

# **PROGRAM**



**95th ANNUAL MEETING**

**Southern Region**

of the

**American Society for Horticultural Science**

**January 31 - February 2, 2014**

**Dallas, TX**

## **Southern Region ASHS**

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

### **Goals:**

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

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

### **President**

**Curt Rom**

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### **President-Elect**

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### **Secretary-Treasurer**

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### **Web Site**

**srashs.org**

**Visit It**

**PROGRAM**  
**95th ANNUAL MEETING**  
**Southern Region**  
**American Society for Horticultural Science**  
**Dallas, TX**  
**January 31 - February 2, 2014**  
**SPECIAL EVENTS AND SESSIONS**

**FRIDAY**

<b>7:00 am - 6:00 pm</b>	<b>Registration</b> Room: Hotel Lobby
<b>8:00 am - 5:00 pm</b>	<b>National Sweet Potato Collaborators</b> Room: Majestic Room 5
<b>8:00 am - 5:00 pm</b>	<b>Pecan Research and Extension Forum</b> Room: Majestic Room 3
<b>8:00 am - 5:00 pm</b>	<b>Southern Blueberry/Small Fruit Workers</b> Room: Majestic Room 4
<b>10:00 am - 11:30 am</b>	<b>ACB Club Share</b> Room: Majestic Room 1
<b>11:30 5:00 pm</b>	<b>ACB Group Lunch and/or Tour</b> Room: TBA at Club Share
<b>1:00 am - 5:00 pm</b>	<b>Watermelon Research Group</b> Room: Majestic 7
<b>1:00 pm - 5:00 pm</b>	<b>Horticulture Administrators</b> Room: Majestic Room 2
<b>5:00 pm - 6:00 pm</b>	<b>Executive Committee Meeting</b> Room: Majestic Room 2
<b>5:00 approx. until</b>	<b>ACB Reception and Mixer</b> Time, place and room TBA

**SATURDAY**

<b>7:00 am - 4:00 pm</b>	<b>Registration</b> Room: Majestic Room Foyer
<b>8:00 am - 12:00 pm</b>	<b>Set-up Posters</b> Room: Grand Hall Preconvene
<b>8:00 am - 12:00 noon</b>	<b>J. Benton Storey Horticulture Judging Contest Setup</b> Room: Dallas Ballroom B
<b>8:00 am - 9 am</b>	<b>J. B. Edmond Undergraduate Student Paper Competition.</b> Room: Majestic Room 4
<b>8:00 am - 10:00 am</b>	<b>Extension Section</b> Room: Majestic Room 2
<b>8:00 am - 5:00 pm</b>	<b>National Sweet Potato Collaborators</b> Room: Majestic Room 5
<b>8:00 am - 4:00 pm</b>	<b>Watermelon Research Group</b> Room: Majestic 1
<b>9:00 am - 12:00 noon</b>	<b>Vigna Crop Germplasm Committee</b> Room: Majestic Room 8
<b>10:30 am - 2:30 pm</b>	<b>Norman F. Childers M.S. Student</b> Room: Majestic Room 4
<b>12:00 noon - 4:00 pm</b>	<b>Poster Session Viewing</b>

12:00 pm - 4:00 pm	Room: Grand Hall Preconvene <b>J. Benton Storey Horticulture Judging Contest</b>
1:00 pm - 4:00 pm	Room: Dallas Ballroom B <b>National Cowpea Improvement Association</b>
2:00 pm - 4:00 pm	Room: Majestic Room 8 <b>Education Section</b>
4:00 pm - 5:30 pm	Room: Majestic Room 3 <b>Warren S. Barham Ph.D. Student Paper Competition</b>
	Room: Majestic Room 4

## SUNDAY

7:00 am - 10:30 am	<b>Registration</b> Room: Majestic Room Foyer
8:00 am - 10:30 pm	<b>Poster Session Viewing</b> Room: Grand Hall Preconvene
8:00 am - 10:45 am	<b>Vegetable Crops Section</b> Room: Majestic Room 4
8:00 am - 10:30 am	<b>Fruit Crops Section</b> Room: Majestic Room 5
8:00 am - 10:30 am	<b>Floriculture, Ornamentals and Turf Section</b> Room: Majestic Room 3
9:00 am - 10:30am	<b>ACB Business Meeting</b> Room: Dallas Ballroom A1
11:00 am - 12:30 pm	<b>Annual Business Meeting and Award Program</b> Room: Dallas Ballroom A1
1:00 pm - 2:30 pm	<b>Fruit Crops Section</b> Room: Majestic Room 5
1:00 pm - 3:45 pm	<b>Floriculture, Ornamentals and Turf Section</b> Room: Majestic Room 3
3:00 pm - 4:00 pm	<b>Poster Session Take Down</b> Room: Grand Hall Preconvene
5:00-pm - 10:00 pm	<b>Super Bowl Party</b> Eddie Deen's Ranch Continuous bus shuttle service from hotel entrance starting 5 pm

## SAAS Program

(<http://saasinc.org/2014-Dallas/Programs2/2014%20Program%20Book.pdf>)

## SUNDAY

2:30 pm - 3:30	<b>SAAS Board Meeting</b> Room: Dallas Ballroom A1
4:00 pm - 4:15 pm	<b>SAAS General Business Meeting</b> Room: Dallas Ballroom A1
4:15 pm - 5:30	<b>SAAS Concurrent Sessions/Graduate Student Mixer</b> Room: Dallas Ballroom A1/A2/A3

## MONDAY

11:00 am - 3:00 pm	<b>AHS Administrative Heads of Agriculture</b> Room: Executive Boardroom
2:00 am - 4:00 pm	<b>Academic Department Heads</b> Room: Majestic Room 2

## TUESDAY

7:00 am - 9:30 pm	<b>SAAS Board Breakfast Meeting</b> Room: Chef's Table
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# SECTION TITLES

## SATURDAY

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

**Room:** Majestic Room 4  
**Presiding:** Courtney DeKalb, President, ACB  
 Curt Rom, President, SRASHS  
 Matt Chappel, Section Chair and  
 Judging Coordinator  
**Abstracts:** To publish abstract in *HortScience*, see  
 instructions at end of program. Submit  
 on disk at meeting or email to Chair:  
 (hortprod@uga.edu)

**8:00 am – 8:45 am Order of presentations  
 determined by drawing at beginning of contest.**

Check at registration desk for addendum to determine  
 if presentations will be given.

**Plectranthus: Cultural and Troubleshooting  
 Guide.** Kara Pittman<sup>1\*</sup>, Ingram McCall<sup>1</sup>, Brian  
 Whipker<sup>1</sup>, Rick Schoellhorn<sup>2</sup>, Matt Taylor<sup>3</sup>. <sup>1</sup>North  
 Carolina State University, Horticulture Department,  
 Raleigh, NC 27695. <sup>2</sup>Proven Winners, 111 E. Elm  
 Street, Suite D, Sycamore, IL, 60178, <sup>3</sup>Longwood  
 Gardens, 1001 Longwood Road, Kennett Square, PA  
 19348. (kbpittma@ncsu.edu)

**Social Media Marketing for Locally Owned  
 Independent Garden Centers.** R. Bailey  
 Swanson<sup>1\*</sup>, Hikaru H. Peterson<sup>1</sup>, Cheryl R. Boyer<sup>2</sup>,  
 and Lauri M. Baker<sup>3</sup>. <sup>1</sup>Waters Hall, Kansas State  
 University, Manhattan, KS 66506, <sup>2</sup>Throckmorton  
 Hall, Kansas State University, Manhattan, KS 66506,  
<sup>3</sup>Umberger Hall, Kansas State University,  
 Manhattan, KS 66505.  
 (swansonbailey09@gmail.com).

**Substrate components and drench applied  
 paclobutrazol effects growth and flowering of  
 Poinsettia (Euphorbia pulcherrima).** Paul Bartley\*,  
 Glenn Fain, Raymond Kessler, John Olive, and  
 Anthony L. Witcher. Department of Horticulture,  
 Auburn University, Auburn, AL 36849.  
 (pcb0004@auburn.edu)

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

**Room:** Majestic Room 4  
**Presiding:** Wayne Mackay, President-Elect,  
 Southern Region ASHS  
**Abstracts:** To publish abstract in *HortScience*, see  
 instructions at end of program. Submit  
 on disk at meeting or email to Chair:  
 (wmackay@ufl.edu)

**9:00 am – 2:00 pm Order of presentations  
 determined by drawing at beginning of contest.**

**Comparison of Organic Fertility Treatments on  
 Yield and Total Phenolic Content of Basil  
 (Ocimum basilicum) and Collard Greens (Brassica  
 oleracea).** Raleigh Saperstein\* 1111 Miller Plant  
 Sciences, Department of Horticulture, University of  
 Georgia, Athens, GA 30602.  
 (raleighsap@gmail.com)

**Effect of pre and post-harvest treatments on  
 characteristics of 'Pawnee' pecan kernels.** Zainab  
 Mansur<sup>1\*</sup>, Luis Cisneros-Zevallos<sup>1</sup>, Monte Nesbitt<sup>2</sup>,  
 and Leonardo Lombardini<sup>1</sup>, Department of  
 Horticultural Sciences, Texas A&M University,  
 College Station, TX 77843-2133, <sup>2</sup>Texas A&M  
 AgriLife Extension, Texas A&M University, College  
 Station, TX 77843-2134. (zjmansur@tamu.edu)

**Effects of Cover Crops on Orchard Nutrition.**  
 Jennifer. Billig\* and Curt R. Rom, Department of  
 Horticulture, University of Arkansas, Fayetteville,  
 AR 72701. (jbillig@uark.edu)

**Effects of Five Container Sizes on Initial  
 Landscape Establishment of Three Tree Species.**  
 Lauren Garcia<sup>1\*</sup>, Michael A. Arnold<sup>2</sup>, Leonardo  
 Lombardini<sup>3</sup>, W. Todd Watson<sup>4</sup>, Sean Carver<sup>1</sup>, and  
 Andrew King<sup>1, 2, 3</sup> Teaching / Research Associate,  
 Professor and Associate Department Head, and  
 Associate Professor, respectively, Department of  
 Horticultural Sciences, Texas A&M University,  
 College Station, TX 77843-2133. <sup>4</sup>Ajunct Professor,  
 W. Todd Watson, Department of Ecosystem Science  
 and Management, Texas A&M University, College  
 Station, TX 77843-2138. (lmgarcia06@gmail.com)

**Evaluation of Field Fungicide Application Effects  
 on Nutraceutical Content of Muscadine  
 Genotypes.** Derek W. Barchenger<sup>1\*</sup>, John R. Clark<sup>1</sup>,  
 and Renee T. Threlfall<sup>2</sup>, <sup>1</sup>316 Plant Science,  
 Department of Horticulture, University of Arkansas,  
 Fayetteville, AR 72701, <sup>2</sup>2650 N Young Avenue,  
 Institute of Food Science and Engineering, University

of Arkansas, Fayetteville AR 72704.  
(dwbarche@uark.edu)

**Exploring Methods to Enhance Rooting of *Vaccinium arboreum* Stem Cuttings.** Andrew B. Baker<sup>1\*</sup>, James D. Spiers<sup>1</sup>, Glenn B. Fain<sup>1</sup>, and Eugene K. Blythe<sup>2</sup>, <sup>1</sup>101 Funchess Hall, Dept. of Horticulture, Auburn University, Auburn, AL 36849, <sup>2</sup>Mississippi State University, P.O. Box 193, Coastal Research and Extension Center, South Mississippi Branch Experiment Station, Poplarville, MS 39470. (bakeran@auburn.edu)

**Exposure of *Canna flaccida* and two *Canna* hybrids to five species of *Phytophthora*.** Kristin Van Kampen\*, Sarah A. White, and Steven N. Jeffers. School of Agriculture, Forest, and Environmental Sciences, Clemson University, Clemson, SC 29634. (kampenv@g.clemson.edu)

**Herbicidal activity of Mustard Seed Meal (*Sinapis alba* 'IdaGold' and *Brassica Juncea* 'Pacific Gold') to weeds and vegetable emergence.** Xi Wang<sup>1\*</sup>, Mengmeng Gu<sup>2</sup>, Genhua Niu<sup>3</sup>, and Paul A. Baumann<sup>4</sup>, <sup>1</sup>Department of Horticultural Sciences, Texas A&M University, 2134 TAMU, College Station, TX 77843, <sup>2</sup>Texas AgriLife Extension, 2134 TAMU, College Station, TX 77843, <sup>3</sup>Texas AgriLife Research at El Paso, 1380 A&M Circle, El Paso, TX 79927, <sup>4</sup>Texas Agricultural Extension Service, College Station, TX 77843-2474. (wangxi88@neo.tamu.edu)

**Methods to Enhance Marketable Yield of New AU Kiwifruit Cultivars.** Andrew B. Thompson\*, James D. Spiers, J. Raymond Kessler, Elina D. Coneva and James A. Pitts. Department of Horticulture, Auburn University, Auburn, AL 36830. (thompab@auburn.edu)

**Overexpression of Celery Mannitol Dehydrogenase (MTD) in Tomato Increases Resistance to the Mannitol Secreting Fungal Pathogen *Botrytis cinera*.** Takshay K. Patel\*, J.D. Williamson, S.F. Krasnyanski, D.R. Panthee, G.C. Allen, A. Desai. Department of Horticultural Science, North Carolina State University, Raleigh, NC 27695. (tkpatel@ncsu.edu)

**Ploidy Levels and Relative Genome Sizes of Species, Hybrids, and Cultivars of *Kalmia*.** Dominic A. Gillooly\* and Thomas G. Ranney, Department of Horticultural Science, North Carolina State University, Mountain Horticultural Crops Research and Extension Center, 445 Research Drive Fletcher, NC 28732. (dagilloo@ncsu.edu)

**Poinsettia growth response to container substrate amended with biochar.** Yanjun Guo<sup>1\*</sup>, Mengmeng Gu<sup>1</sup>, Genhua Niu<sup>2</sup>, Terri Starmer<sup>1</sup>, and Frank M. Hons<sup>3</sup>, <sup>1</sup>Horticulture St, College Station, Department of Horticulture, Texas A & M University, TX 77840, <sup>2</sup>1380 A&M Circle, El Paso, TX 79927, <sup>3</sup>Heep Center, Department of Soil and Crop Science, Texas A & M University, TX 77840. (gyj963qaz@tamu.edu)

**Seedling emergence of oilseed crops subjected to various salinity levels.** Xi Wang<sup>1\*</sup>, Mengmeng Gu<sup>2</sup> and Genhua Niu<sup>3</sup>, <sup>1</sup>Department of Horticultural Sciences, Texas A&M University, 2134 TAMU, College Station, TX 77843, <sup>2</sup>Texas AgriLife Extension, 2134 TAMU, College Station, TX 77843, <sup>3</sup>Texas AgriLife Research at El Paso, 1380 A&M Circle, El Paso, TX 79927. (wangxi88@neo.tamu.edu)

**Substrate Comparison in Constructed, Raised-Beds for Vegetable Culture.** Jessica L. Cudnik<sup>1\*</sup>, David Berle<sup>1</sup>, George E. Boyhan<sup>1</sup>, Julia W. Gaskin<sup>2</sup>, <sup>1</sup>1111 Plant Sciences Building, Department of Horticulture, University of Georgia, Athens, GA 30602-7273, <sup>2</sup>4111 Plant Sciences Building, Crop and Soil Science Department, University of Georgia, Athens, GA 30602-7273. (jescud@uga.edu)

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

**Room:** Majestic Room 4

**Presiding:** Wayne Mackay, President-Elect, Southern Region ASHS

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

**4:00 pm – 5:30 pm** Order of presentations determined by drawing at beginning of contest.

**Comparison of Methodologies to Determine Hydrophysical Properties of Soilless Substrates.** Jeb S. Fields<sup>1\*</sup> and James S. Owen, Jr.<sup>2</sup>, <sup>1</sup> Department of Horticulture, Virginia Polytechnic and State University, Blacksburg, VA 24061, <sup>2</sup> Virginia Polytechnic and State University, Department of Horticulture, Hamptons Road Agricultural Research and Education Center, 1444 Diamond Springs Rd. Virginia Beach, VA, 23455. (jsfields@vt.edu)



**Effect of Nitrogen Rate, Irrigation Frequency, and Container Type on Plant Growth of Encore Azalea ‘Chiffon.’** Tongyin Li\*, Guihong Bi, Richard Harkess, Geoffrey Denny, and Xiaojie Zhao, Department of Plant and Soil Sciences, Mississippi State University, Mississippi State, MS 39762. (gb250@msstate.edu)

**Genotypic and environment variation for total soluble solids and  $\beta$ -carotene concentrations in orange fleshed melons (*Cucumis melo* L.).** Sat Pal Sharma<sup>1\*</sup>, Daniel Leskovar<sup>1</sup>, Kevin M. Crosby<sup>2</sup>, A.M.H Ibrahim<sup>3</sup> and Astrid Volder<sup>2</sup>, <sup>1</sup>Texas A&M AgriLife Research and Extension Center, 1619 Garner Field Rd, Uvalde, TX 78801, <sup>2</sup>Department of Horticultural Sciences, Texas A&M University, College Station, TX 77843, <sup>3</sup>Department of Soil and Crop Sciences, Texas A&M University, College Station, TX 77843. (sharma145@neo.tamu.edu)

**Phenotypic Evaluations of Yield and Fruit Quality Traits in Segregating Black Raspberry (*Rubus occidentalis* L. ) Populations in North Carolina.**

Christine M. Bradish<sup>1\*</sup>, Gina E. Fernandez<sup>1</sup>, Jill M. Bushakra<sup>2</sup>, Penelope Perkins-Veazie<sup>3</sup>, Michael Dossett<sup>4</sup>, Nahla V. Bassil<sup>2</sup>, and Chad E. Finn<sup>5</sup>. <sup>1</sup>Campus Box 7609, Department of Horticultural Science, North Carolina State University, Raleigh, NC 27695, <sup>2</sup>USDA-ARS National Clonal Germplasm Repository, 33447 Peoria Rd., Corvallis, OR 97333, <sup>3</sup>NC State University Plants for Human Health Institute, 600 Laureate Way, Kannapolis, NC 28081, <sup>4</sup>Agriculture and Agri-Food Canada - Pacific Agri-Food Research Centre, 6947 Lougheed Hwy, Agassiz, BC V0M 1A2, Canada, <sup>5</sup>USDA-ARS-Horticultural Crops Research Unit, 3420 NW Orchard Avenue, Corvallis, OR, 97330. (cmbradis@ncsu.edu)

## EXTENSION SECTION

**Room: Majestic 2**

**Presiding: Christine Coker**

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

**8:00 A New Strategic Plan for the eXtension Grape Community of Practice.** Eric T. Stafne<sup>1\*</sup>, Rhoda Burrows<sup>2</sup>, Matthew Fidelibus<sup>3</sup>, Lane Greer<sup>4</sup>, Paul Jenkins<sup>5</sup>, Kevin Ker<sup>6</sup>, Michelle Moyer<sup>7</sup>, Patty Skinkis<sup>8</sup>, and Hans Walter-Peterson<sup>9</sup>, <sup>1</sup>MSU Coastal Research and Extension Center, 810 Hwy 26

West, Poplarville, MS 39470, <sup>2</sup>West River Agricultural Center – SDSU, 1905 Plaza Blvd., Rapid City, SD 57702, <sup>3</sup>Department of Viticulture and Enology, University of California, Davis, Kearney Agricultural Center, 9240 S. Riverbend Ave., Parlier, CA 93648, <sup>4</sup>Oklahoma State University, 358 Ag Hall, Stillwater, OK 74078, <sup>5</sup>Michigan State University, Grape and Wine Program, B18 Food Safety & Toxicology Building, East Lansing, MI 48824, <sup>6</sup>Research Associate and Professional Affiliate, Brock University, Cool Climate Oenology and Viticulture Institute, Niagara Region, 500 Glenridge Ave., St. Catharines, ON L2S 3A1, <sup>7</sup>Viticulture Extension, Washington State University – IAREC, 24106 N. Bunn Rd., Prosser, WA 99350, <sup>8</sup>Oregon State University, Department of Horticulture, Oregon Wine Research Institute, 4017 ALS Bldg., Corvallis, OR 97331, <sup>9</sup>Finger Lakes Grape Program, Cornell Cooperative Extension, Cornell University College of Agriculture and Life Sciences, 417 Liberty Street, Penn Yan, NY 14527. (estafne@ext.msstate.edu)

**8:15 Small Acreage Horticultural Crops: an online webinar.** Joseph Masabni. Department of Horticultural Sciences, Texas A&M University, College Station, TX 77843-2134 (jmasabni@ag.tamu.edu)

**8:30 Overview of Recent New Crape Myrtle Cultivar Releases.** Wells, Daniel<sup>1\*</sup>, Allen Owings<sup>1</sup>, and David Creech<sup>2</sup>. <sup>1</sup>LSU AgCenter, Hammond Research Station, 21549 Old Covington Highway, Hammond, LA 70403 and <sup>2</sup>Stephen F. Austin State University Gardens, College of Agriculture, PO Box 13000, Nacogdoches, TX 75962. (dwells@agcenter.lsu.edu)

**8:45 Identifying commercially successful, unprotected plant material with market potential in new regions to help focus our university and industry association-based promotion program activities.** Geoffrey C. Denny<sup>1\*</sup> <sup>1</sup>Plant and Soil Sciences Department, Mississippi State University, Mississippi State University, Mississippi State, MS 39762-9555. (gcdenny@pss.msstate.edu)

**9:00 Pathways2Possibilities: introducing 8<sup>th</sup> graders to agricultural careers.** Christine E.H. Coker<sup>1\*</sup>. <sup>1</sup>Coastal Research and Extension Center, Mississippi State

University, Biloxi, MS 39532.  
(ccoker@ra.msstate.edu)

University of Arkansas, Fayetteville, AR  
72701 (mrevans@uark.edu)

## EDUCATION SECTION

**Room:** Majestic Room 3

**Presiding:** Bill Klingeman

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

**2:00 A Grading Alternative that Shifts Expectations and Re-focuses Student Effort.** William Klingeman\*, The University of Tennessee, Plant Sciences Department, 2431 Joe Johnson Drive, 252 Ellington PSB, Knoxville, TN 37996 (wklingem@utk.edu)

**2:15 Program Assessment: Challenges Writing Effective Expected Outcomes and Assessment Criteria,** Richard Harkess\*, Department of Plant and Soil Sciences, Mississippi State University, Mississippi State, MS 39762 (RHarkess@pss.msstate.edu)

**2:30 Successful Retention Efforts for Distributed Learning Students.** Cynthia McKenney\*, Thayne Montague, and Christi Chadwell, Department of Plant and Soil Science, Texas Tech University, Lubbock, TX 79409-2122 (cynthia.mckenney@ttu.edu)

**2:45 Food Gardening Classes in Horticulture Curricula at Major US Universities.** Curt R. Rom<sup>1</sup>\* and Olivia Suzanne Hines<sup>1</sup>, 316 Plant Sciences Building, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701 (crom@uark.edu)

**3:00** Break

**3:15 Don't try this at home: Creating Videos to Improve On-Campus and Distance Education in Nursery Production Classes.** Robbins, J.A.<sup>1</sup>, M. Gu<sup>2</sup>, and A.N.Wright<sup>3</sup>, <sup>1</sup>Univ. of Ark. CES, 2301 S. Univ. Ave., Little Rock, AR, <sup>2</sup>Texas AgriLife Ext., Dept. of Hortic. Sciences, 2134 TAMU, College Station, TX; <sup>3</sup>Auburn Univ., Dept. of Horticulture, 112 Funchess Hall, Auburn University, Auburn, AL (jrobbins@uaex.edu)

**3:30 Methods and Experiences in Teaching Greenhouse Management Lectures and Labs at a Distance On-line.** Michael R. Evans\*, Department of Horticulture,

**4:00 A Description of National Horticulture Curriculum for Crop Production in Controlled Environments.** Mikel C. Lolley<sup>1</sup>\*, Catherine W. Shoulders<sup>1</sup>, Michael R. Evans<sup>2</sup>, and Christopher Currey<sup>3</sup>, <sup>1</sup>Department of Agricultural Education, Communications and Technology, and <sup>2</sup>Department of Horticulture, University of Arkansas, Fayetteville, AR 72701, <sup>3</sup>Department of Horticulture, Iowa State University, Ames, IA 50011 (mclolley@uark.edu)

**4:15 Educating Students through Service Learning and Civic Engagement Projects** M'Randa R. Sandlin\* and Summer F. Odom, Department of Agricultural Leadership, Education & Communications, Texas A&M University, College Station, TX 77843 (mranda.sandlin@agnet.tamu.edu)

## POSTERS

**Room:** Grand Hall Preconvene

**Presiding:** Tom Ranney

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

**Set-Up:** Saturday, 8:00 am –noon

**Poster Viewing** Saturday noon to 5:00

Sunday 8:00-10:30 am; 1:00-3:00

**Authors at Poster:**

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

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

**Students in Competition at Poster:**

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

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

**Take-down:** Sunday, 3:00 pm – 5:00 pm

### Student Poster Competition

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

### Cross-Commodity

1) **Seed Morphology and Germination of the Medicinal Plant, *Artemisia annua***



(**Asteraceae**). Hazel Y. Wetzstein<sup>1\*</sup>, Justin A. Porter<sup>1</sup>, and Ming Li<sup>2</sup>, <sup>1</sup> 1111 Plant Science Bld., Department of Horticulture, University of Georgia, Athens, GA 30602, <sup>2</sup> Department of Traditional Chinese Medicine Resources, Guangdong Pharmaceutical University, Guangzhou, Guangdong 51006, PRC. (hywetz@uga.edu)

- 2) **Center for Crop Diversification.** Miranda Hileman<sup>1\*</sup>, Tim Woods<sup>1</sup>, and Christy Cassady<sup>2</sup>, <sup>1</sup>407 Charles E. Barnhart Bldg., Department of Agricultural Economics, University of Kentucky, Lexington, KY 40546, <sup>2</sup>N-318 Agricultural Science Center, Department of Horticulture, University of Kentucky, Lexington, KY 40546. (miranda.hileman@uky.edu)

### Fruit Crops

- 3G) **Muscadine Grapes: Evaluation of Genotypes and Field Fungicide Applications on Composition and Postharvest Storage Attributes.** Derek W. Barchenger<sup>1\*</sup>, John R. Clark<sup>1</sup>, and Renee T. Threlfall<sup>2</sup>, <sup>1</sup> 316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701, <sup>2</sup> 2650 N Young Avenue, Institute of Food Science and Engineering, University of Arkansas, Fayetteville AR 72704. (dwbarche@uark.edu)
- 4) **Asian Pear Cultivar Evaluation.** Elina D. Coneva\*, Department of Horticulture, Auburn University, 101 Funchess Hall, Auburn, AL 36849. (Edc0001@auburn.edu)
- 5) **Assessing Advanced Rabbiteye Blueberry (*Vaccinium ashei*) Selections.** Elina D. Coneva\*<sup>1</sup> and Scott NeSmith<sup>2</sup>, <sup>1</sup> Department of Horticulture, Auburn University, 101 Funchess Hall, Auburn, AL 36849, <sup>2</sup> Department of Horticulture, University of Georgia, 1109 Experiment Street, Griffin, GA 30223. (Edc0001@auburn.edu)
- 6G) **North Carolina's Role in a Nationwide Effort to Improve Black Raspberry.** Christine M. Bradish<sup>1\*</sup>, Gina E. Fernandez<sup>1</sup>, Jill M. Bushakra<sup>2</sup>, Penelope Perkins-Veazie<sup>3</sup>, Michael Dossett<sup>4</sup>, Nahla V. Bassil<sup>2</sup>, and Chad E. Finn<sup>5</sup>, <sup>1</sup> Campus Box 7609, Department of Horticultural Science, North Carolina State University, Raleigh, NC 27695, <sup>2</sup> USDA-ARS National Clonal Germplasm Repository, 33447 Peoria Rd., Corvallis, OR 97333, <sup>3</sup> NC

State University Plants for Human Health Institute, 600 Laureate Way, Kannapolis, NC 28081, <sup>4</sup> Agriculture and Agri-Food Canada - Pacific Agri-Food Research Centre, 6947 Lougheed Hwy, Agassiz, BC V0M 1A2, Canada, <sup>5</sup> USDA-ARS-Horticultural Crops Research Unit, 3420 NW Orchard Avenue, Corvallis, OR 97330. (cmbradis@ncsu.edu)

- 7) **Effects of High Tunnel and Shade on Blackberry Yield and Incidence of White Drupelets.** James D. Spiers<sup>1</sup>, Robert T. Boozer<sup>2</sup>, and James A. Pitts<sup>2</sup>. <sup>1</sup> 101 Funchess Hall, Department of Horticulture, Auburn University, Auburn, AL 36849, <sup>2</sup> Alabama Agricultural Experiment Station, Chilton Research and Extension Center, 120 Co. Rd. 756, Clanton, AL 35045. (jds0017@auburn.edu)
- 8G) **The Effects of Cover Crops on Apple Trees- A Model Greenhouse Study.** J. Billig\* and C.R. Rom, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701. (jbillig@uark.edu)
- 9) **Potential New Rabbiteye and Southern Highbush Blueberry Cultivars for the Southeastern U.S.** Stephen Stringer\*, Donna Marshall, Cecil Pounders, Hamidou Sakhanoko, Tim Rinehart and John Adamczyk. USDA ARS Thad Cochran Southern Horticultural Laboratory, Poplarville, MS 39470. (Stephen.Stringer@ars.usda.gov)
- 10U) **Effect of Zinc Foliar Application and Preparation Methods on Nutrient Analysis of Pecan Leaves.** Page Hamby<sup>1\*</sup>, Monte Nesbitt<sup>2</sup>, and Leonardo Lombardini<sup>1</sup>, <sup>1</sup> Department of Horticultural Sciences, Texas A&M University, College Station, TX 77843-2133, <sup>2</sup> Texas A&M AgriLife Extension, Texas A&M University, College Station, TX 77843-2134. (hamb509@tamu.edu)
- 11) **Titan™ Rabbiteye Blueberry.** D. Scott NeSmith\*, Department of Horticulture, University of Georgia, 1109 Experiment Street, Griffin, GA 30223. (snesmith@uga.edu)
- 12G) **Development of Technology for Sustainable Banana Production in Coastal Alabama.** Edgar L. Vinson, III<sup>1\*</sup>, Elina D. Coneva,<sup>1</sup> Joseph M. Kemble,<sup>1</sup> Floyd M. Woods<sup>1</sup>, E. Greg Fonsah,<sup>2</sup> Penelope M. Perkins-Veazie<sup>3</sup>,

and Jeff L. Sibley<sup>1</sup>, <sup>1</sup> Auburn University, Auburn, AL, USA, <sup>2</sup> University of Georgia, Athens, GA, USA, <sup>3</sup> North Carolina State University, Raleigh, NC, USA. (vinsoed@auburn.edu)

- 13U) **The Effects of Sulfuric Acid Scarification and Seed Coat Removal in the Germination of Miracle Berries (*Synsepalum dulcificum* Daniell).** Carly Schall\*, Eric Limbird, and Nate Phillips, School of Agribusiness and Agriscience, Campus Box 5, Middle Tennessee State University, Murfreesboro, TN 37132. (cms6t@mtmail.mtsu.edu)

#### Floriculture, Ornamentals and Turf

- 14) **Establishment and Performance of Sweet Drift® Roses Planted at Different Densities in the Mid-South.** Pamela C. Collins and Geoffrey C. Denny\*, Plant and Soil Sciences Department, Mississippi State University, Mississippi State University, Mississippi State, MS 37962-9555. (gcdenny@pss.msstate.edu)

- 15G) **Determining Optimal Rates of Drench Applied Plant Growth Regulators for Container-grown *Oenothera drummondii* Hook.** Sean T. Carver\*<sup>1</sup>, Michael A. Arnold<sup>1</sup>, David H. Byrne<sup>1</sup>, Anna R. Armitage<sup>2</sup>, R. Daniel Lineberger<sup>1</sup>, and Andrew R. King<sup>1</sup>, <sup>1</sup> Teaching/research assistant, Professor and Assoc. Head for Undergraduate Programs, Professor, Professor and Department Head, and Research Associate, respectively, Department of Horticultural Sciences, Texas A&M University, College Station, TX 77843-2133, <sup>2</sup> Associate Professor, Department of Marine Biology, Texas A&M University, Galveston, TX 77551. (scarver@neo.tamu.edu)

- 16) **Greywater Irrigation of Two Herbaceous Landscape Plant Species.** Richard Sluznis<sup>1</sup>, Amy Wright<sup>2\*</sup>, and Charlene LeBleu<sup>1</sup>. <sup>1</sup> Department of Landscape Architecture, <sup>2</sup> Department of Horticulture, Auburn University, AL 36849. (awright@auburn.edu)

- 17G) **Poinsettia Growth Response to Container Substrate Amended with Biochar.** Yanjun Guo<sup>1\*</sup>, Mengmeng Gu<sup>1</sup>, Genghua Niu<sup>2</sup>, Terri Starmen<sup>1</sup>, and Frank M. Hons<sup>3</sup>, <sup>1</sup> Horticulture St, College Station, Department of Horticulture, Texas A & M University, TX 77840, <sup>2</sup> 1380 A&M Circle, El Paso, TX

79927, <sup>3</sup> Heep Center, Department of Soil and Crop Science, Texas A & M University, TX 77840. (gyj963qaz@tamu.edu)

- 18) **Influence of Substrates and Controlled-Release Fertilizer on Container Production Responses of Drought and Salt Tolerant Native Texas Groundcovers.** Andrew R. King\*<sup>1</sup>, Michael A. Arnold<sup>1</sup>, Charles R. Hall<sup>1</sup>, Marco A. Palma<sup>2</sup> and H. Brent Pemberton<sup>3</sup>. <sup>1</sup> Department of Horticultural Sciences, Texas A&M University, College Station, TX 77843-2133, <sup>2</sup> Department of Agricultural Economics, Texas A&M University, College Station, TX 77843-2124, <sup>3</sup> Department of Horticultural Sciences, Texas AgriLife Research Center, Overton, TX 75684. (aking@tamu.edu)

- 19U) **Commercial Evaluation of a Banker Plant System Using Predatory Mites on Ornamental Pepper to Control Silverleaf Whitefly on Poinsettias in Mississippi Greenhouses.** Sanitra Lawrence\*<sup>1</sup>, Geoffrey C. Denny<sup>1</sup>, and M. Blake Layton, Jr.<sup>2</sup>, <sup>1</sup> Plant and Soil Sciences Department, Mississippi State University, Mississippi State University, Mississippi State, MS 37962-9555, <sup>2</sup> Department of Biochemistry, Molecular Biology, Entomology, & Plant Pathology, Mississippi State University, Mississippi State, MS 39762-9775. (gcdenny@pss.msstate.edu)

- 20) **Phosphorus Uptake and Flooding Tolerance of Three Native Landscape Plant Species.** Amanda Meder and Amy Wright\*, Department of Horticulture, Auburn University, AL 36849. (awright@auburn.edu)

- 21U) **Germination Techniques in *Ipomopsis rubra* and *Melampodium leucanthum*.** Amanda Gunter\*, Cynthia McKenney, and Thayne Montague, Department of Plant and Soil Sciences, Texas Tech University, MS 2122, Lubbock, TX 79409. (amanda.gunter@ttu.edu)

#### Vegetable Crops

- 22) **Evaluation of an Organic Nitrogen Source in a Yellow Squash (*Cucurbita pepo*), Collard (*Brassica oleracea* var. *acephala*) Rotation.** C.Z. Ogles<sup>1</sup>, J.M. Kemble\*<sup>1</sup>, A.N. Wright<sup>1</sup>, and E.A. Guertal<sup>2</sup>, <sup>1</sup> Dept. of Horticulture, 101 Funchess Hall, Auburn, AL 36849, <sup>2</sup> 201 Funchess Hall, Dept. of

- Agronomy & Soils, Auburn, AL., 36849.  
(kembljm@auburn.edu)
- 23G) **Effect of Different Levels of Fertilizer on Yield and Nutritional Qualities of Kangkong (*Ipomoea aquatica*): a Potential Leafy Vegetable.** Harun Sorker\*, Z. Adam and S. Islam, Department of Agriculture, University of Arkansas at Pine Bluff, 1200 North University Drive, Mail Slot 4913, Pine Bluff, AR 71601. (islams@uapb.edu)
- 24) **Fall-planted Cabbage Variety Trials in Southwest Georgia.** Timothy Coolong\*<sup>1</sup> and Matthew Roberts<sup>2</sup>, <sup>1</sup> Department of Horticulture, University of Georgia, Tifton, GA 31793, <sup>2</sup> Colquitt County Cooperative Extension, 350 Bldg. 1 Room 132, Veteran's Parkway North, Moultrie, GA 31788. (tcoolong@uga.edu)
- 25G) **Herbicidal Activity of Mustard Seed Meal (*Sinapis alba* 'IdaGold' and *Brassica juncea* 'Pacific Gold') to Weeds and Vegetable Emergence.** Xi Wang<sup>1\*</sup>, Mengmeng Gu<sup>2</sup>, Genhua Niu<sup>3</sup>, and Paul A. Baumann<sup>4</sup>, <sup>1</sup> Department of Horticultural Sciences, Texas A&M University, 2134 TAMU, College Station, TX 77843, <sup>2</sup> Texas AgriLife Extension, 2134 TAMU, College Station, TX 77843, <sup>3</sup> Texas AgriLife Research at El Paso, 1380 A&M Circle, El Paso, TX 79927, <sup>4</sup> Texas Agricultural Extension Service, College Station, TX 77843-2474. (wangxi88@neo.tamu.edu)
- 26) **Growing the North Carolina Hops Industry.** Jeanine Davis\* and Kelly Gaskill, Department of Horticultural Science, North Carolina State University, Mountain Horticultural Crops Research and Extension Center, 455 Research Drive, Mills River, NC 28759. (Jeanine\_Davis@ncsu.edu)
- 27U) **Pumpkin Cultivar Evaluation for Central Mississippi Production.** Anna McCain\* and William B. Evans, Truck Crops Experiment Station, Mississippi State University, Crystal Springs, MS 39059. (amh461@msstate.edu)
- 28) **Performance of Fall-planted Broccoli Varieties in Georgia.** Timothy Coolong\*, Department of Horticulture, University of Georgia, Tifton, GA 31793. (tcoolong@uga.edu)
- 29G) **The Effect of Soil Type on Disease Severity Symptoms of *Fusarium oxysporum* fsp. *niveum* (Race 1) in Watermelon.** Geoffrey Meru\* and Cecilia McGregor, Department of Horticulture, University of Georgia, Athens, GA 30602. (merujeff@uga.edu)
- 30) **Yield Response of Okra (*Abelmoschus esculentus* Moench) in the U.S. Virgin Islands.** Dilip Nandwani\*, Thomas Geiger and Shamali Dennerly, Plant Science Laboratory, Agricultural Experiment Station, University of the Virgin Islands, Kingshill, VI 00850. (dnandwa@live.uvi.edu)
- 31U) **Respiration During Germination of Triploid and Diploid Watermelon Seeds.** Stephen Perry<sup>1\*</sup>, James Brusca<sup>2</sup> and B Greg Cobb<sup>1</sup>. <sup>1</sup>Department of Horticultural Sciences, Texas A&M University, College Station, TX 77843 and <sup>2</sup>Syngenta Seeds Inc., 21435 County Road 98, Woodland, CA 95695. (sperry@tamu.edu)
- 32) **Molecular Breeding in Spinach.** Ainong Shi<sup>1\*</sup>, Beiqian Mou<sup>2</sup>, Zhangjun Fei<sup>3</sup>, Jim Correll<sup>1</sup>, Dennis Motes<sup>1</sup>, Jianbing Ma<sup>1</sup>, and Chunda Feng<sup>1</sup>, <sup>1</sup> University of Arkansas, Fayetteville, AR, U.S.A., <sup>2</sup> USDA-ARS, Salinas, CA, U.S.A., <sup>3</sup> Cornell University, Ithaca, NY, U.S.A., (ashi@uark.edu)

**Sunday, February 2, 2014**

## POSTERS

- Room:** Grand Hall Preconvenc  
**Presiding:** Tom Ranney  
**Abstracts:** To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair: (tom\_ranney@ncsu.edu).  
**Set-Up:** Saturday, 8:00 am –noon  
**Poster Viewing** Sunday 8:00-10:30; 1:00-3:00  
**Take-down:** Sunday, 3:00 – 5:00

## ANNUAL BUSINESS MEETING AND AWARDS PROGRAM

- Room:** Dallas Ballroom A1  
**Time:** 11:00 – 12:30  
**Presiding:** Curt Rom, President

## VEGETABLE CROPS SECTION

**Room:** Majestic Room 4

**Presiding:** Bill Evans

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

**8:00 Assessing Virus Resistance and Quality in TAMU Tomato Breeding Lines.** Kevin Crosby<sup>\*1</sup>, Bhimu Patil<sup>1</sup>, John Jifon<sup>2</sup> and Daniel Leskovar<sup>3</sup>. <sup>1</sup>Vegetable and Fruit Improvement Center, Texas A&M University, 1500 Research Pkwy, Ste 120, College Station, TX 77845, <sup>2</sup>Texas AgriLife Research, 2415 E. Hwy 83, Weslaco, TX 78596, <sup>3</sup>Texas AgriLife Research, 1619 Garner Field Rd., Uvalde, TX 78801. (k-crosby@tamu.edu)

**8:15 Evaluating Controlled Release Fertilizer for Vidalia Onion Transplant Production.** Timothy Coolong<sup>\*1</sup> and George Boyhan<sup>2</sup>, <sup>1</sup>Department of Horticulture, University of Georgia, Tifton, GA 31793, <sup>2</sup>Department of Horticulture, University of Georgia, Athens, GA 30602. (tcoolong@uga.edu)

**8:30 Weed Control in Watermelon with Reflex (fomesafen) in Oklahoma.** James Shrefler<sup>1</sup>, Merritt Taylor<sup>2</sup> and Lynn Brandenberger<sup>3</sup>, <sup>1</sup>OCS Southeast District, Bryan County Extension, PO Box 749, Durant, OK 74701, <sup>2</sup>Department of Agricultural Economics, Oklahoma State University, Stillwater, OK 74078 and <sup>3</sup>Department of Horticulture and Landscape Architecture, Oklahoma State University, Stillwater, OK 74078. (jim.shrefler@okstate.edu)

**8:45 Reducing Water Use During Strawberry Transplant and Freeze Protection in Florida.** Ixchel M. Hernandez-Ochoa and Bielinski M. Santos. Gulf Coast Research and Education Center, IFAS, University of Florida. (bmsantos@ufl.edu)

**9:00 Developing Technologies for Florida-produced Strawberry Plug Transplants.** Emmanuel A. Torres-Quezada and Bielinski M. Santos. Gulf Coast Research and Education Center, IFAS, University of Florida. (bmsantos@ufl.edu)

**9:15** Break

**9:30 The Protected Ag Information Network (PAINet): Vegetable and Small Fruit**

**Production Under Greenhouses and High Tunnels in Central America and the Caribbean.** Bielinski M. Santos. Gulf Coast Research and Education Center, IFAS, University of Florida. (bmsantos@ufl.edu)

**9:45 Overexpression of Celery Mannitol Dehydrogenase (MTD) in Tomato Increases Resistance to the Mannitol Secreting Fungal Pathogen *Botrytis cinera*.** Takshay K. Patel<sup>\*</sup>, J.D. Williamson, S.F. Krasnyanski, D.R. Panthee, G.C. Allen, A. Desai. Department of Horticultural Science, North Carolina State University, Raleigh, NC 27695. (tkpatel@ncsu.edu)

**10:00 Determination of the Efficiency of a Mechanical Harvesting-aid Machine for Pepper Production.** Carlos A. Zambrano-Vaca, Carlos J. Mendez-Urbaz, and Bielinski M. Santos. Gulf Coast Research and Education Center, IFAS, University of Florida. (bmsantos@ufl.edu)

**10:15 Genotypic and Environment Variation for Total Soluble Solids and  $\beta$ -carotene Concentrations in Orange Fleshed Melons (*Cucumis melo* L.).** Sat Pal Sharma<sup>1\*</sup>, Daniel Leskovar<sup>1</sup>, Kevin M. Crosby<sup>2</sup>, A.M.H Ibrahim<sup>3</sup> and Astrid Volder<sup>2</sup> <sup>1</sup>Texas A&M AgriLife Research and Extension Center, 1619 Garner Field Rd, Uvalde, TX 78801, <sup>2</sup>Department of Horticultural Sciences, Texas A&M University, College Station, TX 77843, <sup>3</sup>Department of Soil and Crop Sciences, Texas A&M University, College Station, TX 77843 (sharma145@neo.tamu.edu)

**10:30 High Tunnel Cultivar Trials: Yield and Potential Returns for Three Spring Crops.** W.B. Evans<sup>\*</sup>, S. Reynolds, and A. McCain. MAFES Truck Crops Branch. Crystal Springs, MS 39059-0231. ([bill.evans@msstate.edu](mailto:bill.evans@msstate.edu))

**11:00 – 12:30 Attend Business Meeting and Awards Program**



## FRUIT CROPS SECTION

**Room:** Majestic Room 5

**Presiding:** Gina Fernandez

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

### Morning Session

**8:00 Compensatory Yield Potential of ‘Neptune’ Grape.** Eric T. Stafne\* and Becky Carroll, P.O. Box 193, South Mississippi Research and Extension Center, Mississippi State University, Poplarville, MS 39470, USA 2358 Agricultural Hall, Department of Horticulture and Landscape Architecture, Oklahoma State University, Stillwater, OK 74078. (estafne@ext.msstate.edu)

**8:15 Prime-Ark® Freedom Thornless Primocane-Fruiting Blackberry.** John R. Clark, 316 Plant Science, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701. (jrclark@uark.edu)

**8:30 Predicting Fruit Maturity Dates for South Carolina Peach Cultivars.** Gregory L. Reighard\*, Leanne M. Kenealy, Bradley Rauh and William Bridges, Jr., SAFES, 161 Poole Ag Center, Clemson University, Clemson, SC 29634. (grghrd@clemson.edu)

**8:45 Storage Retention of Nutraceutical Compounds in Muscadine Grape (*Vitis rotundifolia* Michx.) Cultivars.** Donna A. Marshall<sup>1</sup>\*, Stephen J. Stringer<sup>1</sup>, and James D. Spiers<sup>2</sup>. <sup>1</sup>USDA-ARS Thad Cochran Southern Horticultural Laboratory, Poplarville, MS 39470, USA <sup>2</sup>Department of Horticulture, Auburn University, Auburn, AL 36849. (Donna.Marshall@ARS.USDA.GOV)

**9:00 Fruit Quality Standards and the Potential for Pedigree Based Genetics for Blueberry Breeding in Poplarville.** Cecil Pounders\*, Donna Marshall, Stephen Stringer and Tim Rinehart, USDA-ARS, Thad Cochran Southern Horticultural Laboratory, 810 Highway 26 West, Poplarville, MS 39470. (cecil.pounders@ars.usda.gov)

**9:15** Break

**9:30 Efficacy of Foliar Calcium Applied to Rabbiteye Blueberry (*Vaccinium ashei*) and the Effect on Fruit Quality.** Erick Smith, Department of Horticulture Tifton Campus,

The University of Georgia, Tifton, GA 31793-5766. (ericks@uga.edu)

**9:45 Yield and Fruit Quality Evaluations of Black Raspberry (*Rubus occidentalis* L.) in North Carolina.** Christine M. Bradish<sup>1</sup>\*, Gina E. Fernandez<sup>1</sup>, Jill M. Bushakra<sup>2</sup>, Penelope Perkins-Veazie<sup>3</sup>, Michael Dossett<sup>4</sup>, Nahla V. Bassil<sup>2</sup>, and Chad E. Finn<sup>5</sup>. <sup>1</sup>Campus Box 7609, Department of Horticultural Science, North Carolina State University, Raleigh, NC 27695, <sup>2</sup>USDA-ARS National Clonal Germplasm Repository, 33447 Peoria Rd., Corvallis, OR 97333, <sup>3</sup>NC State University Plants for Human Health Institute, 600 Laureate Way, Kannapolis, NC 28081, <sup>4</sup>Agriculture and Agri-Food Canada - Pacific Agri-Food Research Centre, 6947 Lougheed Hwy, Agassiz, BC V0M 1A2, Canada, <sup>5</sup>USDA-ARS-Horticultural Crops Research Unit, 3420 NW Orchard Avenue, Corvallis, OR, 97330. (cmbradis@ncsu.edu)

**10:00 Cultivation of Pierce’s Disease Resistant *Vitis vinifera* Selections in Alabama.** Elina D. Coneva<sup>1</sup>\* and Andy Walker<sup>2</sup>, <sup>1</sup>Department of Horticulture, Auburn University, 101 Funchess Hall, Auburn, AL 36849, <sup>2</sup>Department of Viticulture and Enology, University of California at Davis, One Shields Avenue, Davis, CA 95616. (Edc0001@auburn.edu)

**10:15 Peach Rootstock Cultivar Trial in Alabama.** Elina D. Coneva<sup>1</sup>\* and Gregory L. Reighard<sup>2</sup>, <sup>1</sup>Department of Horticulture, Auburn University, 101 Funchess Hall, Auburn, AL 36849; <sup>2</sup>School of Agricultural, Forest and Environmental Sciences, 161 Poole Ag Center, Clemson University, Clemson, SC 29634. (edc0001@auburn.edu)

**11:00 – 12:30 Attend Business Meeting and Awards Program**

### Afternoon Session

**1:00 Phenological Responses of Non-Cavendish Banana Cultivars to Central and Coastal Locations in Alabama.** Edgar L. Vinson, III<sup>1</sup>\*, Elina D. Coneva<sup>1</sup>, Joseph M. Kemble<sup>1</sup>, Floyd M. Woods<sup>1</sup>, E. Greg Fonsah<sup>2</sup>, Penelope M. Perkins-Veazie<sup>3</sup>, and Jeff L. Sibley<sup>1</sup>, <sup>1</sup>Auburn University, Auburn, AL 36849, <sup>2</sup>University of Georgia, Athens, GA 30602, <sup>3</sup>North Carolina State University, Raleigh, NC 27695. (vinsoed@auburn.edu)



- 1:15 Observations of Frost Protection in High Tunnels for Season Extension of Berry Production.** Curt R. Rom\*, Jason McAfee, Luke Freeman, and Heather Friedrich, 316 Plant Sciences Building, Department of Horticulture, University of Arkansas, Fayetteville, AR 72701. (crom@uark.edu)
- 1:30 Influence of Irrigation Regime on Gas Exchange, Growth, and Oil Quality of Field Grown *Olea europaea* L. 'Arbequina'.** Thayne Montague\*, Cynthia McKenney, and Staci Parks. Department of Plant and Soil Science, Texas Tech University, Lubbock, TX 79409-2122. (thayne.montague@ttu.edu)
- 1:45 'AU Golden Dragon', 'AU Golden Sunshine', and 'AU Fitzgerald' Kiwifruit Cultivars.** James D. Spiers<sup>1\*</sup>, William A. Dozier, Jr.<sup>1</sup>, James A. Pitts<sup>2</sup>, and Bryan S. Wilkins<sup>3</sup>. 1101 Funchess Hall, Department of Horticulture, Auburn University, Auburn, AL 36849, 2Chilton Research and Extension Center, 120 Co. Rd. 756, Clanton, AL 35045, 3Gulf Coast Research and Extension Center, Fairhope, AL 36532. (jds0017@auburn.edu)

## FLORICULTURE, ORNAMENALS AND TURF SECTION

**Room:** Majestic 3

**Presiding:** Sarah White

**Abstracts:** To publish abstract in *HortScience*, see instructions at end of program. Submit on disk at meeting or email to Chair:(swhite4@clemson.edu).

### Morning Session

- 8:00 Gas Exchange and Growth of Field Grown Redbud Species in Response to Post Establishment Applied Organic Mulch and Drought.** Thayne Montague\*, Cynthia McKenney, and Staci Parks. Department of Plant and Soil Science, Texas Tech University, Lubbock, TX 79409-2122 (thayne.montague@ttu.edu)
- 8:15 Gas Exchange Response to Leaf Excision of Field Grown Redbud Trees.** Thayne Montague\*, Cynthia McKenney, and Staci Parks. Department of Plant and Soil Science, Texas Tech University, Lubbock, TX 79409-2122 (thayne.montague@ttu.edu)
- 8:30 A Spatial Analysis of a Colony of *Hibiscus***

*dasycalyx*, the Neches River Rose Mallow, Established in 1996 in Nacogdoches County, Texas. David L. Creech\*, David L. Kulhavy, Daniel R. Unger, and Matthew A. Wade, Arthur Temple College of Forestry and Agriculture, Stephen F. Austin State University, Nacogdoches, TX 75962-3000. (dcreech@sfasu.edu)

- 8:45 Factors Influencing Quality and Consistency of Pine Bark Substrates.** Brian E. Jackson\*. Department of Horticultural Science, North Carolina State University, Raleigh, NC 27695-7609. (Brian\_Jackson@ncsu.edu)
- 9:00 Effect of flight altitude (spatial resolution) of an unmanned aerial vehicle and canopy separation on plant count accuracy using black fabric as ground cover.** Josue Nahun Leiva<sup>1\*</sup>, James Robbins<sup>1</sup> and Dharmendra Saraswat<sup>2</sup>. <sup>1</sup>316 Plant Science, Department of Horticulture, <sup>2</sup>Department of Biological & Agricultural Engineering, University of Arkansas, Fayetteville, AR 72701. (jrobbins@uaex.edu)

**9:15 Break**

- 9:30 Is Pictometry<sup>®</sup> a Useful Tool for Tree, Shrub and Landscape Evaluation?** David Creech\*, David L. Kulhavy, Daniel R. Unger, and Matthew A. Wade, Arthur Temple College of Forestry and Agriculture, Stephen F. Austin State University, Nacogdoches, TX 75962-3000. (dcreech@sfasu.edu)
- 9:45 Plants in the New Piney Woods Garden at the LSU AgCenter Hammond Research Station.** Allen Owings\*, Daniel Wells, Regina Bracy, Yan Chen and Gina Hebert. LSU AgCenter, Hammond Research Station, 21549 Old Covington Highway, Hammond, LA 70403. (aowings@agcenter.lsu.edu)
- 10:00 Greening Urban Spaces with Native Plants - the Clemson Sustainable Landscape Demonstration Garden.** Sarah A. White\*, Dara M. Park, Ellen A. Vincent. Clemson University, School of Agricultural, Forest, and Environmental Sciences, E-143 Poole Agricultural Center Clemson, SC 29634 (swhite4@clemson.edu)
- 10:15 Effect of Cutless .33G on Six Landscape Shrubs Used as Hedge.** Yan Chen\*, Allen Owings, and Regina Bracy. LSU AgCenter, Hammond Research Station, 21549 Old

Covington Highway, Hammond, LA 70403.(yachen@agcenter.lsu.edu)

**10:30 Contribution of stored nitrogen and spring fertilizer nitrogen to flowering and growth performances of iris 'Immortality'.** Xiaojie Zhao\*, Guihong Bi, Richard L. Harkess, Tongyin Li. Department of Plant and Soil Sciences, Mississippi State University, Starkville, MS 39759. (xz179@msstate.edu)

**11:00 – 12:30 Attend Business Meeting and Awards Program**

#### Afternoon Session

**1:00 Horticulture and Pathology Observations on Landscape Planted Roses at the LSU AgCenter.** Allen Owings<sup>1\*</sup> and Mark Windham<sup>2</sup>. <sup>1</sup>LSU AgCenter, Hammond Research Station, 21549 Old Covington Highway, Hammond, LA 70403; <sup>2</sup>University of Tennessee, Department of Entomology and Plant Pathology, 138 Biotechnology Building, Knoxville, TN 37996. (aowings@agcenter.lsu.edu)

**1:15 Leaf Blackening – A New Physiological Disorder in Rose.** Derald A. Harp<sup>1\*</sup>, Steve George<sup>2</sup>, Greg Church<sup>2</sup>, John Sloan<sup>3</sup>, Dinesh Adhikary<sup>4</sup>, Josephine Taylor<sup>4</sup>, Dennis Gravat<sup>4</sup>, and David Zlesak<sup>5</sup>. <sup>1</sup>Department of Agricultural Sciences, Texas A&M University – Commerce, Commerce, TX 75429; <sup>2</sup>Texas A&M Agrilife Extension, Dallas, TX 75252; <sup>3</sup>National Great Rivers Research and Education Center, East Alton, IL 62024; <sup>4</sup>Stephen F. Austin State University, Department of Biology, Nacogdoches, TX 75962; <sup>5</sup>University of Wisconsin – River Falls, River Falls, WI 54022. (Derald.Harp@tamuc.edu)

**1:30 Nursery Disease Crisis Management: A Case Study.** Ed Bush\*, Carla Herrera, and Jeff Kuehny, LSU AgCenter, School of Plant, Environmental, and Soil Sciences, 104 Sturgis Hall, Baton Rouge, LA 70803 and Raj Singh, LSU AgCenter, Department of Plant Pathology and Crop Physiology, Life Sciences Building, Baton Rouge, LA 70803 (ebush@AgCenter.Lsu.edu).

**1:45 Short-Term Evaluation of Graywater Irrigation on Selected Ornamental Species.** Raul I. Cabrera\*, Department of Horticultural Sciences, Texas A&M AgriLife Research, Uvalde, TX 78801. (r-cabrera@tamuc.edu )

**2:00 Salt tolerance of Selected Texas Superstar perennials.** Youping Sun<sup>1</sup>, Genhua Niu<sup>1\*</sup>, Cristina Perez<sup>2</sup>. <sup>1</sup>1380 A&M Circle, El Paso, TX, Texas AgriLife Research at El Paso, Texas A&M University, <sup>2</sup>El Paso Community College RISE Program, El Paso, TX 79998 (gniu@ag.tamu.edu)

**2:15 Break**

**2:30 Seed Germination in Green Roof Media.** Cheng Chen and Derald A. Harp\*. Department of Agricultural Sciences, Texas A&M University – Commerce, Commerce, TX 75429 (Derald.Harp@tamuc.edu)

**2:45 Green Roofs: Water Recycling Effects on Water Quality and Soil Chemistry.** Kirk Laminack<sup>1\*</sup>, Astrid Volder<sup>1</sup>, Jacqueline Aitkenhead-Peterson<sup>2</sup>, Anthony Camerino<sup>3</sup>, <sup>1</sup>Department of Horticultural Sciences Texas A&M University, College Station, TX 77843, <sup>2</sup>Department of Soil and Crop Science, Texas A&M University College Station, TX 77843, <sup>3</sup>Texas AgriLife Extension Service - Harris County, Texas A&M University System, Houston, TX 77084. (kirkdL9@tamuc.edu)

**3:00 Implementing Precision Irrigation Technology in a Commercial Nursery: A Case Study on Adoption and Expansion.** Matthew R. Chappell, Marc van Iersel. Horticulture Department, University of Georgia, Athens, GA 30602. (hortprod@uga.edu)

**3:15 Grower Priorities for Water Research: Results of a SCRI Planning Grant.** Sarah A. White<sup>1\*</sup>, James S. Owen<sup>2</sup>, John C. Majsztrik<sup>3</sup>, R. Tom Fernandez<sup>4</sup>, Paul Fisher<sup>5</sup>, Charlie R. Hall<sup>6</sup>, Tracy Irani<sup>5</sup>, John D. Lea-Cox<sup>3</sup>, Julie P. Newman<sup>7</sup>, and Loren R. Oki<sup>7</sup>. Clemson University, School of Agricultural, Forest, and Environmental Sciences, E-143 Poole Agricultural Center Clemson, SC 29634, <sup>2</sup>Virginia Polytechnic and State University, Department of Horticulture, Hamptons Road Agricultural Research and Education Center, 1444 Diamond Springs Rd. Virginia Beach, VA, 23455, <sup>3</sup>University of Maryland, Department of Plant Science and Landscape Architecture, 2102 Plant Sciences Building, College Park, MD 20742, <sup>4</sup>Michigan State University, Department of Horticulture, A216 Plant & Soil Science Building East Lansing, MI 48824-1325, <sup>5</sup>University of Florida,

Horticulture Department, 2549 Fifield Hall,  
PO Box 110670, <sup>6</sup>Texas A&M University,  
Department of Horticultural Sciences, 2133  
TAMU, College Station, TX, 77843-2133,  
<sup>7</sup>University of California - Davis, Department  
of Plant Sciences, MS6, One Shields Avenue,  
1110 Env Hort, Davis, CA 95616-8587.  
(swhite4@clemson.edu)

- 3:30 Social Media Marketing by Garden Centers: Findings from a Pilot Study.**  
Cheryl R. Boyer<sup>1\*</sup>, Lauri M. Baker<sup>2</sup> and  
Hikaru H. Peterson<sup>3</sup>, 12021 Throckmorton  
PSC, Dept of Horticulture, Forestry  
and Recreation Resources, Kansas State  
University, Manhattan, KS 66506, 2307  
Umberger Hall, Dept of Communications and  
Agricultural Education, Kansas State  
University, Manhattan, KS 66506-3318  
Waters Hall, Dept of Agricultural Economics,  
Kansas State University, Manhattan, KS  
66506. (crboyer@ksu.edu)

## WORKING GROUPS

(Contact Chairs for Agenda if not listed)

### National Sweet Potato Collaborators Group

**Presiding:** David Picha Chair  
(dpicha@agcenter.lsu.edu)

**Abstracts:** To publish abstracts in *HortScience*, see instructions at the end of the program. Submit on disk at meeting or email to Chair:

**Friday:** 8:00 am – 5:00 pm

**Saturday:** 8:00 am – 5:00 pm

**Room:** Majestic Room 5

### Contact Chair for Time and Order of Presentations

**Optimizing Sweetpotato Production for Fresh and Processing Markets through Plant Spacing and Planting-Harvest Time.** Ramón A. Arancibia<sup>1\*</sup>, Cody D. Smith<sup>2</sup>, Don R. LaBonte<sup>2</sup>, Jeffrey L. Main<sup>1</sup>, Tara P. Smith<sup>3</sup>, and Arthur Q. Villordon<sup>3</sup>. <sup>1</sup>Pontotoc Ridge-Flatwoods Branch Experiment Station, Mississippi State University, Pontotoc, MS 38863; <sup>2</sup>School of Plant, Environmental, and Soil Sciences, Louisiana State University Agricultural Center, Baton Rouge, LA 70803; <sup>3</sup>Sweet Potato Research Station, Louisiana State University Agricultural Center, Chase, LA 71324. (raa66@msstate.edu)

**Improving Sweetpotato Production Efficiency in Louisiana: Observations from On-Farm Validation Plots.** T.F. Arnold\*, T.P. Smith, and A.Q. Villordon. LSU Agricultural Center Sweet Potato Research Station, Chase, LA 71324 (tarnold@agcenter.lsu.edu).

**Developing Sweetpotatoes for Adaptability to Ontario Climates.** Valerio Primomo, Vineland Research and Innovation Centre, Vineland Station, Ontario, Canada LOR2E0 (valerioprimomo@vinelandresearch.com)

**Plant Establishment Considerations in Sweetpotato - Yield Response and Root Quality Due to Various Transplant Sizes and Planting Depths.** W. Bradfred Thompson\* and Jonathan R. Schultheis, Department of Horticultural Science, N.C. State University, Raleigh, NC 27965. (wbthomps@ncsu.edu)

**Effect of Organic and Inorganic Fertilizers on Yield and Biochemical Attributes of Sweetpotato**

**(*Ipomoea batatas* L.) Varieties of Different Flesh Colors.** M. Maksud Hossain\*, ASM. H. Sorker, O. Njue and S. Islam, Department of Agriculture, University of Arkansas at Pine Bluff, 1200 North University Drive, Pine Bluff, AR 71601. (islams@uapb.edu)

**Effect of Irrigation on Yield of Sweetpotatoes in Ontario, Canada.** Melanie Filotas<sup>1\*</sup>, Cathy Bakker<sup>2</sup>, Rebecca Shortt<sup>1</sup> and Mary Ruth McDonald<sup>2</sup>. <sup>1</sup>Ontario Ministry of Agriculture and Food and Ministry of Rural Affairs, OMAF-Simcoe Resource Centre, Simcoe, Ontario, N3Y 4K3. <sup>2</sup>Department of Plant Agriculture, University of Guelph, Guelph, ON, N1G 2W1. (Melanie.Filotas@ontario.ca)

**Insecticide Evaluations for Management of Sugarcane Beetle in Sweetpotato in Louisiana and Mississippi.** T.P. Smith<sup>1\*</sup>, J. Beuzelin<sup>2</sup>, L. Adams<sup>3</sup>, R. Luttrell<sup>3</sup> and T.F. Arnold<sup>1</sup>. <sup>1</sup>LSU Agricultural Center Sweet Potato Research Station, Chase, LA 71324. <sup>2</sup>LSU Agricultural Center Dean Lee Research Station, Alexandria, LA, <sup>3</sup>USDA:SIMRU, Stoneville, MS 38776 (tsmith@agcenter.lsu.edu)

**Applying Insecticide Through Drip Irrigation for Wireworm Control in Sweetpotato.** Amber E. Arrington<sup>1\*</sup>, George G. Kennedy<sup>1</sup>, and Mark R. Abney<sup>2</sup>, <sup>1</sup>Department of Entomology, NC State University, Raleigh, NC 27695, <sup>2</sup>Department of Entomology, University of Georgia, Tifton, GA 31793. (aearring@ncsu.edu)

**Influence of Variety and Days to Harvest on Sweetpotato Weevil Damage in the Virgin Islands.** Thomas W. Zimmerman, Agricultural Experiment Station, University of the Virgin Islands, Kingshill, St. Croix, VI, 00850. (tzimmer@uvi.edu)

**Effect of Prohexadione-Ca on Yield and Insect Damage to Sweetpotatoes.** Tahir Rashid<sup>1\*</sup>, Victor Njiti<sup>1</sup>, and Larry Adams<sup>2</sup>. <sup>1</sup>Alcorn State University, Alcorn State, MS 39096, <sup>2</sup>USDA - ARS, Stoneville, MS 38776.(trashid@alcorn.edu)

**The Short Term Impact of Fish Fertilizer on Sweetpotato [*Ipomoea batatas* (L.) Lam ] Rhizosphere Microbial Communities in South Central Alabama.** Lauren A. Lindsey\* Desmond G. Mortley, Ramble O. Ankumah, and Raymon Shange. Department of Agricultural & Environmental Sciences, College Of Agriculture, Environment and Nutrition Sciences (CAENS), Tuskegee University, Tuskegee Institute, Al 36088. (llindsey4473@mytu.tuskegee.edu)

**USDA-ARS, Southern Insect Management Research Unit Sweetpotato Demonstration Study,**

**2012-2013.** Larry C. Adams<sup>1\*</sup>, Chris P. Johnson<sup>1</sup> and Salliana R. Stetina<sup>2</sup>. <sup>1</sup>USDA, ARS, SIMRU, Stoneville, MS 38776, <sup>2</sup>USDA-ARS, CGPRU, Stoneville, MS 38776. (larry.adams@ars.usda.gov)

**Effect of Foliar VydateL Applications on Reniform Nematode Control in Sweetpotato.** Stephen L. Meyers<sup>1\*</sup>, Mark W. Shankle<sup>1</sup>, and Gary Lawrence<sup>2</sup>. <sup>1</sup>Pontotoc Ridge-Flatwoods Branch Experiment Station, Mississippi State University, Pontotoc, MS 38863. <sup>2</sup>Department of Biochemistry, Molecular Biology, Entomology, and Plath Pathology, Mississippi State University, Mississippi State, MS 39762. (smeyers@ext.msstate.edu)

**Weed Management with and Sweetpotato Tolerance to Fluridone.** Stephen L. Meyers<sup>1\*</sup> and Katie M. Jennings<sup>2</sup>. <sup>1</sup>Pontotoc Ridge-Flatwoods Branch Experiment Station, Mississippi State University, Pontotoc, MS 38863. <sup>2</sup>Department of Horticultural Science, North Carolina State University, Raleigh, NC 27695. (smeyers@ext.msstate.edu)

**Nutsedge Control in Mississippi Sweetpotato Production.** Mark W. Shankle<sup>\*</sup>, Stephen L. Meyers, and Trevor F. Garrett, Pontotoc Ridge-Flatwoods Branch Experiment Station, North Mississippi Research and Extension Center, Mississippi State University, Pontotoc, MS 38863. (shankle@ra.msstate.edu)

**From Research Stations to Commercial Fields: Survey, Detection and Identification of Sweetpotato Viruses in North Carolina.** Christie V. Almeyda<sup>1</sup>, Lydia C. Neal<sup>1</sup>, Tamara Abernethy<sup>1</sup>, Jorge A. Abad<sup>2</sup> and Zvezdana Pesic-VanEsbroeck<sup>1\*</sup> <sup>1</sup>Department of Plant Pathology, North Carolina State University, Raleigh, NC 27695; <sup>2</sup>USDA, APHIS PPQ FO PGQP, Beltsville, MD 20705 (cvalmeyd@ncsu.edu)

**Evidence of Ammonium Sensitivity Response During the Storage Root Formation Period in ‘Georgia Jet’ Sweetpotato Grown in Israel.** Arthur Villordon<sup>1\*</sup> and Nurit Firon<sup>2</sup>. <sup>1</sup>Louisiana State University Agricultural Center Sweet Potato Research Station, Chase, LA 71324. <sup>2</sup>Institute of Plant Sciences, The Volcani Center, Agricultural Research Organization, P.O. Box 6, Bet Dagan, 50250, Israel. (avillordon@agcenter.lsu.edu)

**Root Architecture and Nitrate Signaling in Sweetpotato Storage Root Formation: A Conceptual Model and Preliminary Testing.** Arthur Villordon<sup>1\*</sup> and Nurit Firon<sup>2</sup>. <sup>1</sup>Louisiana State University Agricultural Center Sweet Potato

Research Station, Chase, LA 71324. <sup>2</sup>Institute of Plant Sciences, The Volcani Center, Agricultural Research Organization, P.O. Box 6, Bet Dagan, 50250, Israel. (avillordon@agcenter.lsu.edu)

**Storage Root Initiation and Indole Acetic Acid Oxidase Activity in Sweetpotato Subjected to High Temperature.** Xiang Wang<sup>1\*</sup>, Bandara Gajanayake<sup>2</sup>, K. Raja Reddy<sup>2</sup>, and Ramón A. Arancibia<sup>1</sup>. <sup>1</sup>Pontotoc Ridge-Flatwoods Branch Experiment Station, Mississippi State University, Pontotoc, MS 38863. <sup>2</sup>Department of Plant and Soil Sciences, Mississippi State University, Mississippi State, MS 39762. (raa66@msstate.edu)

**Measuring Resistance to Skin Shear and Tensile Fracture in Sweetpotato Storage Roots.** Ramón A. Arancibia<sup>\*</sup>, Xiang Wang, Nestor Bonilla, Jeffrey L. Main, and Lori B. Grelen. Pontotoc Ridge-Flatwoods Branch Experiment Station, Mississippi State University, Pontotoc, MS 38863. (raa66@msstate.edu)

**Physiological Responses to Preharvest Conditioning Associated with Skinning Resistance in Sweetpotato.** Xiang Wang<sup>\*</sup>, Jeffrey L. Main, Lori B. Grelen and Ramón A. Arancibia. Pontotoc Ridge-Flatwoods Branch Experiment Station, Mississippi State University, Pontotoc, MS 38863. (raa66@msstate.edu)

**Rhizopus Soft Rot: Can We Ever Get Away from Prophylactic Use of Fungicides to Control This Disease?** Christopher A. Clark<sup>\*</sup>, David H. Picha, and Rebecca R. Sweany. Department of Plant Pathology and Crop Physiology, Louisiana State University Agricultural Center, Baton Rouge, LA 70803. (cclark@agcenter.lsu.edu)

**Effect of Oil Temperature and Frying Time on Sugar Composition in French-Fry Style Sweetpotatoes.** David H. Picha<sup>\*</sup> and Mary S. Bowen, School of Plant, Environmental and Soil Sciences, Louisiana State University Agricultural Center, Baton Rouge, LA 70803. (dpicha@agcenter.lsu.edu)

**Reduction of Acrylamide Formation in Sweetpotato French Fries by Common Processing Treatments.** V. D. Truong<sup>1\*</sup>, Y. T. Pascua<sup>1</sup>, R. Reynolds<sup>1</sup>, R. L. Thompson<sup>1</sup>, T.K. Palazoğlu<sup>2</sup>, B.A. Mogol<sup>3</sup>, and V. Gökmen<sup>3</sup>. <sup>1</sup>USDA-ARS, SAA Food Science Research Unit, North Carolina State University, Raleigh, NC 27695, <sup>2</sup>Department of Food Engineering, University of Mersin, 33343 Ciftlikkoy, Mersin, Turkey, <sup>3</sup>Department of Food Engineering,



Hacettepe University, 06532 Beytepe, Ankara, Turkey (Den.Truong@ars.usda.gov)

**Water-Soluble Vitamin Content in Different Sweetpotato Tissue Types.** Wilmer A. Barrera\* and David H. Picha, School of Plant, Environmental and Soil Science, Louisiana State University, Baton Rouge, LA 70803. (wbarr1@tigers.lsu.edu)

**Process for Pigmented Juice Extraction and Co-Product Recovery from Sweetpotatoes.** An N. Truong<sup>1\*</sup>, Yiwen Thor<sup>1</sup>, Josip Simunovic<sup>1</sup>, Keith Harris<sup>1</sup>, and Van-Den Truong<sup>1,2</sup>, <sup>1</sup>Department of Food, Bioprocessing and Nutrition Sciences, <sup>2</sup>USDA-ARS Food Science Research Unit, North Carolina State University, Raleigh, NC 27695. (antruong@ncsu.edu)

**Development of a System to Measure Skinning Incidence in Sweetpotato.** M.H. King\*, J.K. Ward. Agricultural and Biological Engineering, Mississippi State University, Mississippi State, MS 39762. (jward@abe.msstate.edu)

**Application of Biochar to Reduce Skinning in Sweetpotato.** B.H. Hayes<sup>1</sup>, J.K. Ward\*<sup>1</sup>, J.W. Lowe<sup>1</sup>, J.D. Davis<sup>1</sup>, M.W. Shankle<sup>2</sup>, R.A. Arancibia<sup>2</sup>. <sup>1</sup>Agricultural and Biological Engineering, Mississippi State University, Mississippi State, MS 39762, <sup>2</sup>Pontotoc Ridge-Flatwoods Branch Experiment Station, North Mississippi Research and Extension Center, Mississippi State University, Pontotoc, MS 38863. (jward@abe.msstate.edu)

**Assessment of Undercutting to Increase Skin Strength in Sweetpotato.** J.W. Lowe<sup>1\*</sup>, J.K. Ward<sup>1</sup>, B.H. Hayes<sup>1</sup>, J.D. Davis<sup>1</sup>, M.W. Shankle<sup>2</sup>, R.A. Arancibia<sup>2</sup>. <sup>1</sup>Agricultural and Biological Engineering, Mississippi State University, Mississippi State, MS 39762, <sup>2</sup>Pontotoc Ridge-Flatwoods Branch Experiment Station, North Mississippi Research and Extension Center, Mississippi State University, Pontotoc, MS 38863. (wlowe@abe.msstate.edu)

**Evaluating Skinning Resistance in Sweetpotato.** Reeve Legendre\*<sup>1</sup>, Ramón A. Arancibia<sup>2</sup>, Tara P. Smith<sup>3</sup>, and Don R. LaBonte<sup>1</sup>. <sup>1</sup>School of Plant, Environmental, and Soil Sciences, Louisiana State University Agricultural Center, Baton Rouge, LA 70803; <sup>2</sup>Pontotoc Ridge-Flatwoods Branch Experiment Station, Mississippi State University, Pontotoc, MS 38863; <sup>3</sup>Sweet Potato Research Station, Louisiana State University Agricultural Center, Chase, LA 71324. (rlegen1@tigers.lsu.edu)

## Watermelon Research Group

**Presiding:** James Brusca, Chair  
(james.brusca@syngenta.com)

**Abstracts:** To publish abstracts in *HortScience*, see instructions at the end of the program. Submit on disk at meeting or email to Chair:

**Friday:** 1:00 pm – 5:00 pm

**Room:** Majestic Room 7

### Agenda

1:00 Welcome: James Brusca, Chair,

1:15 Introductions: All in attendance

### Industry Updates

1:45 Regional Watermelon Production Updates

2:30 International markets update

3:00 Variety updates from Seed Companies

3:30 Break

### Research Reports:

### Variety Trials

4:00 **Texas Statewide Watermelon Trials for 2013.** Joseph Masabni<sup>1\*</sup>, Juan Anciso<sup>2</sup>, Larry Stein<sup>3</sup>, and Russell Wallace<sup>4</sup>. Department of Horticultural Sciences, Texas A&M University, <sup>1</sup>College Station, TX 77843-2134, <sup>2</sup>Weslaco, TX 78593, <sup>3</sup>Uvalde, TX 78802, <sup>4</sup>Lubbock, TX 79403. ([jmasabni@ag.tamu.edu](mailto:jmasabni@ag.tamu.edu))

4:20 **Evaluation of Pollenizer Varieties for Triploid Watermelon (*Citrullus lanatus*) Production in Southwestern Indiana, 2013.** Shubin K. Saha<sup>1\*</sup> and Dan Egel<sup>2</sup>, <sup>1</sup>Department of Horticulture, University of Kentucky, Ag Science Building North, N-322C, Lexington, KY 40546-0091, <sup>2</sup>Botany and Plant Pathology Department, Purdue University, 4369 N. Purdue Rd., Vincennes, IN 47591. ([Shubin.saha@uky.edu](mailto:Shubin.saha@uky.edu))

4:40 **Evaluation of Triploid Watermelon (*Citrullus lanatus*) Varieties in Southwestern Indiana, 2013.** Shubin K. Saha<sup>1\*</sup> and Larry Sutterer<sup>2</sup>, <sup>1</sup>Department of Horticulture, University of Kentucky, Ag Science Building North, N-322C, Lexington, KY 40546-0091, <sup>2</sup>Horticulture and Landscape Architecture Department, Purdue University, 4369 N. Purdue Rd., Vincennes, IN 47591. ([Shubin.saha@uky.edu](mailto:Shubin.saha@uky.edu))

4:50 **2013 Watermelon Cultigen Yield and Quality Trial Results in North Carolina.** Jonathan R. Schultheis\* and W. Bradfred

Thompson, Department of Horticultural Science, Kilgore Hall, Box 7609, North Carolina State University, Raleigh, NC 27695-7609. ([jonr@ncsu.edu](mailto:jonr@ncsu.edu))

5:10 **2013 EREC Watermelon Variety Trials.** Gilbert Miller, Clemson University, Edisto Research and Education Center, 64 Research Road, Blackville, SC 29817

5:30 Adjourn

**Saturday:** 8:30-5:00

**Room:** Majestic Room 1

8:30 a.m. Welcome: James Brusca, Chair

### Research Reports

#### Flowering and Pollination

9:00 **Synchronized Flowering of Triploid Watermelon Cultivars and Diploid Pollenizers.** Cecilia E. McGregor\* and Vickie Waters, Department of Horticulture, University of Georgia, 1111 Miller Plant Science Bldg., Athens, GA 30602. ([cmcgre1@uga.edu](mailto:cmcgre1@uga.edu))

9:20 **Pollination, Fruit Development and Hollow Heart Disorder in Watermelon.** Gordon C. Johnson\* and Donald Seifrit, University of Delaware, Carvel REC, 16483 County Seat Highway, Georgetown, DE 19947, Delaware. ([gcjohn@udel.edu](mailto:gcjohn@udel.edu))

#### Grafting

9:40 **Grafted Watermelon Methods: Where Are We Now?** Richard L. Hassell\* and Shawna Daley, Clemson University, Coastal REC, 2700 Savannah Highway, Charleston, SC 29414. ([r.hassell@clemson.edu](mailto:r.hassell@clemson.edu))

10:00 **Grafted Watermelon Response to Various Nitrogen Rates.** David H. Suhoff<sup>1</sup>, Jonathan R. Schultheis<sup>1\*</sup>, Christopher C. Gunter<sup>1</sup> and Richard L. Hassell<sup>2</sup>, <sup>1</sup>Department of Horticultural Science, North Carolina State University, Raleigh, NC 27695-7609, <sup>2</sup>Clemson University, Coastal REC, 2700 Savannah Highway, Charleston, SC 29414. ([jonr@ncsu.edu](mailto:jonr@ncsu.edu))

10:20 Break

10:50 **Grafted Watermelon Root Length Density and Distribution under Different Soil**

**Moisture Treatments.** Gilbert Miller<sup>1\*</sup>, Ahmad Khalilian<sup>1</sup>, Jeffrey W. Adelberg<sup>2</sup>, Hamid J. Farahani<sup>3</sup>, Richard L. Hassell<sup>4</sup>, and Christina E. Wells<sup>5</sup>, <sup>1</sup>Clemson University, Edisto Research and Education Center, 64 Research Road, Blackville, SC 29817, <sup>2</sup>School of Agriculture, Forest, and Environmental Sciences, Clemson University, E-143 Poole Agricultural Center, Box 340319, Clemson, SC 29634, <sup>3</sup>Water Management Engineer, USDA-NRCS East National Technology Support Center, 2901 E. Lee Street, Suite 2100, Greensboro, NC 27401-4901, <sup>4</sup>School of Agriculture, Forest, and Environmental Sciences, Coastal REC, 2700 Savannah Highway, Charleston, SC 29414, <sup>5</sup>Department of Biological Sciences, Clemson University, 150 Long Hall, Clemson, SC 29634. ([gmlr@clemson.edu](mailto:gmlr@clemson.edu))

#### Genetics and Breeding

11:10 **Survey of gene sequences present in *Citrullus* sp. but not in cultivated watermelon.** Amnon Levi<sup>1\*</sup>, Laura Massey<sup>1\*</sup>, Ryan Donahoo<sup>1</sup>, Robert Jarret<sup>2</sup>, Zhangjun Fei<sup>3</sup>, and Pat Wechter<sup>1</sup>, <sup>1</sup>United States Department of Agriculture, Agricultural Research Service, (USDA, ARS), U.S. Vegetable Laboratory, 2700 Savannah Highway, Charleston, SC 29414, <sup>2</sup> Plant Genetics Resources Conservation Unit, 1109 Experiment St., Griffin, GA, 30223, <sup>3</sup> Boyce Thompson Institute for Plant Research, Cornell University, Ithaca, NY 14850. ([amnon.levi@ars.usda.gov](mailto:amnon.levi@ars.usda.gov))

11:30 **Identification and development of multiple disease resistant (fruit rot, powdery mildew) watermelon germplasm.** C.S. Kousik\*, J.L. Ikerd, W.P. Wechter, and A. Levi

11:50 United States Department of Agriculture, Agricultural Research Service, (USDA, ARS), U.S. Vegetable Laboratory, 2700 Savannah Highway, Charleston, SC 29414. ([shaker.kousik@ars.usda.gov](mailto:shaker.kousik@ars.usda.gov))

Noon Lunch

1:30 **USVL-360, a *Citrullus lanatus* var. *citroides* tetraploid germplasm line.** Amnon Levi<sup>1\*</sup>, J.A. Thies<sup>1</sup>, P.W. Wechter<sup>1</sup>, M. Farnham<sup>1</sup>, Y. Weng<sup>1</sup>, S. Kousik<sup>1</sup> and R. Hassell<sup>2</sup>, <sup>1</sup>United States Department of Agriculture, Agricultural Research Service, (USDA, ARS), U.S.

Vegetable Laboratory, 2700 Savannah Highway, Charleston, SC 29414, <sup>2</sup>Clemson University, Coastal REC, 2700 Savannah Highway, Charleston, SC 29414. ([amnon.levi@ars.usda.gov](mailto:amnon.levi@ars.usda.gov))

- 1:50 **Development of root-knot nematode resistant rootstocks for watermelon.** Judy A. Thies<sup>1\*</sup>, Sharon Buckner<sup>1</sup>, Richard Hassell<sup>2</sup>, and Amnon Levi<sup>1</sup>, <sup>1</sup>U.S. Vegetable Laboratory, USDA, ARS, Charleston, SC, <sup>2</sup>Clemson University, CREC, Charleston, SC. ([judy.thies@ars.usda.gov](mailto:judy.thies@ars.usda.gov))
- 2:10 **Evaluation of watermelon plant introductions (PI) for tolerance to postemergence herbicide, halosulfuron.** H.F. Harrison\*, Jr., A. Levi and C.S. Kousik, United States Department of Agriculture, Agricultural Research Service, (USDA, ARS), U.S. Vegetable Laboratory, 2700 Savannah Highway, Charleston, SC 29414. ([Howard.Harrison@ars.usda.gov](mailto:Howard.Harrison@ars.usda.gov))

2:30 p.m. Break

#### Disease

- 3:00 **CGMMV Update.** Eyal Vardi, Origene Seeds, Israel.
- 3:20 **Cover Crops Induce General Suppression of Watermelon Fusarium wilt in the Mid-Atlantic.** Jennifer Himmelstein<sup>1</sup> and Kathryn L. Everts<sup>2\*</sup>, <sup>1</sup>Office of International Research Education and Development, Virginia Tech, Blacksburg VA, <sup>2</sup>27664 Nanticoke Rd., Department of Plant Science and Landscape Architecture, University of Maryland College Park, Salisbury, 21801. ([keverts@umd.edu](mailto:keverts@umd.edu))

- 3:40 WRDG Business  
Hot Topics  
Website  
Watermelon Top 10 Priorities  
NWA Update
- 5:00 Adjourn

#### National Cowpea Improvement Assoc.

**Presiding:** Blair Buckley, Chair  
([bbuckley@agctr.lsu.edu](mailto:bbuckley@agctr.lsu.edu))

**Saturday:** 1:00 pm – 5:00 pm

**Room:** Majestic Room 8

#### Horticulture Administrators

**Presiding:** Wayne Mackay, Chair  
([wmackay@ufl.edu](mailto:wmackay@ufl.edu))

**Friday:** 1:00 pm – 4:00 pm

**Room:** Majestic Room 2

#### Vigna Crop Germplasm Committee

**Presiding:** Judy Thies  
([judy.thies@ars.usda.gov](mailto:judy.thies@ars.usda.gov))

**Saturday:** 9:00 am – 12:00 pm

**Room:** Majestic Room 8

#### Pecan Research and Extension Forum

**Presiding:** Charles Rohla, Chair  
([ctrohla@noble.org](mailto:ctrohla@noble.org))

**Friday:** 8:00 am – 5:00 pm

**Room:** Majestic Room 3

#### S. Blueberry/Small Fruit Workers

**Presiding:** Donna Marshall, Chair  
([donna.marshall@ars.usda.gov](mailto:donna.marshall@ars.usda.gov))

**Friday:** 8:00 am – 5:00 pm

**Room:** Majestic Room 4

## 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**

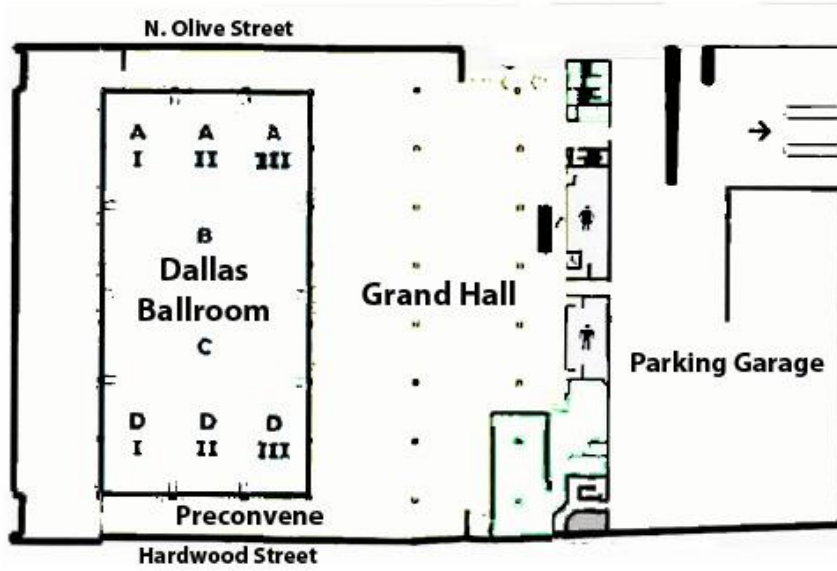
Eric T. Stafne\*<sup>1</sup>, John R. Clark<sup>1</sup>, and Kim S. Lewers<sup>2</sup>

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

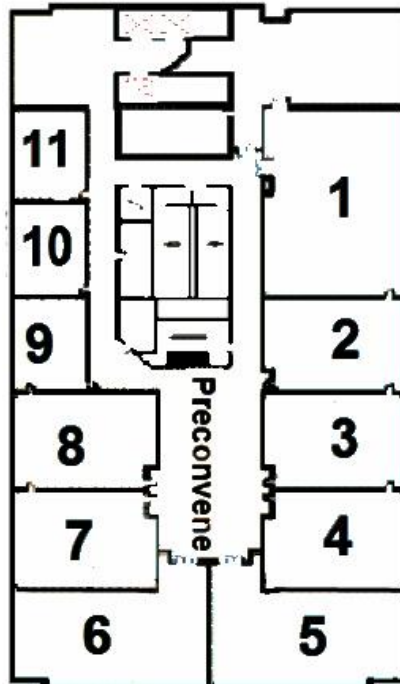
A tetraploid blackberry population that segregates for two important morphological traits, thornlessness and primocane fruiting, was tested with molecular marker analysis. Both randomly amplified polymorphic DNA (RAPD) and simple sequence repeat (SSR) markers were used to screen a population of 98 genotypes within the population plus the two parents, 'Arapaho' and 'Prime-Jim'<sup>®</sup> (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

## Downtown Dallas Convention Center – 1<sup>st</sup> Floor



## Sheraton Hotel – 37<sup>th</sup> Floor Majestic Rooms and Preconvene





## 2014 Program at a Glance

### Friday, January 31

Room	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00
Hotel Lobby	7:00 open									
	Registration									
Majestic Room 3	Pecan Research & Extension Forum									
Majestic Room 4	Southern Blueberry/Small Fruit Workers									
Majestic Room 5	National Sweet Potato Collaborators									
Majestic Room 7	Watermelon Research Group									
Majestic Room 2	Horticulture Administrators									
	Executive Com.									
Majestic Room 1	ACB Club Share			ACB Group Lunch			ACB Activities or Tour			ACB Reception

### Saturday, February 1

Room	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00
Majestic Room Foyer	7:00 open									
	Registration									
Grand Hall Preconvene	Poster Session Set-Up					Poster Session Viewing, Authors at Posters & Judging				
Dallas Ballroom B	Judging Contest Set-Up					J. Benton Storey Horticulture Judging Contest				
Majestic Room 1	Watermelon Research Group									
Majestic Room 8	Vigna Crop Germplasm Committee					National Cowpea Improvement Association				
Majestic Room 5	National Sweet Potato Collaborators									
Majestic Room 2	Extension Section									
Majestic Room 3	Education Sect.									
Majestic Room 4	Edmond UG Paper	Childers M.S. Paper Competition					Barham Ph.D. Paper Comp.			

### Sunday, February 2

Room	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	
Majestic Room Foyer	7:00 open									
	Registration									
Grand Hall Preconvene	Poster Session Viewing					Poster Viewing			Poster Take down	
Dallas Ballroom A1	ACB Business Meeting			Business Meeting/Awards Prog.						
Majestic Room 4	Vegetable Crops Section									
Majestic Room 3	Floriculture, Ornamentals & Turf Section					Floriculture, Ornamentals & Turf Section				
Majestic Room 5	Fruit Crops Section					Fruit Crops Section				
Majestic Room 2	PostHarvest & Biotechnology Section									

SAAS Super Bowl  
Gathering, Eddie  
Deen's Ranch



at

The logo for ASHS '14 is presented on a teal rectangular background. The text "ashs '14" is written in a white, lowercase, sans-serif font. To the right of the text is a cluster of five colorful circles in yellow, light blue, orange, pink, and grey, arranged in a roughly circular pattern. Below the main text, the words "Orlando, Florida" and "July 28-31" are written in a smaller white font, separated by a thin white horizontal line.

ashs '14

Orlando, Florida July 28-31