

## Sunday, 5 February 2006

### Registration

12:00-5:00 PM

Wyndham Orlando Resort, Palms Ballroom Foyer, First Floor

### Crops Posters

3:00 PM-6:00 PM

Wyndham Orlando Resort, Palms Ballroom Salon E, First Floor

- 1 **Heat Stress on Physiology and Biochemistry of Diverse Cotton Germplasm.** Androniki Bibi\*, Derrick Oosterhuis, Evangelos Gonias and Fred Bourland, University of Arkansas
- 2 **The Insecticide Imidacloprid Improves Cotton Growth under Heat Stress.** Evangelos Gonias\*, Derrick Oosterhuis and Androniki Bibi, University of Arkansas
- 3 **St. Augustinegrass Phosphorus Requirement Using Hydroponics Culture.** Min Liu\*, Jerry Sartain, Laurie Trenholm, Grady Miller, Willie Harris, Peter Nkedi-Kizza and Rongling Wu, University of Florida
- 4 **Cultivers from Florida's Annual Ryegrass Breeding Program.** Gordon M. Prine\*, Ann R. S. Blount, Kevin E. Kenworthy and Paul E. Reith, University of Florida
- 5 **Carbohydrate Partitioning in Relationship to Lint Yield in Contrasting Cotton Cultivars.** Jenny D. Clement\* and C. O. Gwathmey, University of Tennessee
- 6 **Comparative Yield and Production Cost of Canola and Winter Wheat in Alabama.** Udai R. Bishnoi\*, S. R. Mentreddy and Ernst Cebert, Alabama A&M University
- 7 **Utility of Microsatellite for Determining Genetic Relationships in Maize Inbred Lines.** Cyrus Abdmishani\*, Fatemeh Dehghan-Nayeri and Bahman yazdi-Samadi, College of Agriculture, University of Tehran
- 8 **Growth Response of the Invasive Weed Tropical Spiderwort to Elevated Atmospheric CO<sub>2</sub>.** Stephen A. Prior<sup>1</sup>, Andrew J. Price<sup>1</sup>, G. Brett Runion<sup>1</sup>, Hugo H. Rogers<sup>1</sup>, Dean H. Gjerstad<sup>2</sup> and H. Allen Torbert<sup>1</sup>, (1)USDA-ARS National Soil Dynamics Laboratory, (2)School of Forestry and Wildlife Sciences
- 9 **Large Plot Evaluation of Soybean Rust Control.** Philip Jost\*, Robert C. Kemerait Jr., Layla Sconyers and James Clark, University of Georgia
- 10 **Effect of Plant Growth Hormones and EDTA on Lead Uptake in *Sesbania drummondii* Seedlings.** Reyes Quintero\* III, Mohd Israr and Shivendra Sahi, Department of Biology, Western Kentucky University
- 11 **Vinegar as a Contact Herbicide: Application Volume and Adjuvants.** Charles L. Webber\* III, USDA, ARS, SCARL and James W. Shrefler, Oklahoma State University
- 12 **Pelargonic Acid as a Contact Herbicide: Concentrations, Adjuvants, and Application Timing.** Charles L. Webber\* III, USDA, ARS, SCARL and James W. Shrefler, Oklahoma State University
- 13 **Production of Edamame Vegetable Soybeans in Tennessee.** Debra J. S. Carpenter\*, Vincent R. Pantalone, Fred L. Allen, Dennis E. Deyton and Carl E. Sams, University of Tennessee
- 14 **Effects of Chloride Irrigation Water on Soybean Excluder and Includer Cultivars.** Joshua M. Dunn\*, Arkansas State University and University of Arkansas and Darell Widick, Arkansas State University
- 15 **Genetic Variation of Radiation Use Efficiency in Wheat and its Impact on Fall Forage Production.** Jeffrey Edwards\*, Oklahoma State University
- 16 **Sequential Planting of Switchgrass Seed to Determine Optimal Planting Date for Establishment.** Kyle B. Holmberg\* and Brian S. Baldwin, Mississippi State University
- 17 **Influence of Late Nitrogen Fertilizer Applications on Corn Grain Yield on Two Mississippi River Alluvial Soils.** H. J. Mascagni\* Jr., LSU AgCenter's Northeast Research Station and R. Bell, LSU AgCenter's Northeast Research Station
- 18 **Optimal Row Spacings and Plant Populations for Single and Twin Row Corn Production.** Jason L. Satterwhite\*<sup>1</sup>, Kipling Balkcom<sup>2</sup>, Francisco J. Arriaga<sup>3</sup>, Andrew J. Price<sup>4</sup> and Edzard Van

- Santen<sup>1</sup>, (1)Auburn University, (2)UDA-ARS, (3)USDA-ARS, (4)USDA-ARS National Soil Dynamics Laboratory
- 19 **Genetic Diversity of Bahiagrass Germplasm Collected in Northern Arkansas.** Byron L. Burson<sup>\*1</sup>, David M. Burner<sup>1</sup>, Russell W. Jessup<sup>1</sup> and K. Renganayaki<sup>2</sup>, (1)USDA-ARS, (2)Texas A&M University
- 20 **Nutrient Transport in Alternative Swine Manure Treatment Systems.** Susan Mcloud<sup>\*</sup>, Natural Resources Conservation Service
- 21 **Early Fertilization to Enhance Root Development in Corn.** Ronnie W. Heiniger<sup>\*1</sup>, Alan D. Meijer<sup>1</sup> and Carl R. Crozier<sup>2</sup>, (1)Dept of Crop Science, North Carolina State University, (2)North Carolina State University Soil Science Dept.
- 22 **Cover Crop Affects Nitrogen Response of Pearl Millet Grain Production in a Strip-Till System.** Andrea L. Maas<sup>\*</sup>, USDA-ARS and Wayne Hanna, University of Georgia
- 23 **Genetic Structure of Natural Populations of *Imperata cylindrica*, an Invasive Clonal Species of the Southeastern United States.** Ludovic J.A. Capo-Chichi<sup>\*</sup> and Edzard van Santen, Auburn University
- 24 **Inter- and Intra-Population Genetics of *Imperata* sp.** Jason C. White<sup>\*</sup>, Ludovic J.A. Capochichi and Edzard van Santen, Auburn University
- 25 **Effect of the Concentration of Chipped Bark in Sawdust Substrate on Crude Polysaccharide Extract and Lentinan Content of Shiitake Mushrooms.** Ramakrishna Nalagorla, Catherine Sabota<sup>\*</sup> and Caula Beyl, Alabama A&M University
- 26 **Effect of Scion vs. Rootstock on Isoflavone, Oil, Protein, and Amino Acid Levels in Seed of Grafted Soybean [*Glycine max* (L.) Merr.] Plants.** Richard Johnson<sup>\*1</sup>, Craig Charron<sup>2</sup>, Carl Sams<sup>1</sup> and Fred Allen<sup>1</sup>, (1)University of Tennessee, (2)USDA-ARS

## Soils Posters

3:00 PM-6:00 PM

Wyndham Orlando Resort, Palms Ballroom Salon E, First Floor

- 27 **Determination of Bioavailable Nitrogen and Phosphorus from Broiler Litter.** W. Ashley Hammac<sup>\* II</sup>, C. Wesley Wood, Yucheng Feng, Oladiran Fasina, Joey Shaw and Brenda Wood, Auburn University
- 28 **The Role of Soil Phosphorus in South Florida Agricultural and Natural Ecosystems.** Yuncong Li<sup>\*</sup>, Tropical Research and Education Center/University of Florida
- 29 **Mowing and Nitrogen Source Effects on Ammonia Volatilization from Fertilizers Applied to Turfgrass.** Ellen C. Knight<sup>\*</sup>, C. Wesley Wood and Elizabeth Guertal, Auburn University
- 30 **Long-Term Effects of Tillage and Manure Application on Soil Carbon and Nitrogen Mineralization.** Dexter Watts<sup>\*</sup>, H. Allen Torbert and Steven Prior, USDA-ARS National Soil Dynamics Laboratory
- 31 **OpenAg.Info: A Geospatial Technologies and Precision Agriculture Education Initiative.** Jared D. Williams<sup>\*</sup>, David A. Crouse and Rob E. Austin, North Carolina State University
- 32 **Effects of Soil Management and Landscape Factors on Greenhouse Gas Emissions.** Catherine N. Gacengo<sup>\*1</sup>, C. Wesley Wood<sup>1</sup>, Joey N. Shaw<sup>1</sup>, Kipling S. Balkcom<sup>2</sup> and Randy Raper<sup>2</sup>, (1)Department of Agronomy and Soils, (2)USDA-ARS
- 33 **Persistence of Bifenthrin and Chlorpyrifos in Nursery Soils.** Sam O. Dennis<sup>\*</sup>, Jason Oliver, Desh Duseja and Peter Nveawiah-Yoho, Tennessee State University

## SAAS Opening Session

4:00-6:00 PM

Wyndham Orlando Resort, Orange and Lemon Rooms

“The Future of Animal Agriculture in North America”

## SAAS Reception

6:30-8:30 PM

Wyndham Orlando Resort, Poolside Pavilion

## Monday, 6 February 2006

### Crops--Forages/Grasses

Wyndham Orlando Resort, Jasmine Room, First Floor

*Presiding: John P. Beasley Jr., University of Georgia*

- 8:30 AM **Opening Remarks.** Daren Redfearn\*, Oklahoma State University.
- 8:45 AM **Leaf Fatty Acid Profiles of Bahiagrass Clones During Fall Regrowth in North Florida.** Jacque W. Breman\*<sup>1</sup>, George Person<sup>2</sup>, Ann Blount<sup>2</sup> and K. H. Quesenberry<sup>3</sup>, (1)Union County Extension Office, (2)University of Florida, (3)Agronomy Department
- 9:00 AM **Self- and Cross-Fertility of Diploid Bahiagrass.** Carlos A. Acuna\*, Ann Blount and Kenneth Quesenberry, University of Florida
- 9:15 AM **Is Creeping Signalgrass an Alternative to Bahiagrass for Cow-Calf Grazing in Florida?** Ike V. Ezenwa\*<sup>1</sup>, John Arthington<sup>2</sup>, Rob S. Kalmbacher<sup>2</sup> and Findlay M. Pate<sup>2</sup>, (1)University of Florida/IFAS, (2)Range Cattle Research & Ed. Center
- 9:30 AM **Effects of Diminishing Soil-P Status on Productivity and Quality of Warm Season Grasses.** Martin B. Adjei\*<sup>1</sup>, Johan M. Scholberg<sup>1</sup>, Yoana Newman<sup>2</sup> and John Rechcigl<sup>1</sup>, (1)University of Florida, (2)Texas A&M University
- 9:45 AM **Agronomic Performance of 'Kentucky 31' and Scandinavian Ecotype Tall Fescue Plants.** Philip S. Shine\* and Tim D. Phillips, Univ. of KY, Dept. of Plant and Soil Sciences
- 10:00 AM **Lupins, Lupins, Lupins!.** Steven Noffsinger\* and Edzard Van Santen, Auburn University
- 10:15 AM **Break**

### Soils--I

Wyndham Orlando Resort, Jasmine Room, First Floor

*Presiding: C. Wesley Wood, Auburn University*

- 10:25 AM **Introductory Remarks**
- 10:30 AM **Bioavailability and Speciation of Mercury in a Soil from Oak Ridge, Tennessee, USA.** Fengxiang Han\*<sup>1</sup>, Yi Su<sup>2</sup>, David L. Monts<sup>2</sup> and Charles A. Waggoner<sup>3</sup>, (1)Mississippi State University, (2)Diagnostic Instrumentation and Analysis Laboratory, Mississippi State University, (3)Diagnostic Instrumentation and Analysis Laboratory (DIAL), Mississippi State University
- 10:45 AM **Influence of Applying MSMA on Soil Minerals and Properties.** Wengui Yan\*<sup>1</sup>, Nathan Slaton<sup>2</sup>, James Gibbons<sup>2</sup> and Richard Cartwright<sup>2</sup>, (1)USDA-ARS, DB NRRC, (2)University of Arkansas
- 11:00 AM **Growth and Copper Accumulation in *Sesbania drummondii* Exposed to High Concentrations of Copper.** Abhishek K. Srivastava\*<sup>1</sup>, Mohd Israr<sup>1</sup> and Shivendra Sahi<sup>2</sup>, (1)Western Kentucky University, (2)Western Kentucky University
- 11:15 AM **Use of *Duo festulolium* in the Remediation of Phosphorus-Enriched Soils.** Daniel L. Starnes\*<sup>1</sup>, Nilesh Sharma<sup>1</sup> and Shivendra Sahi<sup>2</sup>, (1)Department of Biology, Western Kentucky University, (2)Western Kentucky University
- 11:30 AM **Measuring Soil Carbon Storage Differences of Forest Ecosystems: Approaches and Challenges.** Monday Mbila\*, Maria Nobles and Wallace Dillon Jr., Department of Plant and Soil Science, Alabama A&M University
- 11:45 AM **Lunch**

### Crops--Row Crops

Wyndham Orlando Resort, Jasmine Room, First Floor

*Presiding: Barry Tillman, University of Florida*

- 12:55 PM **Introductory Remarks**

- 1:00 PM **Row Spacing and Population Density Effects on Castor Seed Yield: A Preliminary Study.** D. Scott Horton\*, Brian S. Baldwin, Kyle B. Holmberg and Justin W. Smith, Mississippi State University
- 1:15 PM **Do Foliar Fungicides Have a Fit in Mid-South Corn Production Systems?** Jason Kelley\*, Richard Cartwright and Steven Sheets, University of Arkansas Cooperative Extension Service
- 1:30 PM **Determining the Relationship Between Cotton Canopy Reflectance and Plant Parameters to Predict Mepiquat Chloride Recommendations.** J. Randall Nelson\*, North Carolina State University and Ronnie W. Heiniger, Dept of Crop Science, North Carolina State University
- 1:45 PM **Agronomic and Economic Performance of BMP Cropping Systems.** Donald Boquet\*, LSU AgCenter Macon Ridge Research Station and Kenneth Paxton, LSU AgCenter Dep. Agricultural Economics and Agribusiness
- 2:00 PM **Plant Crop Sugarcane Responses to N-rate on Organic-Amended vs. Non-Amended Mineral Soils.** Ike V. Ezenwa\* and Peter Newman, University of Florida/IFAS
- 2:15 PM **Sugarcane Response to Water Table, Periodic Flood, and Foliar Nitrogen on Organic Soil.** Barry Glaz\*, USDA-ARS-SAA and Robert Gilbert, University of Florida
- 2:30 PM **Break**

### Soils--II

Wyndham Orlando Resort, Jasmine Room, First Floor

*Presiding: Nathan Slaton, University of Arkansas*

- 2:55 PM **Introductory Remarks**
- 3:00 PM **Oklahoma Agriculture Experiment Station Encroachment: Problems and Solutions.** R. Brent Westerman\*, Oklahoma State University
- 3:15 PM **Effects of Water Treatments Residuals (WTR) on Runoff and Leachate Phosphorus Losses in a Florida Sand.** Olawale O. Oladeji\*, George A. O'Connor and Jerry B. Sartain, Soil and Water Science Department
- 3:30 PM **Sustainability of Planted Loblolly Pine on a Remediated Brine-Contaminated Soil.** Benjamin C. McNally\* and Kenneth W. Farrish, Stephen F. Austin State University
- 3:45 PM **Chemical Characterization and Mineralization Rates of Selected Biosolids and Organic Wastes.** Caroline B. Reis\*<sup>1</sup>, JERRY B. SARTAIN<sup>2</sup>, Martin Adjei<sup>1</sup>, John Rechcigl<sup>1</sup> and Craig Stanley<sup>1</sup>, (1)University of Florida, (2)Soil and Water Science Department

## Tuesday, 7 February 2006

### Soils--III

Wyndham Orlando Resort, Jasmine Room, First Floor

*Presiding: Kipling S. Balkcom, USDA-ARS, Auburn, AL*

- 8:25 AM **Introductory Remarks**
- 8:30 AM **Soil Science As Inquiry-Based Education in NC Elementary Schools.** Dennis Osborne\*, NC State University, Sam Houston, NC Science, Mathematics, and Technology Education Center and Norman Budnitz, Pratt School of Engineering, Duke University
- 8:45 AM **Transferability of NIR Soil C Measurement Techniques Across Systems.** Jason P. Wight\*<sup>1</sup>, Fred Allen<sup>1</sup>, Nicole Labbe<sup>2</sup> and Timothy G. Rials<sup>2</sup>, (1)University of Tennessee, (2)University of Tennessee, Tennessee Forestry Products Center
- 9:00 AM **Common Ragweed Response to Nitrogen, Phosphorus, and Lime.** C. Wesley Wood\*<sup>1</sup>, H. Lee Stribling<sup>2</sup>, Brenda H. Wood<sup>1</sup> and Steven D. Mitchell<sup>2</sup>, (1)Department of Agronomy and Soils, (2)School of Forestry and Wildlife
- 9:15 AM **Conservation Tillage, Double Cropping and Cover Crop Effects on Soil Properties, Water Use and Crop Growth in Subtropical South Texas.** Robert Wiedenfeld\*, Texas Agricultural Experiment Station

9:30 AM **Strip Tillage Systems for Peanut.** Kipling S. Balkcom\*, USDA-ARS and Francisco Arriaga, USDA-Agricultural Research Service

9:45 AM **Break**

## **Crops--Peanuts and Soybeans**

Wyndham Orlando Resort, Jasmine Room, First Floor

*Presiding: Ernest L. Clawson, LSU AgCenter, St. Joseph, LA*

10:10 AM **Introductory Remarks**

10:15 AM **Contribution of Temperature, Precipitation, and Solar Radiation from Dynamically Downscaled Global Climate Model Output to Predicting Peanut Yields and Phenology in the SE USA.** John G. Bellow\*<sup>1</sup>, Dong-Wook Shin<sup>1</sup>, Justin Schoof<sup>1</sup>, James Jones<sup>2</sup> and James J. O'Brien<sup>1</sup>, (1)Center for Ocean Atmospheric Prediction Studies, (2)University of Florida

10:30 AM **Poor Field Emergence of Late-Maturing Peanut Cultivars.** Barry R. Morton\*, Barry L. Tillman, Daniel W. Gorbet and Kenneth J. Boote, University of Florida

10:45 AM **Variability in Seed Size Among Peanut Genotypes in the University of Florida Peanut Breeding Program.** Barry Tillman\* and Daniel Gorbet, University of Florida

11:00 AM **Influence of Tillage and Nitrogen Application on Canola Following Soybean and Fallow.** Pawel Wiatrak\*, David L. Wright, James J. Marois and Tawainga W. Katsvairo, NFREC / Univ. of Florida

11:15 AM **Planting Dates for Maturity Group III and IV Soybeans in Narrow Rows.** Ernest L. Clawson\*<sup>1</sup>, Donald J. Boquet<sup>2</sup> and Alphonse B. Coco<sup>1</sup>, (1)LSU AgCenter, (2)LSU AgCenter Macon Ridge Research Station

11:30 AM **X-ray Based Soybean Root Visualization and Characterization.** Fred Allen\*<sup>1</sup>, Dan McDonald<sup>2</sup>, Richard Johnson<sup>1</sup> and Ronald Michaels<sup>2</sup>, (1)University of Tennessee, (2)Phenotype Screening Corporation

11:45 AM **Genetic Diversity of Large and Small Soybean Germplasm.** Bo Zhang and Pengyin Chen\*, Univ. of Arkansas

12:00 PM **Lunch**

## **Soils--IV**

Wyndham Orlando Resort, Jasmine Room, First Floor

*Presiding: M. W. Ebelhar, Mississippi State University*

1:25 PM **Introductory Remarks**

1:30 PM **Corn Yield in the Mississippi Delta as Influenced by Nitrogen and Potassium.** M. W. Ebelhar\* and D. R. Clark, Mississippi State University

1:45 PM **Influence of PGR Application Timing on Cotton Yield in the Mississippi Delta with Different N Management.** M. W. Ebelhar\*, S. P. Nichols and D. R. Clark, Mississippi State University

2:00 PM **Mehlich-3 Phosphorus and Potassium Correlation and Fertilizer Calibrations for Rice, Soybean, and Wheat in Arkansas - Preliminary Results.** Nathan Slaton\*, Russell DeLong, Richard Norman, Charles Wilson, Morteza Mozaffari and Leo Espinoza, University of Arkansas

**2:15 PM Effect of Salinity on Local Desert Trees in Oman. Humphrey Esechie\* and Ahmed Al-Saidi, Sultan Qaboos University**

2:30 PM **Southern Branch-ASA Business Meeting.** Presiding: Daren Redfearn, Oklahoma State University