suchoff^{1*}, Frank J. Louws², Jonathan R. Schultheis¹, Matthew D. Kleinhenz³, Christopher C. Gunter¹, ¹Department of Horticultural Science, NC State University, Raleigh, NC, 27695, ²Department of Plant Pathology/NSF CIPM, NC State University, Raleigh, NC 27695, ³Department of Horticulture and Crop Science, The Ohio State University, Wooster, OH, 44691. (dhsuchof@ncsu.edu)

POSTERS

Room: Ballrooms Center Foyer
Riverview Plaza Hotel

Presiding: Leo Lombardini, Chair

Abstracts: To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: l-lombardini@tamu.edu

Set-Up: Saturday, 8:00 am –noon

Poster Viewing:

Saturday noon to 5:00 pm

Sunday 8:00-10:45 am

Authors at their poster:

Saturday, 1:00-2:30 pm even numbered posters

Saturday, 2:30-4:00 pm odd numbered posters

Take-down: Sunday, 1:00 pm – 3:00 pm

Student Poster Competition

UG = Indicates undergraduate poster titles

G = Indicates graduate poster titles

Fruit Crops

1UG) Cutting Propagation of Softwood and Semi-Hardwood *Vitis Aestivalis* ‘Norton / Cynthiana’ Grapevines. Andrew Thomas*, Nathan Phillips, and Song Cui. School of Agribusiness and Agriscience, Middle Tennessee State University, Murfreesboro, TN 37132. (nate.phillips@mtsu.edu)

2G) Blackberry Red Drupelet Incidence After Cold Storage and Associated Fruit Quality Implications. Melinda H. Yin^{1*}, Bethany M. Sebesta¹, Renee T. Threlfall², and John R. Clark¹, ¹316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701, ²Department of Food Science, University of Arkansas, Fayetteville, AR 72704. (mhyin@email.uark.edu)

3) Activation Efficacy of Preemergence Herbicide Flumioxazin Under Three Different Irrigation Systems in Blueberry (*Vaccinium* spp.) Planted in Pine Bark Culture. Erick Smith^{1*} and Mark Czarnota², ¹Department of Horticulture, University of Georgia, Tifton, GA 31793 ²Department of Horticulture, University of Georgia, Griffin, GA 30223 (ericks@uga.edu)

4) Descriptive Sensory Attributes of Arkansas Fresh-market Blackberry Cultivars Harvested Multiple Years. Renee T. Threlfall^{1*}, Daniela M. Segantini², and John R. Clark², ¹2650 North Young Avenue Institute of Food Science and Engineering, University of Arkansas Fayetteville, AR 72704. ²1316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701. (rthrelf@uark.edu)

5UG) Pitaya Floral and Fruit Development in the Virgin Islands. Samuel Joseph*, Thomas W. Zimmermann. University of the Virgin Islands Agricultural Experiment Station, RR#1 Box

- 10,000, Kingshill, VI 00850.
(tzimmer@uvi.edu)
- 6G) Effects of Phosphorus Rate on Pecan (*Carya illinoensis* (Wangenh.) K. Koch) Seedling Development.** Michael F. Polozola II*, Daniel E. Wells, Wheeler G. Foshee, J. Raymond Kessler and Amy N. Wright, Department of Horticulture, Auburn University, Auburn, AL 36849 (mfp0012@auburn.edu)
- 7) Effects of Auxin Concentration on Rooting of Semi-hardwood Cuttings of Select Cultivars of Kiwifruit (*Actinidia chinensis* Planch. and *A. deliciosa* A. Chev.).** D.L. Brown, A.R. King*, and T.P. Hartmann, Department of Horticultural Sciences, Texas A&M University, College Station, TX 77843-2133 (aking@tamu.edu)
- 8) Evaluation of Selected Pluot Cultivars for Alabama: Preliminary Results.** Elina Coneva*, A. Svyantek, E. Vinson, and J. Pitts, 101, Funchess Hall, Department of Horticulture, Auburn University, Auburn, AL 36849. (edc0001@auburn.edu)
- 9G) Effects of Rootstock Species and Propagation Method Vigor Potential and Precocity in Kiwifruit (*Actinidia deliciosa* A. Chev. and *A. chinensis* Planch.).** Timothy P. Hartmann¹*, ²Larry A. Stein, ³James D. Spiers, ⁴David L. Creech, and ¹Justin J. Scheiner, ¹Department of Horticultural Sciences, Texas A&M University, College Station, TX 77843, ²Department of Horticultural Sciences, Texas A&M University, Uvalde, TX 78802, ³Department of Horticulture, Auburn University, Auburn AL 36849, ⁴Department of Agriculture, Stephen F. Austin State University, Nacogdoches, TX 75962. (t-hartmann@tamu.edu)
- 10) Preliminary Report on Biofilm Technology use in Rabbiteye Blueberry (*Vaccinium virgatum* Aiton syn. *ashei*) Applied Preharvest in Relation to Packout and Fruit Quality.** Erick Smith¹* and William Lovett², ¹Department of Horticulture, University of Georgia, Tifton, GA 31793, ²Extension, University of Georgia, Alma, GA 31510 (ericks@uga.edu)
- 11G) Microscopic Analysis of Cold Hardiness in Southern Highbush Blueberry (*Vaccinium corymbosum* L. interspecific hybrid) Floral Buds.** Lauren E. Redpath¹*, Erick Smith², Anish Malladi¹, Dario Chavez³, Jeremy Taylor⁴, Mercy Olmstead⁵, ¹Department of Horticulture, University of Georgia, Athens, GA 30602, ²Department of Horticulture, University of Georgia, Tifton, GA 31793, ³Department of Horticulture, University of Georgia, Griffin, GA, 30223, ⁴University of Georgia Extension, Lakeland, GA, 31635, ⁵University of Florida, Department of Horticulture, Gainesville, FL, 32611. (redpath.lauren@uga.edu)
- 12) Phytochemical Contents Impacted by Post-harvest Storage and Harvest Season of Primocane Blackberry Genotypes.** Daniela M. Segantini¹*, Renee T. Threlfall², John R. Clark¹, Luke R. Howard², Cindi R. Brownmiller², ¹1316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701, ²2650 North Young Avenue Institute of Food Science and Engineering, University of Arkansas Fayetteville, AR 72704. (dani_segantini@hotmail.com)
- 13) Observations of White Drupelets on Three Blackberry Cultivars in South Mississippi.** Eric T. Stafne¹*, Melinda Miller-Butler², and Barbara Smith³. ¹Associate Extension and Research Professor, 810 Hwy 26 West, Coastal Research and Extension Center, Mississippi State University, Poplarville, MS 39470, ²Biological Science Lab Technician, USDA-ARS Thad Cochran Southern Horticultural Laboratory, Poplarville, MS 39470, ³Research Plant Pathologist, USDA-ARS Thad Cochran Southern Horticultural Laboratory, Poplarville, MS 39470. (eric.stafne@msstate.edu)
- 14G) Peaches in Georgia: Finding out what consumer want.** Catherine Belisle¹*, Uyen Thuy Xuan Phan², Dario J Chavez¹, and Koushik Adhikari², ¹Department of Horticulture, University of Georgia, Griffin, GA 30223, ²Department of Food Science, University of Georgia, Griffin, GA 30223. (cebelisle1@uga.edu)
- 15G) Sensory and volatile compounds relationship in coffee cup quality (*Coffea arabica*).** Fabian Echeverria¹, Seth Murray¹, Patricia Klein², Rhonda Miller³, Chris Kerth³, Leonardo Lombardini², and Benoit Bertrand⁴. ¹Dept. of Soil and Crop Sciences, Texas A&M University, College Station, Texas, TX 77843, ²Dept. of Horticultural Sciences, Texas A&M

University, College Station, Texas, TX 77843;
³Dept. of Animal Science, Texas A&M University, College Station, Texas, TX 77843;
⁴World Coffee Research, College Station, Texas, TX 77845. (fabianeb@tamu.edu)

- 16) **Gumbo' Southern Highbush Blueberry.** Stephen J. Stringer*, Arlen D. Draper, Donna A. Shaw, Blair J. Sampson, Hamidou F. Sakhanoko, Ebrahiem Babiker, and John J. Adamczyk, Jr. USDA-ARS Thad Cochran Southern Horticulture Laboratory, Poplarville, MS, 39466. (Stephen.Stringer@ars.usda.gov)

Floriculture, Ornamentals and Turf

- 17) **Effect of N Fertigation Rate and Foliar Urea Application on Plant Growth and Nutrient Status of Encore Azalea 'Chiffon'.** Tongyin Li*, Guihong Bi, Eugene K. Blythe, Richard L. Harkess, and Xiaojie Zhao, Department of Plant and Soil Sciences, Mississippi State University, Mississippi State, MS 39762. (gbi@pss.msstate.edu)

- 18G) **Effect of zinc fertilizer on celosia plant growth and leaf nutrition.** Olukunle Kolade* and Derald A. Harp. School of Agriculture, Texas A&M University – Commerce, Commerce, TX 75429 (OKolade@leomail.tamuc.edu)

- 19) **Effects of Biochar, Vermicompost, Sulfur and Fertigation on Petunia (*Petunia hybrida*) Growth in Container.** Xiuli Liu¹, Chunling Zhou², Meiping Cai³, Sara Mellard⁴ and Mengmeng Gu^{4*}. ¹School of Landscape Architecture, Beijing Forestry University, Beijing Key Laboratory of Ornamental Plants Germplasm Innovation and Molecular Breeding, National Engineering Research Center for Floriculture, Beijing Laboratory of Urban and Rural Ecology Environment, Beijing 100083, ²School of Landscape and Forestry, Qingdao Agriculture University, Qingdao 266109, ³Department of Horticulture, Fujian Agriculture and Forestry University, Fuzhou 350002, ⁴Department of Horticultural Sciences, Texas A&M AgriLife Extension Service, College Station, TX 77843. (mgu@tamu.edu)

- 20) **Growth and development of eleven double flowering Oriental liliu in East Texas.** M.A. Maurer*, R. Burnett and B. I. Chema. Department of Agriculture, Arthur Temple

College of Forestry and Agriculture, P.O. Box 13000, Nacogdoches, TX 75962.

- 21G) **Effects of Silica Supplementation on Well-watered and Water-Stressed Greenhouse Produced Cut Flowers.** Taylor Mills* and B.L. Dunn, Department of Horticulture & Landscape Architecture, Oklahoma State University, Stillwater, OK 74074. (tsmills@okstate.edu)

- 22) **High Tunnel Season Extension for Fall Zinnia Cut Flower Production in south Mississippi.** Gary R. Bachman*, James M. DelPrince, Christine E.H. Coker, Patricia R. Knight and Scott Langlois. Coastal Research and Extension Center, Mississippi State University, 1815 Popps Ferry Road, Biloxi, MS 38532 (gary.bachman@msstate.edu)

- 23) **Influence of Seeding Date on Efficacy of Granular Preemergence Herbicides for the Control of Two Common Container-Nursery Weed Species.** Chris Marble*, Debalina Saha, Cody Stewart, and Annette Chandler. Department of Environmental Horticulture, Mid-Florida Research and Education Center, University of Florida, Apopka, FL 32703. (marblesc@ufl.edu).

- 24G) **Safety of Alcohol in Auxin Solutions Applied to Stem Cuttings of African Wormwood (*Artemisia afra* Jacq. ex Willd.).** James T. Ray^{1,2*}, Eugene K. Blythe¹, Guihong Bi², Daniel B. Reynolds², Patricia R. Knight¹, and Gary R. Bachman¹. ¹Coastal Research and Extension Center, Mississippi State University, Biloxi, MS 39532, ²Department of Plant and Soil Sciences, Mississippi State University, Mississippi State, MS 39762. (tim.ray@msstate.edu)

- 25) **Long-term performance of cool-season annuals fertilized with slow release fertilizer or compost.** Derald A. Harp¹, Todd Williams², Aimee Sandifeer², and Steve George³. ¹School of Agriculture, Texas A&M University – Commerce, Commerce, TX 75429, ²Rockwall County Extension Service, Rockwall, TX 75087, ³Texas AgriLife Extension Service, Department of Horticultural Sciences, Dallas, TX 75252 (derald.harp@tamuc.edu)

- 26) **Micropropagation Protocol Development for Pearlbush.** Guochen Yang* and Zhongge (Cindy) Lu, Department of Natural Resources

and Environmental Design, North Carolina A&T State University, Greensboro, NC 27411. (yangg@ncat.edu).

- 27G) Temperature, moisture content, CO₂ assimilation and stomatal conductance in leaf black damaged rose leaves.** Harp, Derald A.¹, Chie Hosotani², Kevin Chretien^{1*}, David Zlesak³ and ⁴Steve George. ¹School of Agriculture, Texas A&M University – Commerce, Commerce, TX 75429, ²Kagawa University, Takamatsu City, Kagawa 760-8521, Japan, ³University of Wisconsin – River Falls, Department of Plant and Earth Science, River Falls, WI, 54022, and ⁴Texas AgriLife Extension Service, Department of Horticultural Sciences, Dallas, TX 75252 (KChretien@leomail.tamuc.edu)

- 28) Six-plant species response to salt-water inundation and remediation.** M.A. Maurer^{1*}, Rebecca Burnett¹, D. L. Creech¹ and Yuhong Zheng². ¹Department of Agriculture, Arthur Temple College of Forestry and Agriculture, P.O. Box 13000, Nacogdoches, TX 75962, ²Institute of Botany, Jiangsu Province & Chinese Academy of Sciences, Nanjing, China 210014. (maurerma@sfasu.edu)

Vegetable Crops

- 29) Allelopathic Impact of Sugarcane Residue on Vegetable Seed Germination.** Charles L. Webber III^{1*}, Paul M. White Jr.¹, Derek S. Landrum¹, and James W. Shrefler². ¹USDA, Agriculture Research Service, Sugarcane Research Unit, Houma, LA 70360, ²Oklahoma State University, Division of Agriculture Sciences and Natural Resources, Oklahoma Cooperative Extension Service, Durant, OK 74702. (Chuck.Webber@ars.usda.gov)

- 30G) Effects of Increased Nutrient Solution Temperature on Lettuce (*Lactuca sativa* L. ‘Rex’) Grown Using Nutrient Film Technique.** Erin T. Landers, Daniel E. Wells, and Jeremy M. Pickens. Department of Horticulture, Auburn University, Auburn, AL 36849. (etl0002@auburn.edu)

- 31UG) Evaluation of 21 Cucumber Varieties for Downy Mildew Resistance in the Virgin Islands.** Augustus Laurencin Jr.*, Stafford M.A. Crossman, Thomas W. Zimmerman, University of the Virgin Islands Cooperative Extension Service, RR1 Box 10,000 Kingshill, VI 00850 (tzimmer@uvi.edu)

- 32) Bell Pepper Fruit Yield as Affected by Colored Shade Nets.** Juan Carlos Díaz-Perez^{1*} and Kelly St. John-Pickel². ¹Department of Horticulture, University of Georgia, Tifton, GA 31793, ²Trellis Growing Systems LLC, Fort Wayne, IN 46804. (jcdiaz@uga.edu)

- 33) Carotenoid Accumulation in Peel and Pulp Tissues of Genomically Diverse Banana Cultivated in Southeastern United States.** Mahnaz Kargar^{1*}, Floyd M. Woods¹, Marisa M. Wall², E. Greg Fonsah³, Suzanne Sanxter², J. Raymond Kessler¹, Kalidas Shetty⁴, Dipayan Sarkar⁴, Curtis Jolly⁵, Ramesh B. Jeganathan⁶ and Nicholas Larsen⁷. ¹Dept. of Horticulture, Auburn University, Auburn, AL 36849; ²USDA-ARS, US Pacific Basin Agricultural Research Center, Hilo, HI 96720; ³Dept. of Agricultural and Applied Economics, University of Georgia, Tifton, GA 31793; ⁴Dept. of Plant Sciences, North Dakota State University, Fargo, ND 58108; ⁵Dept. of Agricultural Economics and Rural Sociology, Auburn University, Auburn, AL 36849; ⁶Dept. of Nutrition, Dietetics, & Hospitality Management, Auburn University, Auburn, AL 36849; ⁷University of Florida, Everglades Research & Education Center, Belle Glade, FL 33430. (mzk0049@tigermail.auburn.edu)

- 34) Cucurbitacins in *Citrullus* Species.** P. Perkins-Veazie¹, Guoying Ma¹, Marlee Trandel^{1*}, Amnon Levi². ¹Department of Horticulture Science, Plants for Human Health Institute, North Carolina State University, Kannapolis, NC. ²USDA-ARS, US Vegetable Laboratory, Charleston, SC. (matrande@ncsu.edu)

- 35) Fungicides and Resistance in Pumpkin Cultivars Maintain Yield and Provide Effective Control of Powdery Mildew.** T. Casey Barickman*, Thomas E. Horgan, and Jeff C. Wilson, Mississippi State University, North Mississippi Research and Extension Center, Verona, MS, 38879. (t.c.barickman@msstate.edu)

- 36) Heirloom Tomato Fruit Yield under Organic, Conventional and No-Till Production Systems.** Juan Carlos Díaz-Perez, ¹Department of Horticulture, University of Georgia, Tifton, GA 31793. (jcdiaz@uga.edu)

- 37) High Tunnel Specialty Crops Survey in North Carolina.** Sanjun Gu^{1*} and Zhifeng

- Gao². ¹Cooperative Extension, North Carolina Agricultural and Technical State University, Greensboro, NC 27410. ²Food and Resource Economics Department, University of Florida, Gainesville, FL 32611-0240. (sgu@ncat.edu)
- 38) **Impact of Mustard Meal Application on Cucurbit Establishment.** Charles L. Webber III^{1*}, Paul M. White Jr.¹, and James W. Shrefler². ¹USDA, Agriculture Research Service, Sugarcane Research Unit, Houma, LA 70360, ²Oklahoma State University, Division of Agriculture Sciences and Natural Resources, Oklahoma Cooperative Extension Service, Durant, OK 74702. (Chuck.Webber@ars.usda.gov)
- 39) **Kale Cultivar Evaluation in Organic High Tunnels.** James W. Shrefler*, Lynn P. Brandenberger and Hailin Zhang. Oklahoma State University, Division of Agriculture Sciences and Natural Resources, Oklahoma Cooperative Extension Service, Durant, OK 74702. (Jim.Shrefler@okstate.edu)
- 40) **Low tunnels increased growth and spring production of cucumbers in Virginia.** Ramón A. Arancibia and James Jenrette, Eastern Shore AREC, Virginia Tech, Painter, VA 23420, (aran@vt.edu)
- 41) **Organic Onion Transplant Production in High Tunnels.** James W. Shrefler^{1*} and Charles L. Webber III². ¹Oklahoma State University, Division of Agriculture Sciences and Natural Resources, Oklahoma Cooperative Extension Service, Durant, OK 74702 and ²USDA, Agriculture Research Service, Sugarcane Research Unit, Houma, LA 70360. (Jim.Shrefler@okstate.edu)
- 42) **Organic Watermelon Variety Trial.** George E. Boyhan* and Suzanne P. Stone, Department of Horticulture, University of Georgia, 1111 Miller Plant Science Bldg., Athens, GA 30602 (gboyhan@uga.edu)
- 43) **Protein Variability in Seeds from the *Vigna unguiculata* (L.) Walp. Core Collection.** Bradley Morris*, Ming Li Wang, and Brandon Tonniss, USDA, ARS, Plant Genetic Resources Conservation Unit, Griffin, GA 30223. (Brad.Morris@ars.usda.gov)
- 44) **Sugarcane Bagasse Ash as an Amendment for Greenhouse Seedling Media.** Charles L. Webber III^{1*}, Paul M. White Jr.¹, Eric C. Petrie¹, and James W. Shrefler². ¹USDA, Agriculture Research Service, Sugarcane Research Unit, Houma, LA 70360, ²Oklahoma State University, Division of Agriculture Sciences and Natural Resources, Oklahoma Cooperative Extension Service, Durant, OK 74702. (Chuck.Webber@ars.usda.gov)
- 45) **Variety Performance and Impact of Harvest Date on Marketable Yield of Snap Bean.** Timothy Coolong^{1*}, Jennifer Miller² and Brooke Jeffries³, ¹Department of Horticulture, University of Georgia, Tifton, GA 31793, ²Jeff Davis Co. Extension Service, Hazlehurst, GA 31539, ³Wheeler Co. Extension Service, Alamo, GA 30411. (tcoolong@uga.edu)
- 46G) **Enhancing onion seed germination and root traits by plant growth regulators,** María Andrea Macías* and Daniel I. Leskovar, Texas A&M AgriLife Research, Department of Horticultural Sciences, Texas A&M University, Uvalde, TX 78801 (Daniel.Leskovar@ag.tamu.edu)
- 47) **Yield and quality response of butternut cultigens in NC.** Travis E. Birdsell¹, Jonathan R. Schultheis², and Penelope Perkins-Veazie³, ¹North Carolina Cooperative Extension, Ashe County Center, North Carolina State University, 134 Government Circle, Suite 202, Jefferson, NC 28640 USA, ² Department of Horticultural Science, North Carolina State University, 2721 Founders Drive, 264 Kilgore, Raleigh, NC 27695-7609 USA, ³ Plants for Human Health Institute, Department of Horticultural Science, North Carolina Research Campus, North Carolina State University, Kannapolis, NC 28081 USA

Addendum

- 48) **Screening and Testing for Heritability for Anthracnose Susceptibility in Southern Highbush Blueberry Cultivars.** Doug Phillips, Horticultural Sciences Department, University of Florida, Gainesville, FL 32611. (dal64372@ufl.edu)
- 49) **Repatriation of the Carolina African Runner Peanut, Comparative Yields and Emerging Specialty Markets,** Ward K. Ward^{1*} and Richard L. Hassell. ¹Department of Agricultural and Environmental Sciences, Clemson University Coastal Research and Education Center., 2700 Savannah Hwy., Charleston, SC 29414. (bw@clemson.edu)

Sunday, February 5, 2017

ACB BUSINESS MEETING

Room: Bon Secour I
Riverview Plaza Hotel
Time: 9:00 – 10:45
Presiding: Andrew Thomas, President

ANNUAL BUSINESS MEETING AND AWARDS PROGRAM

Room: Bon Secour I
Riverview Plaza Hotel
Time: 11:00 – 12:30
Presiding: Ed Bush, President

POSTER VIEWING & TAKE-DOWN

Room: Ballrooms Center Foyer
Riverview Plaza Hotel
Presiding: Leo Lombardini, Chair
Abstracts: To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: l-lombardini@tamu.edu

Poster Viewing: Sunday 8:00-10:45
Poster Take-down: Sunday, 1:00 – 3:00

SECTION TITLES

VEGETABLE CROPS SECTION

Room: Mobile Bay Ballroom I & II
Riverview Plaza Hotel
Presiding: Katie Jennings, Chair
Abstracts: To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: katie_jennings@ncsu.edu

8:00 Low Tunnels Increased Vegetative Growth in Lettuce and Shortened the Time to Harvest in Virginia. Ramón A. Arancibia and James Jenrette, Eastern Shore AREC,

Virginia Tech, Painter, VA 23420, (raran@vt.edu)

8:15 Timing of Palmer amaranth Control on Sweetpotato Yield and Quality. Stephen Smith*, Katie Jennings, and David Monks, Department of Horticultural Science, North Carolina State University, Raleigh NC 27695. (scsmith7@ncsu.edu)

8:30 Fall Broccoli Cultivar Performance in Central Mississippi. W.B. Evans* and M. Bates. Mississippi Agriculture and Forestry Experiment Station, Truck Crops Branch, P.O. Box 231, Crystal Springs, MS 39059-0231. (bill.evans@msstate.edu)

8:45 Pre- and Post-Harvest Evaluation of Processing Tomato Cultivars in North Carolina. Courtney DeKalb, Nicole Sanchez¹, Penelope Perkins-Veazie², and Chris Gunter¹, Department of Horticultural Science, North Carolina State University, Raleigh NC 27695, ²Plants for Human Health Institute, North Carolina State University, Kannapolis NC 28081 (penelope_perkins@ncsu.edu)

9:00 Metribuzin Herbicide and its Potential for Use as a Layby Application in Sweetpotato Weed Management Systems. Stephen L. Meyers* and Mark W. Shankle, Department of Plant and Soil Sciences/North Mississippi Research and Extension Center, Pontotoc Ridge-Flatwoods Branch Experiment Station, Mississippi State University, Pontotoc, MS 38863. (stephen.meyers@msstate.edu)

9:15 Shading Affects Bell Pepper Plant Growth and Soil-Borne Diseases in Bell Pepper (*Capsicum annuum* L.). Mohammad Yamin Kabir¹*, Juan Carlos Díaz-Pérez², Savithri Nambeesan¹, and Bhabesh Dutta³, ¹Department of Horticulture, University of Georgia, Athens, GA 30602-7273, ²Department of Horticulture and ³Department of Plant Pathology, University of Georgia, Tifton, GA 31793. (myk82754@uga.edu)

9:30 Break

9:45 Zucchini (*Cucurbita pepo*) Fruit Yield as Affected by Organic Fertilization Rate. Juan Carlos Díaz-Pérez¹* and Gabriel Díaz-Saavedra², ¹ 2360 Rainwater Road, Department of Horticulture, University of Georgia, Tifton, GA 31793, ²Perdue AgriRecycle. (jcdiaz@uga.edu)

10:00 Evaluation of Rhizome Size, Planting Date, and Mycorrhiza on Yield of Ginger (*Zingiber officinale*) in Texas. Joseph Masabni^{1*}, Genhua Niu², and Youping Sun². ¹Texas A&M AgriLife Research and Extension Center, 1701 FM 3053 N, Overton, TX 75684, ²Texas A&M AgriLife Research Center, 1380 A and M Circle, El Paso, TX 79927. (jmasabni@ag.tamu.edu)

10:15 Effects of Different Replenish Solutions on the Growth of Leaf Vegetables in Hydroponics. Lifei Chen^{1,2}, Youping Sun¹, Qiang Liu^{1,3}, Genhua Niu^{1,*}, ¹ Texas A&M AgriLife Research Center at El Paso, El Paso, TX 79927, USA, ² Jilin Agricultural University, Changchun, Jilin 130118, China, ³ Central South University of Forestry and Technology, Changsha, Hunan 410004, China. (gniu@ag.tamu.edu)

10:30 Efficacy and Crop Safety of Bicyclopyrone Herbicide in Sweetpotato. Katherine M. Jennings, Department of Horticultural Science, North Carolina State University, Raleigh NC 27695. (katie_jennings@ncsu.edu)

FLORICULTURE, ORNAMENALS AND TURF SECTION

Room: Mobile Bay Ballroom III
Riverview Plaza Hotel

Presiding: Allen Owings, Chair

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

8:00 Potential of Virginia Mountain Mint (*Pycnanthemum virginicum* L.) to Enhance Pollinator and Beneficial Insect Visitation. Bethany A. Harris* and Bodie V. Pennisi, Department of Horticulture, University of Georgia, 1109 Experiment St., Griffin, GA 30223. (bah5191@uga.edu)

8:15 Effect of Soil Amendment, Water Content, and Nitrogen Fertilizer on Decomposition of Biodegradable Paper Pot. Bethany A. Harris¹, Mussie Y. Habteselassie², and Bodie V. Pennisi¹, ¹Department of Horticulture and ²Department of Crop and Soil Sciences, University of Georgia, 1109 Experiment St.,

Griffin GA 30223. (bah5191@uga.edu)

8:30 Integrating socioeconomic, ecosystem engineering, and horticulture research to Clean Water^R. Sarah A. White, Department of Plant and Environmental Sciences, Clemson University, E-143 Poole Ag Center, Clemson, SC 29634. (swhite4@clemson.edu)

8:45 Battling Rose Rosette Disease in the State of Oklahoma. Michael A. Schnelle^{1*} and Jennifer Olson², ¹358 Agriculture Hall, Department of Horticulture and Landscape Architecture, Oklahoma State University, Stillwater, OK 74078, ²127 Noble Research Center, Department of Entomology and Plant Pathology, Oklahoma State University, Stillwater, OK 74078. (mike.schnelle@okstate.edu)

9:00 Relative Salt Tolerance of Eight Barberry Cultivars. Youping Sun¹, Qiang Liu^{1,2}, Lifei Chen^{1,3}, Genhua Niu¹, Texas A&M AgriLife Research Center¹, El Paso, TX 79927, Central South University of Forestry and Technology², Changsha, Hunan 410004, China, Jilin Agricultural University³, Changchun, Jilin 130118, China. (gniu@ag.tamu.edu)

9:15 Break

9:30 Woody Ornamental Plant Establishment Studies on a Salt-affected Soil, Galveston Island, Texas. David Creech*, Kenneth Farrish, and Elaine Harris, Arthur Temple College of Forestry and Agriculture, Stephen F. Austin State University, Nacogdoches, TX 75962. (dcreech@sfasu.edu)

9:45 Crape Myrtle Bark Scale Management with Insect Growth Regulators and Other Chemicals. Yan Chen^{1*}, Michelle Samuel-Foo², and Joey Quebedeaux¹. Hammond Research Station, LSU AgCenter, Hammond, LA 70403. (yachen@agcenter.lsu.edu)

10:00 Culture, Cultivation, and Collaboration - What We Learned from A Scientific Exchange Program on Tea in China. Yan Chen^{1*}, Jeff Beasley², Jason Stagg¹, Brent Pemberton³, Donglin Zhang⁴ and Jason McDonald⁵. Hammond Research Station¹, LSU AgCenter, Hammond, LA 70403, School of Plant, Environmental and Soil Sciences², LSU AgCenter, Baton Rouge, LA 70803, Texas A&M University Agri-Life Research and Extension Center, Overton, TX 75684, Department of Horticulture⁴, University of

Georgia, Athens, GA 30602, and Great Mississippi Tea Company⁵, Brookhaven, MS 39601. (yachen@agcenter.lsu.edu)

- 10:15 Performance of Black Diamond™ Crepe Myrtles (*Lagerstroemia indica* L.) in Northeast Texas.** Kevin Chretien* and Derald A. Harp, School of Agriculture, Texas A&M University – Commerce, Commerce, TX 75429 (derald.harp@tamuc.edu)

FRUIT CROPS SECTION

Room: Grand Bay Ballroom I
Riverview Plaza Hotel

Presiding: Dario Chavez, Chair

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

- 8:00 Feeding Preference of *Popillia japonica* in Banana Leaf Herbivory.** Edgar Vinson^{1*}, David Held¹, and Elina Coneva², ¹ 101 Funchess Hall, Department of Horticulture, Auburn University, AL 36849, ² 301 Funchess Hall, Department of Entomology and Plant Pathology, Auburn University, AL 36849. (vinsoed@auburn.edu)

- 8:15 Seed and Fiber Content of Southern Highbush and Rabbiteye Blueberry Varieties.** Rachel A. Itle* and D. Scott NeSmith, Department of Horticulture, University of Georgia, 1109 Experiment Street, Griffin, GA 30223. (ritle@uga.edu)

- 8:30 Fruit bagging for the production of peaches in conventional and organic orchards.** Jaine Allran^{1*}, Guido Schnabel¹, and Juan Carlos Melgar¹, ¹ Department of Plant and Environmental Sciences, Clemson University, Clemson, SC 29634 (jallran@g.clemson.edu)

- 8:45 Estimating Peach Maturity Dates from Ovule Benchmarks and Growing Degree Days in South Carolina.** Gregory L. Reighard^{1*}, Juan Carlos Melgar¹, R. Trey Burrell¹, Filipe Bittencourt² and Ksenija Gasic¹. ¹Department of Plant and Environmental Sciences, Clemson, SC 29634; ²Department of Agriculture, University of Lavras, Minas Gerais, Brazil 37200. (grghrd@clemson.edu)

- 9:00 Golden Kiwifruit (*Actinidia chinensis* Planch.) as a New Potential Specialty Crop**

for Texas. Timothy P. Hartmann^{1*} and David L. Creech², ¹2134 Texas A&M University, College Station, TX 77843, ²13000 Stephen F. Austin State University, Nacogdoches, TX 75962. (t-hartmann@tamu.edu)

9:15 Break

- 9:30 Preliminary Assessment of Selected Grape Rootstocks for Sustainable Viticultural Production in Alabama.** Andrej Svyantek, Elina Coneva*, Raymond Kessler Jr., and James Pitts, 101, Funchess Hall, Department of Horticulture, Auburn University, Auburn, AL 36849. (edc0001@auburn.edu)

- 9:45 Assessing Secondary Bud Fruitfulness of Two *Vitis* Cultivars Grown on the Texas High Plains.** Thayne Montague*, Edward Hellman, and Emily Graff. Texas AgriLife Research and Extension Center, Lubbock, TX 79403-6603. Department of Plant and Soil Science, Texas Tech University, Lubbock, TX 79409-2122. (thayne.montague@ttu.edu)

- 10:00 Partnerships to improve sustainable citrus production in the Lower Rio Grande Valley** Catherine Simpson^{1*}, Sri Lakshmi Telagamsetty¹, Julian Gonzales III¹, Juan Carlos Melgar², Shad D. Nelson¹, and Mamoudou Setamou¹ 312 N International Blvd, Department of Agriculture, Agribusiness and Environmental Sciences, TAMU-Kingsville Citrus Center, Weslaco, TX 78596; ²Clemson University, Department of Agricultural and Environmental Sciences, SC 29634. (Catherine.simpson@tamuk.edu)

- 10:15 Use of gibberellin (GA) and aminoethoxyvinylglycine (AVG) in Georgia peaches.** Dario J. Chavez^{1*} and Jeff Cook². ¹1109 Experiment Street, Department of Horticulture, University of Georgia, Griffin Campus, Griffin, GA 30223; ² Ivy Street Butler, Taylor County Extension Office, GA 31006. (dchavez@uga.edu)

- 10:30 Observations of winter damage on Georgia peach trees and lessons for the future.** Dario J. Chavez* 1109 Experiment Street, Department of Horticulture, University of Georgia, Griffin Campus, Griffin, GA 30223. (dchavez@uga.edu)

POSTHARVEST AND BIOTECHNOLOGY SECTION

Room: Riverboat Suite
Riverview Plaza Hotel
Presiding: Cecilia McGregor, Chair
Abstracts: To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: cmcgre1@uga.edu.

8:00 Physiochemical Attributes Impacted by Post-harvest Storage and Harvest Season of Primocane Blackberry Genotypes. Daniela M. Segantini^{1*}, Renee T. Threlfall², and John R. Clark¹, ¹1316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701, ²2650 North Young Avenue Institute of Food Science and Engineering, University of Arkansas Fayetteville, AR 72704. (dani_segantini@hotmail.com)

8:15 Using Centromeric Histone 3 Sequence Variance to Build Phylogenies in Penstemon. Xin Ye^{1*} and Shaun R. Broderick², ¹Department of Plant and Soil Sciences, Mississippi State University, Starkville, MS 39059, ²Mississippi Agricultural and Forestry Experiment Station, Truck Crops Branch, Crystal Springs, MS 39056. (srb559@msstate.edu)

8:30 Factors influencing postharvest fruit quality in blueberries. Savithri U. Nambeesan^{1*}, Yi-Wen Wang¹, John W. Doyle¹, Scott D. NeSmith², ¹1111 Miller Plant Sciences, Department of Horticulture, University of Georgia, Athens, GA 30602, ²1109 Experiment Street, Department of Horticulture, University of Georgia, Griffin, GA 30223. (sunamb@uga.edu)

8:45 Genetic control of rind thickness in watermelon. Cecilia McGregor*, 1111 Miller Plant Sciences, Department of Horticulture, University of Georgia, Athens, GA 30602. (cmcgre1@uga.edu)

9:00 Yield response of four sweetpotato (*Ipomea batatas*) clones to in-row spacing and length of growing season. Jonathan R. Schultheis^{1*}, Luis Duque², Keith D. Starke¹, Kenneth V. Pecota¹, and Craig Yencho¹. ¹Department of Horticultural Science, North Carolina State University, Raleigh, NC

27695, ²Penn State University, Headhouse 1, Room 107, University Park, PA 16802. (jonathan_schultheis@ncsu.edu)

ANNUAL BUSINESS MEETING AND AWARDS PROGRAM

Room: Bon Secour I
Riverview Plaza Hotel
Time: 11:00 – 12:30
Presiding: Ed Bush, President

SAAS General Business Meeting

Room: Mobile Convention Center Room 203B
Time: 4:00 PM–4:15 PM

SAAS Social/Super Bowl Party

Room: Mobile Convention Center East/West Ballroom
Time: 4:15 PM – until

WORKING GROUPS

(Contact Chairs for Agenda and order of presentations if not given)

National Sweetpotato Collaborators

Presiding: Melanie Filotas, Chair
Friday: 8:00 am – 5:00 pm
Saturday: 8:00 am – 5:00 pm
Room: Schooner
 Riverview Plaza Hotel

Physiology, Breeding and Genetics

An Optimized Genotyping-By-Sequencing Protocol and SNP Calling Pipeline in Diploid and Hexaploid *Ipomoea* sp. Bode A. Olukolu^{1*}, Awais M. Khan², Zhao-Bang Zeng³, Lachlan J. Coin⁴, Zhangjun Fei⁵, Robin Buell⁶, Guilherme Da Silva Pereira³, Chenxi Zhou⁴, Dorcus C. Gemenet², Shan Wu⁵, Honghe Sun⁵, Marcelo Mollinari³, G. Craig Yencho¹, ¹Dept. of Horticultural Science, NC State University, Raleigh NC 27695-7609, ²International Potato Center, P.O. Box 1558, Lima 12, Peru, ³Bioinformatics Research Center, Dept. of Statistics, NC State University, Raleigh NC 27695-7566, ⁴Institute for Molecular Bioscience, The University of Queensland, 306 Carmody Road, St Lucia, QLD 4072, Brisbane, Australia, ⁵Boyce Thompson Institute for Plant Research, Tower Rd, Ithaca, NY, 14853, ⁶Department of Plant Biology, Michigan State University, East Lansing, Michigan. (baolukol@ncsu.edu)

Genetic Mapping in Sweetpotato Using Genotyping-By-Sequencing. Valerio Primomo*, Travis W. Banks, Joseph O'Neill, and Jaclyn Prystupa, Vineland Research and Innovation Centre, Vineland Station, Ontario, Canada, L0R 2E0. (valerio.primomo@vinelandresearch.com)

Phosphorus Availability and Mechanical Impedance Alter Sweetpotato Storage Root Length. A.Q. Villordon^{1*}, M. Selvaraj², A. Khan³, and D. LaBonte⁴, ¹LSU AgCenter Sweet Potato Research Station, Chase, LA 71324, ²CIAT, Cali, Colombia, ³Cornell University, Geneva, New York (formerly with CIP, Lima, Peru), ⁴School of Plant, Environmental and Soil Sciences, Baton Rouge, LA 70803. (AVillordon@agcenter.lsu.edu)

Plant and Slip Production

Status of Jamaica's Clean Seed Programme Initiative. P. Chang*, I Chambers, A. Reid, and L. Myers-Morgan, Research & Development Division, Ministry of Industry, Commerce, Agriculture and Fisheries (MICAF). Jamaica, West Indies. (pgschang@hotmail.com)

Sulfur Fertilizer on North Mississippi Sweetpotatoes 2016. Jeff Main*, Stephen Meyers, and Mark Shankle, Pontotoc Ridge-Flatwoods Branch Experiment Station, Mississippi State University, Pontotoc, MS 38863. (JLM3@msstate.edu)

Yield Response of Four Sweetpotato (*Ipomoea batatas*) Clones to In-Row Spacing and Length of Growing Season. Jonathan R. Schultheis^{1*}, Luis Duque², Keith D. Starke¹, Kenneth V. Pecota¹, and Craig Yencho¹, ¹Department of Horticultural Science, North Carolina State University, Raleigh, NC 27695, ²Penn State University, Headhouse 1, Room 107, University Park, PA 16802. (jonathan_schultheis@ncsu.edu)

Sweetpotato Cultivar Responses to Interactive Effects of Temperature, Drought, and Carbon Dioxide. Shasthree Taduri¹, Ajaz A. Lone¹, Stephen Meyers², Mark Shankle², and K. Raja Reddy^{1*}, Mississippi State University, Mississippi State, MS and Pontotoc Ridge-Flatwoods Branch Experiment Station, North Mississippi Research and Extension Center, 8320, Hwy 15 South, Pontotoc, MS. mailto:krreddy@pss.msstate.edu

Insect, Disease and Weed Management

Evaluation of Herbicides for Sweetpotatoes in Ontario, Canada. Melanie Filotas, Ontario Ministry of Agriculture, Food and Rural Affairs, OMAFRA-Simcoe Resource Centre, Simcoe, Ontario, N3Y 4K3. (melanie.filotas@ontario.ca)

Weed Management in Sweetpotato. Mark Shankle*, Stephen Meyers, Trevor Garrett, and Jeff Main, Pontotoc Ridge-Flatwoods Branch Experiment Station, Mississippi State University, Mississippi State, MS 39762. (mark.shankle@msstate.edu)

Herbicide Efficacy Trials in California Sweetpotatoes. C. Scott Stoddard*, University of California Cooperative Extension, 2145 Wardrobe Ave, Merced, CA 95341-6445. (csstoddard@ucanr.edu)

Management of Soil Insects in Sweetpotato in Louisiana. T.P. Smith^{1*}, J.M. Beuzelin², T.F. Arnold¹ and D.M. May², LSU Agricultural Center Sweet Potato Research Station, Chase, LA 71324,

²LSU Agricultural Center Dean Lee Research Station, Alexandria, LA. (tsmith@agcenter.lsu.edu)

Comparison of Yield and Quality of Conventional Versus Organic Sweetpotato in Charleston South Carolina. Brian K. Ward^{1*}, Phillip Wadl² and Livy Williams III², ¹Department of Agricultural and Environmental Sciences, Clemson University Coastal Research and Education Center., 2700 Savannah Hwy., Charleston, SC 29414, ²USDA-ARS US Vegetable Lab., 2700 Savannah

Development and Application of Novel Biotechnological Approaches for Sweetpotato (*Ipomoea batatas*) Virus Resistance in Mississippi. Chunquan Zhang^{1,2*}, Yan Meng^{1,2}, Kyler Holmes², Rita Okoro¹ and Victor Njiti¹, ¹Department of Agriculture, ²Center for Biotechnology, Alcorn State University, Lorman, Mississippi, MS 39096. (czhang@alcorn.edu)

Is Sweetpotato Leaf Curl Virus Really Seed Transmitted in Sweetpotato? Kai-Shu Ling, Phillip Wadl, Livy Williams, Alvin Simmons, and D. Michael Jackson, USDA-ARS, U.S. Vegetable Laboratory, Charleston, SC, 29414. (Kai.Ling@ARS.USDA.GOV)

Sweetpotato and the Disease Triangle: I. Russet crack. C.A. Clark*, Department of Plant Pathology and Crop Physiology, Louisiana State University Agricultural Center, Baton Rouge, LA 70803. (cclark@agcenter.lsu.edu)

Evaluation of Resistance to Post-Harvest Fungal Pathogens in Sweetpotato (*Ipomoea batatas*). Edwin R. Palencia* and Lina M. Quesada-Ocampo, Department of Entomology Plant Pathology, North Carolina State University, Raleigh, NC 27695-7601. (erpalenc@ncsu.edu)

Postharvest, Processing and Marketing

Biomass Studies of Ten Sweetpotato Varieties in the Virgin Islands. Thomas W. Zimmerman*, Carlos Montilla, University of the Virgin Islands Agricultural Experiment Station, RR#1 Box 10,000, Kingshill, VI 00850. (tzimmer@uvi.edu)

Using a Low-Cost 3D Scanner for Non-destructive Measurement of Surface Area and Volume of Storage Roots in Post Harvest Research. A. Villordon^{1*} and D. Labonte², ¹LSU AgCenter Sweet Potato Research Station, Chase, LA 71324, ²LSU AgCenter School of Plant, Environmental and Soil Sciences, Baton Rouge, LA 70803. (AVillordon@agcenter.lsu.edu)

Variation in Beta-Carotene and Phenolics Levels in In-House Hybrids During Storage and Processing. Ananda Nanjundaswamy*, Lydia Batey, Victor Njiti, Qun Xia and Franklin Chukwuma, Department of Agriculture, Alcorn State University, Lorman, MS 390

Sweetpotato Skinning Injury Influences Consumer Willingness-to-Pay. Alba J. Collart¹, Stephen L. Meyers^{2*}, and Jason W. Ward³, ¹Department of Agricultural Economics, Mississippi State University, Mississippi State, MS 39762, ²North Mississippi Research and Extension Center-Pontotoc Ridge-Flatwoods Branch Experiment Station, Pontotoc, MS 38863, ³Department of Agricultural and Biological Engineering, Mississippi State University, Mississippi State, MS 39762. (stephen.meyers@msstate.edu)

Sweetpotato Genotypes and Textural Characteristics of French Fries. Ai Sato¹, Van-Den Truong^{1,2*}, Rong Reynolds², Suzanne Johanningsmeier^{1,2}, Kenneth Pecota³, Craig Yencho³

¹Department of Food, Bioprocessing and Nutrition Sciences, ²USDA-ARS, SEA Food Science Research Unit, ³Department of Horticultural Science, North Carolina State University, Raleigh, NC 27695. (Den.Truong@ARS.USDA.GOV)

Fifty Shades of Orange: Sensory and Consumer Evaluation of Sweetpotato Products. Valerio Primomo*, Amy Bowen, Amy Blake, and Jessica Turecek, Vineland Research and Innovation Centre, Vineland Station, Ontario, Canada, L0R 2E0. (valerio.primomo@vinelandresearch.com)

Getting to Know Your Sweetpotato Fans. Michael Boyette. Department of Biological and Agricultural Engineering, North Carolina State University, Raleigh, NC 27695. (boyette@ncsu.edu)

Graduate Student Presentations

PhD Students

Genetic Mapping of Nematode Resistance in a Biparental Sweetpotato Population. Bonny M. Oloka*, Victor A. Amankwaah, Amber D. Harmon, Meri Reeber, Ana Pecota, Kenneth V. Pecota, Bode A. Olukolu, G. Craig Yencho, Department of Horticultural Science, North Carolina State University, 214 Kilgore Hall, Box 7609, Raleigh, NC 27695-7609. (craig_yencho@ncsu.edu)

On-field Sweetpotato Skin Strength Enhancement as a Result of Main Stem -- Root Separation by the Harvest-Assist Vine Puller-Chopper Machine. Anirudh Akula*, J.A. Macialek and M.D.

Boyette, Department of Biological and Agricultural Engineering, North Carolina State University, Raleigh, NC 27695. (aakula@ncsu.edu)

Evaluation of Dry Matter, Starch, Sugar, β -Carotene Content and Amylase Activities in the TB Mapping Population. Victor A. Amankwaah^{1*}, Bonny M. Oloka¹, Ragy Ibrahim¹, Sharon Williamson¹, Ken Pecota¹, Bode Olukolu¹, Van-Den Truong² and Craig Yencho¹, Department of Horticultural Science, North Carolina State University, Raleigh, NC 27695, ² USDA-ARS Food Science Research 322 SCHAUB HALL, NCSU, Raleigh, NC 27695-624. (vamankw@ncsu.edu)

Evaluating the Effects of the Environment on Physiological Properties of Sweetpotato (*Ipomoea batatas*). T. F. Arnold^{1*}, A. Q. Villordon¹, T. P. Smith¹, D. R. LaBonte², and D. H. Picha², LSU AgCenter Sweet Potato Research Station, Chase, LA 71324, ²LSU AgCenter School of Plant Environmental and Soil Sciences, Baton Rouge, LA 70803. (tarnold@agcenter.lsu.edu)

Viral Distribution Titers of SPVG, SPVC, SPFMV and SPV2 (Potyviridae) in 'Beauregard' Sweetpotato (*Ipomoea batatas*). Herrera Favio* and C.A. Clark, Department of Plant Pathology and Crop Physiology, Louisiana State University Agricultural Center. Baton Rouge, LA 70803. (FEguez@agcenter.lsu.edu)

M.S. Students

Evaluating The Shape and Size Characteristics of Sweetpotatoes Using Laser Image Analysis. Amber Tsirnikas* and Michael D. Boyette, P.E., Department of Biological and Agricultural Engineering, North Carolina State University, Raleigh, NC 27695. (atsirni@ncsu.edu)

Interactive Effects of Nitrogen Nutrition and Ultraviolet-B Radiation on Sweetpotato Growth and Development. Zigeng Chen^{3*}, Shasthree Taduri¹, Mark Shankle², Wei Gao³ and K. Raja Reddy¹, ¹Mississippi State University, Mississippi State, MS, 39762, ²Pontotoc Ridge-Flatwoods Branch Experiment Station, North Mississippi Research and Extension Center, 8320, Hwy 15 South, Pontotoc, MS 38863 and ³Colorado State University, Fort Collins, CO 80523. (zigengchen1@gmail.com)

Impact of Palmer Amaranth (*Amaranthus palmeri*) Removal on Sweetpotato Yield and Quality. Stephen Smith*, Katie Jennings, and David Monks, Department of Horticultural Science, North Carolina State University, Raleigh, NC 27695. (scsmith7@ncsu.edu)

Poster titles

Potential Risk of Herbicide Carry-over to Sweetpotato. Trevor Garrett, Mark Shankle*, and Stephen Meyers, Pontotoc Ridge-Flatwoods Branch Experiment Station, Mississippi State University, Mississippi State, MS 39762. (mark.shankle@msstate.edu)

Remote Sensing and Management of Drip Irrigation in Sweetpotato Research Plots in Louisiana: Lessons Learned and the Way Forward. J. Gregorie and A. Villordon*, LSU AgCenter Sweet Potato Research Station Chase, LA 71324. (AVillordon@agcenter.lsu.edu)

Watermelon Research Group

Presiding: Shaker Kousik, Chair

Friday: 1:00 pm – 6:00 pm

Saturday: 8:00 am - 6:00 pm

Room: Bon Secour II
Riverview Plaza Hotel

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

Friday, February 4, 2017, 1:00 pm to 6:00 pm

1:00 Welcome: Shaker Kousik, Chair, WRDG, incoming Chair: Jerome Bernier

1:10 Introductions: All in attendance

Industry updates and presentations

1:30 **Watermelon Industry in India.** Sonali Mookerjee, HM. Clause, 9241 Mace Blvd, Davis, CA 95618 (sonali.mookerjee@hmcclause.com)

1:45 **Update from NWA.** Bob Morrissey, Executive Director, National Watermelon Association. 190 Fitzgerald Road, Suite 3, Lakeland, FL 33813 (bobm@nwawatermelon.com)

2:00 **Regional Watermelon Production Updates**
Florida
Carolinas
DelMarVa
Georgia
Indiana & Midwest

2:30 Variety updates from Seed Companies

Variety Trial Reports:

3:00 **Watermelon Variety Trial Results from Georgia in 2016.** Timothy Coolong^{1*}, ¹2360 Rainwater Road, Department of Horticulture, University of Georgia, Tifton, GA 31793 (tcoolong@uga.edu)

3:15 **Kentucky Seedless Watermelon (*Citrullus lanatus*) Variety Trial, 2016.** Shubin K. Saha^{1*}, John Snyder¹ and John Walsh², ¹Department of Horticulture, University of Kentucky, Ag Science Building North, N-318, Lexington, KY 40546-0091. ²Department of Horticulture, University of Kentucky, Horticulture Research Farm, 4321 Emmert Farm Lane, Lexington, KY 40514. (Shubin.saha@uky.edu).

3:30 Break

4:00 **Fruit Yield and Quality of Heirloom Watermelon Cultivars.** Juan Carlos Díaz-Pérez* and Jesús Bautista, Department of Horticulture, University of Georgia, Tifton, GA 31793-5766. (jcdiaz@uga.edu).

4:15 **Watermelon Variety Trial Results from the SE U.S.** Timothy Coolong^{1*}, Gilbert Miller², Joshua Freeman³, and Jonathan Schultheis⁴, ¹2360 Rainwater Road, Department of Horticulture, Tifton, GA 31793, ²64 Research Road, Edisto Research and Education Center, Blackville, SC 29817, ³155 Research Road, North Florida Research and Education Center, Quincy, FL 32531, ⁴264 Kilgore Hall, Department of Horticulture, Raleigh, NC 27695. (tcoolong@uga.edu)

4:30 **Tri-State Variety Trial for Seedless Watermelon for Kentucky, Indiana, and Delaware, 2016.** Shubin K. Saha^{1*}, Wenjing Guan², Gordon Johnson³, John Snyder¹ and John Walsh⁴, ¹Department of Horticulture, University of Kentucky, Ag Science Building North, N-318, Lexington, KY 40546-0091. ²Horticulture and Landscape Architecture, Purdue University, Southwest Purdue Agriculture Center, 4369 N. Purdue Rd, Vincennes, Indiana, 47591. ³Department of Plant and Soil Sciences, University of Delaware, Carvel Research and Education Center, 16483 County Seat Highway, Georgetown, DE, 19947. ⁴Department of Horticulture, University of Kentucky,

Horticulture Research Farm, 4321 Emmert Farm Lane, Lexington, KY 40514. (Shubin.saha@uky.edu).

Grafting and Yield

4:45 **Watermelon (*Citrullus lanatus*) yield and quality response to grafted versus non-grafted plants, 2016.** Keith D. Starke* and Jonathan R. Schultheis. Department of Horticultural Science, 2721 Founders Drive, 264 Kilgore, Raleigh, NC 27695-7609 (jonathan_schultheis@ncsu.edu)

5:00 **Early Season Crop Development, Yield, and Fruit Quality of Standard and Mini Watermelons Grafted to Several Cucurbit Rootstocks.** Matthew B. Bertucci^{1*}, Kathryn M. Jeninngs¹, Davis W. Monks¹, Jonathan R. Schultheis¹, W. Bradfred Thompson¹, Frank M. Louws², David L. Jordan³, Nicholas A. Basinger¹, Stephen C. Smith¹, Matthew D. Waldschmidt¹, ¹Department of Horticultural Science, ²Department of Entomology and Plant Pathology, ³Department of Crop and Soil Sciences, NC State University, Raleigh, NC 27606. (mbbertuc@ncsu.edu)

5:15 **Yield and Fruit Quality of Grafted Watermelons Grown with Different Planting Densities in Fusarium Wilt Naturally Infested Field.** Wenjing Guan*, Daniel S. Egel, and Dennis Nowaskie, Southwest Purdue Agricultural Center, Vincennes, IN, 47591. (guan40@purdue.edu)

5:30 **Southern Root-Knot Nematode (*Meloidogyne incognita*) Resistance/Tolerance, Watermelon Fruit Yield and Quality in Four Grafted Watermelon Rootstocks and One Non-grafted Watermelon.** Gilbert Miller*, Edisto Research and Education Center, Clemson University, 64 Research Road, Blackville, SC 29817. (gmllr@clemson.edu)

5:45 **Comparison of Grafted Versus Ungrafted Organic Diploid and Triploid Watermelon Yield and Quality Under Enhanced Native Pollinator Habitat.** Brian K. Ward^{1*}, Richard L. Hassell¹, Mimi M. Jenkins¹, B. Merle Shepard¹, ¹Department of Agricultural and Environmental Sciences, Clemson University Coastal Research and Education Center., 2700 Savannah Hwy., Charleston, SC 29414, (bw@clemson.edu)

6:00 Adjourn

Saturday, February 4, 2017, 8:00 am to 5:45 pm

8:00 Welcome and additional introductions: Shaker Kousik, Chair, WRDG

Grafting Session (continued from Day 1)

8:15 **Potential Rootstocks for Watermelon Grafting.** Richard L. Hassell, Clemson University CREC, 2700 Savannah Highway, Charleston, South Carolina 29414. (rhassell@clemson.edu)

8:30 **New Developments in Watermelon Grafting.** Richard L. Hassell^{1*}, Pat Wechter², Amnon Levi², ¹Clemson University CREC, 2700 Savannah Highway, Charleston, South Carolina, 29414, ²USDA-ARS, 2700 Savannah Highway, Charleston, South Carolina 29414. (rhassell@clemson.edu)

Pollenizers

8:45 **Pollenizer placement considerations effects on watermelon (*Citrullus lanatus*) yield and quality.** Jonathan R. Schultheis* and Keith D. Starke. Department of Horticultural Science, 2721 Founders Drive, 264 Kilgore, Raleigh, NC 27695-7609 (jonathan_schultheis@ncsu.edu)

Watermelon Growth and Development

9:00 **Regulation of Citrulline metabolism in Watermelons.** Vijay Joshi*, Diwas Silwal, Daniel Leskovar. Texas AgriLife Research, Texas A&M system. 1619 Garner Field Rd, Uvalde, Texas 78801 (Vijay.Joshi@tamu.edu)

9:15 **¹H NMR and HPLC-based metabolite profiling of watermelon varieties.** Mihir K Mandal^{1,2}, Jennifer Ikerd², Swikriti Shrestha³, Amari Battiste³, Arezue Boroujerdi³, Brian Ward⁴, Shaker Kousik². ¹ORISE participant sponsored by U.S. Vegetable Laboratory, USDA, ARS. ²U.S. Vegetable Laboratory, USDA, ARS, 2700 Savannah Highway, Charleston, SC 29414. ³Claflin University, Orangeburg, SC. ⁴ Clemson University Coastal Research and Education Center, Charleston, SC 29414. (shaker.kousik@ars.usda.gov)

9:30 **An overall small root system in watermelon cultivars indicates a need to improve their lateral fibrous root capacity.** Amnon Levi^{1*}, Shelby Steck¹, Matt Horry², Robert L. Jarret³, Patrick Wechter¹, Shaker Kousik¹, Brian Ward², Gilbert Miller⁴, Richard Hassell², and

Anthony Keinath². ¹USDA, ARS, U.S. Vegetable Laboratory, 2700 Savannah Highway, Charleston, South Carolina 29414; ²Clemson University, Coastal Research and Education Center, 2700 Savannah Highway, Charleston, South Carolina 29414; ³USDA, ARS, Plant Genetic Resources and Conservation Unit, 1109 Experiment St., Griffin, GA 30223; ⁴Clemson University, Edisto Research & Education Center, 64 Research Road, Blackville, SC 29817.

9:45 **Nuclear magnetic resonance (NMR) spectroscopy reveals wide variation in root metabolites of watermelon accessions and cultivars.** Mihail Kantor ^{1*}, Arezue Boroujerdi¹, Camelia Kantor ¹ and Amnon Levi². ¹Claflin University, 400 Magnolia Street, Orangeburg, SC 29115; ²USDA, ARS, U.S. Vegetable Laboratory, 2700 Savannah Highway, Charleston, SC 29414 (Amnon.levi@ars.usda.gov)

10:00 Break**Watermelon Breeding and Genetics**

10:30 **Candidate Genes Regulating Watermelon Fruit Size and Shape.** Reeve Legendre* and Cecilia McGregor, Department of Horticulture, University of Georgia, Athens, GA, 30602 (reeve.legendre@uga.edu)

10:45 **Towards the identification of quantitative trait loci and development of molecular markers linked to Fusarium wilt resistance in watermelon.** W. Patrick Wechter¹, Sandra E. Branham¹, Shauneese Lambel², Nihat Guner³, and Amnon Levi^{1*}. ¹USDA, ARS, U.S. Vegetable Laboratory Charleston, South Carolina 29414; ²HM.CLAUSE Seed Company, 9241 Mace Blvd, Davis, California 95618; ³Sakata Seed America, 20900 FL-82, Fort Myers, Florida 33913 (Amnon.levi@ars.usda.gov)

11:00 **Narrow-sense heritability of citrulline, arginine, and lycopene in two diverse watermelon populations.** Jordan L. Hartman^{1*}, Penelope Perkins-Veazie², Todd C. Wehner¹. ¹Department of Horticultural Science, North Carolina State University, Raleigh, NC 27695-7609, ²Plants for Human Health Institute, North Carolina State University, Kannapolis, NC 28083. (jlhartm3@ncsu.edu)

- 11:15 **Breeding Short Internode Watermelon Varieties for Organic and Direct-Market Production.** Suzanne Stone*, George Boyhan, and Cecilia McGregor, 1111 Miller Plant Science Bldg., Department of Horticulture, University of Georgia, Athens, GA 30602. (sstone2@uga.edu)
- 11:30 **Update from NWPB.** Mark Arney, Executive Director/CEO, National Watermelon Promotion Board, 1321 Sundial Point Winter Springs, FL32708 (info@watermelon.org)
- 12:30 **Lunch Break**
- Biotic and Abiotic Stress**
- 1:30 **Evaluation of a new fungicide for management of Fusarium wilt of watermelon.** Nathan Miller¹*, Mike Adams¹, and Lina M. Quesada-Ocampo¹, ¹Department of Entomology and Plant Pathology, North Carolina State University, Raleigh, NC 27695 (nfmille2@ncsu.edu).
- 1:45 **Evidence for secondary spread of Fusarium wilt of watermelon in transplant trays.** Daniel S. Egel¹, Judith Santini², Curtis Marchino¹, Department of Botany and Plant Pathology¹ and Department of Agronomy², Purdue University, 915 W. State St., West Lafayette, IN, 47907. (egel@purdue.edu)
- 2:00 **Assessment of Watermelon Rootstock Resistance to *Fusarium oxysporum f.sp. niveum* when Subjected to *Meloidogyne incognita*.** Cody L. Smith, Joshua H. Freeman*, North Florida Research and Education Center, University of Florida, 155 Research Road, Quincy, FL 32351 (joshuafr@ufl.edu).
- 2:15 **Cucurbit Leaf Crumple Virus and Potential Impacts on Watermelon Fruit Quality in north Florida and South Georgia.** Joshua H. Freeman*, Mathews L. Paret, and Binoy Babu, North Florida Research and Education Center, University of Florida, 155 Research Road, Quincy, FL 32351. (joshuafr@ufl.edu)
- 2:30 **Development of microsatellites and population analyses of *Phytophthora capsici* infecting vegetable crops.** Camilo H. Parada-Rojas and Lina Quesada-Ocampo, Department of Entomology and Plant Pathology, North Carolina State University, Raleigh, NC 27695-7616. (chparada@ncsu.edu)
- 2:45 **Development of *Phytophthora crown rot (Phytophthora capsici)* resistant rootstocks of *Cucurbita maxima* and *C. moschata* for watermelon grafting.** Kristie Mantooth¹*, Jennifer Ikerd¹, Mihir Mandal², Richard Hassell³ and Shaker Kousik¹. ¹U.S. Vegetable Laboratory, USDA, ARS, 2700 Savannah Highway, Charleston, SC 29414. ²ORISE participant sponsored by U.S. Vegetable Laboratory, USDA, ARS. ³Clemson University Coastal Research and Education Center, Charleston, SC 29414. (shaker.kousik@ars.usda.gov)
- 3:00 **Break**
- 3:30 **Progress towards the understanding of seed infection in *Acidovorax citrulli*-watermelon pathosystem.** Bhabesh Dutta* Ron Walcott, and Ron Gitaitis, Department of Plant Pathology, University of Georgia, Tifton, 31793. (bhabesh@uga.edu)
- 3:45 **Occurrence of foliar pathogens of watermelon on commercial farms in South Carolina - Field survey results from three seasons in 2015 and 2016.** Gabriel Rennberger*¹, Anthony P. Keinath¹ and Patrick Gerard², ¹Coastal Research and Education Center, Clemson University, Charleston, SC 29414, ² Department of Mathematical Sciences, Clemson University, Clemson, SC 29634. (grennbe@clemson.edu)
- 4:00 **Examining host susceptibility and fungicide resistance of *Colletotrichum orbiculare* infecting cucurbit crops in the Southeastern United States.** Nicholas Noël* and Lina Quesada-Ocampo, Department of Entomology and Plant Pathology, North Carolina State University, Raleigh, NC, 27695. (nnoel@ncsu.edu)
- 4:15 **Screening Cucurbit Rootstocks for Varietal Resistance to *Meloidogyne incognita* and *Rotylenchulus reniformis*.** Cody L. Smith*¹, Joshua H. Freeman¹, Nancy Kokalis-Burelle², William P. Wechter³, ¹ North Florida Research and Education Center, University of Florida, 155 Research Road, Quincy, FL 32351, ² USDA-ARS Horticultural Research Laboratory, 2001 South Rock Road, Ft. Pierce, FL 34945, ³ USDA-ARS Vegetable Laboratory, 2700 Savannah Highway, Charleston, SC, 29414 (cstaxidermy@ufl.edu)

Weed Control

4:30 **Influence of Grafting on the Critical Period for Weed Control in Watermelon.** Matthew B. Bertucci^{1*}, Kathryn M. Jeninngs¹, Davis W. Monks¹, Jonathan R. Schultheis¹, Frank M. Louws², David L. Jordan³, Nicholas A. Basinger¹, Stephen C. Smith¹, Matthew D. Waldschmidt¹, ¹Department of Horticultural Science, ²Department of Entomology and Plant Pathology, ³Department of Crop and Soil Sciences, NC State University, Raleigh, NC 27606. (mbbertuc@ncsu.edu)

4:45 **Evaluation of Chateau (Flumioxazin) for Weed Control in Seedless Watermelons.** Wenjing Guan^{1*}, Daniel S. Egel¹, Stephen C. Weller², and Dennis Nowaskie¹, ¹Southwest Purdue Agricultural Center, Vincennes, IN 47591, ²Horticulture & Landscape Architecture, West Lafayette, IN 47907. (guan40@purdue.edu)

5:00 **Strip Tillage Improves Soil Biological Activity, Fruit Yield and Sugar Content of Triploid Watermelon.** Daniel Leskovar*, Yahia Othman, and Xuejun Dong, Texas A&M AgriLife Research and Extension Center, Texas A&M University, 1619 Garner Field Rd., Uvalde, TX 78801. (d-leskovar@tamu.edu)

5:15 **WRDG Business**

New Vice-Chair election
Hot Topics
CGC-Update
Website
Other topics??
2018 WRDG meeting

5:45 pm **Adjourn**

Pecan Research and Extension Forum

Presiding: Lenny Wells, Chair
(lwells@uga.edu)

Friday: 8:00 am – 5:00 pm

Room: Mobile Bay Ballroom I & II
Riverview Plaza Hotel

Southern Blueberry/Small Fruit Workers

Presiding: Eric Stafne, Chair
(eric.stafne@msstate.edu)

Friday: 8:00 am – 5:00 pm

Room: Mobile Bay Ballroom III
Riverview Plaza Hotel

Horticulture Administrators

Presiding: Janet Cole, Chair
(janet.cole@okstate.edu)

Friday: 1:00 pm – 5:00 pm

Room: Jubilee Suite
Riverview Plaza Hotel

Vigna Crop Germplasm Committee

Presiding: Blair Buckley, Chair
(bbuckley@agctr.lsu.edu)

Saturday: 9:00 am – 12:00 pm

Room: Windjammer Suite
Riverview Plaza Hotel

National Cowpea Improvement Association

Presiding: Blair Buckley, Chair

Saturday: 1:00 pm – 5:00 pm

Room: Windjammer Suite
Riverview Plaza Hotel

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

Instructions for Submission of Abstracts for Publication 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

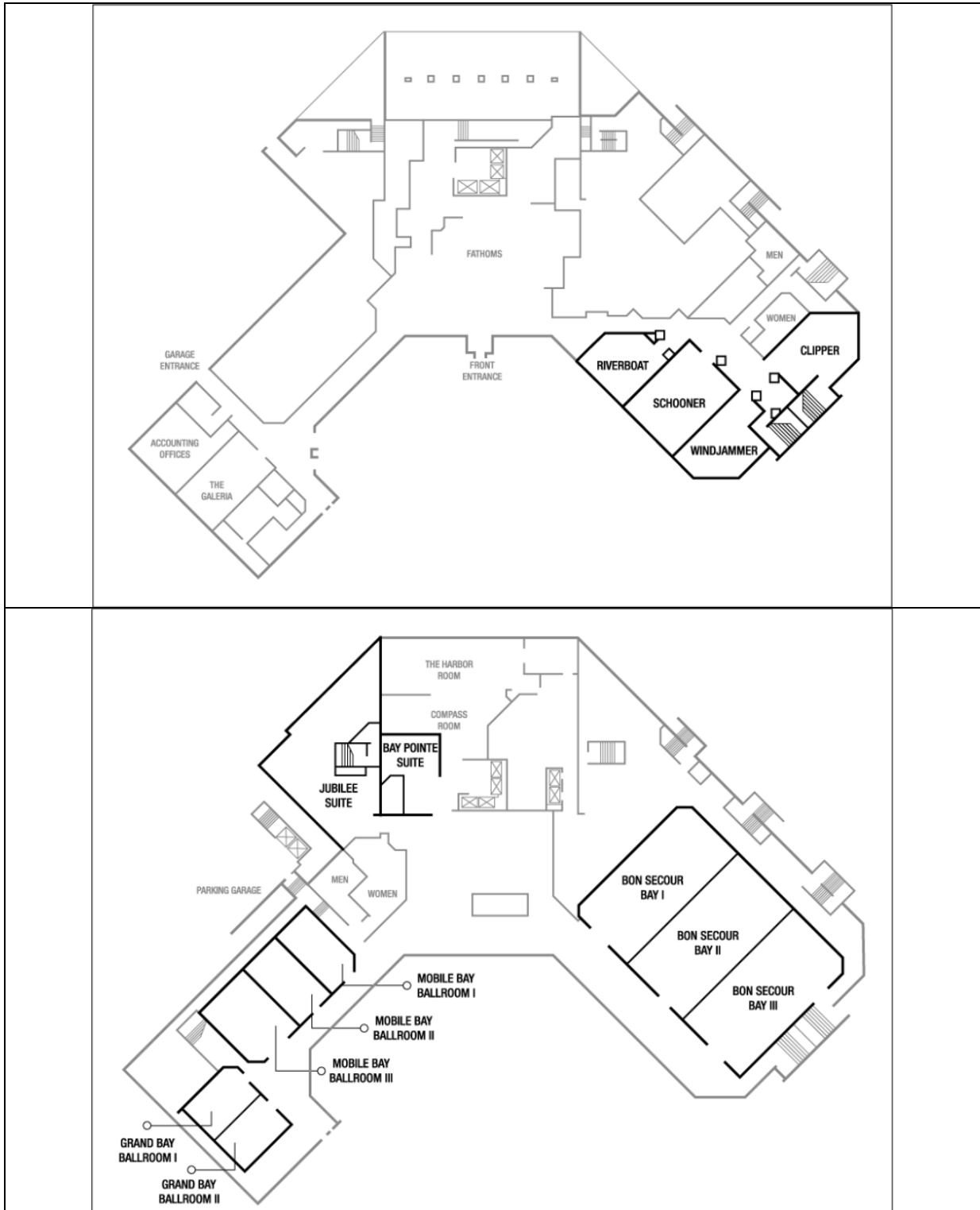
Molecular Marker-Derived Genetic Similarity Analysis of a Segregating Blackberry Population

Eric T. Stafne*¹, John R. Clark¹, and Kim S. Lewers²

¹316 Plant Sciences, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701, ²USDA-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.

Meeting Room Locations Riverview Plaza Hotel



2017 Program at a Glance

Friday, February 3

[illegible]

Saturday, February 4

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| Riverview Plaza Hotel | 8:00 | | | 9:00 | | | | 10:00 | | | | 11:00 | | | | 12:00 | | | | 1:00 | | | | 2:00 | | | | 3:00 | | | | 4:00 | | | | 5:00 | | | | | | | | | | | | | | | | | | | | | | | | |
| Ballrooms Center Foyer | 7:00 open | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Registration | | | | | | | | | | | | | | | | | | | |
| Ballrooms Center Foyer | Poster Session Set-Up | | | | | | | | | | | | | | | | Poster Session Viewing, Authors at Posters & Judging | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bon Secour I | Judging Contest Set-Up | | | | | | | | | | | | | | | | J. Benton Storey Horticulture Judging Contest | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Schooner Suite | National Sweetpotato Collaborators | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bon Secour II | Watermelon Research Group | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Windjammer Suite | | | | | Vigna Crop Germplasm Committee | | | | | | | | | | | | | | | | | | | | National Cowpea Improvement Association | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Grand Bay Ballroom I | Extension Section | | | | | | | | | | | | | | | | Education Section | | | | | | | | Fruit Crops | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile Bay Ballroom I & II | | | | | | | | | | | | | | | | | | | | | Floriculture, Orn. & Turf Section | | | | | | | | | | Vegetable Crops | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Clipper | Edmond UG Paper Comp. | | | | | | | | | | Childers M.S. Paper Competition | | | | | | | | | | Childers M.S. Paper Competition | | | | | | | | | | Barham Ph.D. Paper Comp. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Sunday, February 5

| Riverview Plaza Hotel | 6:00 | | | 9:00 | | | 10:00 | | | 11:00 | | | 12:00 | | | 1:00 | | | 2:00 | | | 3:00 | | | 4:00 | | | 5:00 | | |
|--------------------------------|--|--------------|--|----------------------|--|--|-------|-------------------------------|--|-------|--|--|-------|--|--|------|--|--|------|--|--|------|--|----------------------|------|--|--|------|--|--|
| Ballrooms Center Foyer | 7:00 open | Registration | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ballrooms Center Foyer | Poster Session Viewing | | | | | | | Poster Take down | | | | | | | | | | | | | | | | | | | | | | |
| Bon Secour I | | | | ACB Business Meeting | | | | Business Meeting/Awards Prog. | | | | | | | | | | | | | | | | | | | | | | |
| Mobile Bay Ballroom I & II | Vegetable Crops Section | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobile Bay Ballroom III | Floriculture, Ornamentals & Turf Section | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Grand Bay Ballroom I | Fruit Crops Section | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Riverboat Suite | PostHarvest & Biotechnology Sectio | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Convention Center E/W Ballroom | | | | | | | | | | | | | | | | | | | | | | | | SAAS Supr Bowl Party | | | | | | |



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