2020 Annual Meeting
January 31 - February 2, 2020
Louisville, KY

84rd Year
Southern Region
American Society for Horticultural Science

100th 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 Seal, 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 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.

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Web Site srashs.org Visit It
FRIDAY
7:00 am - 6:00 pm  Registration
Building Room: Omni Hotel Lobby
8:00 am - 5:00 pm  ASHS Board of Directors
Building Room: Omni
8:30 am - 5:00 pm  Southern Fruit Workers
Building Room: Omni Olmsted 2
10:00 am - 12:00 pm  ACB Club Share and Networking
Building Room: Omni Old Louisville
12:00 pm- 5:00 pm  ACB Group Activities, Tour, and Meal
Building Room: TBA
1:00 pm - 4:45 pm  Watermelon Research Group
Building Room: Omni Olmsted 3
1:00 pm - 5:00 pm  Horticulture Administrators
Building Room: Omni Clifton
5:00 pm - 6:00 pm  Executive Committee Meeting
Building Room: Omni Clifton
5:00 pm - until  ACB Mixer
Building Room: TBA

SATURDAY
7:00 am - 6:00 pm  Registration
Building Room: Second Street Prefunction
8:00 am – 10:00 pm  Poster Set Up Room
Building Room: Omni Olmsted 4
8:00 am – 12:00 pm  J. Benton Storey Horticulture Judging Contest Setup
Building Room: Omni Olmsted 5
8:00 am - 11:15 am  Extension and Education Section
Building Room: Omni Old Louisville
8:00 am – 10:30 am  J. B. Edmond Undergraduate Student Paper Competition.
Building Room: Omni Cherokee Triangle
8:30 am - 4:00 pm  Watermelon Research Group
Building Room: Omni Olmsted 3
10:00 am – 12:00 pm  Posters Authors Pin Up Posters
Building Room: Omni Olmsted 4
10:45 am - 3:15 pm  Norman F. Childers M.S. Student
Building Room: Omni Olmsted 6
12:00 pm - 5:00 pm  Poster Session Viewing
Building Room: Omni Olmsted 4
12:00 pm - 5:00 pm  J. Benton Storey Horticulture Judging Contest
Building Room: Omni Olmsted 5
1:00 pm - 4:00 pm  Fruit Crops Section
Building Room: Omni Old Louisville
1:00 am - 2:45 am  Floriculture, Ornamentals and Turf Section  
Building Room: Omni Olmsted 1

3:30 pm - 5:15 pm  Warren S. Barham Ph.D. Student Paper Competition  
Building Room: Omni Olmsted 6

**SUNDAY**

7:00 am - 10:45 am  Registration  
Building Room: Second Street Prefunction

8:00 am - 10:45 pm  Poster Session Viewing  
Building Room: Omni Olmsted 4

8:00 am - 9:30 am  Vegetable Crops Section  
Building Room: Omni Oak

8:00 am - 8:45 am  Floriculture, Ornamentals and Turf Section  
Building Room: Omni Charred

8:00 am - 10:45 am  Fruit Crops Section  
Building Room: Omni Barley

8:00 am - 9:00 am  Postharvest & Biotechnology Section  
Building Room: Omni Wheat

9:00 am - 10:45 am  ACB Business Meeting  
Building Room: Omni Commonwealth 3

11:00 am - 12:30 pm  Annual Business Meeting and Award Program  
Building Room: Omni Commonwealth 3

1:00 pm - 3:00 pm  Poster Session Take Down  
Building Room: Omni Olmsted 4

**SAAS Program**

2:30 pm - 3:30 pm  SAAS Board Meeting  
Building Room: Omni Commonwealth 3

4:00 pm - 4:30 pm  SAAS General Business Meeting  
Building Room: Omni Commonwealth 3

**Special Speaker**

Dr. J. Scott Angle  
Director of NIFA, USDA  
Update on NIFA

**SAAS Super Bowl Party**

5:00 - until  SAAS Super Bowl Party  
Griff’s Restaurant
REGISTRATION

Friday 7:00 am - 6 pm,
Hotel Lobby
Saturday 7:00 am - 6 pm,
Second Street Prefunction
Sunday 7:00 am – 10:45 am
Second Street Prefunction

FRIDAY, January 31, 2020
ACB Activities
Building: Omni
Room: Old Louisville
Time: 10:00 - 12:00 Club Share
12:00-5:00 Activity/Tour TBA
6:00 – Mixer TBA
Presiding: Rhiannon de la Rosa, ACB-President
Nate Phillips, ACB Advisor

SRASHS Executive Committee
Building: Omni
Room: Clifton
Time: 5:00 - 6:30
Presiding: Leo Lombardini, Chair

ASHS Board of Directors
Building: Omni
Room: Nulu
Time: 8:00 - 5:00
Presiding: Mike Neff, Coordinator

Working Groups
Listed at end of program

SATURDAY, February 1, 2020

J. B. EDMOND
UNDERGRADUATE STUDENT
PAPER COMPETITION
Building: Omni
Room: Cherokee Triangle
Presiding: Rhiannon de la Rosa, ACB-President, Moderator
Bodie Pennisi, SRASHS President, Courtesy Welcome to Undergrads
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

Order of Presentations: roughly 15 min intervals
Assessing Variability of Nutritional Potency for Oil obtained from ‘Pawnee’ and ‘Kanza’ Pecans Grown at Various Locations in Oklahoma. Jonathan Fenhous*1, Niels Maness2 and Lu Zhang2, 1Department of Biology and Chemistry, University of Science and Arts of Oklahoma, Chickasha, OK 73018, 2Department of Horticulture and Landscape Architecture, Oklahoma State University, Stillwater, OK 74078. (jfen8162@usao.edu)

Comparison of Nut Growth with Heat Unit Accumulation for Pecans Planted in Different Geographical Locations in Oklahoma. Skylar Baldwin*1, Lu Zhang2, Charles Rohla3, Charles Fontainer2 and Niels Maness2, 1College of Agriculture and Life Sciences, Mississippi State University, B.S. Hood Road, MS 39762, 2Department of Horticulture & Landscape Architecture, Oklahoma State University, Stillwater, OK 74078, 3Noble Research Institute, Ardmore, OK 73401. (luzhang@okstate.edu)

Exclusion of Major Insect Pests from Squash Utilizing Row Covers. DeAnthony Price*, L.K. Carrier, and L. Brandenberger, 358 Agriculture Hall, Department of Horticulture and Landscape Architecture, Oklahoma State University, Stillwater, OK 74078-6027. (dprice5@stallions.abac.edu)

Methods of Informal Assessment. Adeline Holder* and Shelley Mitchell, Department of Horticulture and Landscape Architecture, 358 Ag Hall, Oklahoma State University, Stillwater, OK 74078. (adholder14@hotmail.com)
Persistence and Water Use Rates of Selected Zoysiagrasses under Moderate Shade. Roy Stovall* and Charles Fontanier, Department of Horticulture and Landscape Architecture, 358 Ag Hall, Oklahoma State University, Stillwater, OK 74078. (charles.fontanier@okstate.edu)

The Biofiltration Ability of Asparagus densiflorus to Remove Sulfur Dioxide from the Indoor Atmosphere. Rhiannon A. de la Rosa1* and Mary C. Savin2, 1Department of Horticulture, University of Arkansas, Fayetteville, AR 72701, 2105B Agriculture Building, Crop, Soil and Environmental Science, University of Arkansas, Fayetteville, AR 72701. (radelaro@email.uark.edu)

Tomato Cultivar Trials and Quality Analysis for Local Fresh Markets. Ty Bowman*, L.K. Carrier, and L. Brandenberger, 358 Agriculture Hall, Department of Horticulture and Landscape Architecture, Oklahoma State University, Stillwater, OK 74078-6027. (ty.bowman@langston.edu)

Using In-Vitro Screening to Find Sources of Tolerance to Armillaria spp. in Prunus. John Nisbet*, Sarah Miller, Guido Schnabel, Gregory Reighard and Ksenija Gasic, Department of Plant and Environmental Sciences, Clemson University, SC 29634-0310. (kgasic@clemson.edu)

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

Building: Omni
Room: Olmsted 6
Presiding: Amy Wright, Chair
Abstracts: To publish abstract in HortScience, see instructions at end of program. Submit on disk at meeting or email to Chair: wrigham@auburn.edu

Order of Presentations: roughly 15 min intervals

A Comparative Study of Single Versus Double Plastic Covers of High Tunnels on the Growth and Yield of Kale. Arjun Kafle*and Sanjun Gu, Cooperative Extension, North Carolina A&T State University, Greensboro, NC 27401. (akafle@aggies.ncat.edu)

Assessments of Cane Characteristics and Fruit Quality of Blackberries Grown on the Rotating Cross-Arm trellis and T-trellis. Erika Henderson1, Amanda McWhirt2, Jackie Lee3, and Renee Threlfall4. 1W. Maple St., Department of Horticulture, University of Arkansas, Fayetteville, AR 72701, 22301 S. University, Department of Horticulture, University of Arkansas, Little Rock, AR 72204, 31749 State Hwy 818, University of Arkansas Fruit Research Station, Clarksville, AR 72830, 42650 N. Young Avenue, Food Science Department, University of Arkansas, Fayetteville, AR 72704

Comparison of Trunk Wraps in their Ability to Protect Kiwifruit Vines from Freeze Injury. Joshua S. Cook1*, James D. Spiers1, Eлина D. Coneva1, James R. Kessler1, and Edgar L. Vinson2, 101 Funchess Hall, Department of Horticulture, Auburn University, Auburn, AL 36849, 2Chilton Research & Extension Center, 120 County Road 756, Clanton, Alabama 35045. (jsc0068@auburn.edu)

Economic Feasibility of Creating Value-added Products from Farmers Market Surplus. Morgan R. Gramlich1*, Renee T. Threlfall2, and Amanda L. McWhirt3, 1316 Plant Science, Horticulture Department, University of Arkansas, Fayetteville, AR 72701, 22650 N. Young Avenue, Food Science Department, University of Arkansas, Fayetteville, AR 72704, 32301 S. University, Cooperative Extension Service, University of Arkansas, Little Rock, AR 72204. (mrgramli@email.uark.edu)

Effect of Hydrogen Cyanamide on Flower Production of Golden Kiwifruit. Jacob T. Kelley1*, James D. Spiers1, James R. Kessler1, Elina D. Coneva1, and Edgar L. Vinson2, 1Department of Horticulture, Auburn University, Auburn, Alabama 36849, 2Chilton Research & Extension Center, 120 County Road 756, Clanton, Alabama 35045. (jtk0016@auburn.edu)

Effect of pH on cucumber growth and nutrient availability in a de-coupled aquaponic system with minimal solids removal. Caroline E. Blanchard1*, Daniel E. Wells1, Jeremy M. Pickens2, and David M. Blersch1, 1Department of Horticulture, Auburn University, Auburn, AL 36849, 2Ornamental Horticulture Research Center, Mobile, AL 36689, 3Department of Biosystems Engineering, Auburn University, Auburn, AL 36849. (ceb0116@auburn.edu)

Evaluation of Row Covers in Yield Performance of Leafy Green Vegetables in Organic Management System. Kripa Dhakal* and Dilip Nandwani, Department of Agriculture and Environmental Sciences, Tennessee State
Factors Influencing Incidence and Severity of Bronzing Skin Disorder in Peach. John Mark Lawton*, Juan Carlos Melgar and Guido Schnabel, Department of Plant and Environmental Sciences, Clemson University, 105 Collings Street, Clemson, SC, 29634. (jlawton@g.clemson.edu)

Huanglongbing-associated Preharvest Fruit Drop in Sweet Orange. Sukhdeep Singh¹*, Tripti Vashisth¹, Christopher Vincent¹, and Fernando Alferez². ¹University of Florida, IFAS, Citrus Research and Education Center, 700 Experiment Station Road, Lake Alfred, FL 33850, ²University of Florida, IFAS, Southwest Florida Research and Education Center, 2685 FL-29, Immokalee, FL 34142. (sukdeepSingh@uf.edu)

Mapping the Primocane-Fruiting Locus in Blackberry (Rubus subgenus Rubus). Mitchell E. Armour¹*, Margaret L. Worthington¹, and Bode A. Oluokolua². ¹Dept. of Horticulture, 316 Plant Science Building, University of Arkansas, Fayetteville, AR 72701, ²Dept. of Entomology & Plant Pathology, 352 Plant Biotechnology Building, University of Tennessee, Knoxville, TN 37996. (mearmour@uark.edu)

Physiological and Quality Characteristics of Arkansas-grown Hops. James O. McCleelan¹*, Renee T. Threlfall¹, Amanda L. McWhirt², and Jackie Lee³. ¹2650 N. Young Avenue, Food Science Department, University of Arkansas, Fayetteville, AR 72704, ²2301 S. University, Cooperative Extension Service, University of Arkansas, Little Rock, AR 72204. ³1749 State Hwy 818, Fruit Research Station, University of Arkansas, Clarksville, AR 72830. (jmccleelan@uark.edu)

Postharvest Changes of Physical and Chemical Fruit Quality Characteristics in Three Commercial Blueberry Types During Cold Storage. Rion T. Mooneyham¹*, Savithri U. Nambeesan², D. Scott NeSmith¹, Renée M. Allen¹, Dario J. Chavez¹, and Rachel A. Itle¹. ¹Department of Horticulture, University of Georgia, ¹1109 Experiment Street Griffin, GA 30223, ²Department of Horticulture, University of Georgia, 1111 Miller Plant Science Building, Athens, GA 30602, ³University of Georgia Extension, 203 South Dixon Street, Suite 3, Alma, GA 31510. (rionmoon@uga.edu)

Results of a Two Year Study on the Performance of Table Grape Cultivar Jupiter with Cluster Thinning Treatments Under High Tunnels at Two Locations in Arkansas. Jose Hernandez*, Virginia Beasley, Karlee Pruitt, and M. E. Garcia, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701. (megarcia@uark.edu)

The Effect of Leaching Fraction-Based Irrigation on Fertilizer Longevity and Leachate Nutrient Content in a Greenhouse Environment. Claire E. Krofft¹*, Jeremy M. Pickens², Adam F. Newby³, Glenn B. Fain¹, and Jeff L. Sibley¹. ¹101 Funchess Hall, Department of Horticulture, Auburn University, Auburn, AL 36849, ²Ornamental Horticulture Research Center, P.O. Box 8276, Mobile, AL 36608, ³1300 Hickory Lane, Auburn, AL 36830. (cek0054@auburn.edu)

The Impact of Daughter-plant Harvest Technique and Nitrate: Ammonium Ratio on Asexual Reproduction in Day-neutral Strawberry (Fragaria x ananassa cv. ‘Albion’). Xiaonan Shi* and Mark Hoffmann, Department of Horticultural Science, North Carolina State University, Raleigh, NC 27695. (xshi8@ncsu.edu)

Educating Scientists on Grower Needs Related to Indoor Plant Propagation. Kristin E. Gibson¹*, Alexa J. Lamm, and Fallys Masambuka, Department of Agricultural Leadership, Education, and Communication, University of Georgia, Athens, GA 30602. (kristin.gibson@uga.edu)

Two Year Study of Marketability Attributes of Jupiter Table Grape Grown Under High Tunnels at Two Locations in Arkansas. Virginia Beasley¹*, Renee Threlfall², Jose Hernandez¹, Karlee Pruitt¹, and M. E. Garcia¹. ¹316 Plant Science Department, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701. (megarcia@uark.edu)

Use of Plant Growth Regulators to Induce Uniform Flowering in Low-chill Peach Cultivar ‘UFBest’. Bikash Adhikari¹*, Tripti Vashisth¹, Jeffrey G Williamson², and Ali Sarkhosh². ¹700 Experiment Station Rd, Citrus Research and Education Center, Horticultural Sciences Department, University of Florida, Lake Alfred, FL 33850, ²Fifield Hall, 2550 Hull Rd, Horticultural Sciences Department, University of Florida, Gainesville, FL 32611 (b.adhikari@ufl.edu)
WARREN S. BARHAM
Ph.D. GRADUATE STUDENT
PAPER COMPETITION

Building: Omni
Room: Olmsted 6
Presiding: Amy Wright, Chair
Abstracts: To publish abstract in HortScience, see instructions at end of program. Submit on disk at meeting or email to Chair: wrigham@auburn.edu

Order of Presentations: roughly 15 min intervals

A Comparison of Instrumental and Sensory Approaches to Evaluating Texture Profiles in Muscadine. T.M. Chizk1*, Margaret L. Worthington1, Renee T. Threlfall2, 1Department of Horticulture, 316 Plant Science Building, University of Arkansas, Fayetteville, AR 72701, 2Food Science Building B-3, University of Arkansas, Fayetteville, AR 72701. (tmczizk@uark.edu)

Detection of the Gummy Stem Blight Pathogens in Watermelon Using Quick Field-Adapted Technologies. Jorge Reyes1*, Caterina Villari2, Marin Brewer3, Bhadesh Dutta3 and Cecilia McGregor1, 1Department of Horticulture, 2Warnell School of Forestry & Natural Resources, 3Department of Plant Pathology, University of Georgia, Athens, GA 30605 (jorgeyes155@uga.edu)

Discrete Blue and Red Narrowband Wavelengths Alter Flavor Volatile Profiles in Hydroponically Grown ‘Italian Large Leaf’ Basil. Hunter Hammock*, Dean Kopsell, and Carl Sams, Department of Plant Sciences, University of Tennessee, Knoxville, TN 37996. (hhammock1@vols.utk.edu)

Effect of an Inactivated Yeast Foliar Spray on Ripening and Harvest Attributes of Chambourcin Wine Grapes. Sarah E. Mayfield1* and Renee T. Threlfall, 2650 N. Young Avenue, Food Science Department, University of Arkansas, Fayetteville, AR 72704. (sem013@email.uark.edu)

Effect of Ethylene De-greening Treatment on Fruit Quality and Postharvest Storage Life of HLB-affected Mandarin Cultivars. Faisal Shahzad1*, Jeffrey K. Brecht2, Yu Wang1, Fred Gmitter1, Mark A. Ritournel3 and Tripti Vashisth1, 1700 Experiment Station Rd, Citrus Research and Education Center, Lake Alfred, FL 33850, 2Horticulture Sciences Department, IFAS, Gainesville, University of Florida, FL 32611, 3Indian River Research and Education Center, Fort Pierce, University of Florida, FL 34945-3138. (amibubu@ufl.edu)

Effect of Honey as a Rooting Adjuvant on Rooting of Rosa ‘Red Cascade’ Stem Cuttings. Anthony T. Bowden1*, Patricia R. Knight1, Christine Coker1, Sean Broderick2, Eugene K. Blythe3, Hamidou Sakhanokho1, and Ebrahiem Babiker1, 1Coastal Research and Extension Center, South Mississippi Branch Experiment Station, P.O. Box 193, Poplarville, MS 39470, 2Truck Crops Branch Experiment Station, 2024 Experiment Station Rd., Crystal Springs, MS 39059, 3College of Agriculture, Auburn University, Auburn, AL 36849, 4USDA-ARS Southern Horticultural Lab., P.O. Box 287, Poplarville, MS 39470. (ab1001@msstate.edu)

Effect of sand-injection and air-injection cultivation on creeping bentgrass. Naba Amgain* and Charles Fontanier, Department of Horticulture and Landscape Architecture, 358 Ag Hall, Oklahoma State University, Stillwater, OK 74078. (Naba@okstate.edu)

Effect of Total ImmersionAuxin Application Method on Florida Azalea Survivability and Root Response. Jenny B. Ryals1*, Patricia R. Knight1, Daryl R. Chastain2, Lloyd E. Ryals III3, Christine E. H. Coker4, Gary R. Bachman4, Jim DelPrince4, Patricia R. Drackett1, and Anthony T. Bowden1. 1Coastal Research and Extension Center, Mississippi State University, Poplarville, MS 39470, 2Delta Research and Extension Center, Mississippi State University, Stoneville, MS 38776, 3Mississippi Department of Agriculture and Commerce, Bureau of Plant Industry, Mississippi State, MS 39762, 4Coastal Research and Extension Center, Mississippi State University, Biloxi, MS 37532, 5The Crosby Arboretum, Mississippi State University, Picayune, MS 3466 (j.ryals@msstate.edu)

Efficacy of Bagging as an Alternative Insect and Disease Management Tool for Peach (Prunus persica L.) in Florida. David Campbell1*, Jennifer Gillett-Kaufman2, Ali Sarkhosh1, Jeffrey Brecht1, and Danielle Treadwell1, 1Department of Horticultural Sciences, University of Florida,
Evaluation of Humic Substances on Yield Performance and Quality of Cantaloupe (Cucumis melo L.) in Organic Management System. ZaDarreyal Wiggins* and Dilip Nandwani, Department of Agriculture and Environmental Sciences, Tennessee State University, Nashville, TN 37209 (dnandwan@tnstate.edu)

Evaluation of Humic Substances on Yield Performance of Watermelon (Citrus lanatus [Thunb.] Matsum and Nakai) in Organic Production System. Onyekachukwu Akaeze* and Dilip Nandwani, Department of Agriculture and Environmental Sciences, Tennessee State University, Nashville, TN 37209 (dnandwan@tnstate.edu)

Feasibility of Genomic Selection for Brown Rot Tolerance in Peach. Wanfang Fu*, Cassia da Silva Linge, Ralph Burrell and Ksenija Gasic, Department of Plant & Environmental Sciences, Clemson University, 105 Collings St., Clemson, SC 29634. (wfu@clemson.edu)

Influence of Fertilizer Placement on Growth of Eclipta (Eclipta prostrata) and its Competition Effect on Ligustrum (Ligustrum lucidum) and Boxwood (Buxus microphylla). Yuvraj Khamare*, S. Christopher Marble and Annette Chandler,, University of Florida/IFAS, Mid-Florida Research and Education Center, Apopka, FL, 32703. (ykhamare@ufl.edu)

Water Use Pattern and Intrinsic Antioxidant Machinery Confer Tetraploid Volkamer Lemon Tolerance to Various Water-Deficit Scenarios. Muhammad Fasih Khalid1,2*, Sajjad Hussain1, Muhammad Akbar Anjum1, Christopher Vincent2, Shakeel Ahmad1, Muhammad Arif Ali1 and Raphael Morillon3, 1Faculty of Agricultural Sciences and Technology, Bahauddin Zakariya University, 60800 Multan, Pakistan. 2Citrus Research and Education Center, University of Florida, 33850 Lake Alfred, FL, United States. 3Equipe “Structure Evolutive des Agrumes, Polyploidie et Amelioration Genetique”, SEAPAG-UM AGAP-Department BIOS-CIRAD Station de Roujol 97170 Petit Bourg/Guadeloupe, France. (civince@ufl.edu)

Genetic Architecture of Salt and Drought Tolerance in Cowpea. Authors: Waltram Ravelombola*, Ainong Shi, and Haizheng Xiong, 316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701 (wravelom@uark.edu)

POSTERS

Building: Omni
Room: Olmsted 4, Chair
Presiding: Yan Chen, Chair
Abstracts: To publish abstract in HortScience, see instructions at end of program. Submit on disk at meeting or email to Chair: yachen@agcenter.lsu.edu

Set-Up Room: Saturday, 8:00-10:00
Mount Posters: Saturday, 10:00-noon

Poster Viewing
Saturday noon to 5:00 pm
Sunday 8:00-10:45 am

Authors at their poster:
Saturday, 1:00-3:00 pm even numbered posters
Saturday, 3:00-5:00 pm odd numbered posters
Take-down: Sunday, 1:00-3:00 pm

Student Poster Competition
UG = Indicates undergraduate poster titles
G = Indicates graduate poster titles

Floriculture, Ornamentals and Turf

1G) Honeybee (Apis mellifera L.) Visits to Crepe Myrtle (Lagerstroemia indica L.) Vary According to Proximity to Pollinator-Friendly Plants. Canaan Sutton*1, Taryn Bazhaw, Martin Mendietta, Michaela Bledsoe, and Derald A. Harp, College of Agricultural Sciences and Natural Resources, Texas A&M University-Commerce, Commerce, TX 75429. (Derald.Harp@tamuc.edu)

2) Systematic Strategies to Manage Crapemyrtle Bark Scale (Acanthococcus lagerstroemiae). Runshi Xie1, Bin Wu1, Michael E Merchant2, Erfan Vafaie2, Yan Chen1, David Held3, Gary W. Knox4, Yu Zhang5, Jim Robbins6, Derald Harp8, and Mengmeng Gu7*, 1Department of Horticultural Sciences, Texas A&M University (TAMU), 2Texas A&M AgriLife Extension, 3LSU AgCenter Hammond Research Station, 4Department of Entomology and Plant Pathology, Auburn University, 5University of Florida IFAS,
8) An Overview of the Mississippi State University Extension Farmer Florist Series. Christine Coker1*, James DelPrince1, Benedict Posadas1, Eric Stafne2, Patricia Knight1, and Christian Stephenson2. 1MSU Coastal Research and Extension Center, 1815 Poppins Ferry Road, Biloxi, MS 39532. 2South Mississippi Branch Station, 810 Hwy. 26W, Poplarville, MS 39470. (Derald.Harp@tamuc.edu)

9) Floral Bud and Fruit Development in Hibiscus sabdariffa. Imhotep Charles* and T.W. Zimmerman, University of the Virgin Islands Agricultural Experiment Station, RR#1 Box 10,000, Kingshill, VI 00850. (Charlesimhotepctec@yahoo.com)

10) Effect of Sample Collection Methods on Anthocyanins in Crape Myrtle Flower Petals. Jenny B. Ryals1*, Patricia R. Knight1, Ebrahiem Babiker2, Christine E. H. Coker1, Gary R. Bachman1, Daryl R. Chastain1, Guihong Bi3, Ben Posadas3, and Lavonne Stringer3. 1Coastal Research and Extension Center, Mississippi State University, Poplarville, MS 39470, 2Coastal Research and Extension Center, Mississippi State University, Biloxi, MS 39532, 3Delta Research and Extension Center, Mississippi State University, Stoneville, MS 38776. (cm1410@msstate.edu)

11) Consumer Preferences and Willingness to Pay for Poinsettia Varieties (Euphorbia pulcherrima L.). Caitlin McLeod* and Christine Coker, Patricia Knight, James DelPrince, Gary Bachman, Benedict Posadas and Scott Langlois, Coastal Research and Extension Center Mississippi State University, MS 39532. (cm1410@msstate.edu)

12) Asexual propagation of Bucida buceras: Air layering versus Groundlayering. Eliam Sanchez Palaez*, M. Morgan and T.W. Zimmerman, University of the Virgin Islands Agricultural Experiment Station, RR#1 Box 10,000, Kingshill, VI 00850. (elansape00@hotmail.com)
13g) **Effect of Pre-emergence Herbicides and Mulches on Rooting of Nursery Cuttings and Weed Control.** Isha Poudel* and Anthony Witcher, Department of Agricultural and Environmental Sciences, Otis L. Floyd Nursery Research Center, Tennessee State University, McMinnville, TN, 37110. (ipoudel@my.tnstate.edu)

14) **Identification and Management of Praxelis clematidea; A New and Troublesome Weed in Central Florida.** S. Chris Marble*, Yuvraj Khamare, and Annette Chandler, Department of Environmental Horticulture, University of Florida, Mid-Florida Research and Education Center, 2725 S. Binion Rd., Apopka, FL 32703. (marblesc@ufl.edu)

15g) **Compost Substrate Amendments for Spicebushes.** Allie Maternowski, Winston Dunwell, Jin Handayani, Dava Hayden, Dwight Wolfe, and Virginia Travis. School of Agriculture, Murray State University, Murray, KY. (amaternowski1@murraystate.edu)

16g) **Light response curves for creeping bentgrass under temporal shade.** Naba Amgain* and Charles Fontanier., Department of Horticulture and Landscape Architecture, 358 Ag Hall, Oklahoma State University, Stillwater, OK 74078. (Naba@okstate.edu)

17) **Multi-year Monitoring of Crapemyrtle Bark Scale Crawler Population across Louisiana.** Yan Chen1*, Rodrigo Diaz2, Mengmeng Gu3, Michael E Merchant1, Erfan Vafeaie3,1 Louisiana State University AgCenter Hammond Research Station, 21549 Old Covington Hwy., Hammond LA, 1Louisiana State University AgCenter Department of Entomology, Life Science Bldg. Baton Rouge, LA, 3Texas A&M AgriLife Extension. (yachen@agcenter.lsu.edu)

18g) **Influence of Cutting Type and Stem Position on Spring Cuttings of Pascagoula™ Crape Myrtle.** J. Skylar Baldwin1*, Patricia R. Knight2, Scott L. Langlois2, Eugene K. Blythe3, Jenny B. Ryals2, Christine E. H. Coker1, Gary R. Bachman3, and Jim DelPrince3. 1Department of Biochemistry, Molecular Biology, Entomology, and Plant Pathology, Mississippi State University, Mississippi State, MS 39762, 2Coastal Research and Extension Center, Mississippi State University, Poplarville, MS 39470, 3Coastal Research and Extension Center, Mississippi State University, Biloxi, MS 39532 (jsb702@msstate.edu)

19g) **Surface Temperature Measurements in An Urban Agricultural System as A Crop Grows.** K’Ori Terry*, Dr. Leigh Whitinghill, and Dr. Gebremedhin Maheteme. College of agriculture, Communities and the Environment, Kentucky State University, Frankfort, 40601. (kori.terry@kysu.edu)

**Fruit Crops**

20g) **Using Paper Bags for Growing Peaches in Backyard Gardens: a New Horticultural Practice in the United States.** Ann Kule*, Juan Carlos Melgar, Department of Plant and Environmental Sciences, Clemson University, Clemson, SC 29634. (akule@clemson.edu)

21g) **Biological and Biochemical Physiognomies of Pineapple Genotypes Grown under the Greenhouse Conditions in the Southern United States.** ASM Harun Sorker*, Zelalul Adam and Shahidul Islam1. 1Department of Agriculture /Agricultural Regulations, University of Arkansas at Pine bluff, 153 Woodward Hall, Pine Bluff, AR 71601. (islams@uaph.edu)

22) **Yield Performance of Three Fall Fruiting Blackberry Selections Grown Organically in Kentucky.** Jeremiah D. Lowe*, Kirk W. Pomper, and Sheri B. Crabtree. College of Agriculture, Communities, and the Environment, Kentucky State University, Cooperative Extension Building, Frankfort KY 40601-2355. (Jeremy.lowe@kysu.edu)

23g) **Effects of NAA, AVG, and 1-MCP on Preharvest Fruit Drop, Fruit Maturity, and Quality of ‘AU Golden Sunshine’ Kiwifruit.** Jacob T. Kelley1*, James D. Spiers1, James R. Kessler1, Elina D. Coneva1, and Edgar L. Vinson2. 1Department of Horticulture, Auburn University, Auburn, Alabama 36849, 2Chilton Research & Extension Center, 120 County Road 756, Clanton, Alabama 35045. (jtk0016@auburn.edu)

24g) **Leaf and flower morphology of**
Ecuadorian *P. serotina* subsp. *Capuli*. Sakshi Pathania1*, Juan C. Carrasco2, Carlos R. Chavez2, Luis Fiallos3, and Dario J. Chavez2. 1University of Georgia, Department of Horticulture, Griffin, GA, USA; 2Faculty of Natural Resources, Escuela Superior Politécnica de Chimborazo, Riobamba, Ecuador; 3Faculty of Livestock Sciences, Escuela Superior Politécnica de Chimborazo, Riobamba, Ecuador. (sp28191@uga.edu)

25) Precocious Fruit Production in 2 Year Old Bark Inlay Grafted Pawpaw Trees. Sheri B. Crabtree1*, Jeremiah D. Lowe1, Kirk W. Pomper1, and R. Neal Peterson2. 1College of Agriculture, Communities, and the Environment, Kentucky State University, Cooperative Extension Building, Frankfort KY 40601, 2Peterson Pawpaws, Harpers Ferry, WV 25425. (sherif.crabtree@kysu.edu)

26g) Rapid Digital Imaging Approach for Screening Red Drupelet Reversion in Blackberry. T.M. Chizk*, Margaret L. Worthington, and John R. Clark. Department of Horticulture, 316 Plant Science Building, University of Arkansas, Fayetteville, AR, 72701. (tmchizk@uark.edu)

27g) Apple Fruit Size Is Enhanced with Increasing 6-BA Application Number. Krittika Tonapi1*, Anish Malladi1 and Tom Kon2. 11111 Miller Plant Sciences, Department of Horticulture, University of Georgia, Athens, GA 30602, 2Department of Horticultural Sciences, North Carolina State University, Mountain Horticultural Crops and Research and Extension Center, 455 Research Drive, Mills River, NC, 28759. (kvt71052@uga.edu)

28g) The Backbone of Fruit: Cell Wall Polysaccharides in Grafted and Non-grafted ‘Liberty’ Watermelon at Varying Levels of Hollow Heart. Marlee A. Trandel1*, Penelope Perkins-Veazie1, Suzanne Johanningsmeier2, Jonathan Schultheis3 and Chris Gunter3. 1North Carolina State University, Department of Horticultural Sciences, 600 Laureate Way, Plants for Human Health Institute, Kannapolis NC 28081, 2North Carolina State University, Department of Food, Bioprocessing and Nutrition Sciences, 400 Dan Allen Drive, Schaub Hall, Raleigh NC 27606, 3North Carolina State University, Department of Horticultural Sciences, 2721 Founders Drive, Kilgore Hall, Raleigh NC 27606. (matrande@ncsu.edu)

29g) Effect of Biochar on Root Morphology and Nutrient Content in Muscadine Grape (*Vitis rotundifolia* L.). Yuru Chang* and Ali Sarkhosh, Horticultural Sciences Department, University of Florida, Gainesville, FL 32611-0690. (changyuru@ufl.edu)

30g) Physiological Responses of Six Prunus Rootstocks Submitted to Waterlogging Stress. Trequan McGee1*, Ali Sarkhosh2, José Chaparro1, and Tom Beckman2. 1Horticultural Sciences Department, University of Florida, Gainesville, FL 32611. 2USD-ARS, Fruit and Tree Nut Research, Byron, GA (trequanmcgee@ufl.edu)

31g) Effect of Rootstock Cultivar on Consumer Quality Attributes of ‘Aztec Fuji’ Apple. Dylan Teel*, Elina Coneva, Floyd M. Woods, and Nylan. Holmes. Department of Horticulture, Auburn University, Auburn, AL 36849-5408. (edc001@auburn.edu)

Vegetable Crops

32g) Selection of Stable Bush-Type Southern Appalachian Heirloom Snap Beans. Mary A. Mahan* and Brian M. Leckie. School of Agriculture, Tennessee Tech University, Cookeville, TN 38505. (bleckie@tntech.edu)

33UG) Insect Populations in Screened and Unscreened Summer Squash (*Cucurbita pepo*). DeAnthony Price*, L.K. Carrier, and L. Brandenberger. 358 Agriculture Hall, Department of Horticulture and Landscape Architecture, Oklahoma State University, Stillwater, OK 74078-6027. (dprice5@stallions.abac.edu)

34G) Small Farm Evaluation of Bush-Type Southern Appalachian Heirloom Snap Beans. Erik Koehler* and Brian M. Leckie. School of Agriculture, Tennessee Tech University, Cookeville, TN 38505. (bleckie@tntech.edu)

36) **Compost Type and Rate Effects on Plant Yield and Mineral Nutrients in Bell Pepper (Capsicum annum L.).** Juan C. Díaz-Pérez*, Department of Horticulture, Tifton Campus, University of Georgia, Tifton, GA 31793 (jcdiaz@uga.edu)

37) **Comparative Study of Ginger Mineral Nutrient Contents.** Guochen Yang*, Julia Robinson, Sanjun Gu, Zhongge (Cindy) Lu, William Lashley, and Bryce Holms, College of Agriculture and Environmental Sciences, North Carolina A&T State University, Greensboro, NC 27411. (yangg@ncat.edu)

38G) **Differential Lead (Pb) Accumulation in Cold Season Vegetables and Raised Garden Bed Barrier Evaluations for Safer Gardening.** Celine Richard1, Kiki Fontenot, Edward Bush, Taylor Bryant, and Heather Kirk-Ballard, School of Plant, Environmental, and Soil Sciences, Louisiana State University Agricultural Center, Baton Rouge, LA 70803. (chris99@lsu.edu)

39G) **Utilization of KASP Assays for Marker Assisted Selection of Key Watermelon Traits.** Samuel Manthi*, Geungjoo Lee1 and Cecilia McGregor1, 1Department of Horticulture, University of Georgia, 1111 Plant Sciences Building, Athens, GA 30602, USA. 2Department of Horticulture, Chungnam National University, Daejeon 34134, Republic of Korea. (Samuel.Josiah@uga.edu)

40) **Characterization of Southern Appalachian Heirloom Snap Beans using Genotyping by Sequencing.** Brian M. Leckie* and Michael Best, School of Agriculture, Tennessee Tech University, Cookeville, TN 38505. (bleckie@tntech.edu)

41G) **Influence of Deflowering on Jicama Production.** Milan Philbert* and T.W. Zimmerman, University of the Virgin Islands Agricultural Experiment Station, RR#1 Box 10,000, Kingshill, VI 00850. (milkphilbert@gmail.com)

42G) **Warm and Cool LED Supplements Impact Key Flavor Volatiles in Hydroponically Grown 'Purple Petra' Basil.** Hunter Hammock*, Dean Kopsell, and Carl Sams, Department of Plant Sciences, University of Tennessee, Knoxville, TN 37996. (hhammoc1@vols.utk.edu)

43G) **Bulked Segregant Analysis Identification of Four Gummy Stem Blight Resistance Loci in Wild Watermelon Relatives.** Lincoln Adams* and Cecilia McGregor. 1401 Miller Plant Sciences, Institute of Plant Breeding, Genetics, and Genomics, University of Georgia, Athens, Georgia 30605. (Lincoln.Adams@uga.edu)

44U) The Influence of Single and Double-Rows on Sweetpotato Production. Kervin Mathurin* and T.W. Zimmerman, University of the Virgin Islands Agricultural Experiment Station, RR#1 Box 10,000, Kingshill, VI 00850. (kervinmathurin@gmail.com)

45) **Effect of Slow Release Fertilizer on Mineral Nutrition and Fruit Yield in Bell Pepper (Capsicum annum L.).** Juan C. Díaz-Pérez*. Department of Horticulture, Tifton Campus, University of Georgia, Tifton, GA 31793 (jcdiaz@uga.edu)

46G) **Growth and Yield of Pak Choi in High Tunnels of Single- and Double-Layers of Plastic Covers.** Arjun Kafle* and Sanjun Gu. Cooperative Extension, North Carolina A&T State University, Greensboro, NC 27401. (akafle@aggies.ncat.edu)

47U) **Squash Bug Ovipositional Preference within Cucurbita pepo.** Grayson DeLay*, Chelsea Sanders, and Brian M. Leckie, School of Agriculture, Tennessee Tech University, Cookeville, TN 38505. (bleckie@tntech.edu)

48G) **Impact of a Shaded High Tunnel Effects for Organically-Grown Summer Lettuce in Georgia.** Savanah Laur* and T. Coolong., Department of Horticulture, University of Georgia, Athens, GA 30602 (sall98292@uga.edu)

49U) **Ovipositional Preference of Silverleaf Whitefly on Benchmark Acylsugar Tomato Breeding Lines.** Briannah Castleberry*, Erik Koehler1, Martha A. Mutschler2, and Brian M. Leckie1, 1School
of Agriculture, Tennessee Tech University, Cookeville, TN 38505, 2 School of Integrated Plant Science, Plant Breeding and Genetics Section, Cornell University, Ithaca, NY 14853. (bleckie@tntech.edu)

50) “Every Piece a Work of Art”: Ella Grant Campbell, Florist. James M. DelPrince, Mississippi State University Coastal Research and Extension Center, 1815 Popps Ferry Rd., Biloxi, MS 39532. (JDelPrince@pss.msstate.edu)

Post-Harvest and Biotechnology

51G) Role of Mineral Nutrition in Citrus Fruit Quality and Postharvest Storage Life of HLB-affected Mandarin cv. ‘LB8-9’ (Sugar Belle®). Faisal Shahzad1*, Jeffrey K. Brecht2, Yu Wang3, Fred Gmitter1, Mark A. Ritienour1 and Tripti Vashisth1, 1Citrus Research and Education Center, 700 Experiment Station Rd, Lake Alfred, FL 33850, 2Horticulture Sciences Department, IFAS, Gainesville, University of Florida, FL 32611, 3Indian River Research and Education Center, Fort Pierce, University of Florida, FL 34945. (amiaib@ufu.edu)

52G) Effects of Cooling and Postharvest Storage Methods on the Quality of Broccoli (Brassica oleracea var. Italica). Sarah E. Parker1*, Jennifer R. Wheeler1, Curtis R. Luckett2, Dennis E. Deyton3, Carl E. Sams4, 1Department of Plant Science, Institute of Agriculture, University of Tennessee, Knoxville, TN 37996, 2Department of Food Science, Institute of Agriculture, University of Tennessee, Knoxville, TN 37996. (sparke53@utk.edu)

53G) Working to Better Understand Postharvest Fresh Keeping Quality in Blueberry through Differential Gene Expression Analyses. Rion T. Mooneyham1*, Yi-Wen Wang2, Savithri U. Nambeesan3, Dario J. Chavez4, and Rachel A. Itle5, 1Department of Horticulture, University of Georgia, 1109 Experiment Street Griffin, GA 30223, 2Department of Horticulture, University of Georgia, 1111 Miller Plant Science Building, Athens, GA 30602. (rionmoon@uga.edu)

54G) Phytochemical Profile in Finger Lime (Citrus australasica). Bikash Adhikari1*, Manjul Dutt1 Tripti Vashisth1, 1700 Experiment Station Rd, Citrus Research and Education Center, Horticultural Sciences Department, University of Florida, Lake Alfred, FL 33850, (b.adhikari@ufl.edu)

Cross-Commodity

55G) Evaluation of Saffron (Crocus sativa L.) in Four Growing Systems. Pradip Poudel*, Hideka Kobayashi, Shawn Lucas and Leigh Whittinghill, College of agriculture, Communities and the Environment, Kentucky State University, Frankfort, 40601. (Pradip.Poudel@kysu.edu)

56) Impact of Winemaking Techniques on Characteristics of Enchantment Wine. Sarah E. Mayfield1*, Renee T. Threlfall2, and John R. Clark3, 12650 N. Young Avenue, Food Science Department, University of Arkansas, Fayetteville, AR 72704, 2316 Plant Science, Horticulture Department, University of Arkansas, Fayetteville, AR 72701. (sem013@email.uark.edu)

57UG) Comparison of Hydroponic American Ginseng (Panax quinquefolius) in Response to the Absence of Specific Nutrients. Elizabeth Clippard1*, Nate Phillips2, Song Cui3, Robert Eichas2, and Ying Gao2, 1Biology Department, 2School of Agriculture, Middle Tennessee State University, Murfreesboro TN, 37132. (elizabeth.clippard@gmail.com)

58G) Effect of Cooking Methods on the Bioactive Compounds and Physiological Functions of Sweetpotato Leaves (Ipomoea batatas L Lam). Mosammat Briti Rabbani*, Zelalul Adam and Shahidul Islam, Department of Agriculture /Agricultural Regulations, University of Arkansas at Pine Bluff, 153 Woodard Hall, Pine Bluff, AR 71601. (islams@uapb.edu)

59) Anticipating Farmers Market Surplus for Creating Value-added Products. Morgan R. Gramlich1*, Renee T. Threlfall2, and Amanda L. McWhirt3, 1316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701, 22650 N. Young Avenue, Food Science Department, University of Arkansas, Fayetteville, AR 72704, 32301 S. University, Cooperative Extension Service, University of Arkansas, Little Rock, AR 72204. (mrglamli@email.uark.edu)
The Distinction of Antioxidant Capacity of Colored Sweetpotatoes (*Ipomoea batatas* L.) and Its Tops in Relation to Polyphenolic Contents. Jameka Hartson*, Zelalul Adam and Shahidul Islam, Department of Agriculture /Agricultural Regulations, University of Arkansas at Pine Bluff, 153 Woodard Hall, Pine Bluff, AR 71601. (islams@uapb.edu)

**SECTION TITLES**

**EXTENSION AND EDUCATION**

**Building:** Omni  
**Room:** Old Louisville  
**Presiding:** Mike Schnelle, Chair Extension  
**Abstracts:** To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: mike.schnelle@okstate.edu, or richard.harkess@msstate.edu

**Education**

8:00 The Utilization of User Fees to Manage Greenhouses and Growth Chambers at Public and Land Grant Universities. Kennedy Mayfield-Smith*, Alexa J. Lamm, Robert Stougaard, Department of Agricultural Leadership, Education, and Communication, University of Georgia, Athens, GA 30602. (Kennedy.Mayfieldsmith@uga.edu)

8:15 Using Motivations and Benefits to Calculate Match for Extension Master Gardener Volunteers. Sheri Dorn1, Svoboda Pennisi1, Ellen Bauske2, and Uttam Bhattachar1, 1Department of Horticulture, University of Georgia, Griffin, GA 30224, 2Department of Plant Pathology, University of Georgia, Griffin, GA 30224, (sdorn@uga.edu)

8:30 Horticulture CSI: The Latest Clues in the Search for the Long Beach Red Radish. Gary R. Bachman1*, Christine E.H. Coker1 and Patricia R. Knight2, 1Coastal Research and Extension Center, Mississippi State University, 1815 Popps Ferry Road, Biloxi, MS 38532, 2Coastal Horticulture Research, South Mississippi Branch Station, Poplarville, MS 39470. (gary.bachman@msstate.edu)

8:45 Indoor Plant Growers’ Preferred Sources of Agricultural Information. Fally Masambuka-Kanchewa*, Kristin E. Gibson and Alexa J. Lamm, Department of Agricultural Leadership and Communication, University of Georgia, Four Towers, Suite 209, 405 College Station Road, Athens, GA 30602. (fallys.masambuka@uga.edu)

9:00 Industrial Hemp Pilot Program at A&T Provides Guidance to Small Farmers in North Carolina. Sanjun Gu1*, Guochen Yang2, and Valerie Giddings1, 1Cooperative Extension, 2Department of Natural Resources and Environmental Design, 3Department of Family and Consumer Sciences, North Carolina A&T State University, Greensboro, NC 27401. (sgu@ncat.edu)

9:15 Break

9:30 Modernizing Extension Publications: A Case Study of U.S. Landscape Design Resources. Cheryl R. Boyer*, Jianqiao Luan, and Gregory Davis. Department of Horticulture and Natural Resources, Kansas State University, Manhattan, KS 66506. (cboyer@ksu.edu)

9:45 Dealing a Winning Strategy: An Integrated Pest Management Card Deck for Extension Learning. Cheryl R. Boyer1*, Frannie L. Miller2, and Brooke M. Garcia2, 1Department of Horticulture and Natural Resources, Kansas State University, Manhattan, KS 66506, 2Department of Entomology, Kansas State University, Manhattan, KS 66506. (cboyer@ksu.edu)

10:00 Implementation of an LSU AgCenter K-12th School Garden Leadership Workshop to Assess and Teach Basic Horticulture Skills. Celine Richard1,2, Kiki Fontenot1, Ed Bush1,2, Pam Blanchard1 and Carl Motsenbocker1,2, 1Louisiana State University, Baton Rouge, LA 70803, 2Louisiana State University Agricultural Center, Baton Rouge, LA 70803. (crich99@lsu.edu)

10:15 Trail Users’ Perceptions of Plant Species as a Tool for Future Design in Restoring Degraded Landscapes. Rachel Bechtold4, Catherine W. Shoulders, Jennie Popp, Lisa Wood, Elena Garcia, and Donald M.
**10:30 Break**

**10:45 The Effectiveness of an Online Webinar Platform for Training Cooperative Extension Agents in Blueberry Production.** Amanda McWhirt*, Bill Cline 2, Ryan Neal3, Lizzy Herrera1 and Mary Poling4, 12301 S. University, Department of Horticulture, University of Arkansas Cooperative Extension Service, Little Rock, AR 72204, 23800 Castle Hayne Rd, Department of Entomology and Plant Pathology, Horticultural Crops Research Station, North Carolina State University, Castle Hayne, NC 28429, 1204 SW 14th St. Suite 2, Benton County University of Arkansas Cooperative Extension Service, Bentonville, AR 72712, 42301 S. University, Department of Information Technology, University, University of Arkansas Cooperative Extension Service, Little Rock, AR 72204. (amcwhirt@uaex.edu)

**11:00 Promoting Tall Ridged Beds to Improve Plant Stand, Growth and Production of Vegetable Crops in Areas Prone to Flooding Conditions.** Ramón A. Arancibia. University of Missouri Extension, WC Region, Butler, MO 64730. (Raa522@missouri.edu)

**11:15 Effectiveness of Canvas Learning Management Software as a Tool for Master Gardener Volunteer Training: Use as a Course Supplement and as an Alternative to In-Person Classes.** Wayne Hobbs, University of Florida/IFAS Extension Clay County, Green Cove Springs, FL 32043. (whhobbs@ufl.edu)

**11:30 Substrate stratification: A media management strategy for increased resource efficiency.** Jeb S. Fields1*, James S. Owen, Jr.2, and James Altland2, 1Hammond Research Station, 21549 Old Covington Hwy, Louisiana State University Agricultural Center. Hammond, LA 70403, 2Hampton Roads Agricultural Research and Extension Center, 1444 Diamond Springs Rd., Virginia Tech, Virginia Beach, VA 23455, and 3USDA-ARS, 1680 Madison Ave., Wooster, OH 44691. (JSFields@agcenter.lsu.edu)

**11:45 Analysis of energy use and its impact on carbon footprint of four greenhouse model systems.** Dewayne L. Ingram1, Charles R. Hall2 and Joshua Knight3, 1Department of Horticulture, University of Kentucky, Lexington, KY 40506 and 3Department of Horticulture, Texas A&M University, College Station, TX 77843. (dingram@uky.edu)

**12:00 Short-term Effects of Basal Stem Glufosinate Applications to Nursery Trees.** Anthony L. Witcher*, Department of Agricultural and Environmental Sciences, Otis L. Floyd Nursery Research Center, Tennessee State University, 472 Cadillac Ln., McMinnville, TN 37110. (awitcher@tnstate.edu)

**1:15 From Pot to Reservoir: Tracking Nitrogen Movement at a SC Nursery.** Sarah A. White1*, John C. Majsztrik1, William H.J. Strosnider2, Lauren M. Garcia Chance3, Natasha L. Bell4, and Daniel R. Hitchcock5, 1E-143 Poole Agricultural Center, Department of Plant and Environmental Sciences, Clemson University, Clemson, SC 29634, 22306 Crabhall Rd, Belle W. Baruch Institute for Marine and Costal Sciences, University of South Carolina, Georgetown, SC 29442, 3East 5th Street, Department of Engineering, East Carolina University, Greenville, NC 27858, 4177 Hobcaw Rd. Department of Agricultural Sciences, Clemson University, Georgetown, SC 29442 (swhite4@clemson.edu)

**1:30 Substrate stratification: A media management strategy for increased resource efficiency.** Jeb S. Fields1*, James S. Owen, Jr.2, and James Altland2, 1Hammond Research Station, 21549 Old Covington Hwy, Louisiana State University Agricultural Center. Hammond, LA 70403, 2Hampton Roads Agricultural Research and Extension Center, 1444 Diamond Springs Rd., Virginia Tech, Virginia Beach, VA 23455, and 3USDA-ARS, 1680 Madison Ave., Wooster, OH 44691. (JSFields@agcenter.lsu.edu)

**1:45 Analysis of energy use and its impact on carbon footprint of four greenhouse model systems.** Dewayne L. Ingram1, Charles R. Hall2 and Joshua Knight3, 1Department of Horticulture, University of Kentucky, Lexington, KY 40506 and 3Department of Horticulture, Texas A&M University, College Station, TX 77843. (dingram@uky.edu)

**2:00 Break**

**2:15 Carbohydrate allocation of creeping bentgrass under temporal shade.** Saydi Loewer, Naba Amgain*, Paden House, and
FRUIT CROPS

Building: Omni
Room: Old Louisville
Presiding: Justin Scheiner, Chair
Abstracts: To publish abstract in HortScience, see instructions at end of program. Submit on disk at meeting or email to: jscheiner@tamu.edu

1:00 Canopy Management Evaluation of Three Arkansas Table Grape Cultivars: Gratitude, Faith, and Jupiter Grown Under a High Tunnel System. Jose Hernandez1*, Virginia Beasley1, Karlee Pruitt1, and M. E. Garcia1, 316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701. (megarcia@uark.edu)

1:15 Post-harvest Storage Performance of Three Table Grape Cultivars: Gratitude, Faith, and Jupiter Under a High Tunnel System. Virginia Beasley*1, Renee Therlfall2, Jose Hernandez1, Karlee Pruitt1, and M. E. Garcia1, 316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701, 2650 N. Young Ave. Food Science Department, University of Arkansas, Fayetteville, AR 72701. (megarcia@uark.edu)

1:30 Link Between Fruit Development and Mature Fruit Drop in Huanglongbing-Affected Sweet Orange (Citrus sinensis).

1:45 Update on UGA Research for Irrigation and Fertilization Practices for Young Peach Trees in the Southeastern United States. Bruno Casamali1, Marc W. van Iersel2, and Dario J. Chavez1, 11101 Miller Plant Science Bldg., Dept of Horticulture, Univ of Georgia, Griffin, GA 30223, 21111 Miller Plant Science Bldg., Dept of Horticulture, Univ of Georgia, Athens, GA 30602 (dchavez@uga.edu)

2:00 Identifying Quality and Sensory Attributes of Arkansas-grown Hops. Renee T. Threlfall1*, Arnount VanDamme1, James O. McCleelan1, Amanda L. McWhirt1, and Jackie Lee1*, 2650 N. Young Avenue, Food Science Department, Univ of Arkansas, Fayetteville, AR 72704, 2301 S. University, Cooperative Extension Service, Univ of Arkansas, Little Rock, AR 72204. 11749 State Hwy 818, Fruit Research Station, Univ of Arkansas, Clarksville, AR 72830. (rthrelf@uark.edu)

2:15 Break

2:30 Consumer Sensory Attributes of Arkansas Fresh-Market Blackberry Cultivars that Impact Marketability. Renee T. Threlfall1*, John R. Clark3, and Margaret L. Worthington2, 2650 N. Young Avenue, Food Science Department, University of Arkansas, Fayetteville, AR 72704, 316 Plant Science, Horticulture Department, University of Arkansas, Fayetteville, AR 72701. (rthrelf@uark.edu)

2:45 Evaluating the Potential for Contamination of Grapevine Petiole Versus Whole Leaf Tissue Samples for Nutrient Analysis. Justin Scheiner* and Fran Pontasch, Dept of Horticultural Sciences, Texas A&M Univ, Texas A&M AgriLife Extension, TAMU, College Station, TX 77843. (jscheiner@tamu.edu)

3:00 Effect of Foliar Application of ERGER on Growth and Fruit Quality of Peach cv. ‘UFSun’. Shirin Shahkoomahally and Ali Sarkhosh. Department of Horticultural Science, University of Florida, Gainesville, FL 32611. (s.shahkoomahally@ufl.edu)
3:15 Two Year Evaluation of Biopesticide Combinations for Plasticulture Strawberries Grown in High Tunnels in Arkansas. M. Elena Garcia*, Karlee Pruitt1, Russ Wallace2, 1316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701, 2 1116 East FM 1294, Texas A&M University, Lubbock, TX 79403. (megarcia@uark.edu)

3:30 Post-harvest Broad Mite (Polyphagotarsonemus latus) Infestations in Arkansas Blackberry. Aaron J. Cato, 2301 South University Ave, Department of Horticulture, University of Arkansas, Little Rock, AR, 72204. (acato@uaex.edu)

3:45 Freezing Temperature Responses of Flower Stigmas on “Pawnee”, “Kanza” and “Maramec” Pecan Trees. Lu Zhang*, Niels Maness and Justin Moss, Department of Horticulture & Landscape Architecture, Oklahoma State University, Stillwater, OK 74078. (luzhang@okstate.edu)

Sunday, February 2, 2020

ACB BUSINESS MEETING
Building: Omni
Room: Commonwealth
Time: 9:00 – 10:45
Presiding: Rhiannon de la Rosa, President

ANNUAL BUSINESS MEETING AND AWARDS PROGRAM
Building: Omni
Room: Commonwealth 3
Time: 11:00-12:30
Presiding: Bodie Pennisi, President

POSTER VIEWING & TAKE-DOWN POSTERS
Building: Omni
Room: Olmsted 4
Presiding: Yan Chen, Chair
Poster Viewing: Sunday 8:00-10:45
Poster Take-down: Sunday, 1:00 – 3:00

SECTION TITLES

VEGETABLE CROPS

Building: Omni
Room: Oak
Presiding: Peter Dittmar, Chair
Abstracts: To publish abstract in HortScience, see instructions at end of program. Submit on disk at meeting or email to Chair: pdittmar@ufl.edu

8:00 Effect of Carolina Strongback Watermelon Rootstock on Grafted Greenhouse Cucumber Production. Richard L. Hassell*, Coastal Research and Education Center, Clemson University, Charleston, SC 29414. (rhassel@clemson.edu)


8:30 Effect of multi-cropped plastic mulching on yellow squash and zucchini production. Andre Luiz Bica da Silva*, Joara Secchi Candian, Elizanilda Ramalho do Rego, Department of Horticulture, University of Georgia, Tifton, GA 31793. (adasilva@uga.edu)

8:45 Farmers’ Opinions of Cover Crop Integration in Specialty Crop Systems in Puerto Rico and St. Croix, USVI. Danielle Treadwell1*, Jose Perez1, Stuart Wiess2, and David Campbell1. 1P.O. Box 110690, Horticultural Sciences Department, University of Florida-IFAS, Gainesville, FL 32611, 2Univesrity of the Virgin Islands (UVI) Agricultural Experiment Station (AES), RR#1, Box 10000, Kingshill, U.S. Virgin Islands 008050 (ddtreadw@ufl.edu)

9:00 Break

9:15 Weed Control in Bok Choy following Cover Crops with and without S-metolachlor. Peter J. Dittmar* and Nathan Boyd2. 1Horticultural Sciences Department, University of Florida, Gainesville, FL 32611, 2Gulf Coast Research and Extension Center, Wimauma, FL 33598. (pdittmar@ufl.edu)
Comparison of Tomato Genotypes Grown Under Conventional and Organic Production System for Nutrient Composition and Fruit Quality. Dilip R. Pant and Penelope Perkins-Vazquez. 1Department of Horticultural Science, North Carolina State University, Mountain Horticultural Crops Research & Extension Center, 455 Research Dr., Mills River, NC 28759. 2Department of Horticultural Science, North Carolina State University, Plants for Human Health Institute, NC Research Campus, 600 Laureate

Transdisciplinary work in horticulture: The center for rural enterprise engagement. Cheryl R. Boyer1*, Hikaru H. Peterson2, and Lauri M. Baker3. 1Department of Horticulture and Natural Resources, Kansas State University, Manhattan, KS 66506, 2Department of Applied Economics, University of Minnesota, St. Paul, MN 55108, 3Department of Agricultural Education and Communication, University of Florida, Gainesville, FL 32611. (crboyer@ksu.edu)

FLORICULTURE, ORNAMENTALS AND TURF

Building: Omni
Room: Charred
Presiding: Jeb Fields, Chair
Abstracts: To publish abstract in HortScience, see instructions at end of program. Submit on disk at meeting or email to Chair: Jeb Fields, jfields@agecenter.lsu.edu

Current and future supply and demand for growing media in North America. Brian E. Jackson, Department of Horticultural Science, NC State University, Raleigh, NC 27695. (Brian_Jackson@ncsu.edu)

Advancements in soilless substrates: Engineering, composition, and amendments. Brian E. Jackson, Department of Horticultural Science, NC State University, Raleigh, NC 27695. (Brian_Jackson@ncsu.edu)

Marketing Matters: Interpreting survey-based heatmaps to understand consumer preferences for elements of Facebook posts designed to market petunias online. Anissa M. Zagonel1*, Lauri M. Baker2, Cheryl R. Boyer1, and Hikaru H. Peterson1. 1Center for Rural Enterprise Engagement, University of Florida, Gainesville, FL 32611, 2Department of Agricultural Education and Communication, University of Florida, Gainesville, FL 32611. (azagonel@ufl.edu)

Fertilizer strategies to improve post-production performance of container-grown petunia. Ryan Dickson, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701. (ryand@uark.edu)

Evaluating peat substrate amended with wood products for effects on nitrogen immobilization and plant performance with petunia. Kalyn Helms, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701 (kmhelms@uark.edu)

Improving Nursery Crop Pest Management with Precision Pesticide Application Technology. Amy Fulcher1*, Lauren Fessler1, Wesley Wright2, Heping Zhu3, Trystan Bordeaux1, and Luc Nadaud1. 1Department of Plant Sciences, 2505 E.J. Chapman Drive, University of Tennessee, Knoxville, TN 37996-4500, 2 Biosystems Engineering and Soil Science, 2506 E.J. Chapman Drive, University of Tennessee, Knoxville, TN 37996-4531, and 3USDA-ARS, 1680 Madison Ave., Wooster, OH 44691. (afulcher@utk.edu)

FRUIT CROPS

Building: Omni
Room: Barley
Presiding: Justin Scheiner, Chair
Abstracts: To publish abstract in HortScience, see instructions at end of program.
Submit on disk at meeting or email to Chair: jscheiner@tamu.edu

8:00 Higher Renovation Pruning Height Improves Early Yields of ‘Woodard’ Rabbiteye Blueberry. Eric T. Stafne1*, and Barbara J. Smith2, 1South Branch Experiment Station, Coastal Research and Extension Center, Mississippi State University, 810 Hwy 26 West, Poplarville, MS 39470, 2USDA-ARS Thad Cochran Southern Horticultural Laboratory, 810 Hwy 26 West, Poplarville, MS 39470. (eric.stafne@msstate.edu)

8:15 Additional Nitrogen Application May Reduce White Drupelet Disorder in ‘Sweetie Pie’ Blackberry. Eric T. Stafne1* and Barbara J. Smith2, 1South Branch Experiment Station, Coastal Research and Extension Center, Mississippi State University, 810 Hwy 26 West, Poplarville, MS 39470, 2USDA-ARS Thad Cochran Southern Horticultural Laboratory, 810 Hwy 26 West, Poplarville, MS 39470. (eric.stafne@msstate.edu)

8:30 Assessment of Size Controlling Peach Rootstocks for High Density Orchards in Alabama. Elina D. Coneva, 101 Funchess Hall, Department of Horticulture, Auburn University, Auburn, AL 36849. (Edc0001@auburn.edu)

8:45 Response of Young Field-Grown Kiwifruit (Actinidia chinensis Planch. and A. delicosa A. Chev.) Plants to Fall Frost. Tim Hartmann1*, David Creech2, Larry Stein3, and Justin Scheiner1 1Department of Horticultural Sciences, Texas A&M University, College Station, Texas 77843, 2SFA Gardens, Stephen F. Austin State University, Nacogdoches, TX 75962, 3Department of Horticultural Sciences, Texas A&M University, Uvalde, TX 78802 (t-hartmann@tamu.edu)

9:00 Breeding for Prunus Rootstock Tolerance to Replant Diseases. Ksenija Gasic1*, Sarah Miller1, Goran Barac2, Christopher Sasaki1, Guido Schnabel1 and Gregory Reighard1, 1Department of Plant and Environmental Sciences, Clemson University, Clemson, SC 29634-0310, 2Faculty of Agriculture, University of Novi Sad, Novi Sad 21000, Serbia. (kgasic@clemson.edu)

9:15 Break

9:30 Evaluation of Growth and Physiological Responses of HLB Affected Citrus Trees to Thermotherapy. Pawan Kumar*, Megan Dewdney, Evan Johnson and Tripti Vashisth, Citrus Research and Education Center, University of Florida/IFAS, 700 Experiment Station Rd. Lake Alfred, FL 33850. (tvashisth@ufl.edu)

9:45 Exploring Potassium Balance in Southeastern Peach Orchards. Brian T. Lawrence1*, Qi Zhou2,1, and Juan Carlos Melgar1, 1Department of Plant and Environmental Sciences, Clemson University, Clemson, SC 29631, 2University of California Cooperative Extension, Santa Clara County, 1553 Berger D. Bldg. 1, San Jose, CA 95112. (btlawre@g.clemson.edu)

10:00 History, Inventory and Contributions of the Small Fruit Program at Stephen F. Austin State University. David Creech* and Malcolm Turner, SFA Gardens, Stephen F. Austin State University, Nacogdoches, TX 75962. (dcreech@sfasu.edu)

10:15 Effect of Calcium Sulfate on Southern Highbush Blueberry Establishment. Erick D. Smith1*, Chelsea Matewe2, Jonathan Oliver2, 1Department of Horticulture, University of Georgia – Tifton Campus 31793, 2Department of Pathology, University of Georgia – Tifton Campus 31793. (ericks@uga.edu)

10:30 Fruit Characterization of Ecuadorian P. serotina subsp. Capuli. Sakshi Pathania1*, Juan C. Carrasco2, Carlos R. Chavez2, Luis Fiallos3, and Dario J. Chavez1 1University of Georgia, Department of Horticulture, Griffin, GA, USA; 2Faculty of Natural Resources, Escuela Superior Politécnica de Chimborazo, Riobamba, Ecuador; 3Faculty of Livestock Sciences, Escuela Superior Politécnica de Chimborazo, Riobamba, Ecuador.(sp28191@uga.edu)

POSTHARVEST AND BIOTECHNOLOGY

Building: Omni
Room: Wheat
Presiding: Anne Randle, Chair
Abstracts: To publish abstract in HortScience,
see instructions at end of program. Submit on disk at meeting or email to Chair: arandle@uga.edu

8:00 Partial Extraction of Aromatic Compounds from Dehydrated Herbs: Basil (Ocimum sp. L.) and Cilantro (Coriandrum sativum L.), Niels Maness*, Elif Kalkan1, Jasreen Sekhon1, Carol Jones1, and Donna Chrz1, 1Department of Horticulture and L.A., 358 Ag. Hall, Oklahoma State University, Stillwater, OK 74078, 2Department of Culinary Arts and Food Science, Drexel University, 3141 Chestnut Street, Philadelphia, PA 19104, 3Department of Biosystems and Agricultural Engineering, 216 Ag. Hall, Oklahoma State University, Stillwater, OK 74078. (niels.maness@okstate.edu)

8:15 Diabetes to Cancer: Plants in Oklahoma That Can Make a Difference. Niels Maness*, Jonathan Fenhaus2, Katelyn Stenmark1 and Lu Zhang1, 1Department of Horticulture and Landscape Architecture, Oklahoma State University, Stillwater, OK 74078, 2Department of Biology and Chemistry, University of Science and Arts of Oklahoma, Chickasha, OK 73018. (niels.maness@okstate.edu)

8:30 Postharvest Extraction of Pecan Oil: Quantitation of Tocopherols, Tocotrienols and Squalene in Oklahoma Pecan Cultivars. Jonathan Fenhaus*1, Niels Maness2 and Lu Zhang2, 1Department of Biology and Chemistry, University of Science and Arts of Oklahoma, Chickasha, OK 73018, 2Department of Horticulture and Landscape Architecture, Oklahoma State University, Stillwater, OK 74078. (jfen8162@usao.edu)

8:45 Harvesting, Extraction Processing and Purification of Podophyllotoxin from Eastern Red Cedar (Juniperus virginiana L.) in Oklahoma. Katelyn Stenmark* and Niels Maness, Department of Horticulture and Landscape Architecture, Oklahoma State University, Stillwater, OK 74078. (katie.stenmark@okstate.edu)

9:00 Hollow heart disorder and its relationship to cell wall pectins in grafted and non-grafted ‘Liberty’ watermelon. Marlee A. Trandel*, Penelope Perkins-Neazie1, Suzanne Johanningsmeier2, Jonathan Schultheis1 and Chris Gunter3, 1North Carolina State University, Department of Horticultural Sciences, 600 Laureate Way, Plants for Human Health Institute, Kannapolis NC 28081, 2North Carolina State University, Department of Food, Bioprocessing and Nutrition Sciences, 400 Dan Allen Drive, Schaub Hall, Raleigh NC 27606, 3North Carolina State University, Department of Horticultural Sciences, 2721 Founders Drive, Kilgore Hall, Raleigh NC 27606. (matrande@ncsu.edu)

9:15 Break

9:30 Pumpkin Postharvest: Stem Retention and Moisture with Storage. Penelope Perkins-Neazie*, Jonathan Schultheis2 and Travis Birdsell1, 1Plants for Human Health Institute, Department of Horticultural Science, North Carolina State University, Kannapolis, NC 28081, 2 2721 Founders Dr, Department of Horticultural Science, North Carolina State University, Raleigh, NC 27695, 3134 Government Circle Suite 202, Jefferson, NC 28640. (penelope_perkins@ncsu.edu)

9:45 Evaluating Rhubarb as a New Crop for North Carolina. Penelope Perkins-Neazie*, Dannelle Cutting2, Der Holcomb3, Lenny Rogers3, Kira Sims4, Hunter Barrier3, Matt Lenhardt5, Lauren Hill6, April Vigardt6, Michael Fine7 and Elina Snyder10, 4Plants for Human Health Institute, Department of Horticultural Science, North Carolina State University, Kannapolis, NC 28081, 2217 S Main St, Salisbury, NC 28144, 3151 W Main Ave, Taylorsville, NC 28681, 8530 Sherrills Ford Rd, Salisbury, NC 28147, 444 Bristol Dr, Statesville, NC 28677, 7715 Cabarrus Ave W, Concord, NC 28027, 81175 S Brady Ave # 2, Newton, NC 28658, 92727 Old Concord Rd, Salisbury NC 28147, 10416 Executive Dr, Wilkesboro, NC 28697. (penelope_perkins@ncsu.edu)

10:00 Impact of Postharvest and Processing of Fruits and Vegetables on Nutritional Security. Bhimanagouda S. Patil*, G.K. Jayaprakashaka, Jasbir Singh and Pratibha Acharya, Vegetable and Fruit Improvement Center, Department of Horticultural Sciences, USDA National Center of Excellence, Texas A&M University, College Station, TX 77843. (b-patil@tamu.edu)

10:15 Effect of Ethylene De-greening Treatment on Fruit Quality and Postharvest Storage Life of HLB-affected Mandarin Cultivars.
Faisal Shahzad1, Jeffrey K. Brecht2, Yu Wang3, Fred Gmitter1, Mark A. Ritenour1 and Tripti Vashisth1. 1700 Experiment Station Rd, Citrus Research and Education Center, Lake Alfred, FL 33850, 2Horticulture Sciences Department, IFAS, Gainesville, University of Florida, FL 32611, 3Indian River Research and Education Center, Fort Pierce, University of Florida, FL 34945-3138. (amiabu@ufl.edu)

10:30 Preliminary investigation of role of rootstock cultivar on metabolite redox control in “Aztec Fuji” apple. Floyd M. Woods*, Elina Coneva, Dylan Teel, and Nylan Holmes, Department of Horticulture, Auburn University, Auburn, AL 36849-5408. (woodsfm@auburn.edu).

ANNUAL BUSINESS MEETING AND AWARDS PROGRAM

Building: Omni
Room: Commonwealth 3
Time: 11:00 12:30
Presiding: Bodie Pennisi, President

SAAS Meetings

SAAS Board Meeting
Bldg/Room: Omni Commonwealth 3
Time: 2:30 PM–3:30 PM

SAAS General Business Meeting
Bldg/Room: Omni Commonwealth 3
Time: 4:00 PM–4:30 PM

Special Speaker
Dr. J. Scott Angle
Director of NIFA, USDA
Update on NIFA

SAAS Social/Super Bowl Party
Place: Griff’s Restaurant
Time: 5:00 PM – until
WORKING GROUPS
(Contact Chairs for Agenda and order of business meeting and presentations if not given)

Watermelon Research Group
Presiding: Daniel Engle, Chair
dgel@purdue.edu
Building: Omni
Room: Olmsted 3
Friday: 1:00-5:00
Saturday: 8:30-5:00

Friday, January 31, 2020
1:00 Introductions: All in attendance
1:45 Effects of Early Grafted Watermelons on Three Commercial Watermelon Cultivars Using Row Covers and Colored mulches. Dr. Richard L. Hassell, Clemson University, Coastal Research and Education Center, Charleston, SC USA
2:00 Effects of Hybrids Generated from Rootstock (Carolina Strongback) on Earliness, Fruit Quality, and Yields Grafted on Cultivar Sweet Dawn. Dr. Richard L. Hassell, Clemson University, Coastal Research and Education Center, Charleston, SC USA
2:20 Performance of Grafted Watermelons at Reduced Density in Indiana. Wejing Guan, Purdue University.
4:15 Watermelon Makes Headlines – 2019. Mark Arney, Executive Director of the National Promotion Board
4:35 Adjourn

Saturday, February 1, 2020
8:30 Introductions: All in attendance
9:15 Regional Watermelon Production Updates
Florida, Georgia, Carolinas, Delaware/Maryland, Mid-West, West USA
9:45 Variety updates from Seed Companies
10:00 2019 Seedless Watermelon Evaluation in Georgia.
10:15 2019 South Carolina Seedless and Mini Watermelon Variety Trial Results.
10:30 20 Minutes Break
10:50 2019 Watermelon Variety Evaluation in Indiana
11:05 Standard and Mini Seedless Watermelon Variety Trials Conducted by University of Delaware Cooperative Extension in 2019. Gordon Johnson* and Emmalea Ernest, Department of Plant and Soil Sciences, University of Delaware, Elbert N. and Ann V. Carvel Research and Education Center, 16483 County Seat Highway, Georgetown, DE 19947. (gcjohn@udel.edu)
11:20 A new tool to help growers selecting watermelon varieties and pollinizers. Andre Luiz Biscaia Ribeiro da Silva, Ph.D., University of Georgia.
11:35 Lunch Break
1:30 Quantitative trait loci (QTL) associated with resistance to major diseases of watermelon identified by the CucCAP team. Sandra Branham, Pat Wechter, Shaker Kousik, Kai-shu Ling, and Amnon Levi.
1:50 Is There Light at the End of the Gummy Stem Blight Tunnel? Cecilia McGregor*, Winnie Gimode*, Lincoln Adams*, and Jorge Reyes1, 1Department of Horticulture, University of Georgia, 1111 Miller Plant Science Bldg., Athens, GA, 30302, 2Institute of Plant Breeding Genetics and Genomics,
A web application designed to search for pest management solutions for watermelon and other vegetables. Dan Egel, Dept. of Botany and Plant Pathology, Purdue University

Management of Fusarium wilt of watermelon transplants in the greenhouse. Dan Egel, Dept. of Botany and Plant Pathology, Purdue University

WRDG Business

3:00 Hot Topics
   Website
   New vice-chair selection
   Upcoming meetings

4:00 Adjourn

Southern Fruit Workers

Presiding: Rachel Ite
   ashi@uark.edu
Building: Omni
Room: Olmsted 2
Friday: 9:00 am – 5:00 pm

Horticulture Administrators

Presiding: Dean Kopsell, Chair
   dean.kopsell@ufl.edu
Building: Omni
Room: Clifton
Friday: 1:00 pm – 5:00 pm

National Sweetpotato Working Group

Presiding: Lina Quesada
Location: Does not meet with SRASHS this year
   Meets with US Sweetpotato Council
   January 24-25
   Nashville, TX
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 abstract 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.
Omni Hotel Rooms

Omni Hotel level 2

Omni Hotel level 3
## 2020 Program at a Glance

### Friday, January 31

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<td>Omni Hotel Lobby</td>
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