

SATURDAY, FEBRUARY 12, 2022

REGISTRATION: 10:00 AM - 4:00 PM

POSTER SESSION: 1:00 PM - 4:00 PM

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

LOCATION: Napoleon Foyer – Third Floor

UNDERGRADUATE STUDENT POSTER COMPETITION - CROPS AND SOILS

1. Evaluating Soil Quality Indicators in Non-Organic and Organic Farming Systems.
Matthew Fowler, Murray State Agronomy Club, Lebanon, KY, and Iin P. Handayani, Hutson School of Agriculture, Murray State University, Murray, KY
2. Capturing NDVI Using Greenseeker and UAS to Identify How N Fertility and Seeding Rate Differences Impact Yield in Late-Planted Corn.
Luther Dunlap Altman, Department of Agriculture, Abraham Baldwin Agricultural College, Tifton, GA, United States
3. Optimal Nitrogen Fertilizer Rates between Various Planting Populations in Late-Planted Corn.
Amara White, Abraham Baldwin Agricultural College, Tifton, GA
4. Teffgrass Tolerance to Post-Emergence Herbicide Applications.
Brody Hamm, Mississippi State University, Mississippi State, MS, and Rocky W. Lemus, Mississippi State University, Mississippi State, MS

GRADUATE STUDENT POSTER COMPETITION – M.S. STUDENTS

5. Grazing and tillage effect on cover crop and soybean performance in an integrated crop-livestock system.
Forrest Davis, Coastal Plain Branch Experiment Station, Mississippi State, MS and Brett Rushing, Coastal Plain Experiment Station, Mississippi State University, Newton, MS
6. Eliminating the Effects of Secondary Dormancy in Leguminous Cover-Crops.
Jared McLaurin, Plant and Soil Sciences, Mississippi State University, Mississippi State, MS
7. Breeding for Tolerance to Blast (*Pyricularia oryzae*) on Early Planted Annual Ryegrass.
Calyn Adams, Plant and Soil Sciences, Mississippi State University, Mississippi State, MS
8. Impact of Nitrogen and Sulfur Application to Yield and Quality of Mississippi Corn.
Ramandeep Kumar, Mississippi State University, Starkville, MS, Camden Oglesby, Plant and Soil Sciences, Mississippi State University, Starkville, MS, James Dew, Plant and Soils Science, Mississippi State University, Shannon, MS, Krishna Reddy, USDA ARS, Stoneville, MS, Xiaofei Li, Agricultural Economics, Mississippi State University, Mississippi State, MS, Gurpreet Kaur, Delta Research and Extension Center, Mississippi

State University, Stoneville, MS and Jagmandeep Singh Dhillon, Plant and Soil Sciences, Mississippi State University, Mississippi State, MS

9. Soil Carbon and Nitrogen Mineralization Are Affected by Tillage and Cover Cropping in an Organic Cotton System in Texas.
Parker Murphree, Texas A&M University, Weatherford, TX and Jake E. Mowrer, Soil and Crop Sciences, Texas AgriLife Extension Service, College Station, TX
10. Post Flowering Heat and Drought Stress Effects on Yield and Quality in Corn.
Ranadheer Reddy Vennam, Department of Plant and Soil Sciences, Mississippi State, MS, Raju Bheemanahalli, Mail Stop 9555, Mississippi State University, Mississippi State, MS, Sadikshya Poudel, Plant and Soil Sciences, Mississippi State University, Mississippi State, MS, David Brand, Room 117, Dorman Hall, Mississippi State University, Mississippi State, MS and K. Raja Reddy, Department of Plant & Soil Sciences, Mississippi State University, Mississippi State, MS
11. Drought Stress Effects on Soybean Pollen Germination, Physiology, and Yield.
Sadikshya Poudel, Plant and Soil Sciences, Mississippi State University, Mississippi State, MS, Raju Bheemanahalli, Mail Stop 9555, Mississippi State University, Mississippi State, MS, Ranadheer Reddy Vennam, Department of Plant and Soil Sciences, Mississippi State, MS and K. Raja Reddy, Department of Plant & Soil Sciences, Mississippi State University, Mississippi State, MS
12. Effect of Cover Crops and Grazing on Soil Microbial Community Composition, Function, and Soil Health in East-Central Mississippi Row Crop Production Systems.
Namita Sinha¹, Brett Rushing², William Kingery³, Michael S Cox¹ and Shankar Ganapathi Shanmugam⁴, (1) Plant and Soil Sciences, Mississippi State University, Starkville, MS, (2) Coastal Plain Experiment Station, Mississippi State University, Newton, MS, (3) Department of Plant and Soil Sciences, Mississippi State University, Mississippi State, MS, (4) Plant and Soil Sciences, Mississippi State University, Mississippi State, MS
13. Genetic and Phenotypic Diversity in Bermudagrass (*Cynodon* spp.).
Lovepreet Singh¹, Yanqi Wu², James D McCurdy³, Barry R. Stewart³, Brian S. Baldwin³ and Hongxu Dong³, (1) Mississippi State University, Mississippi State, MS, (2) Department of Plant and Soil Sciences, Oklahoma State University, Stillwater, OK, (3) Department of Plant and Soil Sciences, Mississippi State University, Mississippi State, MS
14. Is There a Relationship between Arthropod Population and Cannabinoid Content in Floral Hemp?
Gary Wayne Morgan Jr., Auburn University, Auburn, AL
15. Managing Iron Deficiency Chlorosis (IDC) through a Cropping System Approach.
Katelin Waldrep¹, Mary Love Tagert¹, Justin McCoy², Mark P. Harrison² and Andy R. Taylor², (1) Agricultural and Biological Engineering, Mississippi State University, Mississippi State, MS, (2) North Mississippi Research and Extension Center, Mississippi State University, Verona, MS

GRADUATE STUDENT POSTER COMPETITION – Ph.D. STUDENTS

16. Designing Efficient Organic Grain Rotation Systems for Soil Health and Crop Productivity in Tennessee.
Ravi Teja Kumar Neelipally, University of Tennessee-Knoxville, Louisville, TN, Debasish Saha, Biosystems Engineering and Soil Science, University of Tennessee-Knoxville, Knoxville, TN, Shawn A. Hawkins, Biosystems Engineering and Soil Science, University of Tennessee – Knoxville, Knoxville, TN, Song Cui, Middle Tennessee State University, Murfreesboro, TN and Sindhu Jagadamma, 2506 E.J. Chapman Drive, University of Tennessee-Knoxville, Knoxville, TN
17. Influence of Organic Grain Production Systems on Soil Nitrous Oxide Gas Emissions.
Arjun Chhetri, Biosystems Engineering and Soil Science, University of Tennessee, Knoxville, Knoxville, TN, Debasish Saha, Biosystems Engineering and Soil Science, University of Tennessee-Knoxville, Knoxville, TN and Sindhu Jagadamma, 2506 E.J. Chapman Drive, University of Tennessee-Knoxville, Knoxville, TN
18. Cover Crops for Weed Management in Cotton.
Yogendra Upadhyaya, Highway 182, University of Florida, Milton, FL, Pratap Devkota, West Florida Research and Education Center, Jay, FL, Michael J. Mulvaney, Highway 182, University of Florida West Florida Research & Education Center, Jay, FL, William Hammond, Agronomy, University of Florida, Gainesville, FL and Haimanote Bayabil, Agricultural and Biological Engineering, University of Florida, Homestead, FL
19. Lint Yield and Fiber Quality as Affected by Various Physiological Parameters and within Yield Components in Advanced Cotton Genotypes.
Gurpreet Virk¹, John Snider¹, Peng Chee², Simerjeet Virk³, Navneet Kaur⁴ and Ved Parkash⁴, (1) University of Georgia-Tifton, Tifton, GA, (2) University of Georgia, Tifton, GA, (3) Crop and Soil Sciences, University of Georgia-Tifton, Tifton, GA, (4) University of Georgia, Tifton, GA
20. Impact of Cotton Leafroll Dwarf Virus on Photosynthetic Processes and Yield of Cotton.
Ved Parkash¹, Divya Bhanu Sharma², John Snider³, Sudeep Bag², Phillip Roberts², Afsha Tabassum², Dalton West², Sameer Khanal⁴, Nelson Dias Suassuna² and Peng Chee², (1) University of Georgia, Tifton, GA, (2) University of Georgia, Tifton, GA, (3) University of Georgia-Tifton, Tifton, GA, (4) Crop and Soil Science, University of Georgia, Athens, GA
21. Winter Cash Cover Crop Effects on Subsequent Summer Crop Production and Vice Versa.
Joseph Enye Iboyi, University of Florida, Milton, FL, Michael J. Mulvaney, Highway 182, University of Florida West Florida Research & Education Center, Jay, FL, Kipling S. Balkcom, USDA-ARS, Auburn, AL, Ramon G. Leon, Crop and Soil Sciences, North Carolina State University, Raleigh, NC, Mahesh Bashyal, Bldg 4900, University of Florida, Milton, FL, Pratap Devkota, West Florida Research and Education Center, Jay, FL, and Ian M Small, North Florida Research and Education Center, University of Florida, Quincy, FL

22. Carinata C and N Mineralization Dynamics Under Different Residue Loads and Tillage Practices.

Mahesh Bashyal, University of Florida, Milton, FL, Michael J. Mulvaney, Highway 182, University of Florida West Florida Research & Education Center, Jay, FL, Ramdeo Seepaul, North Florida Research and Education Center, North Florida Research & Education Center, Quincy, FL, Joseph Enye Iboyi, University of Florida, Milton, FL, Sheeja George, North Florida Research and Education Center, University of Florida, Quincy, FL, Gabriel Maltais-Landry, Soil and Water Sciences Department, University of Florida, Gainesville, FL, Ramon G. Leon, Crop and Soil Sciences, North Carolina State University, Raleigh, NC, Chris H. Wilson, Department of Agronomy, University of Florida, Gainesville, FL and Kenneth J. Boote, Agric. and Biol. Engr. Dept., University of Florida, Gainesville, FL

PROFESSIONAL POSTER – CROPS

23. Evaluation of Teffgrass Cultivars as a Fall Forage in Mississippi.

Brody Hamm, Mississippi State University, Mississippi State, MS and **Rocky W. Lemus**, Mississippi State University, Mississippi State, MS

24. Changing the Look of Row Crop Extension Winter Programs; Life during Covid in 2021.

Ethan Carter, UF/IFAS Extension, Marianna, FL, Libbie Johnson, Escambia County Extension, Cantonment, FL, Jennifer Bearden, UF/IFAS Extension, Crestview, FL and Danielle Sprague, UF/IFAS Extension, Monticello, FL

25. Winter Fallow to Cover Crops: Local Farmers Transition to Test Theories on-Farm.

Libbie Johnson, Escambia County Extension, Cantonment, FL, **Ethan Carter**, UF/IFAS Extension, Marianna, FL, Michael J. Mulvaney, Highway 182, University of Florida West Florida Research & Education Center, Jay, FL, Yogendra Upadhyaya, Highway 182, University of Florida, Milton, FL and Drew Schrimsher, Auburn University, Auburn, AL

26. Influence of Management and Climate on Carbon Balance and Its Seasonality across.

Dorothy Menefee, Agronomy, USDA-ARS Grassland Soil & Water Research Lab, Temple, TX, Russell Scott, USDA-ARS, Southwest Watershed Research Center, Tuscon, Joseph G Alfieri, Bldg 007, Rm 104, BARC-W, USDA-ARS, Beltsville, MD, Pradeep Wagle, USDA-ARS Grazinglands Research Laboratory, El Reno, OK, Michael Abraha, Kellogg Biological Station, Michigan State University, East Lansing, MI, Andrew E. Suyker, University of Nebraska, Lincoln, NE, Eric S. Russell, Department of Civil and Environmental Engineering, Washington State University, Pullman, WA, John M. Baker, 439 Borlaug, USDA-ARS, St Paul, MN, Paul White, Soil and Water Management Research Unit, USDA-ARS, St. Paul, MN, Gretchen Miller, Civil Engineering, Texas A & M, College Station, TX, Mark A. Liebig, PO Box 459, USDA-ARS, Mandan, ND and Nicanor Saliendra, USDA-ARS, Mandan, ND

27. Corn and Soybean Seeding Rate Evaluation in North Mississippi.

Mark P. Harrison¹, Justin McCoy² and Andy R. Taylor¹, (1) North Mississippi Research and Extension Center, Mississippi State University, Verona, MS, (2) North Mississippi Research and Extension Center, Mississippi State University, Columbus, MS

28. Evaluation of Nutrient Availability to Cash Crops Following Cover Crops in Mississippi Production Systems.
Andy R. Taylor¹, Justin McCoy², Mark W. Shankle³, Bill Burdine⁴ and Mark P. Harrison¹, (1) North Mississippi Research and Extension Center, Mississippi State University, Verona, MS, (2) North Mississippi Research and Extension Center, Mississippi State University, Columbus, MS, (3) Plant and Soil Sciences, Mississippi State University, Pontotoc, MS, (4) North Mississippi Research and Extension Center, Mississippi State University, Mississippi State, MS
29. Winter Grazing Impacts Soil Health and Crop Productivity in Coastal Plain Soils.
Audrey V. Gamble¹, **Chris Parker**², Hayley Crowell³ and Anna Johnson¹, (1) Crop, Soil and Environmental Sciences, Auburn University, Auburn, AL, (2) Wiregrass Research and Extension Center, Auburn University, Headland, AL, (3) Auburn University, Boca Raton, FL
30. Corn Growth, Leaf Pigments, and Canopy Reflectance Properties in Response to Cover Cropping.
Raju Bheemanahalli¹, Ardeshir Adeli², Nisarga Kodadinne Narayana³, Daniel McCraine⁴, Amrit, Shrestha⁴, Sathish Samiappan⁴, Joby Prince Czarneck⁴, K. Raja Reddy⁵ and Robert Moorhead⁴, (1)Mail Stop 9555, Mississippi State University, Mississippi State, MS, (2)Genetics and Sustainable Agriculture Research Unit, USDA-ARS, Mississippi State, MS, (3)Mississippi State University, Mississippi State University, Starkville, MS, (4)Geosystems Research Institute, Mississippi State University, Mississippi State, MS, (5)Department of Plant & Soil Sciences, Mississippi State University, Mississippi State, MS
31. Drought and Heat Stress Effects on Physiology, Pollen Germination, and Leaf Reflectance Properties of Corn.
Purushothaman Ramamoorthy, Geosystems Research Institute, Mississippi State University, Starkville, MS, UNITED STATES, Raju Bheemanahalli, Mail Stop 9555, Mississippi State University, Mississippi State, MS, Nuwan K Wijewardane, Biological Systems Engineering, University of Nebraska Lincoln, Starkville, MS, Sathish Samiappan, Geosystems Research Institute, Mississippi State University, Mississippi State, MS, David Brand, Room 117, Dorman Hall, Mississippi State University, Mississippi State, MS and K. Raja Reddy, Department of Plant & Soil Sciences, Mississippi State University, Mississippi State, MS
32. A Geospatial Decision-Support System for Mississippi Corn Producers.
Patrick J. English, Delta Research & Extension Center, Mississippi State University, Stoneville, MS and Sherri L. DeFauw, Ascend Geospatial LLC, Cleveland, MS
33. Morpho-Physiological Responses of Cotton Cultivars to Reniform Nematode and Soil Phosphorus.
Bhupinder Singh, Mississippi State University, Stoneville, MS, Daryl Chastain, United States Department of Agriculture, Agriculture Research Service, Stoneville, MS and Gurbir Singh, Delta Research and Extension Center, Mississippi State University, Stoneville, MS

34. Assessing Interaction of Row and Irrigation Patterns for Maximizing Water Productivity in Soybean.
Bhupinder Singh, Delta Research and Extension Center, Mississippi State University, Stoneville, MS, Gurbir Singh, Delta Research and Extension Center, Mississippi State University, Stoneville, MS, and Gurpreet Kaur, Delta Research and Extension Center, Mississippi State University, Stoneville, MS.
35. Student Experiential Learning Opportunities with a New Forage Nutrition Laboratory to Expand Research and Outreach in Livestock Communities.
Isaac Lepcha, Department of Agriculture, Geosciences & Natural Resources, University of Tennessee-Martin, Martin, TN, **Madelyn Holbrook**, Agriculture, Geosciences and Natural Resources, University of Tennessee Martin, Martin, TN, Craig Darroch, University of Tennessee at Martin, Martin, TN, Clint Ary, Agriculture, Geosciences and Natural Resources, University of Tennessee, Martin, TN, and Harley D. Naumann, 700 Hitt St, University of Missouri, Columbia, MO
36. Long-Term Cotton-Based Crop Rotations Effects on Crop Yields in the Mississippi Delta.
Akanksha Sehgal¹, Gurbir Singh², Gurpreet Kaur², Jagman Dhillon³, and M. Wayne Ebelhar⁴, (1) Plant and Soil Sciences, Mississippi State University, Mississippi State, MS, (2) Delta Research and Extension Center, Mississippi State University, Stoneville, MS, (3) Department of Plant and Soil Sciences, Mississippi State University, Mississippi State, MS, (4) 82 Stoneville Road, Mississippi State University, Stoneville, MS
37. Understanding and Determining the Impacts of Soybean Taproot Decline (TRD) Disease Severity in Mississippi Delta Farms.
Nisarga Kodadinne Narayana, Mississippi State University, Mississippi State University, Starkville, MS, Daniel Prevost, Southern Ag Consulting, Starkville, William L. Kingery, Department of Plant and Soil Sciences, Mississippi State University, Mississippi State, MS and Shankar Ganapathi Shanmugam, Plant and Soil Sciences, Mississippi State University, Mississippi State, MS

PROFESSIONAL POSTER – SOILS

38. Impact of Grazing on Soil Health in Integrated Crop-Livestock Systems.
Jason Brett Rushing, Mississippi State University, Newton, MS and Bronson Bass, Mississippi State University, Newton
39. Phosphorus Solubility in Traditional Versus Gypsum Treated Poultry Litter.
Debolina Chakraborty, 201 Funchess Hall, Auburn University, Auburn, AL and Rishi Prasad, Crop, Soil and Environmental Sciences, Auburn University, Auburn, AL
40. Soil Organic Carbon and Fertility in a 17-Year Agroforestry Site.
Amanda J. Ashworth¹, Helen Amorim², Thomas J. Sauer³, Andrew Thomas⁴, Phillip R. Owens⁵, Mary Cathleen Savin⁶, Yuri Zinn², Sérgio Henrique Godinho Silva⁷, Teotonio Soares de Carvalho⁸ and Nilton Curi⁹, (1) USDA-ARS PPSRU, Fayetteville, AR, (2) Universidade Federal de Lavras, Brazil, Lavras, Brazil, (3) USDA-ARS National Laboratory for Agriculture and the Environment, Ames, IA, (4) University of Missouri, Mt. Vernon,

MO, (5) USDA-ARS, Booneville, AR, (6) Crop, Soil and Environmental Sciences, University of Arkansas, Fayetteville, AR, (7) Soil Science, Universidade Federal de Lavras, Lavras, Brazil, (8) Soil Science, Federal University of Lavras, Lavras, Brazil, (9) Federal University of Lavras, Lavras, Brazil

41. Fertilizer Application Method for Potato Yields and Quality on Sandy Loam Soils in the Mid-Atlantic.

Mark S. Reiter and John Mason, Eastern Shore AREC, Virginia Tech, Painter, VA

42. Coupling the Incidence of Pharmaceuticals in Surface Water with Organic Carbon in East Fork Stones River.

Ravneet Kaur¹, Anonya Akuley Amenyenu¹, Karnita Garner² and Samuel O. Dennis¹, (1) Department of Agricultural and Environmental Sciences, Tennessee State University, Nashville, TN, (2) Alabama Cooperative Extension System, Alabama A&M University, Normal, AL

43. Functional Soil Maps to Improve Efficiency in Agroforestry Systems.

Phillip R. Owens, USDA-ARS, Booneville, AR

44. Soil Carbon Sequestration Associated with Common Cropping Systems.

Iin P. Handayani, Presley Woodrum, Corey Haley, Alyx Shultz, Brian Parr, and Mallorie Snider, Hutson School of Agriculture, Murray State University, Murray, KY

SUNDAY, FEBRUARY 13, 2022

Registration: 8:00 AM - 5:00 PM

LOCATION: Napoleon A 2/3 – Third Floor

GRADUATE STUDENT ORAL COMPETITION – M.S. STUDENTS

7.55 AM	Opening Remarks, Moderator: Dr. Bhupinder Singh
8.00 AM	Evaluating the Response of Late Planted Corn (<i>Zea mays</i> L.) to Different Nutrient Management Schemes in Mississippi. Patterson P Hilaire , Department of Plant Soil Sciences, Mississippi State University, Mississippi State, MS
8.15 AM	Impact of Cover Crop Species Diversity on Soil Nutrient Availability and Crop Productivity. Amanda Kramer , Environmental and Soil Science, University of Tennessee - Knoxville, Knoxville, TN and Sindhu Jagadamma, 2506 E.J. Chapman Drive, University of Tennessee-Knoxville, Knoxville, TN
8.30 AM	Cover crops in Saccharum for Nitrogen and Weed Control. Dylan Hollowell , Mississippi State University, Mississippi State, MS
8.45 AM	Comparing First Year Energycane Yields at Two Locations in Starkville, MS. Wyatt Eason , Mississippi State University, Mississippi State, MS
9.00 AM	Weed Suppression by Cotton Chromosome Substitution Lines within Different Cover Crop Production Systems.

	Alyssa Lea Miller , Plant & Soil Science, Mississippi State University, Mississippi State, MS, United States
9.15 AM	Evaluation of New Prohexadione Calcium Formulation for Plant Growth Regulation in Peanut (<i>Arachis hypogaea</i> L.). Savannah Banner , University of Georgia-Tifton, Tifton, GA and W. Scott Monfort, Crop & Soil Sciences, University of Georgia-Tifton, Tifton, GA
9.30 AM-9.45	Break
9.45 AM	Interactive Effects of Heat and Drought Stress on Soybean Physiology, Pollen Germination, and Yield. Sadikshya Poudel , Plant and Soil Sciences, Mississippi State University, Mississippi State, MS, Raju Bheemanahalli, Mail Stop 9555, Mississippi State University, Mississippi State, MS, Ranadheer Reddy Vennam, Department of Plant and Soil Sciences, Mississippi State, MS and K. Raja Reddy, Department of Plant & Soil Sciences, Mississippi State University, Mississippi State, MS
10.00 AM	Water Deficit Effects on Corn Physiology and Early-Season Vigor. Ranadheer Reddy Vennam , Department of Plant and Soil Sciences, Mississippi State, MS, Purushothaman Ramamoorthy, Geosystems Research Institute, Mississippi State University, Starkville, MS, UNITED STATES, Sadikshya Poudel, Plant and Soil Sciences, Mississippi State University, Mississippi State, MS, Raju Bheemanahalli, Mail Stop 9555, Mississippi State University, Mississippi State, MS and K. Raja Reddy, Department of Plant & Soil Sciences, Mississippi State University, Mississippi State, MS
10.15 AM	Impact of Planting Pattern and Planting Population on Cotton Development, Fruit Distribution, Yield, and Fiber Quality. William Joseph Rutland ¹ , Brian Pieralisi ² , Darrin Dodds ¹ , Wes Lowe ³ , Justin McCoy ⁴ , Whitney Crow ⁵ , Tyler Soignier ⁶ , Eli Hobbs ⁶ and Bradley Norris ⁷ , (1) Mississippi State University, Mississippi State, MS, (2) Mississippi State Delta Research Center, Greenville, MS, (3) Agricultural and Biological Engineering, Mississippi State University, Starkville, MS, (4) North Mississippi Research and Extension Center, Mississippi State University, Columbus, MS, (5) Mississippi State University, Stoneville, (6) Mississippi State University, Starkville, MS, (7) Mississippi State University, Starkville
10.30 AM	Evaluation of Cover Crop Influence on Potassium Uptake Dynamics in the Southeastern Cotton Belt. Eli Hobbs , Mississippi State University, Starkville, MS
10.45 AM	An Evaluation on the Effects of Additions and Deletions of Specific Nutrient Management Strategies on Corn Yield at Different Plant Densities. James Dew ¹ , Jagmandeep Singh Dhillon ² , Amelia A. Fox ² , Gurbir Singh ³ , Justin McCoy ⁴ , Camden Oglesby ⁵ and Ramandeep Sharma ⁶ , (1) Plant and Soils Science, Mississippi State University, Shannon, MS, (2) Plant and Soil Sciences, Mississippi State University, Mississippi State, MS, (3) Delta Research and Extension Center, Mississippi State University, Stoneville, MS, (4) North Mississippi Research and Extension Center, Mississippi State University, Columbus, MS, (5) Plant and Soil Sciences, Mississippi State University, Starkville, MS, (6) Mississippi State University, Starkville, MS

11.00 AM	Impact of in-furrow Fertilizers on Peanut Stand. Macie Wheeler , University of Georgia, Boston, GA
11.15 AM	Drought Intensities and Timing Affects Photosynthesis, Water Use, Yield and Cannabinoid Profile in Greenhouse Cultivated Floral Hemp. Gary Wayne Morgan Jr. , Auburn University, Auburn, AL

GRADUATE STUDENT ORAL COMPETITION – Ph.D. STUDENTS

Moderator: Dr. Akanksha Sehgal

1.00 PM	Evaluation of Drain Tile Performance When Used in Cotton Production. Tyler Soignier ¹ , Brian Perialisi ² , Darrin M. Dodds ³ , L. Jason Krutz ⁴ , Eli Hobbs ¹ , William Joseph Rutland ⁵ and Bradley Norris ⁶ , (1) Mississippi State University, Starkville, MS, (2) Mississippi State Delta Research Center, Greenville, MS, (3) Plant and Soil Sciences, Mississippi State University, Mississippi State, MS, (4) Mississippi State University, Stoneville, MS, (5) Mississippi State University, Mississippi State, MS, (6) Mississippi State University, Starkville
1.15 PM	Screening Sweet Potato Varieties for Their Allelopathic Effects on Growth of Different Weed Species Under Field Conditions. Varsha Singh , Plant and Soil Sciences, Mississippi State University, Mississippi State, MS, Isabel Werle, Plant & Soil Sciences, Mississippi State University, Mississippi State, MS, Mark W. Shankle, Plant and Soil Sciences, Mississippi State University, Pontotoc, MS, Stephen L. Meyers, Horticulture and Landscape Architecture, Purdue University, West Lafayette, IN and Te-Ming Paul Tseng, Plant and Soil Sciences, Mississippi State University, Starkville, MS
1.30 PM	Assessing the Role of Plant-Growth Promoting Microbial Species from Cow Manure-Based Organic Formulations. Ravi Teja Kumar Neelipally ¹ , Wilson Ouma ² , Bonnie H Ownley ² and Sindhu Jagadamma ³ , (1) University of Tennessee-Knoxville, Louisville, TN, (2) Department of Entomology and Plant Pathology, The University of Tennessee, Knoxville, TN, (3)2506 E.J. Chapman Drive, University of Tennessee-Knoxville, Knoxville, TN
1.45 PM	Effects of Thatch Depth on Native Warm-Season Grass (NWSG) Establishment. Keagan Swilling ¹ , Eric Bisangwa ² , Jennifer Mansfield ³ , Chad Bitler ³ and Patrick D Keyser ¹ , (1) Center for Native Grasslands Management, Department of Forestry Wildlife and Fisheries, University of Tennessee - Knoxville, Knoxville, TN, (2) Forestry, Wildlife and Fisheries, University of Tennessee, Maryville, TN, (3) Greenacres Foundation, Cincinnati, OH
2.00 PM	Cereal Rye Biomass and PRE-Herbicides for Weed Management in Cotton. Yogendra Upadhyaya , Highway 182, University of Florida, Milton, FL, Pratap Devkota, West Florida Research and Education Center, Jay, FL, Michael J. Mulvaney, Highway 182, University of Florida West Florida Research & Education Center, Jay, FL, William Hammond, Agronomy, University of Florida, Gainesville, FL and Haimanote Bayabil, Agricultural and Biological Engineering, University of Florida, Homestead, FL
2.15 PM	Determining an Irrigation Management Plan in a Furrow Irrigated Rice Production System.

	Anna Smyly , Mississippi State Delta Research Center, MS State, MS and Dr. Drew Gholson, Delta Research and Extension Center, Mississippi State University, Stoneville, MS
2.30 PM	Land Use Affects Hydraulic Conductivity Dynamics in Shrink-Swell Soils. Geeta Kharel , Thorsten Knappenberger, Joey N. Shaw, Audrey V. Gamble and Yaniv Olshansky, Crop, Soil and Environmental Sciences, Auburn University, Auburn, AL
2.45 PM	Identification of Optimum Side Dress Nitrogen Rate for Dryland Corn and Cotton Using Broiler Litter as Starter Fertilizer. Rajveer Singh ¹ , Rishi Prasad ¹ , Dexter B. Watts ² and H. Allen Torbert ³ , (1) Crop, Soil and Environmental Sciences, Auburn University, Auburn, AL, (2)411 S Donahue Dr, USDA-ARS, Auburn, AL, (3) National Soil Dynamics Laboratory, USDA-ARS, Auburn, AL
3.00 PM-3.15	Break
3.15 PM	Melatonin As a Safener in Cotton Against Sublethal Doses of 2,4-D. Josiane Argenta , Mississippi State University, Starkville, MS and Te-Ming Paul Tseng, Plant and Soil Sciences, Mississippi State University, Starkville, MS
3.30 PM	Cotton Chromosome Substitution Lines, a Possible Weed Management Strategy. Worlanyo Segbefia , Mississippi State University, Mississippi State, MS
3.45 PM	Predicting Peanut Maturity Using Degree Day Indices in Mississippi. Joseph Bryan Whittenton ¹ , Brendan Zurweller ¹ , Jagmandeep Singh Dhillon ¹ , Connor Ferguson ² , Amelia A. Fox ¹ and Jeff Gore ³ , (1) Plant and Soil Sciences, Mississippi State University, Mississippi State, MS, (2) Sesaco Corporation, Yukon, OK, (3) Delta Research and Extension Center, Mississippi State University, Stoneville, MS
4.00 PM	Root Morphological Traits That Improve Soybean Germination Under Water Stress. Jyoti Prasad Kakati , Clemson University, Clemson, SC, Sruthi Narayanan Kutty, Clemson University, Clemson University, Clemson, SC and Benjamin Fallen, Research Scientist, USDA, Soybean & Nitrogen Fixation Unit, Raleigh, NC
4.15 PM	Variation in NUE Among <i>Brassica Carinata</i> Genotypes Grown in a Controlled Environment. Joseph Enye Iboyi ¹ , Michael J. Mulvaney ² , Ramdeo Seepaul ³ , Ian M Small ⁴ , Mahesh Bashyal ⁵ , Ramon G. Leon ⁶ , Pratap Devkota ⁷ , Kipling S. Balkcom ⁸ , Sheeja George ⁴ and David L. Wright ⁴ , (1) University of Florida, Milton, FL, (2) Highway 182, University of Florida West Florida Research & Education Center, Jay, FL, (3) North Florida Research and Education Center, North Florida Research & Education Center, Quincy, FL, (4) North Florida Research and Education Center, University of Florida, Quincy, FL, (5) Bldg 4900, University of Florida, Milton, FL, (6) Crop and Soil Sciences, North Carolina State University, Raleigh, NC, (7) West Florida Research and Education Center, Jay, FL, (8) USDA-ARS, Auburn, AL
4.30 PM	Can the Use of Prohexadione Calcium Increase Peanut Peg Strength and Yield in North Florida?

	Mahesh Bashyal , Bldg 4900, University of Florida, Milton, FL, Michael J. Mulvaney, Highway 182, University of Florida West Florida Research & Education Center, Jay, FL and Pratap Devkota, West Florida Research and Education Center, Jay, FL
4.45 PM	Temperature Extremes Influence on Growth and Photosynthetic Performance of Advanced Cotton Genotypes. Gurpreet Virk ¹ , John Snider ¹ , Peng Chee ² , Navneet Kaur ³ and Alessandro Ermanis ⁴ , (1) University of Georgia-Tifton, Tifton, GA, (2) University of Georgia, Tifton, GA, (3) University of Georgia, Tifton, GA, (4) University of Georgia-Tifton, Tifton, GA
5.00 PM	Impact of Nitrogen Deficiency on Physiological Processes in Cotton. Ved Prakash ¹ , John Snider ² , Amrit Pokhrel ² , Gurpreet Virk ² , Henry Sintim ³ , Camp Campbell Hand ² and Cristiane Pilon ⁴ , (1) University of Georgia, Tifton, GA, (2) University of Georgia-Tifton, Tifton, GA, (3) Crop and Soil Sciences, University of Georgia, Tifton, GA, (4) Crop & Soil Sciences, University of Georgia, Tifton, GA

MONDAY, FEBRUARY 14, 2022

LOCATION: Napoleon A 2/3 – Third Floor

PROFESSIONAL ORAL – CROPS

7.55 AM	Opening Remarks, Moderator: Dr. Bhupinder Singh
8.00 AM	Evaluating the Impact of Diuron on Regrowth Control Following Cotton Defoliation. Camp C Hand ¹ , Caitlyn Lawton ² and John Snider ¹ , (1) University of Georgia-Tifton, Tifton, GA, (2) Crop and Soil Sciences, University of Georgia, Tifton, GA
8.15 AM	Evaluation of Cover Crop Monocultures and Mixtures for Soil Health. Anna Johnson ¹ , Hannah Decker ¹ , Kip Balkcom ² and Audrey V. Gamble ¹ , (1) Crop, Soil and Environmental Sciences, Auburn University, Auburn, AL, (2) USDA/ARS, Auburn, AL
8.30 AM	Evaluation of a Rapid Method for Assessing Corn Nitrogen Management in-Season. Justin McCoy ¹ , Jason Bond ² , Corey J Bryant ³ , Mark P. Harrison ⁴ and Andy R. Taylor ⁴ , (1) North Mississippi Research and Extension Center, Mississippi State University, Columbus, MS, (2) Delta Research and Extension Center, Mississippi State University, Stoneville, MS, (3) Delta Research and Extension, Mississippi State University, Stoneville, MS, (4) North Mississippi Research and Extension Center, Mississippi State University, Verona, MS
8.45 AM-9.00 AM	Break
9.00 AM	Interaction Effects of Genotype-By-Environment Morphology and Physiology of SIX Modern and Obsolete Cotton Cultivars across Southern Cotton BELT. Akanksha Sehgal ¹ , Gurpreet Kaur ² , Daryl Chastain ³ , John Snider ⁴ , Haydee E Laza ⁵ , Wenxuan Guo ⁶ and Gurbir Singh ² , (1) Plant and Soil Sciences, Mississippi State University, Mississippi State, MS, (2) Delta Research and Extension Center,

	Mississippi State University, Stoneville, MS, (3) United States Department of Agriculture, Agriculture Research Service, Stoneville, MS, (4) University of Georgia-Tifton, Tifton, GA, (5) Plant and Soil Sciences, Texas Tech University, Lubbock, TX, (6) Plant and Soil Science, PO Box 42122, Texas Tech University, Lubbock, TX
9.15 AM	Correlation and Calibration of Soil-Test-Based Potassium Fertilizer Recommendations for Louisiana Soybean. Rasel Parvej , Tidewater Agricultural Research and Extension Center, LSU Ag Center, Winnsboro, LA, Brenda Tubana, School of Plant, Environmental, and Soil Sciences, Louisiana State University AgCenter, Baton Rouge, LA, Syam K. Dodla, Agricultural Center, Red River Research Station, Louisiana State University, Bossier City, LA and David O. Moseley, Dean Lee Research Station, LSU Agricultural Center - Dean Lee Research Station, Alexandria, LA
9.30 AM	Optimum Cover Crop Seeding Rates in Semi-Arid Cotton Cropping Systems. Paul B. DeLaune , Texas A&M AgriLife Research, Vernon, TX, Emi Kimura, Texas A&M AgriLife Extension Service, Vernon, TX and Francisco Abello, Texas A&M AgriLife Extension, Vernon, TX
9.45- 10.00 AM	Break

10.00 – 11.00 AM Agronomy Business Meeting and Awards