

SATURDAY, FEBRUARY 1, 2020

REGISTRATION: 10:00 AM - 4:00 PM

LOCATION: SECOND STREET PREFUNCTION



POSTER SESSION 1:00 PM - 4:00 PM

AUTHORS PRESENT FROM 1:00 PM- 3:00 PM

LOCATION: OLMSTEAD 4

UNDERGRADUATE STUDENT POSTER COMPETITION - CROPS AND SOILS

Influence of Fertilizer Additives on Crabgrass (*Digitaria sanguinalis*) Biomass Production.

Cheyenne Simmons, Mississippi State University; **Rocky W. Lemus**, Mississippi State University; **Brett Rushing**, Mississippi State University

Effect of KI on Leaf Mineral Uptake in Soybean Plants.

Haley Beasley, Mississippi Valley State University; **Manju Pande**, Mississippi Valley State University; **Mardarius Mann**, Mississippi Valley State University; **Mudlagiri Goli**, Mississippi Valley State University

Aggregation and Soil Organic Carbon Pools Following Tillage-Cover Crop Practices.

Carrie Ann Followell, Murray State University; **Lin P. Handayani**, Murray State University; **David L Ferguson**, Murray State University

Physiological Effect of Melatonin on Plants.

Kayla Reynolds, Mississippi Valley State University; **Manju Pande**, Mississippi Valley State University

Paraquat Use As a Soybean Harvest Aid in the Southeastern U.S.: Developing Relationships between Timing, Yield, Seed Moisture, and Vegetation Index.

Andrew Russell, Abraham Baldwin Agricultural College; **Emma Tyre**, Abraham Baldwin Agricultural College; **Alex McLemore**, Abraham Baldwin Agricultural College; **Michael J Maw**, Abraham Baldwin Agricultural College

GRADUATE STUDENT POSTER COMPETITION – M.S. STUDENTS

Physiological Characteristics Determining Drought Tolerant in Peanuts.

Qiong Zhang, Auburn University; **Xiaoxing Zhen**, Auburn University; **Charles Yiwu Chen**, Auburn University; **William Batchelor**, Auburn University; **Alvaro Sanz-Saez**, Auburn University

Impact of Winter Cover Crop Grazing on Soil Health in Southeastern Cropping Systems.

Hayley Crowell, Auburn University; **Audrey V. Gamble**, Auburn University; **Yucheng Feng**, Auburn University; **Kip Balkcom**, USDA/ARS

Influence of Conservation Tillage on Water-Use Efficiency and Yield of Peanut.

Sujata Bogati, University of Georgia; **Monique Leclerc**, University of Georgia; **Ronald Scott**

Tubbs, University of Georgia; Gengsheng Zhang, University of Georgia; Walter Scott Monfort, University of Georgia-Tifton; Navjot Singh, University of Georgia

Evaluation of Soybean (*Glycine max*) Yield Potential Following Sub-Optimal Plant Populations.

Lou Adams, *Mississippi State University*; *J. Trenton Irby, Mississippi State University; Alanna B. Scholtes, Mississippi State University*

Evaluation of Insect Dynamics in Southeastern Cover Cropping Systems.

Joseph Akins, *Auburn University*

Physiological Variance of Soybean Under High Night Temperature Stress.

Tianchu Shu, *Auburn University; Alvaro Sanz-Saez, Auburn University*

Studying the Relationship between Water Use Efficiency and Yield in Elite Soybean Lines in Alabama.

Mary Durstock, *Auburn University; Maria Luisa Buchailot, University of Barcelona; Alvaro Sanz Saez de Jauregui, Auburn University*

GRADUATE STUDENT POSTER COMPETITION – PH.D. STUDENTS

Optimum Nitrogen Fertilizer Rate and Timing Management of Corn When Following a Rye Cover Crop.

Daniel Quinn, *University of Kentucky; Hanna Poffenbarger, University of Kentucky; Chad D Lee, University of Kentucky*

The Dollars and Sense of Nitrogen Application on Summer Annual Forage Mixtures.

Kelly Mercier, *University of Kentucky; Christopher D. Teutsch, University of Kentucky; Samuel Ray Smith, University of Kentucky; Kenny Burdine, University of Kentucky; Edwin L. Ritchey, University of Kentucky; Eric Vanzant, University of Kentucky*

Root-Specific Chemical Profiling of Winter Wheat Cultivars in No-till Systems.

Rebecca K. McGrail, *University of Kentucky; David H. McNear Jr., University of Kentucky; David Van Sanford, University of Kentucky*

Carinata Yield and Physiological Response to Nitrogen Levels.

Mahesh Bashyal, *University of Florida; Michael J. Mulvaney, University of Florida West Florida Research & Education Center; Dewey Lee, University of Georgia; Ramon G Leon, North Carolina State University; Gabriel Maltais-Landry, University of Florida; Chris Wilson, University of Florida; John Erickson, University of Florida*

The Effect of Previous Summer Crops on the Seed and Oil Yield of Brassica Carinata.

Joseph Enye Iboyi, *University of Florida West Florida Research & Education Center; Michael J. Mulvaney, University of Florida West Florida Research & Education Center; Ramon G Leon, North Carolina State University; Kipling S. Balkcom, USDA-ARS; Ian M Small, University of Florida North Florida Research & Extension Center; Pratap Devkota, West Florida Research and Education Center*

Assessment of Hybrids and Plant Populations in a Narrow-Row Corn Production System.

John J. Williams, *Mississippi State University; W. Brien Henry, Mississippi State University; Normie W. Buehring, Mississippi State University*

PROFESSIONAL POSTER – CROPS

Economic Feasibility of Grazing Summer Cover Crops and Intercropping in No-till Winter Wheat Production in the Texas Rolling Plains.

Yubing Fan, Texas A&M AgriLife Research; Partson Mubvumba, Texas A&M AgriLife Research; Paul B. DeLaune, Texas A&M AgriLife Research; Seong C. Park, Tennessee Tech University

Farmers' Investment Decisions on Winter Cover Crops in Dryland Cotton Production.

Yubing Fan, Texas A&M AgriLife Research; Paul B. DeLaune, Texas A&M AgriLife Research; Partson Mubvumba, Texas A&M AgriLife Research; Seong C. Park, Tennessee Tech University

Cover Cropping in Organic Farming Systems in Texas.

Jonathan Moreno, Texas A&M University Agronomy Society; Ronnie W. Schnell, Texas Agrilife Research; Nithya Rajan, Texas A&M University

Comparison of Desktop and Handheld Near-Infrared Spectroscopy Devices to Determine Forage Nutritive Value.

Miguel S. Castillo, North Carolina State University; Juan J. Acosta, North Carolina State University

A Geospatial Decision-Support System for Mississippi Corn Producers.

Patrick J. English, Mississippi State University; Sherri L. DeFauw, Ascend Geospatial LLC

Enhanced Efficiency Nitrogen Formulation Effect on Tall Fescue - Red Clover Mixed Species Pasture Productivity.

Kathryn M. Payne, Virginia Tech; Samuel Ray Smith, University of Kentucky; Ben Goff, West Virginia University Extension Service

Seeding RATE Implications for Single-ROW and Twin-ROW Soybean Production in the Mississippi DELTA.

Richard E. Turner, Mississippi State University; M. Wayne Ebelhar, Mississippi State University

Influence of Planting Date on Summer Annuals Grass Biomass and Nutritive Value.

Rocky W. Lemus, Mississippi State University; O'Neal Nicolas, Mississippi State University; J Daniel Rivera, Mississippi State University; Brett Rushing, Mississippi State University; Noah Frank, Mississippi State University

Leaf Photosynthetic Activity and Pod Maturity Profile of Peanuts Treated with Different Fungicides.

Cristiane Pilon, University of Georgia-Tifton; Leticia A. Moreno, University of Georgia; Gurpreet Virk, University of Georgia; Timothy Brenneman, University of Georgia; Albert K. Culbreath, University of Georgia; John Snider, University of Georgia-Tifton

Cellulose Nanocrystals from Cellulosic Biomass Waste: Unique Green Material for Product Development across Industries with Income Generating Potential.

Hari Pratap Singh, Fort Valley State University; Venkata Nagendra Degala, Fort Valley State University; Quaneisha L. Woodford, Fort Valley State University; Zandria Chambers, Fort Valley State University

PROFESSIONAL POSTER – SOILS

Reducing Ammonia Emissions from Poultry Litter with a New Litter Amendment.
Philip A. Moore Jr., USDA-ARS; Kelsey Anderson, University of Arkansas; Jerry Martin, USDA/ARS; Amanda J. Ashworth, USDA-ARS

What Is the Nutrient Composition of FGD Gypsum Litter after Five Flocks.
Dexter B. Watts, USDA-ARS; H. Allen Torbert, USDA-ARS

SUNDAY, FEBRUARY 2, 2019

Registration: 7:00 AM - 5:00 PM

LOCATION: Second Street Prefunction

GRADUATE STUDENT ORAL COMPETITION – M.S. STUDENTS

Location: Olmsted 3

7.55 AM	Opening Remarks
8.00 AM	<u>Temperature Effects on Aqueous Selenium Removal By Cattail and Duckweed.</u> Michael P. Natrass , Mississippi State University
8.15 AM	<u>Nitrogen Contribution from Peanut Residues to Brassica Carinata.</u> Mahesh Bashyal , University of Florida
8.30 AM	<u>Carinata Yield Is Optimized at 6 Kg Seed per Hectare Rate Regardless of Tillage Regime Used.</u> Joseph Enye Iboyi , University of Florida West Florida Research & Education Center; Michael J. Mulvaney, University of Florida West Florida Research & Education Center; Kipling S. Balkcom, USDA-ARS; Ramdeo Seepaul, North Florida Research & Education Center; Ramon G Leon, North Carolina State University; Pratap Devkota, West Florida Research and Education Center; Ian M Small, University of Florida North Florida Research & Extension Center; David L. Wright, University of Florida
8.45 AM	<u>Optimum Nitrogen Fertilizer Rate and Timing Management of Corn Following a Rye Cover Crop.</u> Daniel Quinn , University of Kentucky; Hanna Poffenbarger, University of Kentucky; Chad D Lee, University of Kentucky
9.00 AM	<u>Effect of Winter Cover Crop on Canopy Coverage and Subsequent Effect on a Peanut Cotton Rotation.</u> Ana Julia Azevedo , University of Georgia-Tifton; R. Scott Tubbs, University of Georgia-Tifton; William F. Anderson, USDA-ARS; Alisa Coffin, USDA-ARS Southeast Watershed
9.15 AM	<u>Effect of Prohexadione Calcium, a Plant Growth Regulator, on Peanut Growth and Yield in Arkansas, Georgia, Mississippi, South Carolina and North Carolina.</u>

	<p>Sara E. Pelham, University of Georgia-Tifton; Walter Scott Monfort, University of Georgia-Tifton; R. Scott Tubbs, University of Georgia-Tifton; David L. Jordan, North Carolina State University; Travis Faske, University of Arkansas; Dan Anco, Clemson University; Jason M. Sarver, Indigo Ag; Connor Ferguson, Mississippi State University</p>
9.30 AM	<p><u>Are Cover Crops Worth It? Assessing Soil Benefits and Production Costs in a Corn and Soybean Rotation in Northwestern Mississippi.</u> Alayna Jacobs, The University of Kentucky</p>
9.45 AM	<p><u>Quantifying Inhibitory Impacts of Soil Nitrogen on Biological Nitrogen Fixation Potential in Guar.</u> Philip Osei Hinson, Texas A&M University; Curtis Adams, Texas A&M AgriLife Research; Rajan Shrestha, Texas A&M University; Jennifer MacMillan, Texas A&M University</p>
10.00-10.15 AM	Break
10.15 AM	<p><u>Environmental Implications of Conservation Management in Mid-Southern, Irrigated Corn.</u> Gene Spencer, Mississippi State University; Jason Krutz, Mississippi State University; Drew M. Gholson, Mississippi State Delta Research Center; Martin A. Locke, USDA-ARS</p>
10.30 AM	<p><u>Growth and Nodulation Response in Guar at Different Soil Moisture Levels and Post-Deficit Recovery Potential upon Moisture Restoration.</u> Rajan Shrestha, Texas A&M University; Curtis Adams, Texas A&M AgriLife Research; Philip Osei Hinson, Texas A&M University; Jennifer McMillan, Texas A&M University</p>
10.45 AM	<p><u>Integrated Use of Organic and Inorganic N Fertilizers to Improve Crop N Use Efficiency and to Reduce the N Leaching Losses.</u> Bhupinder Jatana, Clemson University ; Christopher Kitchens, Clemson University; Christopher L. Ray, Clemson University; Nishanth Tharayil, Clemson University</p>
11.00 AM	<p><u>Using UAV and Multispectral Images to Assess Late-Season Physiological Responses of Peanuts to Different Planting Dates.</u> Chiara Rossi, University of Georgia-Tifton; Adao F. dos Santos, University of Georgia; Lorena Lacerda, University of Georgia; George Vellidis, University of Georgia-Tifton; Cristiane Pilon, University of Georgia-Tifton</p>
11.15 AM	<p><u>Acquisition Pattern of Physiological Quality in Peanut Seeds Under Irrigated and Drought Conditions.</u> Leticia de Aguila Moreno, University of Georgia-Tifton; Cristiane Pilon, University of Georgia-Tifton; Adao F. dos Santos, University of Georgia; Marshall C. Lamb, USDA-ARS; R. Scott Tubbs, University of Georgia-Tifton; Timothy L. Grey, University of Georgia</p>

11.30 AM	<u>Root Phenotyping of Winter Wheat for Phosphorus Acquisition.</u> Rebecca K. McGrail , University of Kentucky; David Van Sanford, University of Kentucky; David H. McNear Jr., University of Kentucky
11.45 PM	<u>Evaluation of Narrow-Row Corn (<i>Zea mays</i> L.) Production in the Mid-South.</u> John J. Williams , Mississippi State University; W. Brien Henry, Mississippi State University; Normie W. Buehring, Mississippi State University; Christopher A. Daves, Bayer CropScience
12.00 PM	Adjourn

GRADUATE STUDENT ORAL COMPETITION – M.S. STUDENTS

Location: Olmsted 3

1.25 PM	Opening Remarks
1.30 PM	<u>Analyzing the Effectiveness of Winter Cover Cropping of Reducing Pollutant Loads in the Mississippi Alluvial Valley.</u> Thomas Badon , Mississippi State University; Joby Czarnecki, Mississippi State University; Beth Baker, Mississippi State University
1.45 PM	<u>Effect of Varying Storage Environments and Planting Conditions on Seedling Emergence of Peanut.</u> Caleb Weaver , University of Georgia-Tifton; W. Scott Monfort, University of Georgia-Tifton; Cristiane Pilon, University of Georgia-Tifton; Timothy L. Grey, University of Georgia; Ronald Scott Tubbs, University of Georgia
2.00 PM	<u>Testing the Impact of USDA Rhizobia Accessions on Nodulation, Nitrogen Assimilation, and Productivity of Guar.</u> Jennifer MacMillan , Texas A&M University; Curtis Adams, Texas A&M AgriLife Research
2.15 PM	<u>Physiological and Yield Response to Uniform Vs Non-Uniform Plant Stands of Varying Plant Populations for Non-Irrigated Cotton.</u> Brad Davis , University of Georgia-Athens; R. Scott Tubbs, University of Georgia-Tifton; John Snider, University of Georgia-Tifton; Robert Kemerait, University of Georgia
2.30 PM	<u>Analyzing the Effectiveness of Cover Crops in Reducing Pollutant Loads in the Mississippi Alluvial Valley.</u> Thomas Badon , Mississippi State University; Joby Czarnecki, Mississippi State University; Beth Baker, Mississippi State University
2.45 PM	<u>Peanut Plant Response to Vegetative Injury Occurring at Different Intensity and Stage of Growth.</u> Hayden B Godwin , University of Georgia Tifton Campus; R. Scott Tubbs, University of Georgia-Tifton; Cristiane Pilon, University of Georgia-Tifton; W. Scott Monfort, University of Georgia-Tifton; Wesley M Porter, University of Georgia - Tifton; James Houx, National Crop Insurance Services; Mark E. Zarnstorff, National Crop Insurance Services
3.00-3.15 PM	Break

3.15 PM	<u>Evaluation of Soybean (Glycine max) Yield and Quality Following Delayed Harvest Conditions.</u> <i>Lou Adams, Mississippi State University; J. Trenton Irby, Mississippi State University; Jason Bond, Mississippi State University; Thomas W. Allen, Mississippi State University; William Maples, Mississippi State University; Alanna B. Scholtes, Mississippi State University</i>
3.30 PM	<u>Evaluating Nest Detection Methods When Reviewing Videos As Opposed to Maps Produced from Unmanned Aerial Vehicles (UAVs) Equipped with Thermographic Imaging Technologies.</u> <i>Lori M. Hearon, Mississippi State University; Jesse Morrison, Mississippi State University</i>
3.45 PM	<u>Interactions between Landscape Topography and Cover Crops in a Southeastern Corn Cropping System.</u> <i>Sam J Leuthold, University of Kentucky; Ole Wendroth, University of Kentucky; Montse Salmerón, University of Kentucky; Erin Haramoto, University of Kentucky; Hanna Poffenbarger, University of Kentucky</i>
4.00 PM	<u>Effect of Cultivar, Fungicide Program, and Harvest Date on Germination and Vigor of Saved Peanut Seed.</u> <i>Matthew Stuart, University of Georgia-Tifton; Walter Scott Monfort, University of Georgia-Tifton; Cristiane Pilon, University of Georgia-Tifton</i>
4.15 PM	<u>Determining the Optimum Planter Downforce Settings in Soybeans.</u> <i>Tyler Soignier, Clemson University ; Michael Plumlee, Clemson University</i>
4.30 PM	Adjourn

5:00 PM Social and Super Bowl Party

MONDAY, FEBRUARY 3, 2019

PROFESSIONAL ORAL – CROPS

Location: Olmsted 3

7.55 AM	Opening Remarks
8.00 AM	<u>Variations in Field Level P and K Fertilizer Additions Based on Grid Sampling.</u> <i>M. Wayne Ebelhar, Mississippi State University; Richard E. Turner, Mississippi State University</i>
8.15 AM	<u>Identifying Practical Soil Health Indicators in Semi-Arid Environments.</u> <i>Paul B. DeLaune, Texas A&M AgriLife Research; Katie L. Lewis, Texas A&M AgriLife Research; Partson Mubvumba, Texas A&M AgriLife Research; Joseph A. Burke, Texas Agrilife Research-Lubbock</i>

8.30 AM	<u>Yield Response of Elite Eastern Gamagrass Genotypes to Post Harvest Nitrogen Application.</u> <i>Dylan Hollowell, Mississippi State University</i>
8.45 AM	<u>Agronomic Practices Regarding Industrial Hemp Production for Cannabinoids: A Pilot Study in Florida.</u> <i>Rui Yang, University of Florida; Erin Berthold, University of Florida; Josh Freeman, University of Florida; Sarah Benevenuto, University of Florida</i>
9.00 AM	<u>A Mesoporous Silica Nanoparticle Technology Applied in Dilute Nutrient Solution Accelerated Establishment of Zoysiagrass.</u> <i>Curtis Adams, Texas A&M AgriLife Research; John Erickson, University of Florida</i>
9.15 AM	<u>Increasing Seeding Rates and Nitrogen Rates for Irrigated Corn - Practical Considerations.</u> <i>M. Wayne Ebelhar, Mississippi State University; Brien Henry, Mississippi State University; Richard E. Turner, Mississippi State University</i>
9.30 AM	<u>Interaction of Planting Systems and Management Inputs for Soybean Production in the Mississippi Delta.</u> <i>Richard E. Turner, Mississippi State University; M. Wayne Ebelhar, Mississippi State University; J. Trenton Irby, Mississippi State University; Bobby R. Golden, Mississippi State University</i>
9.45 AM	<u>Integrated Alfalfa Production Systems in Mississippi.</u> <i>Rocky W. Lemus, Mississippi State University; Brett Rushing, Mississippi State University; Joshua Andrew White, Mississippi State University; Josh Maples, Mississippi State University</i>
10.00 AM	<u>Economic Impact of Increased Seeding Rates in Single Row Peanut in Georgia.</u> <i>W. Scott Monfort, University of Georgia-Tifton; Ronald Scott Tubbs, University of Georgia; Jennifer T Miller, University of Georgia Cooperative Extension Service</i>
10.15 AM	<u>Effect of Irrigation on Twin-Row Vs. Single-Row Soybean in the Humid Mississippi Delta.</u> <i>Srinivasa Rao Pinnamaneni, USDA-ARS; Saseendran Anapalli, USDA-ARS; Reddy Krishna, USDA-ARS; Fisher Daniel, USDA-ARS; Nacer Bellaloui, USDA-ARS; Nacer Bellaloui, USDA-ARS; Ruixiu Sui, USDA-ARS</i>
10.30 AM	<u>Nitrogen Credits from Peanut to Wheat.</u> <i>Michael J. Mulvaney, University of Florida West Florida Research & Education Center; Arun D Jani, University of Florida; Ramon G Leon, North Carolina State University; John Erickson, University of Florida; Heather A Enloe, University of Florida</i>
10.45 PM	Adjourn

11:00 AM-12:00 PM Agronomy Business Meeting and Awards

Location: **Olmsted 3**