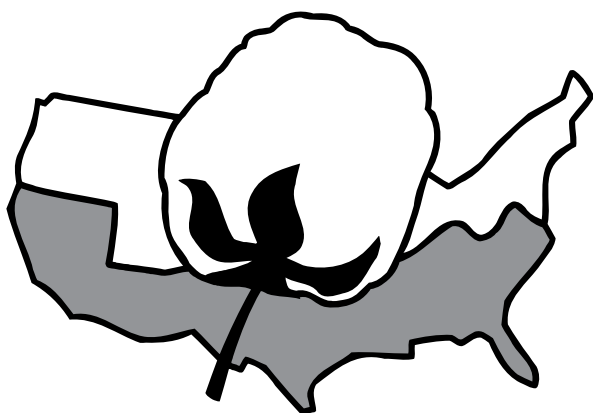


Beltwide Cotton Conferences



**January 3–5, 2024
Omni Fort Worth Hotel
Fort Worth, TX**

**National
Cotton
Council** 
OF AMERICA

Schedule of Events



FARM CREDIT

Thanks to Farm Credit, our Final Program Sponsor

Wednesday, January 3, 2024		
7:00a- 24 hrs.	Speaker Practice Room	Sundance 6
7:00a- 8:00a	Technical Chairpersons Breakfast	Fort Worth Ballroom 1-2
9:00a- 5:00p	Conference Registration	Texas Ballroom Prefunction
9:00a- 5:00p	Newsroom	Sundance 5
9:00a- 5:00p	Confex Presentation Uploading Room for Speakers	Fort Worth Ballroom 3
11:00a- 12:00p	Consultants Conference Luncheon	Fort Worth Ballroom 1-2
11:00a- 1:30p	NCGA Safety Specialist Forum (Members Only)	Texas Ballroom G/H
12:00p- 5:00p	Consultants Conference General Session	Fort Worth Ballroom 4-5
1:00p- 5:00p	Climate Smart Partner Meeting (Members Only)	Texas Ballroom C-D
1:30p- 3:15p	NCGA Safety and Labor Committee	Texas Ballroom A-B
3:00p- 3:30p	Coffee Break	Texas Ballroom Prefunction
3:30p- 5:00p	NCGA Technology Committee – Air Quality Subcommittee	Texas Ballroom A-B
6:00p- 7:00p	Welcome Reception for All Attendees	Texas Ballroom E-F

Wi-Fi

Address: Beltwide Wi-Fi

Password: beltwide2024



Special thanks to the **GEORGIA PEANUT COMMISSION** for providing the peanuts in the registration area.

<https://gapeanuts.com/>

Schedule of Events

Thursday, January 4, 2024

7:30a- 8:00a	Coffee Break	Texas Ballroom Prefunction
7:30a- 5:00p	Speaker Practice Room	Sundance 6
7:30a - 5:00p	Conference Registration	Texas Ballroom Prefunction
7:30a - 5:00p	Newsroom	Sundance 5
7:30a - 5:00p	Confex Presentation Uploading Room for Speakers	Fort Worth Ballroom 3
8:00a- 10:00p	Poster Board Session	Texas Ballroom Foyer Salons D-G
8:00a- 11:00a	NCGA Technology Committee	Texas Ballroom A-B
8:00a- 12:00p	Cotton Pest Committee and Boll Weevil Protection Fund, Inc. Meeting	Texas Ballroom G-H
8:00a- 12:00p	Consultants Conference General Session	Fort Worth Ballroom 5
8:00a- 12:00p	Cotton Weed Science Research Conference	Sundance 1
8:00a - 3:30p	Cotton Insect Research and Control Conference – Ph.D. Student Competition	Fort Worth Ballroom 1-2
8:00a - 5:00p	Cotton Agronomy, Physiology and Soils Conference – M.S & Ph.D. Student Competition	Stockyard 1
8:00a- 5:00p	Cotton Agronomy, Physiology and Soils Conference	Texas Ballroom E
8:00a- 5:30p	Cotton Insect Research and Control Conference – M.S. Student Competition	Fort Worth Ballroom 4
8:30a- 2:15p	Cotton Engineering-Systems Conference (Sponsored by John Deere)	Fort Worth Ballroom 8
8:30a- 3:00p	Cotton Sustainability Conference (Sponsored by John Deere)	Texas Ballroom I/J
10:00a- 10:30a	Coffee Break	Texas Ballroom Prefunction
10:30a- 12:00p	Cotton Economic Outlook Symposium	Texas Ballroom F
10:30a – 5:45p	Cotton Improvement Conference	Texas Ballroom C-D
11:00a- 12:00p	Cotton Insect Conf. Roundtable	Fort Worth Ballroom 4
11:30a- 1:00p	NCGA Executive Committee (Closed)	Angus Boardroom 15th fl.

Schedule of Events

Thursday, January 4, 2024 (cont.)		
1:00p- 5:00p	Cotton Disease Council	Texas Ballroom A/B
1:00p- 5:30p	Cotton Quality Measurements and Utilization Conference	Sundance 2
1:30p- 5:15p	Cotton Ginning Conference (Sponsored by TAMA)	Fort Worth Ballroom 6-7
1:30p- 5:00p	Cotton Economics and Marketing Conference	Texas Ballroom F
3:15p- 4:00p	Coffee Break in Poster Board Sessions (All Authors Present)	Texas Ballroom Foyer Salons D-G
5:00p- 7:00p	Cotton Disease Council Business Meeting	Texas Ballroom A-B
5:15p – 7:00p	Cotton Agronomy, Physiology and Soils Conference Business Meeting	Texas Ballroom E
5:30p – 6:30p	Cotton Industry Support Group Meeting	Fort Worth Ballroom 6-7
5:30p- 7:00p	Cotton Insect Research and Control Business Meeting and Mixer	Fort Worth Ballroom 4
6:00p- 7:00p	Journal of Cotton Science Editorial Board	Sundance 4
7:00p- 9:00p	Joint Cotton Breeding Committee	Sundance 3

Schedule of Events

Friday, January 5, 2024		
7:00a- 12:00p	Speaker Practice Room	Sundance 6
7:30a- 8:00a	Coffee Break	Texas Ballroom Prefunction
7:30a -11:00a	Conference Registration	Texas Ballroom Prefunction
7:30a -11:00a	Newsroom	Sundance 5
7:30a- 11:00a	Confex Presentation Uploading Room for Speakers (Closed – Presenters go to meeting rooms to upload.)	Fort Worth Ballroom 3
8:00a- 10:30a	Cotton Agronomy, Physiology and Soils Conference	Texas Ballroom E
8:00a- 10:45a	Cotton Insect Research and Control Conference. – Session B	Fort Worth Ballroom 1/2
8:00a- 11:00a	Cotton Improvement Conference	Texas Ballroom C-D
8:00a- 11:00a	Cotton Insect Research and Control Conference – Session A	Fort Worth Ballroom 4
8:00a- 11:15a	Joint Cotton Ginning and Cotton Engineering Conferences	Fort Worth Ballroom 6-7
8:00a- 11:30a	Cotton Disease Council	Texas Ballroom A-B
8:00a- 12:00p	Poster Board Session	Texas Ballroom Foyer Salons D-G
10:00a- 10:30a	Weed Science Conference Graduate Student Awards	Fort Worth Ballroom 5
10:00a- 10:30a	Coffee Break	Texas Ballroom Prefunction

CEU Information

BWCC attendees are encouraged to seek CEU credits from the appropriate agency based on an individual's level of participation in BWCC programs.

The CEU application process is now tailored to the CEU requirements of each certifying entity (state regulatory authority or association certifier). Until recently, the application process across entities was relatively uniform. However, application processes have diverged to the extent that it is no longer feasible for BWCC staff to provide blanket CEU application services. BWCC staff will submit the final BWCC program to those states and agencies listed below that may accept the BWCC Technical Conferences program for CEU evaluation. It is up to individuals to submit their application to their desired accreditation authority.

Accrediting Group or State
<p>Certified Crop Adviser (CCA) Program American Society of Agronomy (Soil Science Society of America), 5585 Guilford Road, Madison, WI 53711-5801 (National) Certification Representative--Certification Programs; Phone: 608-268-4953; Fax: 608-273-2081; Toll Free Number: 866-359-9161; Email: ledwardson@sciencesocieties.org</p>
<p>Alabama Department of Agriculture and Industries, Pesticide Management ~ Certification Unit; 1445 Federal Drive, Montgomery, AL 36107; Phone: 334-240-7240; Fax: 334-240-7168; Email: Barbara.gates@agi.alabama.gov</p>
<p>Arizona Department of Agriculture, Office of Pest Management; 1688 West Adams, Phoenix, AZ 85007; Phone: 602-255-3662; Email: rwalker@azda.gov</p>
<p>Arkansas Charles E. Denver, Denver Crop Consultants; P.O. Box 304, Watson, AR 71674; Phone: 870-866-2335; Fax: 870-644-3254; Email: cdagri@hotmail.com</p>
<p>California Department of Pesticide Regulation; P. O. Box 1379, Sacramento, CA 95812; Phone: 916-445-3914; Fax: 916-928-0705; Email: info4ce@cecpm.com</p>
<p>Georgia Department of Agriculture; 19 Martin Luther King, Jr. Dr., Room 410, Atlanta, GA 30334; Phone: 404-656-4960; Fax: 404-657-8378; Email: Adrean.Rhodes@agr.georgia.gov</p>
<p>Louisiana Department of Agriculture and Forestry, Office of Agricultural and Environmental Sciences; 5825 Florida Blvd. Ste. 3003, Baton Rouge, LA 70806-4259; Phone: 225-925-3763; Fax: 225-237-5725; Email: kevin_w@ldaf.state.la.us; Web: www.ldaf.state.la.us</p>
<p>Mississippi Department of Agriculture and Commerce, Bureau of Plant Industry, Pest Control Section; P.O. Box 5207, Mississippi State, MS 39762; Phone: 662-325-0522 or 662-325-7766; FAX: 662-325-0397; Email: russellk@mdac.ms.gov (or) AnnaA@mdac.ms.gov</p>
<p>New Mexico Department of Agriculture, Cert. and Training Specialist; 190 S. Espina, MSC 3AQ, Box 30005, Las Cruces, NM 88003-8005; Phone: 575-646-4837; FAX: 575-646-1540; Email: pesticides@nmda.nmsu.edu</p>
<p>North Carolina Pesticide Section, NCDA and CS; 1090 Mail Service Center, Raleigh, NC 27699-1090; Phone: 919-857-4133; FAX: 919-733-9796; Email: John.Feagans@ncagr.gov</p>

Oklahoma Pesticide Certification and Training Administrator, Agriculture, Food and Forestry, Consumer Protection Services;
2800 N. Lincoln Blvd., Oklahoma City, OK 73105;
Phone: 405-522-5993; Fax: 405-522-5986;
Email: ryan.williams@ag.ok.gov

South Carolina Special Programs Manager/Recertification Manager
Department of Pesticide Regulation
Division of Regulatory and Public Service Programs
511 Westinghouse Road, Pendleton, SC 29670;
Phone: 864-646-2150; Fax: 864-646-2179;
Email: thghslr@clemson.edu

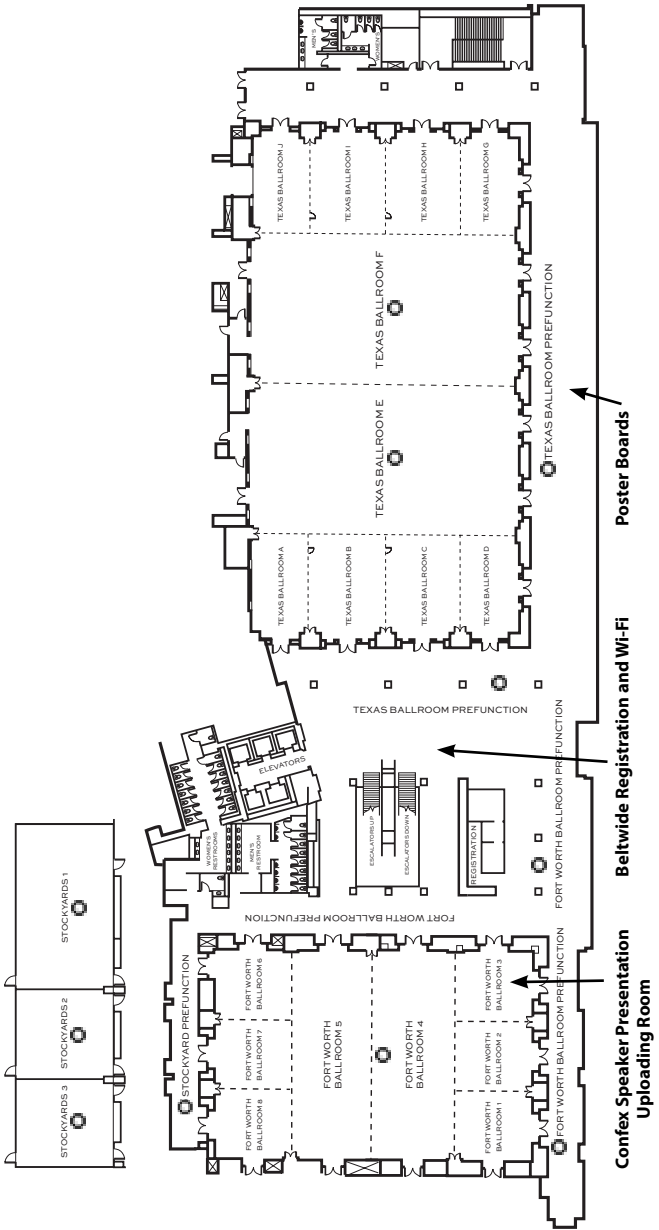
Tennessee Department of Agriculture, Ellington Ag. Center, Regulatory Services;
440 Hogan Road, Melrose Station, Nashville, TN 37204;
Phone: 615-837-5310; Fax: 615-837-5012;
Email: mary.borthick@tn.gov

Texas Department of Agriculture, Coordinator for Pesticide Certification and Compliance;
P.O. Box 12847, Austin, TX 78711;
Phone: 512-463-7692 or 800-835-5832; Fax: 888-216-9865;
(CEU inquiries) Email: recertcourses@texasagriculture.gov

Fort Worth Omni Hotel

Meeting Room Floor Plans

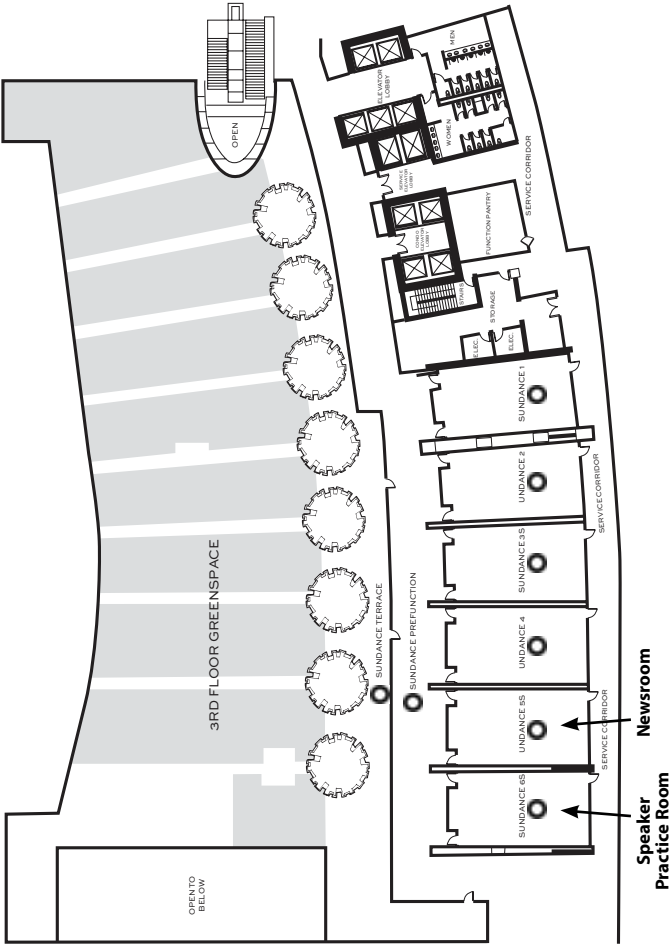
2nd Floor Stockyard Rooms, Fort Worth and Texas Ballrooms



Fort Worth Omni Hotel

Meeting Room Floor Plans

3rd Floor Sundance Rooms



Wednesday, January 3, 2024

Cotton Consultants Conference

**CONSULTANTS CONFERENCE GENERAL SESSION
WEDNESDAY AFTERNOON**

Fort Worth Ballroom 4-5 - 12:00 PM-5:00 PM

12:00 PM Welcoming Remarks

Hank Jones, RHJ Ag Services, Winnsboro, LA

12:05 PM Message from Sponsors – Bayer

Jennifer Crumpler, Bayer, Fayetteville, NC

12:10 PM Message from Sponsors - BASF

Steve Nichols, BASF, Brandon, MS

12:15 PM Message from Sponsors - Corteva/Phytogen

Joel Faircloth, Phytogen, Clemmons, NC

12:20 PM Message from Sponsors - FMC

Eric Castner, FMC, Pauls Valley, OK

12:25 PM Message from Sponsors - Syngenta

Tony Driver, Syngenta, Crawford, TX

12:30 PM Cotton Varieties and Management Strategies

12:45 PM Cotton Varieties and Management Strategies - BASF

Kenny Melton, BASF, Lubbock, TX

1:00 PM Cotton Varieties and Management Strategies - Delta Pine

Eric Best, Bayer, Lubbock, TX

1:15 PM Cotton Varieties and Management Strategies - Phytogen

Joel Faircloth, Phytogen, Clemmons, NC

1:30 PM Cotton Varieties and Management Strategies - Americot

Dr. Robert Lemon, Americot, Caldwell, TX

1:45 PM Cotton Varieties and Management Strategies - Gowan

Joe Johnson, Gowan Seed, Lubbock, TX

2:00 PM Integrating Data Management for Better Decisions

Ryan Moore, M&M Ag Consulting, LLC, Little Rock, AR

2:15 PM See and Spray Technology Panel

Tim Deinert, John Deere, Olathe, KS

Travis Senter, Senter Farms, Keiser, Arkansas

3:00 PM In Memory of Dr. Don Parker

3:15 PM Coffee Break

3:30 PM New Products from Industry - BASF

Dan Westberg, BASF, Cary, NC

3:50 PM New Products from Industry - Syngenta

Trevor Newkirk, Syngenta, West Monroe, LA

4:10 PM New Products from Industry - FMC

Drake Copeland, FMC, Louisville, KY

4:30 PM ThryvOn Year Two Panel

Dr. Whitney Crow, Mississippi State University, Mississippi State, MS

Ben Thrash, University of Arkansas, Fayetteville AR

Eddie Lomax, Lomax Ag Consulting, Rives, MO

Hank Jones, RHJ Ag Services, Winnsboro, LA

Tyler Hydrik, Ag Assistants, LLC, Jonesboro, AR

Tucker Miller, Miller Entomological Service Inc., Drew, MS

Thursday, January 4, 2024

Cotton Agronomy, Physiology and Soil Conference

COTTON AGRONOMY, PHYSIOLOGY AND SOIL
THURSDAY EARLY MORNING

Texas Ballroom E - 8:00 AM-10:00 AM

8:00 AM Assessing Soil Health Potential in the U.S. Cotton Belt

Bright Ofori, Nate Looker, Dianna Bagnall and Cristine Morgan, Soil Health Institute, Morrisville, NC

8:15 AM Cotton Response to Topdress N Fertilizer in Years 1 and 2 in Rotation with Peanut in Commercial Fields with Heterogeneous Soils in Northeast Arkansas

Ray Benson¹, John Nowlin¹, Jennifer Hinojosa², Tina Teague², (1)Arkansas State University, State University, AR, (2)Arkansas State University / University of Arkansas System Division of Agriculture, Jonesboro, AR

8:30 AM Multi-State Biological Project: Evaluation of Tissue Nutrient Concentration Data

Brian Arnall¹, William Frame², Keith Edmisten³, Michael Jones⁴, Tom Ducey⁵, Lavesta Hand⁶, Brian Pieralisi⁷, Tyler Soignier⁷, Tyson Raper⁸, Bradley Wilson⁹, Trenton Roberts¹⁰, Benjamin McKnight¹¹, Katie Lewis¹², Randy Norton¹³, Gaylon Morgan¹⁴, (1)Oklahoma State University, Stillwater, OK, (2) Virginia Tech, Blacksburg, VA, (3)North Carolina State University, Raleigh, NC, (4)Clemson University, Florence, SC, (5)USDA - ARS, Florence, SC, (6) University of Georgia, Tifton, GA, (7)Mississippi State, Starkville, MS, (8) University of Tennessee, Jackson, TN, (9)University of Missouri, Portageville, MO, (10)University of Arkansas, Fayetteville, AR, (11)Texas A&M University, College Station, TX, (12)Texas A&M AgriLife Research and Extension Center, Lubbock, TX, (13)University of Arizona, Safford, AZ, (14)Cotton Incorporated, Cary, NC

8:45 AM Impact of Using Microbial Products to Increase Nitrogen Use Efficiency in Cotton Grown Across the U.S. Cotton Belt

Brian Pieralisi, Mississippi State University, Mississippi State, MS

9:00 AM Characterizing Soil Nitrogen Supply to Optimize Nitrogen Fertilizer Rate in Cotton

Alan Franzluebbbers¹, Bhupinder Farmaha², Srinivasulu Ale³, Brian Arnall⁴, Kipling Balkcom⁵, William Frame⁶, James Heiser⁷, Julie Howe⁸, Katie Lewis⁹, Murilo Maeda⁹, Benjamin McKnight¹⁰, Calvin Meeks⁷, Brian Pieralisi¹¹, Tyson Raper¹², Trenton Roberts¹³, Dorivar Diaz¹⁴, Henry Sintim¹⁵, Bradley Wilson⁴, Gaylon Morgan¹⁶, (1)USDA - ARS, Raleigh, NC, (2)Clemson University, Edisto Research and Education Center, Blackville, SC, (3)Texas A&M Agrilife Research and Extension Center at Vernon, Vernon, TX, (4) Oklahoma State University, Stillwater, OK, (5)USDA - ARS, Auburn, AL, (6) Virginia Tech, Suffolk, VA, (7)University of Missouri, Portageville, MO, (8) Texas A&M University, College Station, TX, (9)Texas A&M Agrilife Research and Extension Center at Lubbock, Lubbock, TX, (10)Texas A&M AgriLife Extension, College Station, TX, (11)Mississippi State, Mississippi State, MS, (12)University of Tennessee, West TN Research and Education Center, Jackson, TN, (13)University of Arkansas, Fayetteville, AR, (14)Kansas State University, Manhattan, KS, (15)University of Georgia, Tifton, GA, (16)Cotton Incorporated, Cary, NC

9:15 AM Will Soil Biochemical Data Improve Cotton Yield Prediction to Nitrogen Fertilization for the Cotton Belt?

Bhupinder Farmaha¹, Alan Franzluebbbers², Shikha Dubey¹, Gaylon Morgan³, Brian Arnall⁴, Kipling Balkcom⁵, William Frame⁶, Julie Howe⁷, Katie Lewis⁸, Benjamin McKnight⁹, Brian Pieralisi¹⁰, Trenton Roberts¹¹,

Dorivar Diaz¹², Henry Sintim¹³, John Snider¹³, Bradley Wilson¹⁴, (1)Clemson University, Blackville, SC, (2)USDA-ARS, Raleigh, NC, (3)Cotton Incorporated, Cary, NC, (4)Department of Plant and Soil Sciences, Stillwater, OK, (5)USDA - ARS, Auburn, AL, (6)Tidewater Agricultural Research and Extension Center (TAREC), Suffolk, VA, (7)Texas A&M University,, College Station, TX, (8)Texas A&M University, Lubbock, TX, (9)Texas A&M University, College Station, TX, (10)Mississippi State University, Mississippi State, MS, (11)University of Arkansas, Fayetteville, AR, (12)Kansas State University, Manhattan, KS, (13) University of Georgia, Tifton, GA, (14)University of Missouri, Portageville, MO

9:30 AM Cotton Response to Soil Applied Liquid Phosphorus and Potassium Fertilizers

Md Rasel Parvej, Louisiana State University AgCenter, Winnsboro, LA

9:45 AM Updating the Boron Recommendations for Virginia Cotton
William Frame, Virginia Tech, Suffolk, VA

**COTTON AGRONOMY, PHYSIOLOGY AND SOILS CONFERENCE
THURSDAY EARLY MORNING - MS STUDENT COMPETITION**

Stockyard 1 - 8:00 AM-10:00 AM

8:00 AM Evaluating Skip-Row Patterns and the Ultra-Wide-Row (60 and 72 inch) Systems in NC Cotton

Michael Phillips¹, Guy Collins², Keith Edmisten¹, Jeremy Hendricks¹, Evan Sayani¹, (1)NC State University , Raleigh, NC, (2)NC State University, Rocky Mount, NC

8:15 AM Investigation of Cool Germination Parameters to Improve Predictability of Field Performance

Jacob Forehand, Charles Cahoon, Guy Collins, Keith Edmisten, Lori Unruh Snyder, Zachary Taylor, Brock Dean, Jose de Sanctis¹, Hunter Lee and Michael Phillips, North Carolina State University, Raleigh, NC

8:30 AM Potential of Zone-Based Soil Sampling Strategies for Site-Specific Nutrient Management in Cotton

John Beasley¹, Matthew Tucker², Simerjeet Virk¹, Glendon Harris¹, Matthew Levi³, Jason Lessl³, (1)University of Georgia Tifton Campus, Tifton, GA, (2) Lasseter Tractor Co., Inc., Moultrie, GA, (3)University of Georgia, Athens, GA

8:45 AM Effect of Cultivar Differences in Seed Size on Early Season Growth and Physiology of Cotton Under Low and High-Temperature Extremes

Comfort Adegbenro¹, John Snider¹, Ved Parkash¹, Viktor Tishchenko², Ingrid Almeida³, (1)University of Georgia Tifton Campus, Tifton, GA, (2)University of Georgia Griffin Campus, Griffin, GA, (3)Júlio de Mesquita Filho São Paulo State University, Botucatu, São Paulo

9:00 AM Assessing Water Use Differences in Cotton Crop Densities

Miller Hayes, Wesley Porter, Luke Fuhrer, Lavesta Hand, John Snider and George Vellidis, University of Georgia Tifton Campus, Tifton, GA

9:15 AM Potential of UAV Imagery to Estimate Cotton Harvest-Aids Efficacy for Different Application Methods and Carrier Volumes

Ashbin Bhat¹, Coleman Byers², Simerjeet Virk¹, John Snider¹, Lavesta Hand¹, (1)The University of Georgia College of Agricultural and Environmental Sciences, Athens, GA, (2)The University of Georgia College of Engineering, Athens, GA

9:30 AM Impact of Planting Pattern and Planting Population on Cotton Development, Fruit Distribution, Yield, and Fiber Quality

William Rutland, Brian Perialisi, Darrin Dodds, Whitney Crow and Dave Spencer, Mississippi State University, Mississippi State, MS

9:45 AM Efficacy of Banded Potassium Applications and Reduced Rates in a Cotton Production System

Bryce Bullock, Brian Pieralisi, Darrin Dodds and Tessie Wilkerson, Mississippi State University, Mississippi State, MS

**COTTON AGRONOMY, PHYSIOLOGY AND SOILS
THURSDAY LATE MORNING**

Texas Ballroom E - 10:30 AM-12:00 PM

10:30 AM Effects of Short-Term Nighttime Heat Waves on CO₂ Response and Water Use Efficiency in Cotton

Daryl Chastain, USDA ARS SWMRU, Leland, MS

10:45 AM Genotypic Variation in Growth, Single Leaf Physiology, and Acclimation Potential of Thylakoid Processes in Cotton Exposed to High Temperature Extremes

Navneet Kaur¹, **John Snider**¹, Ved Parkash¹, Andrew Paterson², Timothy Grey¹, Viktor Tishchenko³, (1)University of Georgia, Tifton, GA, (2)University of Georgia, Athens, GA, (3)University of Georgia, Griffin, GA

11:00 AM Evaluating Crop-Growth-Stage-Based Variable Deficit Irrigation Strategies for Enhancing Crop Water Productivity of Cotton

Srinivasulu Ale¹, Sushil Himanshu², Sayantan Samanta¹, Bhupinder Singh¹, (1)Texas A&M AgriLife Research, Vernon, TX, (2)Asian Institute of Technology, Klong Luang, Pathum Thani

11:15 AM Impact of Elevated Concentration of Atmospheric Ozone on Cotton Physiology and Agronomical Parameters

Giovani Rossi¹, Courtney Leisner², (1)Auburn University, Auburn, AL, (2) Virginia Polytechnic Institute and State University, Blacksburg, VA

11:30 AM Utilizing Crop Physiological Data to Parameterize and Validate a Simple Plant-Based Crop Water Use Model for Cotton

Gurpreet Virk, John Snider, Lavesta Hand, George Vellidis, Wesley Porter and Yangxuan Liu, University of Georgia, Tifton, GA

11:45 AM Seasonal Variations in Carbon Balances and Water Use Efficiencies under Cotton (*Gossypium hirsutum* L.) in the Mississippi Delta

Saseendran Anapalli and Krishna Reddy, USDA, Stoneville, MS

**COTTON AGRONOMY, PHYSIOLOGY AND SOILS CONFERENCE
THURSDAY LATE MORNING - MS STUDENT COMPETITION**

Stockyard 1 - 10:30 AM-12:00 PM

10:30 AM Impact of Defoliation and Loss of Apical Dominance on Cotton Growth, Development, and Yield

Luke Noah, Brian Pieralisi and Darrin Dodds, Mississippi State University, Mississippi State, MS

10:45 AM Simulated Effects of Winter Rye Termination Date on Cotton Production Systems in the Southern High Plains

Hardev Singh¹, Sayantan Samanta¹, Rene Francis Simbi Mvuyekure¹, Srinivasulu Ale¹, Katie Lewis², Joseph Burke², Christopher Cobos², Rabi Mohtar³, (1)Texas A&M AgriLife Research, Vernon, TX, (2)Texas A&M AgriLife Research, Lubbock, TX, (3)Department of Biological and Agricultural Engineering, College Station, TX

11:00 AM Does Injury from Preemergent Herbicides Alter Management Strategies for Thryvon Cotton?

Meredith McGlamory¹, Sarah Hobby¹, Lavesta Hand¹, Phillip Roberts¹, Steve Brown², Scott Graham², (1)University of Georgia, Tifton, GA, (2)Auburn University, Auburn, AL

11:15 AM Atmospheric Cold Plasma Treatment of Seeds with Visual Mechanical Damage

Vaishnavi Edara, Cara London, Shikhadri Mahanta and Janie Moore, Texas A&M University, College Station, TX

11:30 AM Use of Protein Hydrolysate Biostimulant on Cotton Seedling Performance and Seed Oil Content

Matthew Starr¹, Marisa Crisp¹, Lori Unruh Snyder¹, Rosalyn Shim², Bandana Otsi², (1)NC State, Raleigh, NC, (2)Texas Tech University, Lubbock, TX

**COTTON AGRONOMY, PHYSIOLOGY AND SOILS
THURSDAY EARLY AFTERNOON**

Texas Ballroom E - 1:00 PM-3:00 PM

1:00 PM Cotton Production in Thermally Limited Regions of the Southern Great Plains: Kansas Research

Jonathan Aguilar^{1,2}, Farzam Moghbel², Aleksey Sheshukov², Bill Golden², (1) K-State SWREC, Garden City, KS, (2)Kansas State University, Manhattan, KS

1:15 PM Cotton Production in Thermally Limited Regions of the Southern Great Plains: Texas Research

Jourdan Bell¹, Thomas Marek², Craig Bednarz², Gary Marek³, Bridget Guerrero⁴, Dana Porter⁵, Roland Louis Baumhardt³, Jane Dever⁵, (1)Texas A&M AgriLife Extension, Amarillo, TX, (2)Texas A&M AgriLife Research, Amarillo, TX, (3)USDA-ARS Conservation and Production Research Laboratory, Bushland, TX, (4)West Texas A&M University, Canyon, TX, (5) Texas A&M AgriLife Research, Lubbock, TX

1:30 PM Evaluating Climate Change Adaptation Strategies for Cotton Production in the Texas High Plains

Bhupinder Singh¹, Sayantan Samanta¹, Srinivasulu Ale¹, Ed Barnes², (1) Texas A&M AgriLife Research, Vernon, TX, (2)Cotton Incorporated, Cary, NC

1:45 PM Carbon Stocks of Texas Cotton Farms

Joseph Burke¹, Katie Lewis¹, Paul DeLaune², Jamie Foster³, Jourdan Bell⁴, (1) Texas A&M AgriLife Research and Extension Center at Lubbock, Lubbock, TX, (2)Texas A&M AgriLife Research and Extension Center at Vernon, Vernon, TX, (3)Texas A&M AgriLife Research and Extension Center at Corpus Christi, Corpus Christi, TX, (4)Texas A&M AgriLife Research and Extension Center in Amarillo, Amarillo, TX

2:00 PM Carbon Allocation Strategies and Priorities of Cotton under Water-Limited Conditions

Irish Lorraine Pabuayon and Glen Ritchie, Texas Tech University, Lubbock, TX

2:15 PM Cotton Reproductive Structure Losses During the Low Desert Growing Season - Peaks and Related Causes

Michael Rethwisch, University of California Cooperative Extension - Riverside County, Blythe, CA

2:30 PM Improving USA and Australian Cotton Production Systems Through Exchange in Knowledge

Craig Bednarz¹, Duke Pauli², Gaylon Morgan³, Evy Jaconis³, Mike Bange⁴, (1)West Texas A&M University, Canyon, TX, (2)University of Arizona, Tucson, AZ, (3)Cotton Incorporated, Cary, NC, (4)Cotton Seed Distributors, Wee Waa, NSW

2:45 PM Evaluation of Regenerative Agricultural Practices in Peanut/Cotton Rotations

Paul DeLaune¹, Katie Lewis², Nicholas Boogades², Emi Kimura³, (1)Texas A&M AgriLife Research, Vernon, TX, (2)Texas A&M AgriLife Research, Lubbock, TX, (3)Texas A&M AgriLife Extension Service, Vernon, TX

**COTTON AGRONOMY, PHYSIOLOGY AND SOILS CONFERENCE
THURSDAY EARLY AFTERNOON - PHD STUDENT COMPETITION**

Stockyard 1 - 1:00 PM-3:15 PM

1:00 PM Evaluation of Phenotypic Variability in U.S. Upland Cotton Core Set for Root Traits and Water Use Efficiency

Om Prakash Ghimire¹, W. Walker Spivey¹, Vasu Kuruparth², B Todd Campbell³, Michael Jones¹, Joe Thomas⁴, William Bridges⁵, Sruthi Narayanan¹, (1)Department of Plant and Environmental Sciences, Clemson University, Clemson, SC, (2)Department of Crop and Soil Sciences, North Carolina State University, Raleigh, NC, (3)US Agricultural Research Services, Florence, SC, (4)USDA-ARS Cotton Ginning Research Unit, Stoneville, MS, (5)School of Mathematics and Statistical Sciences, Clemson University, Clemson, SC

1:15 PM Cotton Growth, Development, and Yield When Utilizing ThryvOn Technology under High Thrips Pressure

Joshua Lee, John Snider, Phillip Roberts, Lavesta Hand, Sarah Hobby and Ved Parkash, University of Georgia Tifton Campus, Tifton, GA

1:30 PM Assessing the Effects of Different Soil Management Practices on Cotton Yield and Global Warming Potential in East-Central Texas

Noriki Miyanaka¹, Nithya Rajan¹, Kenneth Casey², Steven Pires³, Sk Musfiq Us Salehin¹, Peter Tomlinson⁴, Julie Howe¹, Jaehak Jeong⁵, (1)Department of Soil and Crop Sciences, Texas A&M University, College Station, TX, (2)Department of Biological and Agricultural Engineering, Texas A&M University, Amarillo, TX, (3)Cotton Incorporated, Cary, NC, (4)Department of Agronomy, Kansas State University, Manhattan, KS, (5)Department of Biological & Agricultural Engineering, Texas A&M University, Temple, TX

1:45 PM Development of Recommended Organic Crop Rotation with Cover Crops in the Semi-Arid Texas High Plains

Lauren Selph¹, Katie Lewis², Paul DeLaune³, (1)Texas Tech University, Lubbock, TX, (2)Texas A&M AgriLife Research, Lubbock, TX, (3)Texas A&M AgriLife Research and Extension Center, Vernon, TX

2:00 PM Soil Water Dynamics in Semi-Arid Cotton Conservation Systems

Christopher Cobos, Paul DeLaune, Joseph Burke and Katie Lewis, Texas A&M AgriLife Research, Lubbock, TX

2:15 PM Assessing Extrafloral Nectar Production in Cotton by Variety and Environment

Jhansy Reddy Katta¹, John Snider¹, Scott Carlson², Gurpreet Virk¹, Ved Parkash¹, Navneet Kaur¹, Devendra Chalise¹, Akanksha Sehgal³, Gurpreet Kaur³, Gurbir Singh³, Esmaeil Amiri³, Daryl Chastain⁴, Haydee E Laza⁵, Wenxuan Guo⁵, Guy Collins⁶, (1)University of Georgia, Tifton, GA, (2) University of Georgia Cooperative Extension, Sylvester, GA, (3)Mississippi State University, Stoneville, MS, (4)USDA-National Center for Alluvial Aquifer Research, Leland, MS, (5)Texas Tech University, Lubbock, TX, (6)North Carolina State University, Rocky Mount, NC

2:30 PM How Management Practices in One Season Affect Stand Establishment, Canopy Development, and Yield in the Following Season

Emmanuella Bredu¹, John Snider¹, Cristiane Pilon¹, Lavesta Hand¹, Phillip Roberts¹, Ved Parkash¹, Joshua Lee¹, Gurpreet Virk¹, Guy Collins², (1) University of Georgia Tifton Campus, Tifton, GA, (2)North Carolina State University, Rocky Mount, NC

2:45 PM Transpirational Cooling of Cotton Cultivars Increased Yield and Crop Physiological Responses

Chiranjibi Poudyal¹, Nithya Rajan¹, Curtis Adams², Mahendra Bhandari³, Robert Hardin¹, (1)Texas A&M University, College Station, TX, (2)USDA-ARS, Pendleton, OR, (3)Texas A&M University, Corpus Christi, TX

3:00 PM Cover Crops Improve Soil Moisture and Infiltration

Carson Roberts¹, Drew Gholson¹, Martin Locke², Dave Spencer³, Brian Peralisi³, Whitney Crow³, Nicolas Quintana-Ashwell¹, (1)Mississippi State University, Stoneville, MS, (2)USDA-ARS National Sedimentation Laboratory, Oxford, MS, (3)Mississippi State University, Starkville, MS

**COTTON AGRONOMY, PHYSIOLOGY AND SOILS
THURSDAY LATE AFTERNOON**

Texas Ballroom E - 4:00 PM-5:00 PM

4:00 PM Cotton Yield Estimation using High-Resolution Satellite Imagery Obtained from Planet SkySat

Mahendra Bhandari¹, Lei Zhao¹, Benjamin Ghansah², Pankaj Pal¹, Jose Landivar¹, Juan Landivar¹, (1)Texas A&M AgriLife Research, Corpus Christi, TX, (2)Texas A&M University Corpus Christi, Corpus Christi, TX

4:15 PM Relating Irrigation Management, Soil Properties, and Atmospheric Conditions to In-Season Cotton Canopy Temperature from sUAS

Sebastian Calleja¹, Jeffrey Demieville¹, Kelly Thorp², Duke Pauli¹, (1)The University of Arizona, Tucson, AZ, (2)USDA REE-ARS, Temple, TX

4:30 PM Management Implications on Cotton Fiber Quality: A Meta-Analysis on the Effects of Fertilization, Irrigation, Plant-Growth Regulator, and Pest Control

Leonardo M. Bastos¹, Wesley Porter², Gonzalo Scarpin¹, (1)University of Georgia, Athens, GA, (2)University of Georgia, Tifton, GA

4:45 PM Monitoring Plant Biomass and Lint Yield in Cotton Crops Using UAS and Digital Twin Models

Juan Landivar¹, Pankaj Pal¹, Landivar-Scott Jose¹, Mahendra Bhandari¹, Luis Ribera², Murilo Maeda³, (1)Texas A&M AgriLife Research Corpus Christi, Corpus Christi, TX, (2)Texas A&M AgriLife Extension, College Station, TX, (3) BASF Corporation, São Paulo, Brazil

**COTTON AGRONOMY, PHYSIOLOGY AND SOILS CONFERENCE
THURSDAY LATE AFTERNOON
PHD STUDENT COMPETITION**

Stockyard 1 - 4:00 PM-5:00 PM

4:00 PM Dynamic Estimation of Cotton N Content using Multisource Remote Sensing and Integration of Deep Learning

Rupak Karn, Katie Lewis, Glen Ritchie, Oluwatola Adedeji, Bishnu Ghimire and Wenxuan Guo, Texas Tech University, Lubbock, TX

4:15 PM Assessing the Impact of Climate Change on Cotton Yield: Spatiotemporal Variations in Texas High Plains

Bishnu Ghimire, Wenxuan Guo, Oluwatola Adedeji, Rupak Karn and Glen Ritchie, Texas Tech University, Lubbock, TX

4:30 PM Comparison of Heat Stress Tolerance of Photosynthesis and Its Component Processes in Two Cotton Species

Ved Parkash, John Snider and Viktor Tishchenko, University of Georgia, Tifton, GA

4:45 PM Carbon Dioxide Emissions from Regenerative Cotton Systems in the Semi-Arid Texas Plains

Nicholas Boogades^{1,2}, Christopher Cobos^{2,3}, Joseph Burke², Paul DeLaune⁴, Wayne Keeling², Katie Lewis², (1)Texas Tech University, Lubbock, TX, (2)Texas A&M Agrilife Research and Extension Center at Lubbock, Lubbock, TX, (3) Texas A&M University, College Station, TX, (4)Texas A&M Agrilife Research and Extension Center at Vernon, Vernon, TX

Thursday, January 4, 2024

COTTON AGRONOMY AND PHYSIOLOGY BUSINESS MEETING

Texas Ballroom E - 5:15 PM-7:00 PM

Cotton Consultants Conference

**CONSULTANTS CONFERENCE GENERAL SESSION
THURSDAY MORNING**

Fort Worth Ballroom 5 - 8:00 AM-12:00 PM

8:00 AM Regulatory Update

Bernalyn McGaughey, Compliance Services International, Lakewood, WA

8:30 AM Regulatory Update

Kimberly Nesci, Office of Pest Management Policy, Washington, DC

9:00 AM Biological Additives to Fertilizers

Dr. Brian Arnall, Oklahoma State University, Stillwater, OK

Hank Jones, RHJ Ag Services, Winnsboro, LA

9:30 AM Advancing Seed Technology

Joe Denman, Aginnovation, Starkville, MS

10:00 AM Coffee Break

10:30 AM Ag Aviation Challenges – National Ag Aviation

Andrew Moore, National Agricultural Aviation Association, New Alexandria, VA

10:45 AM Return on Investments with Regard to Crop Inputs

Dr. John Robinson, Texas A&M University, College Station, TX

11:00 AM Loss of Farmland to Solar Farms and Other Alternative Uses

Dr. John Robinson, Texas A&M University, College Station, TX

11:15 AM Southern Crop Production Association

John Campbell, Southern Crop Production Association, Wetumpka, AL

11:30 AM Nematodes

Dr. Tristan Watson, Louisiana State University, Baton Rouge, LA

Cotton Disease Council

**COTTON DISEASE COUNCIL
STUDENT PAPER COMPETITION**

Texas Ballroom A-B - 1:00 PM-3:00 PM

1:00 PM Localization of the Proteins of Soybean Vein Necrosis Virus in Plant Cells; an Abundant Orthotospovirus

Abdelaal Shehata and Kathleen Martin, Auburn University, Auburn, AL

1:15 PM Evaluating the Impact of Cultivar Selection and Fungicide Applications on Management of Areolate Mildew and Target Spot on Cotton in Alabama

Karamjit Kaur Baryah, Katherine Burch, Amanda Strayer-Scherer and Hunter Mote, Auburn University, Auburn, AL

1:30 PM Impact of Row Spacing on Areolate Mildew Occurrence
Elias Zuchelli, Tyson Raper and Heather Kelly, West TN AgResearch and Education Center, Jackson, TN

1:45 PM Effects of Fungicide Application in Differing Water Available Environments on Soybean
Jackson Adcock, Heather Kelly and Avat Shekoofa, University of Tennessee, Jackson, TN

2:00 PM Assessing Fungicide Sensitivity in Several Texas Phymatotrichopsis omnivora Isolates
Maxwell Sturdivant and Thomas Isakeit, Texas A&M University, College Station, TX

2:15 PM Survey of Fusarium oxysporum f. sp. vasinfectum in Texas
Jennifer Chagoya¹, Cecilia Monclova-Santana², Thomas Isakeit³, Jane Dever¹, Terry Wheeler¹, (1)Texas A&M AgriLife Research, Lubbock, TX, (2)Texas A&M AgriLife Extension, Lubbock, TX, (3)Department of Plant Pathology and Microbiology, Texas A&M University, College Station, TX

2:30 PM Soil Faunal Communities Are Impacted by Soybean and Cover Crop Management Decisions
Shelly Pate¹, Heather Kelly², Lesley Schumacher³, (1)University of Tennessee, Knoxville, TN, (2)West TN AgResearch and Education Center, Jackson, TN, (3)USDA Crop Genetics and Breeding Unit, Tifton, GA

2:45 PM Examining the Biological and Genetic Similarity of Reniform Nematode Isolates Across the US Cotton Belt
Sagar GC¹, Churamani Khanal¹, Christopher Saski¹, John Mueller², Christopher McMahan¹, (1)Clemson University, Clemson, SC, (2)Clemson University, Blackville, SC

**COTTON DISEASE COUNCIL
THURSDAY LATE AFTERNOON**

Texas Ballroom A-B - 4:00 PM-5:00 PM

4:00 PM Caulimovirid-Like Sequences in Upland Cotton (Gossypium hirsutum L.) and Related Species
Nina Aboughanem-Sabanadzovic¹, Thomas Allen¹, James Frelichowski², Jodi Scheffler³, **Sead Sabanadzovic**¹, (1)Mississippi State University, Mississippi State, MS, (2)USDA-ARS Plains Area, College Station, TX, (3)USDA-ARS Mid-South Area, Stoneville, MS

4:15 PM Tobacco Ringspot Virus: A New Virus Infecting Cotton in Oklahoma
Akhtar Ali and Connor Ferguson, The University of Tulsa, Tulsa, OK

4:30 PM Identification of Mycoviruses to Control Fusarium Wilt of Cotton in the Southwestern United States
Akhtar Ali, and Samira Mokhtari, The University of Tulsa, Tulsa, OK

4:45 PM Exploring the Virus Populations Associated with a New Disease in Upland Cotton Presenting Unexplained Terminal Abortion and Splitting
Alejandro Olmedo-Velarde, Cornell University, Ithaca, NY

COTTON DISEASE COUNCIL BUSINESS MEETING

Texas Ballroom A-B - 5:00 PM-7:00 PM

Thursday, January 4, 2024

Cotton Economics and Marketing Conference

COTTON ECONOMIC OUTLOOK SYMPOSIUM

Texas Ballroom F - 10:30 AM-12:00 PM

10:30 AM Cotton Marketer of the Year Award

Dr. O. A. Cleveland, Mississippi State University, Starkville, MS

10:40 AM Cotton Market Outlook 2024

Steven Schlegel, R.J. O'Brien, Chicago, IL

11:00 AM World Cotton Outlook 2024

Jarral Neeper, Trucott, Bakersfield, CA

Dr. O. A. Cleveland, Mississippi State University, Starkville, MS

11:20 AM Cotton Policy Update

Dr. Bart Fischer, Texas A&M University, Agricultural and Food Policy Center, College Station, TX

Dr. Joe Outlaw, Texas A&M University, Agricultural and Food Policy Center, College Station, TX

11:40 AM U.S. Cotton Export Market and Logistics

COTTON ECONOMICS AND MARKETING THURSDAY EARLY AFTERNOON

Texas Ballroom F - 1:30 PM-3:00 PM

1:30 PM An Analysis of On-Call Cotton Sales and Cotton Prices

Judson Griffin and Jon Devine, Cotton Incorporated, Cary, NC

1:45 PM Estimating Cotton End-Use

Jon Devine, Cotton Incorporated, Cary, NC

2:00 PM Export Competitiveness of U.S. Cotton and Its Determinants: A Novel Dynamic ARDL Approach

Tanmoy Kumar Ghose and Darren Hudson, Texas Tech University, Lubbock, TX

2:15 PM Cotton and Textile Industries in Egypt: Constraint and Opportunity

Mohamed Negm and Suzan Sanad, Cotton Research Institute, Giza

2:30 PM Chinese Consumers Demand for Cotton Textile and Apparel Products

Rachel Wade¹, Darren Hudson¹, Jon Devine², (1)Texas Tech University, Lubbock, TX, (2)Cotton Incorporated, Cary, NC

2:45 PM Heat Stress Impact on Cotton Yield Across the United States

Oluwaseun Samuel Oduniyi¹, Donna McCallister^{1,2}, Bastos Leonardo³, Jagadish Krishna¹, Impa Somayanda¹, (1)Texas Tech University, Lubbock, TX, (2)Texas A&M AgriLife Research, Lubbock, TX, (3)University of Georgia, Athens, GA

COTTON ECONOMICS AND MARKETING POSTERS

Texas Ballroom F - 1:30 PM-5:00 PM

1. Cotton Research Verification Sustainability Program Update: 2022 Economic Report

Joe McAlee, Bill Robertson, Breana Watkins and Colton Henderson, University of Arkansas Cooperative Extension Service, Newport, AR

2. Economics of Conservation Practices in the Texas High Plains

Will Keeling¹, Andrew Wright¹, Donna McCallister^{1,2}, Bridget Guerrero³, Katie Lewis¹, Joseph Burke¹, (1)Texas A&M AgriLife Research and Extension Center at Lubbock, Lubbock, TX, (2)Texas Tech University, Lubbock, TX, (3) West Texas A&M University, Canyon, TX

**COTTON ECONOMICS AND MARKETING
THURSDAY LATE AFTERNOON**

Texas Ballroom F - 4:00 PM-5:00 PM

4:00 PM Economics of Soil Health Management Systems on Eight Cotton Farms in Georgia

Emily Ball, Archie Flanders, **Jessica Kelton**, Dianna Bagnall and Cristine Morgan, Soil Health Institute, Morrisville, NC

4:15 PM Profitability and Sustainability of Cotton Production in the Southern High Plains of Texas

Urzula Carrillo¹, Donna McCallister^{1,2}, Phillip Johnson¹, (1)Texas Tech University, Lubbock, TX, (2)Texas A&M AgriLife Research, Lubbock, TX

4:30 PM Economic Analysis of Cover Crop Adoption Under Risk Aversion: A Farm-Scale Simulation for Corn, Peanut, and Cotton

Kelvin Bobbie¹, Yangxuan Liu², Wesley Porter³, Kaylyn Reagin³, Mary Tostenson³, Peyton Sapp⁴, Jason Mallard⁵, Seth McAllister⁶, (1)Department of Agricultural and Applied Economics, University of Georgia, Athens, GA, (2)Department of Agricultural and Applied Economics, University of Georgia, Tifton, Tifton, GA, (3)Department of Crop and Soil Sciences, University of Georgia, Tifton, Tifton, GA, (4)College of Agricultural and Natural Resources Extension Service, University of Georgia, Waynesboro, GA, (5)College of Agricultural and Natural Resources Extension Service, University of Georgia, Statesboro, GA, (6)College of Agricultural and Natural Resources Extension Service, University of Georgia, Dawson, GA

4:45 PM Describing Cotton Farmer Perceptions of Voluntary Sustainability Programs in West Texas

Kylie Kitten, Donna McCallister and Laura Fischer, Texas Tech University, Lubbock, TX

Thursday, January 4, 2024

Cotton Engineering-Systems Conference

COTTON ENGINEERING-SYSTEMS THURSDAY EARLY MORNING

Fort Worth Ballroom 8 - 8:30 AM-10:00 AM

8:30 AM Research Plot Harvesting and Ginning Experiences with the CP770

Christopher Delhom¹, Femi Alege², John Wanjura³, Joe Thomas², (1) USDA-ARS, Stoneville, MS, (2)USDA-ARS Cotton Ginning Research Unit, Stoneville, MS, (3)USDA-ARS Cotton Production and Processing Research Unit, Lubbock, TX

8:45 AM Space Weather Impact on Cotton Production: Potential Threats and Downtime Cost Estimates

Terry Griffin¹, Kathryn Draeger², (1)Kansas State University, Manhattan, KS, (2)University of Minnesota, St. Paul, MN

9:00 AM On-Farm Evaluation of Variable Rate Seeding of Cotton in Georgia

Simerjeet Virk¹, Matthew Tucker¹, Jeremy Kichler², John Beasley¹, Curt Majeski³, Lavesta Hand¹, (1)University of Georgia, Tifton, GA, (2)University of Georgia Cooperative Extension, Athens, GA, (3)JCM Crop Consulting, Leesburg, GA

9:15 AM Automation of Soil Sampling Using Unmanned Ground Vehicle

Van Patiluna^{1,2}, Joe Mari Maja², Mohd Fazly Mail², Ed Barnes³, (1)University of San Carlos - School of Engineering, Cebu, Cebu, (2)Clemson University Edisto Research, Blackville, SC, (3)Cotton Incorporated, Cary, NC

9:30 AM Development of an Autonomous Laser Weeding Mobile Robot

Canicius Mwitta, Glen Rains and Eric Prostko, University of Georgia, Tifton, GA

9:45 AM Robotic Cotton Harvesting Advancements

Hussein Gharakhani and J. Alex Thomasson, Mississippi State, Mississippi State, MS

COTTON ENGINEERING-SYSTEMS THURSDAY LATE MORNING

Fort Worth Ballroom 8 - 10:30 AM-11:30 AM

10:30 AM An Open-Source Pipeline for Processing Cotton Crop Imagery to Evaluate Application Timing of Harvest Aids

John Long, Oklahoma State University, Stillwater, OK

10:45 AM Innovative Web-based Tool for Efficient Extraction of Plant Features from Unmanned Aerial System Imagery in Cotton Fields with Cultivar Comparison

Jose Landivar, Mahendra Bhandari and Juan Landivar, Texas A&M AgriLife Research, Corpus Christi, TX

11:00 AM An AI Driven Cotton Feature Forecasting using Satellite Data

Pankaj Pal^{1,2}, Mahendra Bhandari¹, Juan Landivar², Lei Zhao¹, Jose Landivar¹, (1)Agrilife Research Texas A&M, Corpus Christi, TX, (2)Texas A&M AgriLife Research and Extension Center, Corpus Christi, TX

Thursday, January 4, 2024

11:15 AM Optimizing Cotton Field Identification by Applying Machine Learning and Feature Selection Techniques to Sentinel-2 Imagery
Chenghai Yang and Charles Suh, USDA-ARS, College Station, TX

**COTTON ENGINEERING-SYSTEMS
THURSDAY EARLY AFTERNOON**

Fort Worth Ballroom 8 - 1:00 PM-2:15 PM

1:00 PM The Correlation of Season-Long Soil Moisture Variation and Yield Variability in Georgia On-Farm Cotton Variety Trials
Emily Bedwell and **Wesley Porter**, The University of Georgia, Tifton, GA

1:15 PM Predicting the Number of Growing Degree Days Left Until a Cotton Boll is Open Using Machine Learning
Caleb Lindhorst and Robert Hardin, Texas A&M University, College Station, TX

1:30 PM Codifying Workflows for Cotton Data Organization, Management, and Curation: The Maricopa Example
Kelly Thorp, USDA-ARS Grassland Soil and Water Research Laboratory, Temple, TX

1:45 PM A Regression-Based Approach to Estimate Soil Water Content in Cover Crop-Based Cotton Production Systems from UAS-Based Images
Sayantan Samanta¹, Srinivasulu Ale¹, Rene Mvuyekure², Shubham Jain², Paul DeLaune¹, Cristine Morgan³, Jasdeep Singh⁴, (1)Texas A&M AgriLife Research, Vernon, TX, (2)Texas A&M University, College Station, TX, (3)Soil Health Institute, Morrisville, NC, (4)Cornell University, Ithaca, NY

2:00 PM Analyzing Bias and Variance in Machine Learning Approaches for Multi-environment Cotton Cultivar Yield Classification Models: Impact of Dataset Size and Strategy
Raul Sebastian Martinez¹, Robert Hardin¹, Ed Barnes², (1)Texas A&M University, College Station, TX, (2)Cotton Incorporated, Cary, NC

Cotton Ginning Conference

**COTTON GINNING
THURSDAY EARLY AFTERNOON**

Fort Worth Ballroom 6-7 - 1:30 PM-3:15 PM

1:30 PM Review of the 2023 Crop Quality
Robert L. Seals, USDA-AMS, Cotton and Tobacco Program, Memphis, TN

1:45 PM Cost of Ginning Survey Results for the 2021 and 2022 Ginning Seasons
Greg Holt¹, Harrison Ashley², Kelley Green³, Dennis (Dusty) Findley⁴, Roger Isom⁵, Tim Price⁶, Mathew Pelletier¹, John Wanjura¹, (1)USDA-ARS, Lubbock, TX, (2)National Cotton Council of America, Cordova, TN, (3)Texas Cotton Ginners Association, Round Rock, TX, (4)Southeastern Cotton Ginners Association, Dawsonville, GA (5)California Cotton Growers Association, Fresno, CA, (6)Southern Cotton Ginners Association, Memphis, TN

2:00 PM Cotton Seed Temperature Monitoring Systems and Benefits
Michael Prachar, Tri-States Grain Conditioning, Spirit Lake, IA

2:15 PM Comparing Foreign Matter Removal and Lint Quality from an Experimental Pneumatic Fractionator and a Conventional Saw-Type Lint Cleaner

Jaya Shankar Tumuluru¹, Christopher Delhom², Carlos Armijo¹, Derek Whitelock¹, Paul Funk¹, (1)USDA-ARS Southwestern Cotton Ginning Research Laboratory, Las Cruces, NM, (2)Southern Regional Research Center - USDA-ARS, New Orleans, LA

2:30 PM Cotton Moisturization in Ginning Process for Staple Length Preservation

Justin Kühn and Thomas Gries, RWTH Aachen Institute of Textile Technology, Aachen, Nordrhein-Westfalen

2:45 PM Innovation in the Rotary Knife System of Rotobar Ginning Machines

Engin Dirik¹, Clifford Fischer², (1)Balkan Çırcır İplik Konf. Tekstil Makineleri San. Ve Tic. Ltd. Şti., Aydın, Turkey, (2)BC Supply, Lubbock, TX

3:00 PM A Loader Attachment for Managing Round Modules

John Wanjura, Greg Holt and Mathew Pelletier, (1)USDA ARS CPPRU, Lubbock, TX

**COTTON GINNING
THURSDAY LATE AFTERNOON**

Fort Worth Ballroom 6-7 - 4:00 PM-5:15 PM

4:00 PM The Cotton Ginners App

Sean Donohoe, Femi Alege and Joe Thomas, USDA-ARS Cotton Ginning Research Unit, Stoneville, MS

4:15 PM Field Evaluation of Lummus Gin Machinery - 2023

Ross Rutherford, Lummus Ag Technology, Lubbock, TX

4:30 PM Field Evaluation of an Auto-Calibration System for Plastic Detection

Mathew Pelletier¹, John Wanjura¹, **Greg Holt**¹, Neha Kothari², (1)USDA-ARS, Lubbock, TX, (2)Cotton Inc., Cary, NC

4:45 PM New Additions to the Cherokee Product Line

Michael Greene, Cherokee Fabrication, Salem, AL

5:00 PM Comparison of Reciprocating-knife roller-, Rotary-knife roller-, and Saw-ginning Pima and Upland Cottons

Derek Whitelock¹, Carlos Armijo¹, Christopher Delhom², John Wanjura³, Jaya Shankar Tumuluru¹, Neha Kothari⁴, Vikki Martin⁴, (1)USDA-ARS Southwestern Cotton Ginning Research Laboratory, Las Cruces, NM, (2) USDA-ARS, Sustainable Water Management Research Unit, Leland, MS, (3) USDA-ARS Cotton Production and Processing Research Unit, Lubbock, TX, (4)Cotton Incorporated, Cary, NC

Thursday, January 4, 2024

Cotton Improvement Conference

COTTON IMPROVEMENT
THURSDAY LATE MORNING

Texas Ballroom C-D - 10:30 AM-12:00 PM

10:30 AM Can We Take Cotton Fiber Quality to a New Level?

Andrew Paterson¹, Jeevan Adhikari¹, Jinesh Patel¹, Rahul Chandnani¹, Wenqian Kong¹, Hrithik Mangla¹, Tariq Shehzad¹, Lisa Rainville¹, Susan Auckland¹, Gary Pierce¹, Rosana Compton¹, Cornelia Lemke¹, Peng Chee², B. Campbell³, Don Jones⁴, Neha Kothari⁴, (1)Plant Genome Mapping Laboratory, Athens, GA, (2)Department of Crop and Soil Science, Athens, GA, (3)Coastal Plains Soil, Water, and Plant Research Center, Florence, SC, (4) Cotton Incorporated, Cary, NC

11:00 AM Can We Select for Lower Short Fiber Content in Upland Cotton

Wayne Smith¹, Marshall Tolleson¹, Nouredine Abidi², Branden Kelly², (1) Texas A&M University, College Station, TX, (2)Fiber and Biopolymer Research Institute, Lubbock, TX

11:15 AM Comparison of Fiber Quality Parameters from Laboratory Ginning Systems Used in Cotton Breeding Programs

Lori Hinz¹, Jodi Scheffler², Alison Thompson³, Steve Hague⁴, Joshua Udall¹, Neha Kothari⁵, (1)USDA - ARS, College Station, TX, (2)USDA-ARS, Stoneville, MS, (3)USDA - ARS, Pullman, WA, (4)Auburn University, Auburn, AL, (5) Cotton Incorporated, Cary, NC

11:30 AM Comparative Genome-Wide Association Study with Bundle and Single Fiber Traits Uncovers Genomic Loci Associated with Fiber Length Distributional Parameters of Upland Cotton (*Gossypium hirsutum* L.)

Hee Jin Kim¹, Gregory Thyssen¹, Christopher Delhom¹, David Fang¹, Marina Naoumkina¹, Christopher Florane¹, Ping Li¹, Johnie Jenkins², Jack McCarty², Linghe Zeng³, B. Todd Campbell⁴, Don Jones⁵, (1)USDA-ARS, SRRRC, New Orleans, LA, (2)USDA-ARS, Mississippi State, MS, (3)USDA-ARS, Stoneville, MS, (4)USDA-ARS, Florence, SC, (5)Cotton Incorporated, Cary, NC

11:45 AM Computational Modeling and Systems Biology Approaches to Enable Cotton Fiber Engineering

Youngwoo Lee¹, **Dan Szymanski**¹, Sivakumar Swaminathan², Alexander Howell¹, Pengcheng Yang¹, Corrinne Grover², Jonathan Wendell², Olga Zabolotina², Jun Xie¹, (1)Purdue University, West Lafayette, IN, (2)Iowa State University, Ames, IA

COTTON IMPROVEMENT
THURSDAY EARLY AFTERNOON

Texas Ballroom C-D - 1:15 PM-3:15 PM

1:15 PM The Cotton "Historical Lines" Project

Grant Billings¹, Daniel Restrepo-Montoya², Ramey Youngblood³, B Todd Campbell⁴, Candace Haigler¹, Brian Scheffler⁵, Jodi Scheffler⁵, Amanda Hulse-Kemp⁶, (1)North Carolina State University, Raleigh, NC, (2)Max Planck Tandem Group at Universidad Nacional de Colombia, Bogotá, Bogotá, (3) Institute for Genomics, Biocomputing, and Biotechnology, Mississippi State University, Stoneville, MS, (4)USDA Agricultural Research Service, Florence, SC, (5)USDA Agricultural Research Service, Stoneville, MS, (6)USDA Agricultural Research Service, Raleigh, NC

1:30 PM The Development of an Upland Cotton (*Gossypium hirsutum*) Population, Divergently Selected According to Seed Size, for the Investigation of Seed Size Impacts on the Cotton Industry

Reagan Heinrich and Jane Dever, Texas A&M AgriLife Research, Lubbock, TX

1:45 PM Phylogenetic and Functional Analysis of Tiller Angle Control (TAC1) Homeologs in Allotetraploid Cotton

Foster Kangben¹, Sonika Kumar¹, Zhigang Li¹, Avinash Sreedasyam², Chris Dardick³, Don Jones⁴, Christopher Saski¹, (1)Clemson University, Clemson, SC, (2)HudsonAlpha Institute for Biotechnology, Huntsville, AL, (3)USDA-ARS, Kearneysville, SC, (4)Cotton Incorporated, Cary, NC

2:00 PM A Simplified Microscopy Technique to Rapidly Characterize Individual Fiber Traits in Cotton

Shalini P. Etukuri¹, Quinn LaFave¹, Chaney L. Courtney¹, Neha Kothari², Trevor W. Rife¹, Christopher Saski¹, (1)Clemson University, Clemson, SC, (2) Cotton Incorporated, Cary, NC

2:15 PM Fate of Triacylglycerol during Cold Stress in Upland Cotton Germination: Metabolism and Enzymatic Regulation

Bandana Osti and Rosalyn Shim, Texas Tech University, Lubbock, TX

2:30 PM Experiences with Verticillium Wilt in Cotton

Freddie Bourland, University of Arkansas, Keiser, AR

2:45 PM Transcriptome Analysis of Resistant cotton Lines Challenged with Reniform Nematodes

Chunda Feng, Sally Stetina and John Erpelding, USDA-ARS, Stoneville, MS

3:00 PM Applying Moving Grid Adjustment (MGA) Method to Control Cotton Field Spatial Variation

Jixiang Wu, Johnnie Jenkins and Jack McCarty Jr., USDA-ARS, Mississippi State, MS

**COTTON IMPROVEMENT
THURSDAY LATE AFTERNOON**

Texas Ballroom C-D - 4:00 PM-5:45 PM

4:00 PM Using CottonGen for Cotton Improvement

Jing Yu, Washington State University, Pullman, WA

4:15 PM Breeding for FOV-4 Resistance

Jim Olvey¹, Mike Olvey¹, Don Jones², Christopher Saski³, Stephen Parris³, (1)O&A Enterprises Inc., Maricopa, AZ, (2)Cotton Incorporated, Cary, NC, (3) Clemson University, Clemson, SC

4:30 PM Marker-Assisted Selection for Resistance to Fusarium Wilt Race 4 in Upland Cotton

Yi Zhu¹, Heather Elkins-Arce², Joel Arce³, Orlando Flores³, Terry Wheeler⁴,

Thursday, January 4, 2024

Jane Dever⁴, Jinfa Zhang¹, (1)New Mexico State University, Las Cruces, NM, (2)Texas A&M AgriLife Research and Extension Center, El Paso, TX, (3)Texas A&M AgriLife Extension Service, El Paso, TX, (4)Texas A&M AgriLife Research and Extension Center, Lubbock, TX

4:45 PM Pre- and Post- Emergence Damping-Off in Cotton Caused by Fusarium Wilt Race 4

Yi Zhu¹, Terry Wheeler², Jane Dever², Jinfa Zhang¹, (1)New Mexico State University, Las Cruces, NM, (2)Texas A&M AgriLife Research and Extension Center, Lubbock, TX

5:00 PM Genetic Mechanisms Underlying Resistance to FOV4 In Upland Cotton

Stephen Parris¹, John Lovell², Feng Ding¹, Zhenzhen Zhang¹, Jim Olvey³, Mike Olvey³, Jeremy Schmutz², Jane Grimwood², Avinash Sreedasyam², Sonika Kumar¹, Zhigang Li¹, Jerry Jenkins², Christopher Plott², Ada Stewart², Jenell Webber², Warwick Stiller⁴, Don Jones⁵, Christopher Saski¹, (1)Clemson University, Clemson, SC, (2)HudsonAlpha Genome Sequencing Center, Huntsville, AL, (3)O&A Enterprises, Tempe, AZ, (4)CSIRO Clayton, Clayton, VIC, (5)Cotton Incorporated, Cary, NC

5:15 PM An Update on the Private/Public Sector Collaboration to Address FOV4

Don Jones¹, Jim Olvey², Mike Olvey², Christopher Saski³, Stephen Parris³, (1)Cotton Incorporated, Cary, NC, (2)O&A Enterprises, Maricopa, AZ, (3) Clemson University, Clemson, SC

5:30 PM Seeking and Utilization of New Genetic Sources for Resistance to Fusarium Wilt Race 4 and Bacterial Blight Race 4 in Upland Cotton

Jinfa Zhang¹, Abdelraheem Abdelraheem¹, Yi Zhu¹, Linghe Zeng², Sally Stetina¹, Chunda Feng², Terry Wheeler³, Jane Dever³, (1)New Mexico State University, Las Cruces, NM, (2)USDA-ARS, Stoneville, MS, (3)Texas A&M AgriLife Research and Extension Center, Lubbock, TX

Cotton Insect Research and Control Conference

**COTTON INSECT RESEARCH AND CONTROL CONFERENCE
THURSDAY EARLY MORNING
SESSION A (MS STUDENT COMPETITION)**

Fort Worth Ballroom 4 - 8:00 AM-9:45 AM

8:00 AM Effect of Cover Crops on Thrips (Thysanoptera:Thripidae) Population Dynamics in Upland Cotton in West Texas

Raju Sapkota, Megha Parajulee and Dol Dhakal, Texas A&M Agrilife Research and Extension, Lubbock, TX

8:15 AM Assessing the Efficacy and Specificity of Multi-Component Pheromone Lures and Funnel Trap Colors for Monitoring Fall Armyworm (Spodoptera frugiperda) Populations

Jonathan Riggan, Andie Miller, Gregory Sword, Dalton Ludwick, Pat Porter and Jose C. Santiago Gonzalez, Texas A&M University, College Station, TX

8:30 AM Impact of Early-Square Removal on Water-Deficient Cotton

Gabriella Marotta and David Kerns, Texas A&M University, College Station, TX

8:45 AM Value of Plinazolin Insecticide in Cotton Insect Management
Gage Maris¹, Ben Thrash², Nick Bateman³, Andrew Plummer², Garrett Felts³, Taylor Harris¹, (1)University of Arkansas, Fayetteville, AR, (2)University of Arkansas Extension, Lonoke, AR, (3)University of Arkansas Extension, Stuttgart, AR

9:00 AM Fitness Costs of Vip3Aa Resistant Helicoverpa zea Populations On Non-Bt Meridic Diet

Morgan Tate¹, David Kerns¹, Fei Yang², (1)Texas A&M University, College Station, TX, (2)University of Minnesota, St Paul, MN

9:15 AM Efficacy of Insect Growth Regulators on Lepidopteran Pest of Soybean

Sawyer Hopkins, Whitney Crow, Don Cook, Jeff Gore and Angus Catchot, Mississippi State University, Starkville, MS

9:30 AM Evaluating Tarnished Plant Bug Damage During Late Bloom on Cotton Yield

Seth Permenter¹, Whitney Crow², Jeff Gore¹, Angus Catchot², Donald Cook¹, Drew Gholson¹, Tyler Towles¹, (1)Mississippi State University, Leland, MS, (2) Mississippi State University, Mississippi State, MS

**COTTON INSECT RESEARCH AND CONTROL CONFERENCE
THURSDAY EARLY MORNING
SESSION B (PHD STUDENT COMPETITION)**

Fort Worth Ballroom 1-2 - 8:00 AM-10:00 AM

8:00 AM Evolving Pest Management in Cotton Production through Targeted Terpene Synthesis Modulation via VIGS and CRISPR/Cas9 Technologies

Hobson Allen, Gregory Sword and Anjel Helms, Texas A&M University, College Station, TX

8:15 AM Mechanistic and Genetic Characterization of Vip3Aa Resistance in Helicoverpa zea

Dawson Kerns¹, Ryan Kuster¹, Matthew Huff¹, Meg Staton¹, Fei Yang², David Kerns³, Scott Stewart¹, Juan Luis Jurat-Fuentes¹, (1)University of Tennessee, Knoxville, TN, (2)University of Minnesota, St. Paul, MN, (3)Texas A&M University, College Station, TX

8:30 AM Bollworm Management with Bt Cotton

Mary Jane Lytle¹, Tyler Towles¹, Jeff Gore¹, Whitney Crow², Don Cook¹, Jason Bond¹, Angus Catchot², (1)Delta Research and Ext Center, Stoneville, MS, (2) Mississippi State, Mississippi State, MS

8:45 AM Plinazolin Technology Fit in Mississippi Thryvon and Non-Thryvon Cotton Systems

Caleb Rice¹, Whitney Crow¹, Tyler Towles², Don Cook², Fred Musser¹, Brian Peralisi¹, Ryan Jackson³, Seth Permenter², James Huoni², Mary Jane Lytle², Hunter Lipsey², (1)Mississippi State, Mississippi State, MS, (2)Stoneville, Stoneville, MS, (3)Syngenta, Carrollton, MS

9:00 AM Cross-Resistance and Redundant Killing of Vip3Aa Resistance in Helicoverpa zea

Haley Kennedy¹, David Kerns¹, Fei Yang², (1)Texas A&M University, College Station, TX, (2)University Of Minnesota, St. Paul, Minnesota

9:15 AM Evaluation of Tarnished Plant Bug Resistance to Common Insecticides in Alabama Cotton

Thomas Douglas¹, Scott Graham¹, Fred Musser², Lauren Catchot², (1) Auburn University, Auburn, AL, (2)Mississippi State University, Mississippi State, MS

9:30 AM Understanding the Factors Driving Cotton Leafroll Dwarf Virus Incidence in Cotton

John Mahas¹, Alana Jacobson¹, Kassie Conner¹, Todd Steury¹, Kira Bowen¹, Sudeep Bag², Phillip Roberts², (1)Auburn University, Auburn, AL, (2) University of Georgia Tifton Campus, Tifton, GA

9:45 AM Delayed Maturity and Yield Loss of Early and Late Season Cotton Cultivars Infested with Cotton Fleahopper, *Pseudatomoscelis seriatus* (Reuter)

Malek Alwedyan, Pius Bradicich and Michael Brewer, Texas A&M AgriLife Research and Extension Center, Corpus Christi, TX

**COTTON INSECT RESEARCH AND CONTROL
CONFERENCE ROUNDTABLE**

Fort Worth Ballroom 4 - 11:00 AM-12:00 PM

**COTTON INSECT RESEARCH AND CONTROL CONFERENCE
THURSDAY EARLY AFTERNOON
SESSION A (MS STUDENT COMPETITION)**

Fort Worth Ballroom 4 - 1:30 PM-3:00 PM

1:30 PM Mid-South Survey and Biological Assay of Tennessee Brown Marmorated Stink Bugs – A Feeding Study

Alexandra Crowder, Sebe Brown and Heather Kelly, University of Tennessee, Jackson, TN

1:45 PM Investigating How Entomopathogenic Nematode Chemical Cues Mediate Cotton Plant Defense

Anjel Helms¹, Charles Suh², **Adriane Fifield¹**, (1)Texas A&M University, College Station, TX, (2)USDA-ARS, College Station, TX

2:00 PM Insecticide Application Efficacy of sUAS Compared to Traditional Delivery Systems

Hunter Blalock, Whitney Crow, Angus Catchot, Darrin Dodds and Bryan Whitten, Mississippi State University, Mississippi State, MS

2:15 PM Relationship Between Corn Earworm Feeding and Corn Ear Fungi Contamination

Kendall Walton, Tom Isakeit and David Kerns, Texas A&M University, College Station, TX

2:30 PM An Overview of Scouting Early Season Cotton for Tarnished Plant Bug

James Huoni¹, Whitney Crow², Jeff Gore¹, Don Cook¹, Tyler Towles¹, Angus Catchot², (1)Mississippi State University, Stoneville, MS, (2)Mississippi State University, Starkville, MS

2:45 PM Assessment of Different Management Methods for Controlling Thrips and TSWV in Peanuts

Claire Cooke and Scott Graham, Auburn University, Auburn, AL

**COTTON INSECT RESEARCH AND CONTROL CONFERENCE
THURSDAY EARLY AFTERNOON
SESSION B (PHD STUDENT COMPETITION)**

Fort Worth Ballroom 1-2 - 1:30 PM-3:30 PM

1:30 PM Evaluation of Cotton Fleahopper (*Pseudatomoscelis seriatus* Reuter) Feeding on Cry51Aa2-traited Cotton Utilizing Electrical Penetration Graph (EPG) Waveforms

Brady Arthur, David Kerns and Thomas Chappell, Texas A&M University, College Station, TX

1:45 PM Refining Treatment Thresholds for Insect Pests in South Carolina Soybeans using Simulated Injury and Natural Populations
Adam Whitfield¹, Jeremy Greene¹, Francis Reay-Jones², (1)Clemson University, Blackville, SC, (2)Clemson University, Florence, SC

2:00 PM Flight Potential of *Lygus lineolaris* on Mid-Atlantic Weed Hosts in Early Summer
John Schepis¹, Brandon Bickely², Aaron Gross², Sally Taylor¹, Alejandro Del Pozo³, (1)Virginia Tech, Tidewater Agricultural Research and Extension Center (TAREC), Suffolk, VA, (2)Virginia Tech, Blacksburg, VA, (3)Virginia Tech, Hampton Roads AREC, Virginia Beach, VA

2:15 PM Localization of Tomato Spotted Wilt Virus (TSWV) Proteins in SF9 Insect Cells
Michael Mayfield¹, Kathleen Martin¹, Yuting Chen², Anna Whitfield², (1) Auburn University, Auburn, AL, (2)North Carolina State University, Raleigh, NC

2:30 PM Management of Tarnished Plant Bugs in ThryvOn and Non-ThryvOn Cotton
Caitlyn Lawton and Scott Graham, Auburn University, Auburn, AL

2:45 PM Assessing Fall Armyworm Strain-Specific Mating Behaviors in the Field as a Future Tool for Strain Identification
Andie Miller¹, Gregory Sword¹, Ashley Tessnow¹, Robert Meagher², (1)Texas A&M University, College Station, TX, (2)USDA-ARS, Gainesville, FL

3:00 PM Quantification of Bt Concentrations Within Different Plant and Fruiting Structures of Transgenic Cotton
Tyler Gilreath and David Kerns, Texas A&M University, College Station, TX

3:15 PM Soil Microbiota Modulate Crop Resistance to Fall Armyworm (*Spodoptera frugiperda*) Herbivory
Morgan Thompson¹, Charles Suh², Anjel Helms¹, (1)Texas A&M University, College Station, TX, (2)USDA-ARS Insect Control and Cotton Disease Research Unit, College Station, TX

**COTTON INSECT RESEARCH AND CONTROL CONFERENCE
THURSDAY LATE AFTERNOON
SESSION A (MS STUDENT COMPETITION)**

Fort Worth Ballroom 4 - 4:00 PM-5:30 PM

4:00 PM Impacts of Simulated Three Cornered Alfalfa Hopper Damage on Cotton Yield
Reece Butler¹, Whitney Crow¹, Tyler Towles², Angus Catchot¹, Don Cook², Fred Musser¹, (1)MSU, Starkville, MS, (2)MSU, Leland, MS

4:15 PM Influence of Imidacloprid Seed Treatment Rate on ThryvOn Cotton
Walker Farmer, Jeff Gore, Angus Catchot, Whitney Crow, Don Cook and Brian Peralisi, Mississippi State University, Mississippi State, MS

4:30 PM The Optimization of *Aphis gossypii* RNA Extraction for the Investigation of *A. gossypii*-CLRVD Interactions
Nicholas Mueller and Kathleen Martin, Auburn University, Auburn, AL

4:45 PM Determining the Effects of Excluding Various Insecticide Classes for Control of Tarnished Plant Bugs, *Lygus lineolaris*, in ThryvOn Cotton
Hunter Lipsey¹, Tyler Towles¹, Don Cook¹, Whitney Crow², Ben Thrash³, Angus Catchot², Seth Permenter¹, Caleb Rice¹, Mary Jane Lytle¹, James Huoni¹, (1)Mississippi State University, Stoneville, MS, (2)Mississippi State University, Mississippi State, MS, (3)University of Arkansas, Lonoke, AR

Thursday, January 4, 2024

5:00 PM Insecticidal Seed Treatment Impacts on Tobacco Thrips and Plant-Parasitic Nematodes in Alabama

Claire Schloemer, Scott Graham and Kathy Lawrence, Auburn University, Auburn, AL

5:15 PM Evaluation of Virginia Peanut Cultivars and Advanced Breeding Lines for Southern Corn Rootworm Resistance

Elijah Hoar¹, Arash Rashed², Sally Taylor³, (1)Virginia Tidewater Agricultural Research and Extension Center (TAREC), Suffolk, VA, (2)Virginia Tech Southern Piedmont Agricultural Research and Extension Center, Blackstone, VA, (3)Cotton Incorporated, Cary, NC

**COTTON INSECT RESEARCH AND CONTROL
BUSINESS MEETING AND MIXER**

Fort Worth Ballroom 4 - 5:30 PM-7:00 PM

Cotton Quality Measurements and Utilization Conference

**COTTON QUALITY MEASUREMENTS AND UTILIZATION
THURSDAY EARLY AFTERNOON**

Sundance 2 - 1:00 PM-3:00 PM

1:00 PM Preliminary Results of the Effect of Nitrogen Application Rates on Cotton Yield and Fiber Quality

Marinus van der Sluijs, Textile Technical Services, Geelong, VIC

1:15 PM An In-Depth Analysis of The Effects of Weather on Lint Grade Factors in Two Very Different Years: 2020 vs 2021

Rex Friesen, Southern Kansas Cotton Growers Cooperative, Inc., Anthony, KS

1:30 PM Variation in Cotton Yield and Fiber Quality Across Years and Locations on the Southern High Plains of Texas

Brooke Shumate^{1,2}, Joao Morais³, Brendan Kelly^{1 2}, (1)Texas A&M AgriLife Research and Extension Center at Lubbock, Lubbock, TX, (2)Texas Tech University, Lubbock, TX, (3)Embrapa, Campina Grande, Paraiba

1:45 PM Role of Micronaire on HVI Strength Measurement

Md Abu Sayeed, Christopher Turner and Eric Hequet, Texas Tech University, Lubbock, TX

2:00 PM Investigation of a Method to Measure Fiber-to-Fiber Friction for Cotton Fibers

Christopher Turner, Sumedha Liyanage, Md Abu Sayeed and Eric Hequet, Texas Tech University, Lubbock, TX

2:15 PM Use of the Optical Fiber Diameter Analyzer for Measuring Cotton Fiber Ribbon Width

Addisu Ferede Tesema¹, Md Abu Sayeed¹, Christopher Turner¹, Christopher Delhom², Eric Hequet¹, (1)Fiber and Biopolymer Research Institute, Lubbock, TX, (2)Southern Regional Research Center - USDA-ARS, New Orleans, LA

2:30 PM Identify Potential Calibration Cotton Bales to Calibrate New Fibrogram-Based Length Parameters

Md Abu Sayeed, Christopher Turner and Eric Hequet, Texas Tech University, Lubbock, TX

Thursday, January 4, 2024

2:45 PM Comparative Investigation of Cotton Fiber HVI and AFIS Quality from Laboratory Saw Ginning and Blending
Yongliang Liu and Christopher Delhom, Cotton Structure and Quality Research Unit, New Orleans, LA

**COTTON QUALITY MEASUREMENTS AND UTILIZATION
THURSDAY LATE AFTERNOON**

Sundance 2 - 4:00 PM-5:30 PM

4:00 PM Updates on a New Imaging Modality for High-Throughput Cotton Fiber Quality Evaluation

Brooke Shumate^{1,2}, **Brendan Kelly**^{1,2}, Rahul Gorantala¹, Hamed Sari-Sarraf¹, Alamgir Kabir³, Aniruddha Ray³, (1)Texas Tech University, Lubbock, TX, (2) Texas A&M AgriLife Research and Extension Center at Lubbock, Lubbock, TX, (3)The University of Toledo, Toledo, OH

4:15 PM Crystallinity Measurement of Developing Cotton Fibers
Sunghyun Nam, Yongliang Liu and Zhongqi He, Southern Regional Research Center - USDA-ARS, New Orleans, LA

4:30 PM Exploration of Cottonseed for Value-Added Food and Nonfood Products

Zhongqi He, Sunghyun Nam and Huai Cheng, USDA-ARS SRRC, New Orleans, LA

4:45 PM Potential of Increasing Cottonseed Value Through Cottonseed Bioactive Materials for Nutrition and Health

Heping Cao, USDA-ARS, New Orleans, LA

5:00 PM Quantification of Microfibers Released from the Dry Abrasion of Fabrics

Michael Santiago and Christopher Delhom, Southern Regional Research Center - USDA-ARS, New Orleans, LA

5:15 PM Management of 2-Thread and 3-Thread Fleece Knitted Fabrics Performance Produced from Cotton and Different Regenerated Fibers

Alaa Badr¹, Ashraf El-Nahrawy², (1)Consultant, Alexandria, Alexandria Governorate, (2)Alexandria University, Alexandria, Alexandria Governorate

Cotton Weed Science Research Conference

**COTTON WEED SCIENCE RESEARCH
THURSDAY EARLY MORNING**

Sundance 1 - 8:00 AM-10:00 AM

8:00 AM Evaluation of Residual Herbicide-Coated Fertilizer

Brock Dean, Charles Cahoon, Zachary Taylor, Jacob Forehand, Jose de Sanctis and Hunter Lee, North Carolina State University, Raleigh, NC

8:15 AM Exploring the Feasibility of Harvest Weed Seed Control in Cotton

Sarah Chu¹, Jon Jackson², Neil Sater², Lauren Schwartz-Lazaro³, Gaylon Morgan⁴, Michael Walsh⁵, Benjamin McKnight¹, Robert Hardin¹, Greg Holt⁶, Peter Dotray⁷, Muthukumar Bagavathiannan¹, (1)Texas A&M University, College Station, TX, (2)Global Neighbor Inc, Xenia, OH, (3)Blue River Technology, LLC., Santa Clara, CA, (4)Cotton Incorporated, Cary, NC, (5)The University of Western Australia, Crawley, Western Australia, (6)USDA, College Station, TX, (7)Texas Tech University, Lubbock, TX

8:30 AM Tolerance of Cotton to Over-the-Top Application of Herbicides Coated on Fertilizer

Summer Pritchett¹, Jason Norsworthy¹, Christian Arnold¹, Michael Dodde¹, Mason Castner¹, Lon Barber², (1)University of Arkansas System Division of Agriculture, Fayetteville, AR, (2)University of Arkansas System Division of Agriculture, Lonoke, AR

8:45 AM Demographic Response of Palmer Amaranth to Novel Integrated Weed Management Practices for Cotton

Hannah Lindell¹, David Weisberger², Gaylon Morgan³, Michael Bocz¹, Charles Smith¹, Nicholas Basinger¹, (1)University of Georgia, Athens, GA, (2) University of Rhode Island, Kingston, RI, (3)Cotton Inc, Cary, NC

9:00 AM Palmer Amaranth Control by Isoxaflutole Applied Preplant Incorporated and Preemergence

Megan Singletary¹, Peter Dotray^{1,2}, Scott Asher³, Adam Hixson³, Gregory Baldwin⁴, (1)Texas Tech University, Lubbock, TX, (2)Texas A&M AgriLife Research and Extension Center at Lubbock, Lubbock, TX, (3)BASF Corporation, Lubbock, TX, (4)BASF Corporation, Research Triangle Park, NC

9:15 AM A Beltwide Perspective of Alite 27 Herbicide Performance in Axant™ Flex Cotton

Jennifer Dudak¹, Zachary Treadway¹, Todd Baughman¹, Tom Barber², Charlie Cahoon³, A. Culpepper⁴, Benjamin McKnight⁵, Scott Nolte⁵, Adam Hixson⁶, (1)Oklahoma State University, Ardmore, OK, (2)University of Arkansas-Extension, Lonoke, AR, (3)North Carolina State University, Raleigh, NC, (4)University of Georgia, Tifton, GA, (5)Texas A&M University, College Station, TX, (6)BASF, Lubbock, TX

9:30 AM Cotton Response to Simulated Sprayer Contamination with a Diflufenican-Containing Premix

Matthew Woolard¹, Jason Norsworthy¹, Pamela Carvalho-Moore¹, Mason Castner¹, Jared Smith¹, Lon Barber², (1)University of Arkansas System Division of Agriculture, Fayetteville, Arkansas, (2)University of Arkansas System Division of Agriculture, Lonoke, Arkansas

9:45 AM Use of See & Spray™ in Cotton with and without Cover Crops

Tristen Avent¹, Dr. Jason Norsworthy¹, Michael Dodde¹, William Patzoldt², Lauren Schwartz-Lazaro², Michael Houston³, (1)University of Arkansas, Fayetteville, AR, (2)Blue River Technology, Santa Clara, CA, (3)Blue River Technology, Greenville, MS

**COTTON WEED SCIENCE RESEARCH
THURSDAY LATE MORNING**

Sundance 1 - 10:30 AM-12:00 PM

10:30 AM Response of Palmer Amaranth Populations to Glufosinate with Metabolic Inhibitors

Jared Smith¹, Dr. Jason Norsworthy¹, Pamela Carvalho-Moore¹, Summer Pritchett¹, Tanner King¹, L Barber², (1)University of Arkansas, Fayetteville, AR, (2)University of Arkansas, Newport, AR

10:45 AM Evaluating Fomesafen Tank Mix Combinations for Weed Control in Oklahoma Cotton

Zachary Treadway, Jennifer Dudak and Todd Baughman, Oklahoma State University, Ardmore, OK

Thursday, January 4, 2024

11:00 AM Single vs. Dual Tank See & Spray Evaluations in Cotton
Michael Dodde¹, Jason Norsworthy¹, Tristan Avent¹, William Patzoldt², Lauren Schwartz-Lazaro³, Michael Houston³, Wesley Everman⁴, Diego Contreras⁴, Larry Steckel⁵, Jared Buck⁵, (1)University of Arkansas System Division of Agriculture, Fayetteville, AR, (2)Blue River Technology, Santa Clara, CA, (3)Blue River Technology, Greenville, MS, (4)North Carolina State University Department of Crop and Soil Sciences, Raleigh, NC, (5)University of Tennessee Department of Plant Science, Jackson, TN

11:15 AM Palmer Amaranth Control Using Alite™ 27 Applied Preemergence
Maxwell Smith¹, Peter Dotray^{2,3}, Adam Hixson⁴, (1)Oklahoma State University, Altus, OK, (2)Texas Tech University, Lubbock, TX, (3)Texas A&M AgriLife Research and Extension, Lubbock, TX, (4)BASF, Lubbock, TX

11:30 AM Glyphosate Resistant Johnsongrass Found in Texas
Ryan Matschek¹, Reagan Noland², Muthukumar Bagavathiannan³, Clay Cole⁴, Cody Scott¹, (1)Angelo State University, San Angelo, TX, (2)Texas A&M AgriLife Extension, San Angelo, TX, (3)Texas A&M University, College Station, TX, (4)Jones County Extension Service, Anson, TX

11:45 AM Isoxaflutole Use in Axant Flex Cotton in East Central Texas
Zachary Howard and Scott Nolte, Texas A&M AgriLife Extension, College Station, TX

Cotton Sustainability Conference

COTTON SUSTAINABILITY THURSDAY EARLY MORNING

Texas Ballroom I-J - 8:30 AM-10:00 AM

8:30 AM U.S. Cotton Trust Protocol
Daren Abney, U.S. Cotton Trust Protocol, Lubbock, TX

9:00 AM U.S. Climate Smart Cotton Program Overview and Update
Chad Brewer, U.S. Cotton Trust Protocol, Cordova, TN

9:20 AM Advancing Soil Health in U.S. Cotton
Dianna Bagnall, Nate Looker, Cristine Morgan, Jessica Kelton, Emily Ball and Misty Miles, Soil Health Institute, Morrisville, NC

9:40 AM Enhanced Soil Carbon Farming as a Climate Solution
Alan Franzluebbbers, USDA-Agricultural Research Service, Raleigh, NC

COTTON SUSTAINABILITY THURSDAY LATE MORNING

Texas Ballroom I-J - 10:30 AM-12:00 PM

10:30 AM Flipped Composting of Cotton Textile Waste Materials
Joe Sagues, NC State University, Raleigh, NC

10:50 AM Challenges and Opportunities of Organic Cotton Production in the Mid-South
Andrew Jordan, Jordan Associates Ag and Bio Engineering Services, Cordova, TN

11:10 AM Enhancing Cotton's Sustainability Progress with Automated Systems
Ed Barnes, Cotton Incorporated, Cary, NC

Friday, January 5, 2024

11:30 AM Cotton Genome Editing for Improved Insect Management
Greg Sword, Texas A&M University, College Station, TX

**COTTON SUSTAINABILITY
THURSDAY EARLY AFTERNOON**

Texas Ballroom I-J - 1:00 PM-3:00 PM

1:00 PM Calculating the Environmental Impacts of Cotton Lint and Cotton Seed

Juanita Barrera-Ramirez¹, Steven Pires², Jesse Daystar², Lise Laurin¹, (1) EarthShift Global, Kittery, ME, (2) Cotton Inc, Cary, NC

1:15 PM Development of Sustainable Bio-Based Films from Cotton Gin Trash

Renuka Dhandapani, Cotton Incorporated, Cary, NC

1:30 PM Cotton to Sugar: Efforts to Convert Cotton Textile Waste into Glucose

Matthew Farrell, Cotton Incorporated, Cary, NC

1:45 PM Exploring the Implications of Temporary Biogenic Carbon Storage and Emission Timing in Cotton Garments Using Dynamic Life Cycle Assessment

Steven Pires^{1,2}, Jesse Daystar¹, Allan Williams³, Richard Venditti², (1) Cotton Incorporated, Cary, NC, (2) North Carolina State University, Raleigh, NC, (3) Cotton Research & Development Corporation, Narrabri, NSW

2:00 PM Impact of Management on Greenhouse Gas Emissions and Runoff Water Quality in Mid-South US Cotton Production

Michele Reba¹, Colby Reavis¹, Tina Teague², Benjamin Runkle³, (1) USDA-ARS-SEA, Jonesboro, AR, (2) Arkansas State University, Jonesboro, AR, (3) University of Arkansas, Fayetteville, AR

2:15 PM Conservation Management and Irrigation Influence Yield and Greenhouse Gas Emissions in Mid-South Cotton

Arlene Adviento-Borbe¹, Sandhya Karki², Michele Reba¹, Tina Teague³, (1) USDA-ARS, Jonesboro, AR, (2) University of Arkansas-Fayetteville, Fayetteville, AR, (3) University of Arkansas Division of Agriculture, State University, AR

2:30 PM Cover Crops as Weed Suppression Tools in Cotton: Translating Research to Support Management Decisions

Jessica Kelton¹, Dianna Bagnall¹, Gustavo Camargo Silva², Jodie McVane², Muthu Bagavathiannan², (1) Soil Health Institute, Morrisville, NC, (2) Texas A&M University, College Station, TX

2:45 PM Sustainability Student Poster Competition Awards

Cotton Agronomy, Physiology and Soil Conference

**COTTON AGRONOMY, PHYSIOLOGY AND SOILS CONFERENCE
FRIDAY EARLY MORNING**

Texas Ballroom E - 8:00 AM-10:00 AM

8:00 AM Intercropping Cotton and Perennial Groundcover Crops to Reduce Inputs in the Southeastern Coastal Plain

Eric Billman and B. Todd Campbell, USDA-ARS Coastal Plains Soil, Water, and Plant Research Center, Florence, SC

8:15 AM White-Tailed Deer: The Most Economically Impactful Pest of Georgia Cotton

Lavesta Hand, Phillip Roberts, John Snider and Wade Parker, University of Georgia, Tifton, GA

8:30 AM In Season Measurements of ThryvOn™ Technology Varieties to Direct Agronomic Management

Timothy Dabbert, Eric Best and David Albers, Bayer Crop Science, Creve Coeur, MO

8:45 AM Can Peanut Combines Impact Cotton Yield?

Justin Calhoun, University of Missouri, Portageville, MO

9:00 AM The Effects of Long Term Storage on Upland Cotton Seed Germination

Lori Unruh Snyder, Marisa Crisp, Keith Edmisten and Guy Collins, NC State, Raleigh, NC

9:15 AM Cover Crops Allelochemicals as Potential Seed Germination Inhibitor: Lab, Greenhouse, and Field

Avat Shekoofa, Kendall Sheldon, Isha Poudel, Charles Muiruri, Tamara Erin Sterrett, Kellie Walters and Virginia Sykes, University of Tennessee, Knoxville, TN

9:30 AM Cotton Water Dynamics After Cover Crops: Dry Versus Humid Regions

Avat Shekoofa¹, Isha Poudel¹, Crystal Ferrell¹, Tyson Raper¹, Katie Lewis², Jessica Bicaldo², (1)University of Tennessee, Knoxville, TN, (2)Texas A&M AgriLife Research University, Lubbock, TX

9:45 AM Nine-Month Composting of Cotton Gin 'Trash'

Femi Alege, Sean Donohoe and Joe Thomas, USDA-ARS Cotton Ginning Research Unit, Stoneville, MS

**COTTON AGRONOMY, PHYSIOLOGY AND SOILS
CONFERENCE AWARDS**

Texas Ballroom E - 10:00 AM-10:30 AM

Cotton Disease Council

**COTTON DISEASE COUNCIL
FRIDAY EARLY MORNING**

Texas Ballroom A-B - 8:00 AM-9:30 AM

8:00 AM Disrupted Oxylipin Biosynthesis Mitigates Pathogen Infections and Pest Infestations in Cotton (*Gossypium hirsutum*)

Róisín McGarry, Harrison Higgs, Jyoti Shah and **Brian Ayre**, Department of Biological Sciences and BioDiscovery Institute, University of North Texas, Denton, TX

8:15 AM Sources of FOV-4 Resistance

Jim Olvey¹, Don Jones², Mike Olvey¹, Christopher Saski³, Stephen Parris³, (1)O&A Enterprises Inc., Maricopa, AZ, (2)Cotton Incorporated, Cary, NC, (3) Clemson University, Clemson, SC

8:30 AM Diversity of Culturable Cotton Seedling-Associated Fungi in Kansas

Chris Little, Kansas State University, Manhattan, KS

8:45 AM Investigations into the Seedling Disease Complex in Mississippi Cotton

Thomas Allen¹, Vinson Doyle², (1)Mississippi State University, Starkville, MS, (2)Louisiana State University, Baton Rouge, LA

9:00 AM Evaluating Fungicides for Management of Areolate Mildew in Georgia

Jeremy Kichler¹, Robert Kemerait², (1)University of Georgia Cooperative Extension, Moultrie, GA, (2)University of Georgia Cooperative Extension, Tifton, GA

9:15 AM Evaluating the Response of Commercial Cotton Varieties and Experimental Breeding Lines to Areolate Mildew and Target Spot in the OVT Short Season Cotton in Southeast Alabama

Amanda Strayer-Scherer¹, Henry Jordan¹, Katherine Burch¹, Christopher Parker², (1)Auburn University, Auburn University, AL, (2)Wiregrass Research and Extension Center, Headland, AL

**COTTON DISEASE COUNCIL
FRIDAY LATE MORNING**

Texas Ballroom A-B - 10:30 AM-11:30 AM

10:30 AM Identification of a Cotton Blight Outbreak in South Texas

Enrique Medrano¹, Garry Odvody², (1)USDA-ARS, College Station, TX, (2)Texas A&M University, Corpus Christi, TX

10:45 AM Nematode Reproduction and Cotton Yield of Root-Knot and Reniform Nematodes in Commercial Cotton Cultivars

Terry Wheeler, Texas A&M AgriLife Research, Lubbock, TX

11:00 AM Toxicity of Cyclobutrifluram to Cotton Nematodes

Katherine Brown and **Travis Faske**, University of Arkansas System, Division of Agriculture, Lonoke Extension Center, Lonoke, AR

11:15 AM Sequence of Crop Species and Genetic Resistance to Manage Reniform Nematode in Cotton

Reagan Noland¹, Ken Lege², Scott Fuchs³, Morgan McCulloch¹, (1)Texas A&M AgriLife Extension Service, San Angelo, TX, (2)Corteva Agriscience, Lubbock, TX, (3)Corteva Agriscience, San Angelo, TX

Joint Session: Cotton Ginning Conference and Cotton Engineering Systems Conference

Fort Worth Ballroom 6-7 - 8:00 AM-11:15 AM

8:00 AM Towards a Unified Management Framework for Peta-Scale Agricultural Sensing Data

Daniel Petti¹, Changying Li¹, Ed Barnes², (1)University of Florida, Gainesville, FL, (2)Cotton Incorporated, Cary, NC

8:15 AM Assessing Accuracy and Effectiveness of Variable-Rate PGR Applications with Spray Drones in Cotton

Ravi Meena, Coleman Byers, Simerjeet Virk, Gurpreet Virk and Lavesta Hand, University of Georgia Tifton Campus, Tifton, GA

8:30 AM Spray Deposition and Efficacy of Cotton Harvest-Aid Applications with a Spray Drone and Ground Sprayer

Coleman Byers¹, Simerjeet Virk¹, Lavesta Hand¹, Ravi Meena¹, John Beasley¹, Ed Barnes², (1)University of Georgia, Tifton, GA, (2)Cotton Incorporated, Cary, NC

8:45 AM Evaluation of Fiber Quality Averaging in Cotton Ginning: Implications of Round Module Adaption

Luke Fuhrer¹, Wesley Porter¹, Ed Barnes², Joe Thomas³, Christopher Delhom⁴, (1)University of Georgia Tifton Campus, Tifton, GA, (2)Cotton Incorporated, Cary, NC, (3)USDA-ARS Cotton Ginning Research Unit, Stoneville, MS, (4)Southern Regional Research Center - USDA-ARS, New Orleans, LA

9:00 AM Monitoring Warehouse Stored Cottonseed – Year 2 Results and Progress

Eli Porter¹, Aaron Turner¹, Brennan Teddy¹, Michael Plumblee¹, Edward Barnes², (1)Clemson University, Clemson, SC, (2)Cotton Inc, Cary, NC

9:15 AM Continued Development of Multi-Position Round Module Moisture Sensing

Max Hooks¹, Jason Ward¹, Ed Barnes², (1)NC State University, Raleigh, NC, (2)Cotton Incorporated, Cary, NC

9:30 AM Development of a New Cotton Harvesting Robot

Mohd Fazly Mail¹, Joe Mari Maja¹, Van Patiluna¹, Michael Marshall¹, Gilbert Miller¹, Matthew Cutulle², William Bridges³, Ed Barnes⁴, (1)Edisto Research and Education Center, Blackville, SC, (2)Coastal Research and Education Center, Charleston, SC, (3)Clemson University, Clemson, SC, (4)Cotton Incorporated, Cary, NC

9:45 AM Harnessing Stereo Vision Systems on a Multipurpose Intelligent Ground Rover for Precision Cotton Growth Monitoring

Peter Ngimbwa¹, Canicius Mwitta¹, Wesley Porter¹, Simerjeet Virk¹, Javad Velni², Glen Rains¹, (1)University of Georgia, Tifton, GA, (2)Clemson University, Clemson, SC

10:00 AM Cotton Growth Forecast Based on Unmanned Aerial Vehicle Data using Neural Ordinary Differential Equations

Lei Zhao¹, Mahendra Bhandari², Dugan Um¹, Palaniappan Devanayagam¹, (1)Texas A&M University -- Corpus Christi, Corpus Christi, TX, (2)Texas A&M AgriLife Research, Corpus Christi, TX

10:15 AM Moisture Diffusivity of Seed Cotton at Module Densities

Caleb Riehl¹, Robert Hardin¹, J. Alex Thomasson², (1)Texas A&M University, College Station, TX, (2)Mississippi State, Mississippi State, MS

10:30 AM A Sliding Mode Controller for a Cotton Gin Dryer: Synthesis, Simulation, and Validation

Adeyemi Adeleke and Robert Hardin, Texas A&M University, College Station, TX

10:45 AM Strategic Implementation of Convolutional Neural Networks for Simplified Wrap Damage Detection in Round Cotton Modules

Md Zafar Iqbal¹, Robert Hardin¹, Jason Ward², John Wanjura³, Ed Barnes⁴, (1) Texas A&M University, College Station, TX, (2)NC State University, Raleigh, NC, (3)USDA-ARS, Lubbock, TX, (4)Cotton Incorporated, Cary, NC

11:00 AM Engineering and Ginning Student Paper Competition Awards

Friday, January 5, 2024

Cotton Improvement Conference

COTTON IMPROVEMENT
FRIDAY EARLY MORNING

Texas Ballroom C-D - 8:00 AM-10:00 AM

8:00 AM Announcement and Book Review – 1952 Book on Cotton Variety History

Freddie Bourland, University of Arkansas, Keiser, AR

8:15 AM Resetting the Bar: How DP 1646 B2XF Impacted the U.S. Cotton Market

David Albers¹, Lloyd May², Eric Best³, Keylon Gholston⁴, (1)Bayer, Starkville, MS, (2)Bayer, Tifton, GA, (3)Bayer, Lubbock, TX, (4)Bayer (Retired), Baldwin, MS

8:30 AM New Variety Offerings from BASF for 2024

Tim Culpepper, BASF, Lubbock, TX

8:45 AM A New Infinium SNP Array for Cost-Effective Genotyping, The CottonSNP30K

Grant Billings¹, B Todd Campbell², Peng Chee³, David Fang⁴, Vasu Kuraparthi¹, Luis De Santiago⁵, Jodi Scheffler⁶, David M. Stelly⁷, Gregory Thyssen⁴, **Amanda Hulse-Kemp**⁸, (1)North Carolina State University, Raleigh, NC, (2)USDA Agricultural Research Service, Florence, SC, (3) University of Georgia, Tifton, GA, (4)USDA Agricultural Research Service, New Orleans, LA, (5)University of Texas at Austin, Austin, TX, (6)USDA Agricultural Research Service, Stoneville, MS, (7)Texas A&M University, College Station, TX, (8)USDA Agricultural Research Service, Raleigh, NC

9:00 AM Transcriptome and Gene Expression Network Analyses Reveal an Association of Homoeologous Transcriptional Factors with Fiber Yield under Drought Conditions

Duke Pauli¹, Andrew Nelson², Li'ang Yu², (1)University of Arizona, Tucson, AZ, (2)Boyce Thompson Institute, Ithaca, NY

9:15 AM Breeding Populations Developed Utilizing the Dominant Male Sterility Gene (Ms4) To Facilitate Crossing

Don Keim¹, **Jodi Scheffler**², (1)USDA-ARS, Leland, MS, (2)USDA-ARS, Stoneville, MS

9:30 AM Induced Photoperiod Insensitivity of Wild Cotton *Gossypium hirsutum* subsp. *Purpurascens*

Fakhriddin Kushanov¹, John Yu², (1)Uzbekistan Academy of Sciences, Tashkent, NA, (2)USDA-ARS, College Station, TX

9:45 AM Development of an Efficient Intervarietal Grafting Method for *Gossypium hirsutum* and Its Use for Interspecific Grafting

Devendra Pandeya, LeAnne Campbell and **Keerti Rathore**, Texas A&M AgriLife Research, College Station, TX

COTTON IMPROVEMENT BUSINESS MEETING AND AWARDS

Texas Ballroom C-D - 10:30 AM-11:00 AM

Cotton Insect Research and Control Conference

COTTON INSECT RESEARCH AND CONTROL CONFERENCE FRIDAY EARLY MORNING - SESSION A (GENERAL)

Fort Worth Ballroom 4 - 8:00 AM-11:00 AM

8:00 AM Managing Early-Season Insect Pests of Cotton in the Texas High Plains

Suhas Vyavhare, Texas AandM AgriLife Extension Service, Lubbock, TX

8:15 AM Thrips Management in Mid-South Cotton

Don Cook¹, Tyler Towles¹, Whitney Crow², Sebe Brown³, Ben Thrash⁴, David Kerns⁵, Glenn Studebaker⁶, James Villegas⁷, Nick Bateman⁶, (1)Mississippi State University, Stoneville, MS, (2)Mississippi State University, Mississippi State, MS, (3)University of Tennessee, Jackson, TN, (4)University of Arkansas, Lonoke, AR, (5)Texas AandM University, College Station, TX, (6)University of Arkansas, Stuttgart, AR, (7)LSU AgCenter, Alexandria, LA

8:30 AM Organophosphate Resistance in Tobacco Thrips Populations

Sebe Brown¹, Chase Floyd², Ben Thrash³, Glenn Studebaker³, Tyler Towles⁴, Whitney Crow⁴, Dominic Reisig⁵, Anders Huseeth⁵, (1)University of Tennessee, Jackson, TN, (2)University of Missouri, Portageville, MO, (3)University of Arkansas, Keiser, AR, (4)Mississippi State University, Stoneville, MS, (5)North Carolina State University, Plymouth, NC

8:45 AM A Two Year Evaluation of ThryvOn and Thrips Management Across the Southeast

Scott Graham¹, Alana Jacobson¹, Jeremy Greene², Phillip Roberts³, Dominic Reisig⁴, Isaac Esquivel⁵, (1)Auburn University, Auburn University, AL, (2)Clemson University, Blackville, SC, (3)University of Georgia, Tifton, GA, (4)North Carolina State University, Plymouth, NC, (5)University of Florida, Quincy, FL

9:00 AM Tarnished Plant Bug Thresholds on Thryvon Cotton

Ben Thrash¹, Nick Bateman², Tyler Towles³, Dominic Reisig⁴, Scott Graham⁵, Whitney Crow⁶, Chase Floyd⁷, Sebe Brown⁸, Adam Whitfield⁹, Don Cook³, (1)University of Arkansas Division of Agriculture, Lonoke, AR, (2)U of A, Stuttgart, AR, (3)Mississippi State University, Stoneville, MS, (4)NC State, Plymouth, NC, (5)Auburn University, Auburn University, AL, (6)Mississippi State University, Mississippi State, MS, (7)University of Missouri, Portageville, MO, (8)University of Tennessee, Jackson, TN, (9)Clemson University, Clemson, SC

9:15 AM Effects of Simulated Injury by Tarnished Plant Bug, *Lygus lineolaris*, to Terminals and Pre-Floral Buds on Cotton Growth and Yield

Jeremy Greene¹, Francis Reay-Jones², Phillip Roberts³, Dominic Reisig⁴, Scott Graham⁵, Alana Jacobson⁵, Sally Taylor⁶, Sean Malone⁷, (1)Clemson University Edisto Research and Education Center, Blackville, SC, (2)Clemson University Pee Dee Research and Education Center, Florence, SC, (3)University of Georgia, Tifton, GA, (4)North Carolina State University, Plymouth, NC, (5)Auburn University, Auburn, AL, (6)Cotton Incorporated, Cary, NC, (7)Virginia Tech, Suffolk, VA

9:30 AM Biochemical and Molecular Characterization of Insecticide Resistance in the Tarnished Plant Bug, *Lygus lineolaris* (Hemiptera: Miridae)

Yuzhe(Cathy) Du¹, Shane Scheibener¹, Yucheng Zhu², Maribel Portilla¹, Gadi Reddy¹, (1)USDA-ARS, Southern Insect Management Research Unit, Stoneville, MS, (2)USDA-ARS, Pollinator Health in Southern Crop Ecosystem Research Unit, Stoneville, MS

9:45 AM Performance of Select Insecticides for the Control of Tarnished Plant Bugs in Midsouth Cotton

Tyler Towles¹, Don Cook¹, Whitney Crow², Benjamin Thrash³, Sebe Brown⁴, Chase Floyd⁵, (1)Mississippi State University, Stoneville, MS, (2)Mississippi State University, Mississippi State, MS, (3)University of Arkansas, Lonoke, AR, (4)University of Tennessee, Jackson, TN, (5)T.E. "Jake" Fisher Delta Research, Extension and Education Center, Portageville, MO

10:00 AM 2023 Observations of Tarnished Plant Bugs in ThryvOn and Non-ThryvOn Cotton in Georgia

Phillip Roberts¹, Cale Cloud², Jeremy Kichler³, Sarah Hobby¹, Anthony Black⁴, Scott Rogers⁵, (1)University of Georgia, Tifton, GA, (2)University of Georgia, Cairo, GA, (3)University of Georgia, Moultrie, GA, (4)University of Georgia, Midville, GA, (5)University of Georgia, Plains, GA

10:15 AM Effects of Thrips and Planting Date on Cotton With and Without ThryvOn™ Technology in West Texas and Southern New Mexico

Joni Casabonne¹, Tim Dabbert², David Albers², (1)Bayer CropScience, Welch, TX, (2)Bayer CropScience, Creve Coeur, MO

10:30 AM Impact of Lygus Bugs on Cotton Fiber Yield and Quality Under Supplemental and Full Irrigation Production Conditions

Dol Dhakal, Megha Parajulee, Raju Sapkota and Amanda Sieps, Texas AandM AgriLife Research and Extension Center, Lubbock, TX

10:45 AM Plants Detected from Stink Bug Guts Throughout the Cotton Growing Season in the Brazos River Bottom, Texas

Lindsey Perkin and Charles Suh, USDA ARS, College Station, TX

**COTTON INSECT RESEARCH AND CONTROL CONFERENCE
FRIDAY EARLY MORNING - SESSION B (GENERAL)**

Fort Worth Ballroom 1-2 - 8:00 AM-10:45 AM

8:00 AM Optimizing Insecticide Efficacy for Aphid and Silverleaf Whitefly Management through the Understanding of Spray Coverage in California Cotton Production

Buddhi Achhami and Ian Grettenberger, Department of Entomology and Nematology, University of California, Davis, CA

8:15 AM Supporting "Inaction" and Better Cotton with Predator Thresholds in Arizona

Peter Ellsworth¹, Isadora Bordini¹, Naomi Pier¹, Alfred Fournier¹, Karen Wynne², Steven Naranjo³, (1)University of Arizona, Maricopa, AZ, (2)Better Cotton Initiative, Vernier, Genève, (3)USDA-ARS, ALARC, Maricopa, AZ

8:30 AM Investigation of Dynamic Distribution of Whiteflies (*Bemisia tabaci*) Within Cotton Field for Enhanced Precision Agriculture

Denis olgen Kiobia, Jason Schmidt, David Riley and Glen Rains, University of Georgia, Tifton, GA

8:45 AM Disrupted Oxylin Biosynthesis Mitigates Pathogen Infections and Pest Infestations in Cotton (*Gossypium hirsutum*)

Róisín McGarry, Harrison Higgs, Jyoti Shah and **Brian Ayre**, Department of Biological Sciences and BioDiscovery Institute, University of North Texas, Denton, TX

9:00 AM Quid Pro Quo? Relationships of Bees and Cotton

Isaac Esquivel¹, Katherine Parys², (1)University of Florida North Florida Research and Education Center, Quincy, FL, (2)USDA-ARS-Pollinator Health in Southern Crop Ecosystem Research Unit, Stoneville, MS

9:15 AM Remote Sensing of Pest Population in Cotton: Acoustics and AI

Kaiying Chen, Kun Luan, Dominic Reisig and R. Roe, North Carolina State University, Raleigh, NC

9:30 AM Inheritance of Vip3Aa39 Resistance in the Tobacco Budworm *Chloridea virescens* (Lepidoptera: Noctuidae)

Jose Santiago-Gonzalez¹, Fei Yang², David Kerns², Dawson Kerns³, Juan Luis Jurat-Fuentes³, (1)Texas A&M AgriLife Extension, Amarillo, TX, (2)Texas A&M University, College Station, TX, (3)University of Tennessee, Knoxville, TN

9:45 AM Strain-Specific Susceptibility of the Fall Armyworm (*Spodoptera frugiperda*) to Cypermethrin and Chlorantraniliprole May Necessitate More Focused Monitoring and Management Strategies

Andie Miller, Gregory Sword and David Kerns, Texas A&M University, College Station, TX

10:00 AM Larval Bollworm Bacteria Microbiota is More Mobile Than You Think

R. Roe¹, Jean Deguenon¹, Roger Lawrie¹, Dominic Reisig², Loganathan Ponnusamy¹, (1)North Carolina State University, Raleigh, NC, (2)North Carolina State University, Plymouth, NC

10:15 AM Rapid Evolution of Pesticide Resistance in U.S. Populations of *Helicoverpa zea* via Adaptation and Interspecific Introgression from the Old World Bollworm, *H. armigera*

Henry North¹, Zhen Fu², Richard Metz², Matthew Stull², Charles Johnson², Xanthe Shirley³, Kate Crumley⁴, Dominic Reisig⁵, David Kerns², Todd Gilligan⁶, Tom Walsh⁷, Chris Jiggins¹, **Gregory Sword**², (1)University of Cambridge, Cambridge, England, (2)Texas A&M University, College Station, TX, (3)USDA-APHIS, College Station, TX, (4)Texas A&M University, Wharton, TX, (5)North Carolina State University, Plymouth, NC, (6)USDA-APHIS, Ft. Collins, CO, (7)CSIRO, Canberra, ACT

10:30 AM Safeguarding Bt Cotton with Experimental Social Science Evidence

Dominic Reisig¹, Greg Ferraro², Zachary Brown², (1)North Carolina State University, Plymouth, NC, (2)North Carolina State University, Raleigh, NC

Cotton Weed Science Research Conference

COTTON WEED SCIENCE RESEARCH
GRADUATE STUDENT AWARDS

Fort Worth Ballroom 5 - 10:00 AM-10:30 AM

Wednesday, January 3, 2024

Thursday, January 4, 2024

Friday, January 5, 2024

TECHNICAL CONFERENCES POSTER BOARD SESSION

WEDNESDAY, JANUARY 3, 2024, 8:00 AM - 8:00 PM

THURSDAY, JANUARY 4, 2024, 8:00 AM - 10:00 PM

FRIDAY, JANUARY 5, 2024, 8:00 AM - 12:00 PM

Texas Ballroom Foyer

POSTERS WILL BE ON DISPLAY IN TEXAS BALLROOM F
FOR THE FOLLOWING:
COTTON ECONOMICS AND MARKETING CONFERENCE

Cotton Agronomy, Physiology and Soil Conference Posters

- Directed Energy System: Can it Be Effective at Cotton Seed Priming?**
Sarah Chu¹, Jon Jackson², Neil Sater², Muthukumar Bagavathiannan¹, (1)Texas A&M University, College Station, TX, (2)Global Neighbor Inc, Xenia, OH
- 2023 UGA On-Farm Cotton Variety Evaluation Program Preliminary Results**
Lavesta Hand, Wade Parker, Chandler Rowe, Holly Anderson, Tony Barnes, John Bennett, Derrick Bowen, Scott Carlson, Blake Carter, Cale Cloud, Jeff Cook, Braxton Crews, Jason Edenfield, Phillip Edwards, Morgan Grizzle, Guy Hancock, Justin Hand, Brian Hayes, Jeremy Kichler, Chelsea Lopez, Madison Luke, Seth McAllister, Jennifer Miller, Justin Odom, Tucker Price, Jay Porter, Cody Powell, Steven Powell, Ben Reeves, Colby Royal, Pam Sapp, Aubrey Shirley, Ashley Smith, Bill Starr, Savannah Tanner, Bill Tyson, Anthony Black, Eric Elsner and Scott Rogers, University of Georgia, Tifton, GA
- Predicting the Response of a Cotton-Sorghum Production System to Climate Change in a Semi-Arid Environment of West Texas**
Bishnu Ghimire, Wenxuan Guo, Rupak Karn, Oluwatola Adedeji, Glen Ritchie, Texas Tech University, Lubbock, TX
- Our Least Favorite Subject in NC Cotton**
Guy Collins¹, Keith Edmisten², Michael Phillips², Jeremy Hendricks², Evan Sayani², (1)NC State University, Rocky Mount, NC, (2)NC State University, Raleigh, NC
- Assessing Precision Water Management in Cotton using Unmanned Aerial Systems and Satellite Remote Sensing**
Oluwatola Adedeji¹, Alwaseela Abdalla¹, Rupak Karn¹, Bishnu Ghimire¹, Emily Wieber¹, Wenxuan Guo^{1,2}, (1)Department of Plant and Soil Science, Texas Tech University, Lubbock, TX, (2) Texas A&M AgriLife Research and Extension Center at Lubbock, Lubbock, TX

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6. **A Project Overview: Understanding Biotic and Abiotic Factors of Visually Mechanical Damaged Seed Impacting Cotton Seed Quality that Can Lead to Improved Value and Profitability**
Lori Unruh Snyder¹, Jane Dever², **Matthew Starr**¹, Marisa Crisp¹, Rebekah Ortiz², Rosalyn Shim³, Bandana Otsi³, Ruthie Angelovicir⁴, (1)NC State, Raleigh, NC, (2)Texas A&M AgriLife Research and Extension Center at Lubbock, Lubbock, TX, (3)Texas Tech University, Lubbock, TX, (4)University of Missouri, Columbia, MO
7. **Mechanical Damage of Cotton Seed and Biostimulant Application**
Marisa Crisp, Matthew Starr and Lori Unruh Snyder, NC State, Raleigh, NC
8. **Dynamic Estimation of Cotton N Content Using Multisource Remote Sensing and Integration of Deep Learning**
Rupak Karn¹, Katie Lewis^{1,2}, Glen Ritchie¹, Wenxuan Guo^{1,2}, (1)Texas Tech University, Lubbock, TX, (2)Texas A&M AgriLife Research and Extension Center at Lubbock, Lubbock, TX
9. **Evaluating the Effect of Thryvon™ Technology on Cotton Root and Shoot Growth**
Mohit Kumar, Gurpreet Virk, Simerjeet Virk, John Snider, Joshua Lee and Ved Parkash, University of Georgia, Tifton, GA
10. **Evaluation of Cotton in Large-Plot On-Farm Variety Testing in Arkansas for 2023**
Colton Henderson and Joe McAlee, University of Arkansas Cooperative Extension Service, Newport, AR
11. **Carbon Stock and Cotton Yield as Affected by Sandy Soil Tillage**
Caroline Honorato Rocha^{1,2}, Giovanna Maniezzo De Mattos¹, Juliano Calonego³, Cássio Tormena⁴, Tyson Raper², Fábio Echer¹, (1)University of West Paulista, Campus II, Presidente Prudente, São Paulo, (2)West TN AgResearch and Education Center, Jackson, TN, (3)Unesp Campus de Botucatu, Botucatu, São Paulo, (4)Universidade Estadual de Maringá, Maringá, Paraná
12. **Evaluation of Plant Population on Varieties in Arkansas Large-Plot Variety Trials**
Colton Henderson and Joe McAlee, University of Arkansas Cooperative Extension Service, Newport, AR
13. **Optimizing Boron Management in Missouri Cotton**
Justin Calhoun, Bradley Wilson and **Angelica Crosby**, MU Fisher Delta Research Education and Extension Center, Portageville, MO
14. **Evaluating Drought Tolerance in South African Germplasm lines**
Mathilda van der Westhuizen, Meshack Mofokeng and Stephen Amoo, Agricultural Research Council Roodeplaat, Pretoria, Gauteng
15. **Evaluating Last Effective Bloom Date with Various Termination Dates in NC Cotton**
Jeremy Hendricks¹, Keith Edmisten¹, Guy Collins², Michael Phillips¹, Evan Sayani¹, (1)North Carolina State University, Raleigh, NC, (2)North Carolina State University, Rocky Mount, NC

Wednesday, January 3, 2024

Thursday, January 4, 2024

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16. **Evaluation of the Nutrient Requirements and Uptake Indices of Ten Modern Cotton Cultivars**
Jessica Joy Bicaldo, Katie Lewis and Glen Ritchie, Texas Tech University, Lubbock, TX
17. **Evaluation of Subsurface Drainage in a Cotton Production System**
Tyler Soignier, Brian Pieralisi and Whitney Crow, Mississippi State University, Mississippi State University, MS
18. **Effect of Nitrogen Rates and Plant Growth Management Strategies on Canopy Growth and Yield of Cotton**
Ingrid Almeida, John Snider, Ved Parkash and Joshua Lee, University of Georgia, Tifton, GA
19. **Developing Improved Nitrogen Recommendations for Florida Cotton Growers**
Ethan Carter¹, Joseph Iboyi², Peter Omara², Hardeep Singh², Lakesh Sharma³, Michael Dukes³, (1)University of Florida, Marianna, FL, (2)University of Florida, Jay, FL, (3)University of Florida, Gainesville, FL
20. **Impact of In-Season Applications of Potassium on Yield and Fiber Quality**
Tyler Mays, Dale Mott and Matt Matocha, Texas A&M AgriLife Extension Service, Hillsboro, TX
21. **Cotton Lint Yield and Quality Variability in Georgia: Understanding Genotypic and Environmental Interactions**
Gonzalo Scarpin¹, Lavesta Hand², Phillip Roberts², Chandler Rowe², Leonardo M. Bastos¹, (1)University of Georgia, Athens, GA, (2)University of Georgia, Tifton, GA
22. **Side-Dress Sensor-Based Variable Rate Nitrogen Management in Cotton**
Anish Bhattarai¹, John Snider², Wesley Porter², Lavesta Hand², Leonardo M. Bastos¹, (1)University of Georgia, Athens, GA, (2) University of Georgia Tifton Campus, Tifton, GA
23. **Optimization of Nitrogen and Phosphorus Fertigation Strategies Through Subsurface Drip Irrigation**
Hector Valencia^{1,2}, Joseph Burke¹, Tessa Bennett^{1,2}, Katie Lewis^{1,2}, (1)Texas A&M AgriLife Research and Extension, Lubbock, TX, (2) Texas Tech University, Lubbock, TX
24. **Interactive Effects of Fertilizer and Growth Regulator Rates on Yield and Quality of Georgia Cotton**
Lindsay McDonald, Glendon Harris and Lavesta Hand, University of Georgia, Tifton, GA
25. **Variety Selection Does Not Alter Cotton Performance in Alternative Row Arrangements in Georgia**
Jordon Hall¹, Lavesta Hand¹, Caitlyn Lawton², John Snider¹, Phillip Roberts¹, (1)University of Georgia Tifton Campus, Tifton, GA, (2)Auburn University, Auburn, AL
26. **Does Occasional Tillage Control Windmill Grass Without Compromising Soil Health Benefits?**
Kale Adams, Charles Coufal and Paul DeLaune, Texas A&M AgriLife Research, Vernon, TX

Wednesday, January 3, 2024

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27. **Differential Sensitivities of Photosynthetic and Carbon Loss Processes Govern Water Deficit-Induced Variation in Net Carbon Assimilation Rate for Field-Grown Cotton**
Ved Parkash, John Snider, Gurpreet Virk, Kamalpreet Kaur Dhillon and Joshua Lee, University of Georgia, Tifton, GA
28. **Cover Crop Termination Timing Effects on Soil and Plant Parameters**
Christopher Cobos¹, Gurjinder Baath², Sumantra Chatterjee², Joseph Burke¹, Paul DeLaune¹, Katie Lewis¹, (1)Texas A&M AgriLife Research, Lubbock, TX, (2)Texas A&M AgriLife Research, Temple, TX
29. **Benzyladenine + Gibberellins Modify Cotton Boll Retention and Yield**
Reinaldo Da Silva^{1,2,3}, Guilherme Sueiro³, Guilherme Santos³, Ciro Rosolem², Rogerio Soratto², (1)Holagri Paranapanema, Paranapanema, State of São Paulo, (2)Unesp Campus de Botucatu, Botucatu, São Paulo, (3)CREA-SP, Sao Paulo, São Paulo
30. **The Effects of Manure Applications on Cotton Yield and Soil Greenhouse Gas Emissions in The Texas High Plains**
Tessa Bennett and Katie Lewis, Texas Tech University, Lubbock, TX
31. **Impact of Leaf and Terminal Removal on Cotton Yield and Fiber Quality**
Michael Jones¹, Mark Zarnstorff², (1)Clemson University, Florence, SC, (2)National Crop Insurance Services, Overland Park, KS
32. **Wetting Agent Impacts on Soil Water Dynamics in Semi-Arid Cotton Production**
Katerina Vargas^{1,2}, Joseph Burke³, Katie Lewis^{2,3}, (1)Texas A&M Agrilife Research Center, Lubbock, TX, (2)Texas Tech University, Lubbock, TX, (3)Texas A&M AgriLife Research and Extension Center at Lubbock, Lubbock, TX
33. **Cultivar Root and Shoot Responses to N Concentrations**
Michaela Smith and Brian Arnall, Oklahoma State University, Stillwater, OK
34. **2023 Mississippi On-Farm Cotton Variety Trials**
William Rutland and Brian Perialisi, Mississippi State University, Mississippi State, MS
35. **Analyzing Nematode Management Practices in Cotton**
Blake Carter, Wade Parker, Jason Mallard, Robert Kemerait and Lavesta Hand, University of Georgia Cooperative Extension Service, Springfield, GA
36. **Alternative Chemical Tactics for Cotton Defoliation**
Macey Keith¹, Peter Ellsworth², Randy Norton², (1)University of Nebraska-Lincoln, Lincoln, NE, (2)The University of Arizona, Tucson, AZ

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37. **Late Season Cold Temperatures Impact on Cotton (*Gossypium hirsutum*) Production**
Rebekah Ortiz^{1,2}, Brooke Shumate^{1,2}, Brendan Kelly^{1,2}, Jourdan Bell³, John Wanjura⁴, Murilo Maeda⁵, (1)Texas A&M AgriLife Research and Extension Center at Lubbock, Lubbock, TX, (2)Texas Tech University, Lubbock, TX, (3)Texas A&M Agrilife, Amarillo, TX, (4)ARS USDA, Lubbock, TX, (5)BASF, Trindade, Goiás
38. **Evaluation of Gin Type and Number of Replicates to Generate Reliability in Turnout and Fiber Quality within the University of Tennessee Official Variety Trial Program**
Samuel Reeves, Tyson Raper, Earl Reed, Patricia de Sousa Soares, Caroline Honorato, Matt Davis, and Ryan Blair, University of Tennessee, Jackson, TN
39. **Varying Row Spacing and Seed Density Impact on Cotton (*Gossypium hirsutum*) Physiology, Lint Yield, and Fiber Quality**
Rebekah Ortiz^{1,2}, Brooke Shumate^{1,2}, Brendan Kelly^{1,2}, Irish Lorraine Pabuayon², (1)Texas A&M AgriLife Research and Extension Center at Lubbock, Lubbock, TX, (2)Texas Tech University, Lubbock, TX
40. **Impact of Future Climate on GDD of Cotton and Its Phenology Development in Cotton Belt Region**
Chiranjibi Poudyal¹, Nithya Rajan¹, Curtis Adams², Mahendra Bhandari³, Robert Hardin¹, (1)Texas A&M University, College Station, TX, (2)USDA-ARS, Adams, OR, (3)Texas A&M University, Corpus Christi, TX
41. **Remote Detection of Leaf Type After the Initial Defoliation Application**
Caroline Honorato¹, Tyson Raper¹, Lori Duncan², Patricia de Sousa Soares¹, Samuel Reeves¹, Matt Davis¹, (1)University of Tennessee, Jackson, TN, (2)University of Tennessee, Knoxville, TN
42. **A Comprehensive Overview of My Summer Internship: Research and Extension Experiences for Undergraduates (REEU)**
Crystal Ferrell¹, Kendall Sheldon¹, Avat Shekoofa¹, Isha Poudel¹, (1)University of Tennessee, Jackson, TN
43. **2023 Cotton Plant Population and Row Spacing Evaluation in the Texas Blackland Prairie**
Benjamin McKnight and Dale Mott, Texas A&M AgriLife Extension Service, College Station, TX
44. **2023 Texas Upper Gulf Coast Replicated Agronomic Cotton Evaluation (RACE) - Trial Summary**
Dale Mott and Benjamin McKnight, Texas A&M University, College Station, TX

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45. **Modeling Cotton Growth and Greenhouse Gas Emissions Using the DSSAT Crop Simulation Model**
Noriki Miyanaka¹, Nithya Rajan¹, Kenneth Casey², Steven Pires³, Sk Musfiq Us Salehin¹, Peter Tomlinson⁴, Jaehak Jeong⁵, Julie Howe¹, (1)Department of Soil and Crop Sciences, Texas A&M University, College Station, TX, (2)Department of Biological and Agricultural Engineering, Texas A&M University, Amarillo, TX, (3) Cotton Incorporated, Cary, NC, (4)Department of Agronomy, Kansas State University, Manhattan, TX, (5)Department of Biological and Agricultural Engineering, Texas A&M University, Temple, TX
46. **Seeding Rate Studies Across Four Georgia Locations**
Wade Parker¹, Colton Moon¹, Seth McAllister², Lavesta Hand³, (1) University of Georgia, Statesboro, GA, (2)University of Georgia, Dawson, GA, (3)University of Georgia, Tifton, GA
47. **Visually Mechanically Damaged Seed and Its Impact on Cotton Production**
Marisa Crisp, Matthew Starr and Lori Unruh Snyder, NC State, Raleigh, NC

Cotton Disease Council Posters

48. **In-Depth Study of a Cotton Leafroll Dwarf Virus Protein Working Against the Host's Antiviral Defense Mechanism**
Sung Hwan Kang and Mary Akinyuwa, Auburn University, Auburn, AL
49. **In-Depth Study of a Cotton Leafroll Dwarf Virus Protein Countering the Host's Antiviral Defense Mechanism**
Sung Hwan Kang, Auburn University, Auburn, AL
50. **Effects of Temperature and Cotton Leafroll Dwarf Virus Infection in Cotton**
Kelly Schlarbaum¹, Kassie Conner², Alana Jacobson¹, (1)Auburn University, Department of Entomology and Plant Pathology, Auburn, AL, (2)Alabama Cooperative Extension System, Auburn, AL
51. **De Novo Genome Sequences And Assemblies From Pathogenic *Fusarium oxysporum* f. sp. *vasinfectum* Isolates From California**
Timothy Jobe¹, Mauricio Ulloa¹, Margaret Ellis², (1)USDA-ARS PA, CSRL Plant Stress and Germplasm Development Research Laboratory, Lubbock, TX, (2)California State University, Fresno, Fresno, CA
52. **A Secreted In Xylem (SIX) Gene Is Highly Conserved In *Fusarium oxysporum* f. sp. *vasinfectum* Race 4**
Timothy Jobe¹, Michael Urner², Mauricio Ulloa¹, Kirk Broders³, Robert Hutmacher⁴, Margaret Ellis², (1)USDA-ARS PA, CSRL Plant Stress and Germplasm Development Research Laboratory, Lubbock, TX, (2)California State University, Fresno, Fresno, CA, (3) USDA ARS NCAUR, Peoria, IL, (4)University of California, Davis, Five Point, CA

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53. **Characterization of Fusarium Isolates Collected in Uzbekistan**
Timothy Jobe¹, Jorge Garcia², Ibrokhim Abdurakhmonov³, Mauricio Ulloa¹, Zabardast Buriev³, Shukhrat Shermatov³, Abdusalom Makamov³, Dilshod Usmanov³, Mukhtor Darmanov³, Robert Hutmacher⁴, Kirk Broders⁵, Margaret Ellis², (1)USDA-ARS Plant Stress and Water Conservation Lab, Lubbock, TX, (2)Jordan Agricultural Research Center, Fresno, CA, (3)Center of Genomics and Bioinformatics, Tashkent, Kibray Region, (4)Plant Sciences Department, University of California, Davis, CA, (5)USDA ARS NCAUR, Peoria, IL
54. **The Roll of Lacinilene and Gossypol Pathways in the Resistance to the Hemibiotrophic Fusarium Wilt Pathogen and Necrotrophic Seedling Disease Pathogen Rhizoctonia solani**
Tanya Wagner¹, Alois Bell¹, Lorraine Puckhaber¹, Clint Magill³, **Jinggao Liu**¹, (1)USDA-ARS, College Station, TX, (2)Texas A&M University, College Station, TX
55. **Increased Genetic Diversity within Fusarium oxysporum f. sp. vasinfectum Isolated from Cotton in California**
Jorge Garcia¹, Timothy Jobe², Mauricio Ulloa², Robert Hutmacher³, Margaret Ellis¹, (1)California State University, Fresno, CA, (2)USDA-ARS, PA, CSRL Plant Stress and Germplasm Development Research, Lubbock, TX, (3)University of California, Davis, CA
56. **Dissecting Differences in Resistance to Fusarium Oxysporum f. sp. Vasinfectum Race 4 Between Gossypium hirsutum and G. barbadense**
Tanya Wagner¹, Alois Bell¹, Clint Magill², Jinggao Liu¹, (1)USDA-ARS-ICCDRU, College Station, TX, (2)Texas A&M, College Station, TX
57. **Deciphering Fungicide Seed Treatments for Seedling Disease Management**
Paul Price, Myra Purvis and Dustin Ezell, LSU AgCenter, Winnsboro, LA
58. **Monitoring Cotton Soil-Borne Seedling Diseases Through Isolation and Soil Metabarcoding**
Morgan Bragg¹, Heather Kelly², Akhtar Ali³, Thomas Allen⁴, Tessie Wilkerson⁴, Robert Kemerait⁵, Kathy Lawrence¹, Amanda Strayer-Scherer¹, Cecilia Monclova-Santana⁶, Paul Price⁷, Alejandro Rojas⁸, Terry Spurlock⁹, Ian Small¹⁰, Zachary Noel¹, (1)Auburn University, Auburn, AL, (2)University of Tennessee, Jackson, TN, (3)The University of Tulsa, Tulsa, OK, (4)Mississippi State, Mississippi State, MS, (5)University of Georgia, Tifton, GA, (6)Texas Tech University, Lubbock, TX, (7)Louisiana State University, Winnsboro, LA, (8)Michigan State University, East Lansing, MI, (9)University of Arkansas, Fayetteville, AR, (10)University of Florida, Gainesville, FL
59. **The Impact of Latent Infections on the Transmission of Cotton Bacterial Blight**
Philip Adepoju¹, Brian Kvitko¹, Jovana Mijatovic², Robert Kemerait³, (1)University of Georgia, Athens, GA, (2)Oregon State University, Corvallis, OR, (3)University of Georgia, Tifton, GA

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60. **Cultivar Response to Inoculation with *Xanthomonas citri* pv. *malvacearum* in Mississippi in 2023**
Thomas Allen and Shien Lu, Mississippi State University, Starkville, MS
61. **Extension Cotton Fungicide Trials Address Areolate Mildew in Bulloch County, GA**
Bill Tyson¹, Robert Kemerait², (1)University of Georgia Cooperative Extension, Statesboro, GA, (2)University of Georgia, Tifton, GA
62. **A Multi Year Assessment of Root Knot Nematode Management in Georgia**
Jeremy Kichler¹, Robert Kemerait², (1)University of Georgia Cooperative Extension, Moultrie, GA, (2)University of Georgia Cooperative Extension, Tifton, GA
63. **Evaluation of Cotton Cultivars for Root-Knot Nematode Control in Mississippi**
Tessie Wilkerson and Thomas Allen, Mississippi State University-Delta Research and Extension Center, Stoneville, MS
64. **Evaluating Reniform Nematode Management Practices with Reniform-Resistant Cotton Cultivars and Breeding Lines Containing USDA Germplasm**
Tessie Wilkerson¹, Thomas Allen¹, Sally Stetina², Jack McCarty Jr.³, Nicholas Tadlock¹, **Jon Corser**¹, (1)Mississippi State University-Delta Research and Extension Center, Stoneville, MS, (2)USDA-ARS, Stoneville, MS, (3)USDA-ARS, Mississippi State, MS
65. **Comparison of Cotton Cultivars and Nematicides in a Root-Knot Infested Field in Arkansas**
Katherine Brown, Micheal Emerson, Brandon Baker and Travis Faske, University of Arkansas, Lonoke, AR
66. **Variety and Seed Treatment Effects on Reniform and Root Knot Nematodes in TN Cotton Production**
Eduarda Schutz and Heather Kelly, University of Tennessee, Jackson, TN
67. **In-Field Equipment Cleaning and Sanitization Options to Reduce between Field Movement of Reniform Nematodes**
Morgan McCulloch¹, Reagan Noland¹, Thomas Isakeit², (1)Texas A&M AgriLife Extension, San Angelo, TX, (2)Texas A&M AgriLife Extension, College Station, TX
68. **Efficacy of Foliar Fungicides for Management of Target Spot and Aereolate Mildew on Cotton in Southern South Carolina**
Rogan Gibson¹, Joe Varn², Charles Davis³, John Mueller⁴, (1) Allendale County Extension Office, Allendale, SC, (2)Bamberg County Extension, Bamberg, SC, (3)Calhoun County Extension, St. Matthews, SC, (4)Clemson University, Blackville, SC
69. **Distribution of Areolate Mildew in the Mississippi Cotton Production System During 2022 and 2023**
Thomas Allen, Mississippi State University, Starkville, MS

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70. **Results from the National Predictive Modeling Tool Initiative Foliar Fungicide Management Trials Conducted during 2022**
Thomas Allen¹, Akhtar Ali², Mandy Bish³, Thomas Isakeit⁴, Heather Kelly⁵, Robert Kemerait⁶, John Mueller⁷, Paul Price⁸, Ian Small⁹, Terry Spurlock¹⁰, Amanda Strayer-Scherer¹¹, (1) Mississippi State University - Delta Research and Extension Center, Stoneville, MS, (2)University of Tulsa, Tulsa, OK, (3) University of Missouri, Columbia, MO, (4)Texas A&M University, College Station, TX, (5)University of Tennessee - West Tennessee Agresearch and Education Center, Jackson, TN, (6)University of Georgia - Tifton Campus, Tifton, GA, (7)Clemson University - Edisto Research and Education Center, Blackville, SC, (8)Louisiana State University - Macon Ridge Experiment Station, Winnsboro, LA, (9)University of Florida - North Florida Research and Extension Center, Quincy, FL, (10)University of Arkansas - Lonoke Extension Center, Lonoke, AR, (11)Auburn University, Auburn, AL
71. **Estimating the Regional Distribution and Potential Impacts of Foliar Diseases Through Spore Trapping in Commercial Cotton Fields**
Terry Spurlock¹, Tom Allen², Trey Price³, Heather Kelly⁴, Tom Isakeit⁵, Akhtar Ali⁶, Mandy Bish⁷, Bradley Wilson⁸, Kaitlyn Bissonette⁹, Ian Small¹⁰, Amanda Scherer¹¹, John Mueller¹², Robert Kemerait¹³, (1)University of Arkansas System Division of Agriculture Cooperative Extension Service, Lonoke, AR, (2) Mississippi State University, Stoneville, MS, (3)LSU AgCenter, Winnsboro, LA, (4)University of Tennessee, Jackson, TN, (5)Texas A&M University, College Station, TX, (6)University of Tulsa, Tulsa, OK, (7)University of Missouri, Columbia, MO, (8)University of Missouri, Portageville, MO, (9)Cotton Incorporated, Cary, NC, (10) University of Florida, Quincy, FL, (11)Auburn University, Auburn, AL, (12)Clemson University, Blackville, SC, (13)University of Georgia, Tifton, GA

Cotton Engineering-Systems Conference Posters

72. **Comparison of Two Cotton Moisture Sensors for Real-Time Monitoring**
Sushma Perati and S.D. Filip To, Mississippi State University, Mississippi State, MS
73. **Evaluation of Fungicide Applications with Spray Drone in the Management of Foliar Diseases in Cotton**
Jeremy Kichler¹, Simerjeet Virk², Coleman Byers², (1)University of Georgia Cooperative Extension, Moultrie, GA, (2)University of Georgia, Tifton, GA
74. **Utilizing Soil Moisture Sensors to Aid in Explaining Yield Variability Across Georgia On-Farm Cotton Variety Trials**
Morgan Syskind, Wesley Porter, John Winkler, Emily Bedwell and Miller Hayes, University of Georgia, Tifton, GA

Cotton Ginning Conference Posters

75. **Increasing Sample Throughput and Data Quality in the University of Tennessee MicroGin**
Matt Davis, Tyson Raper, Ryan Blair, Caroline Honorato, Samuel Reeves, Earl Reed, Patricia de Sousa Soares, University of Tennessee, Jackson, TN

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Cotton Improvement Conference Posters

76. **Developing a Protocol to Assess Cotton Drought Tolerance**
Christopher Barron, Texas A&M University, College Station, TX
JAZ^Δjas an Alternate for Bt Tech in the Fight against Consistently Evolving Lepidopteran Threat: *Helicoverpa zea*
77. **Indra Adhikari^{1,2}**, Chirstopher Rock¹, Meghanath Parajulee³, Sunitha Sukumaran¹, (1)Texas Tech University, Lubbock, TX, (2)La Trobe University, Bundoora, VIC, (3)Texas A&M AgriLife Research and Extension Center at Lubbock, Lubbock, TX
78. **Development, Characterization, and Evaluation of *G. mustelinum* Introgression Lines of Cotton**
Himabindhu Badavath and David M. Stelly, Texas A&M University, College Station, TX
79. **Evaluation of Heritability and Genotype Effects of MT2468 Ren1 Resistance to Reniform Nematode (*Rotylenchulus reniformis*) in an Upland Cotton (*Gossypium hirsutum*) Recombinant Inbred Line Population**
Jixiang Wu¹, Gregory Thyssen², Amanda Gaudin¹, Jack McCarty Jr.¹, Johnie Jenkins¹, Martin Wubben¹, (1)USDA-ARS Genetics and Sustainable Agriculture Research Unit, Mississippi State, MS, (2) USDA-ARS Cotton Fiber Bioscience Research Unit, New Orleans, LA
80. **Elucidating Cyclic Fatty Acid Biosynthesis and Compartmentalization in Cotton**
Patrick Horn, University of North Texas, Denton, TX
81. **Status of the National Cotton Germplasm Collection**
James Frelichowski¹, Janna Love¹, Lori Hinze¹, Joshua Udall¹, Don Jones², Jodi Scheffler³, (1)USDA-ARS, Plains Area, Southern Plains Agricultural Research Center, College Station, TX, (2)Cotton Incorporated, Cary, NC, (3)USDA - ARS, Stoneville, MS
82. **Genetic Gain of Fiber Properties in 40 Years Regional High Quality Tests (RHQ): A Preliminary Result**
Linghe Zeng¹, Jixiang Wu², (1)USDA-ARS, Stoneville, MS, (2) Genetics and Sustainable Agriculture Research, Starkville, MS

Cotton Insect Research and Control Conference Posters

83. **Cage Study of Tarnished Plant Bugs on ThryvOn and Non-ThryvOn Cotton in Georgia**
Sarah Hobby, Chandler Rowe and Phillip Roberts, University of Georgia, Tifton, GA
84. **Effect of Tarnished Plant Bug Infestations on Yield in ThryvOn and Non-ThryvOn Cotton Varieties**
Glenn Studebaker¹, Matthew Mann¹, Fred Bourland², (1) University of Arkansas, Keiser, AR, (2)Arkansas Agricultural Experiment Station, Northeast Research and Extension Center, Keiser, AR
85. **Cotton Phenological Stages and Cotton Fleahopper Susceptibility**
Megha Parajulee, Dol Dhakal, Raju Sapkota, Amanda Sieps and Suhas Vyavhare, Texas A&M AgriLife Research and Extension Center at Lubbock, Lubbock, TX

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86. **Cotton Fleahopper Susceptibility and Compensatory Potential of Three Distinct Phenological Stages of Pre-Flower Cotton in Water-Deficit Production Scenario**
Amanda Sieps, Dol Dhakal, Megha Parajulee and, Raju Sapkota, Texas A&M AgriLife Research and Extension Center, Lubbock, TX
87. **Efficacy of Insecticides Targeting Thrips in the Texas Blackland Prairie**
Tyler Mays, Matt Matocha and Zach Davis, Texas A&M AgriLife Extension Service, Hillsboro, TX
88. **Efficacy of Foliar, In-Furrow and Seed Applied Insecticides Against Tobacco Thrips in Arkansas Cotton**
Matthew Mann and Glenn Studebaker, University of Arkansas Division of Agriculture, Little Rock, AR
89. **The Effect of Planting Date on Thrips in Cotton, Soybean and Peanut in Alabama**
Jessica Mahas¹, **Giovani Rossi**¹, Anitha Chitturi², Alana Jacobson¹, (1)Auburn University, Auburn, AL, (2)Malheur Agricultural Experiment Station, Oregon State University, Ontario, OR
90. **Sublethal Effects of Bt on Bollworm Caterpillars with Impact to Predation from a Lady Beetle**
Blake Elkins, Nathan Little, Clint Allen and Maribel Portilla, USDA ARS, Stoneville, MS
91. **Okra-Leaf Cotton Impacts on Helicoverpa zea (Boddie) Egg Hatch and Predation Under Semi-Arid Conditions in Southeastern New Mexico**
Jane Pierce, Patricia Monk and Ivan Tellez, New Mexico State University, Las Cruces, NM
92. **Investigating Allochronic Mating Behavior of the Fall Armyworm (Spodoptera frugiperda) Host Strains and Hybrids in Controlled Field Experimentation**
Megan Kopecki, Andie Miller, Gregory Sword and Jonathan Riggan, Texas A&M University, College Station, TX
93. **Description of a Nesting Aggregation of a Native Bee in Cotton**
Isaac Esquivel¹, **Katherine Parys**², (1)University of Florida, Quincy, FL, (2)USDA ARS PHSCERU, Stoneville, MS
94. **Weevil Species Commonly Captured in Boll Weevil Pheromone Traps**
Charles Suh¹, Xanthe Shirley², Lindsey Perkin¹, (1)USDA-ARS, College Station, TX, (2)USDA-APHIS, College Station, TX

Cotton Quality Measurements and Utilization Conference

95. **An Assessment of OFDA 4000 for Cotton Fiber Length Measurement**
Surendra Gautam, Addisu Ferede Tesema, Md Abu Sayeed, Christopher Turner and Eric F. Hequet, Texas Tech University, Lubbock, TX

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96. **Cotton Gin: A Liquor Made from Discarded Fabrics and Flavored with Juniper and Other Botanicals**
K. Thomas Klasson¹, Matthew Farrell², (1)U.S. Department of Agriculture, Agricultural Research Service, New Orleans, LA, (2) Cotton Incorporated, Textile Chemistry Research, Cary, NC

97. **A New Method for Determining Fuzzy Cotton Seed Damage Caused by Mechanical Means**
K. Thomas Klasson, Scott Pelitire and Michael Dowd (retired), U.S. Department of Agriculture, Agricultural Research Service, New Orleans, LA

Cotton Weed Science Research Conference Posters

98. **Isoxaflutole Tank Mixtures Efficacy on Volunteer Peanut and Weed Control**
Livia Pereira, Steve Li, Ryan Langemeier and Justin McCaghren, Auburn University, Auburn, AL

99. **Weed Control in Cotton with Different Herbicides Coated on Fertilizer and Applied Over-the-Top**
Michael Dodde¹, Dr. Jason Norsworthy¹, Summer Linn¹, Samuel Noe¹, Mason Castner¹, Lon Barber², (1)University of Arkansas System Division of Agriculture, Fayetteville, AR, (2)University of Arkansas System Division of Agriculture, Lonoke, AR

100. **Palmer Amaranth Control Options in the Absence of Dicamba**
Tyler Soignier, Mississippi State University, Mississippi State University, MS

101. **Effect of Application Timing of Florpyrauxifen-benzyl Coated on Fertilizer on Residual Palmer Amaranth Control and Cotton Tolerance**
Summer Pritchett¹, Jason Norsworthy¹, Pamela Carvalho-Moore¹, Tristen Avent¹, Leonard Piveta¹, Lon Barber², (1)University of Arkansas System Division of Agriculture, Fayetteville, AR, (2) University of Arkansas System Division of Agriculture, Lonoke, AR

102. **Engenia PRE/POST Combinations in XtendFlex Cotton**
C.D. Ray White, Wayne Keeling and Justin Spradley, Texas A&M AgriLife Research, Cropping Systems and Weed Science, Lubbock, TX

103. **Cotton Tolerance to Simulated Diflufenican Carryover**
Matthew Woolard¹, Jason Norsworthy¹, Summer Linn¹, Maria Souza¹, Leonard Piveta¹, Lon Barber², (1)University of Arkansas System Division of Agriculture, Fayetteville, AR, (2)University of Arkansas System Division of Agriculture, Lonoke, AR

104. **Impacts of Current ESA Restrictions to Georgia Agriculture and Collaborative Efforts to Improve Information Available for Pesticide Assessments**
Taylor Randell-Singleton and Stanley Culpepper, University of Georgia, Tifton, GA

105. **Efficacy Comparison of a Baicalin and Glufosinate Premix Versus Glufosinate Alone**
Tristen Avent, Dr. Jason Norsworthy, Pamela Carvalho-Moore, Jared Smith and Maria Carolina Souza, University of Arkansas, Fayetteville, AR

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106. **Postemergence Herbicide Evaluations for Control of Glufosinate-Resistant Palmer Amaranth**
Jared Smith¹, Dr. Jason Norsworthy¹, Pamela Carvalho-Moore¹, Maria Carolina Souza¹, Sam Noe¹, L Barber², (1)University of Arkansas, Fayetteville, AR, (2)University of Arkansas, Newport, AR
107. **Evaluation of Droplet Size and Spray Volume on Grass Control with Glyphosate and Dicamba**
Michael Marshall, Clemson University, Blackville, SC
108. **Glyphosate-Resistant Palmer Amaranth Control in Cotton**
Taghi Bararpour, Thomas Allen, Tessie Wilkerson and Tyler Towles, (1)Mississippi State University - DREC, MS State, MS
109. **Effect of Soil Applied Adjuvant (Grounded) on Residual Activity of Main Preemergence Cotton Herbicide on Weed Management Programs including Glyphosate-Resistant Palmer Amaranth**
Taghi Bararpour, Mississippi State University - DREC, MS State, MS
110. **Weed Management Programs in Enlist Cotton**
Taghi Bararpour, Mississippi State University - DREC, MS State, MS
111. **Effectiveness of Salvage Herbicide Programs for Weed Management in Cotton**
Taghi Bararpour, Mississippi State University - DREC, MS State, MS

Sustainability Posters

112. **Sheep as a Potential Tool for In-Season Cotton Weed Management**
Matthew Stewart¹, Reagan Noland², Benjamin McKnight¹, Reid Redden², (1)Texas A&M University, College Station, TX, (2)Texas A&M University, San Angelo, TX
113. **Evaluating Differences in Sustainability Metrics for Cotton Production Across Various Cover Crop Treatments by Reducing Nitrogen Rates in Georgia**
Kaylyn Reagin¹, **Wesley Porter**¹, Seth McAllister², Mary Logan Tostenson³, (1)University of Georgia - Tifton, Tifton, GA, (2) University of Georgia Extension, Dawson, GA, (3)John Deere, Moline, IL
114. **Landraces as Genetic Resources for Sustainable Cotton Cultivation**
Avinash Shrestha¹, Junghyun Shim^{1,2}, Puneet Kaur Mangat¹, Lakhvir Kaur Dhaliwal¹, Rosalyn Shim¹, (1)Texas Tech University, Lubbock, TX, (2)Olam International Limited, Rubuki, Doma
115. **Conservation and Conventional Tillage Systems in the Mid-South: A Five-Year Study Comparing Irrigated and Rainfed Production**
Tina Teague¹, Michele Reba², Arlene Adviento-Borbe², Ray Benson¹, (1)Arkansas State University / University of Arkansas System Division of Agriculture, State University, AR, (2)Delta Water Management Research Unit - USDA-ARS, State University, AR

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116. **Geospatial Analysis of Crop Production and Publicly-Funded Research Stations to Scale Carbon Markets**
Madeline Ginsberg¹, Lori Duncan¹, Andrea Ludwig¹, Liem Tran², Daniel Yoder¹, (1)Department of Biosystems Engineering and Soil Science, University of Tennessee, Knoxville, TN, (2)Department of Geography and Sustainability, University of Tennessee, Knoxville, TN
117. **UGA Extension's AgWET Programming Promotes Irrigation Efficiency While Providing Educational Opportunities for Ag Producers**
Peyton Sapp^{1,2}, Sydni Ingram³, Anthony Black³, John Bennett³, Cale Cloud², Blake Carter³, Scout Carter³, Braxton Crews³, Luke Crosson³, Shane Curry³, Phillip Edwards³, Hannah Grubbs³, David Hall³, Brian Hayes³, James Jacobs³, Raymond Joyce³, Jeremy Kichler³, Daniel Lyon³, Ashley Smith³, Justin Shealey³, Madison Luke³, Jason Mallard⁴, Seth McAllister³, Taylor McDaniel³, Jay Porter³, Wesley Porter³, Cody Powell³, Jake Price³, Tucker Price³, Pam Sapp³, Savannah Tanner³, Bill Tyson³, (1)University of Georgia, Waynesboro, GA, (2)University of Georgia, Cairo, GA, (3)University of Georgia, Tifton, GA, (4)University of Georgia, Statesboro, GA
118. **UGA Water Team Develops the Master Irrigator Developmental Program in the Altamaha Regional Water Planning Council Area**
Colby Royal¹, Jason Mallard², Holly Anderson¹, John Bennett¹, Derrick Bowen¹, Blake Carter¹, Shane Curry¹, Jason Edenfield¹, Phillip Edwards¹, Mark Frye¹, Wiley Greene¹, David Hall¹, Daniel Lyon¹, Hannah Grubbs¹, Seth McAllister¹, Jennifer Miller¹, Colton Moon¹, Steven Powell¹, Wesley Porter¹, Peyton Sapp¹, Gregory Slaughter¹, Lauren Stanley¹, James Tanner¹, Savannah Tanner¹, (1)University of Georgia Cooperative Extension, Tifton, GA, (2) University of Georgia, Statesboro, GA
119. **A Three-Year Evaluation of Tillage to Address Soil Compaction in an Alluvial Soil in the Mid-South**
Patricia de Sousa Soares¹, Tyson Raper¹, Lori Duncan², Caroline Honorato¹, Samuel Reeves¹, Matt Davis¹, Earl Reed¹, (1)University of Tennessee, Jackson, TN, (2)University of Tennessee, Knoxville, TN
120. **Increasing Profitability by Reducing Input Costs Facilitated by Improving Soil Health**
Joe McAlee, Bill Robertson, Breana Watkins and Colton Henderson, University of Arkansas Cooperative Extension Service, Newport, AR
121. **Impact of White Clover Vegetation-Free Strip Width Living Mulch on Cotton Development and Yield**
Maria Zaccaro Gruener¹, **Hannah Lindell**¹, Sambit Shome², Michael Bocz¹, Matthew Thibodeaux¹, Nicholas Basinger¹, (1) University of Georgia, Athens, GA, (2)Swiss Federal Institute of Technology Zürich, Zurich, North-Central Switzerland

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122. **Carbon Dioxide Emissions from Regenerative Cotton Systems in the Semi-Arid Texas Plains**
Nicholas Boogades^{1,2}, Christopher Cobos^{2,3}, Joseph Burke², Paul DeLaune⁴, Wayne Keeling², Katie Lewis², (1)Texas Tech University, Lubbock, TX, (2)Texas A&M AgriLife Research and Extension Center at Lubbock, Lubbock, TX, (3)Texas A&M University, College Station, TX, (4)Texas A&M AgriLife Research and Extension Center at Vernon, Vernon, TX
123. **Cotton Profitability Under Single Specie vs. Multi-Specie Cover Crop Treatment in South Georgia**
Kelvin Bobbie¹, Seth McAllister², Amanda Smith³, Yangxuan Liu³, (1)Department of Agricultural and Applied Economics, University of Georgia, Athens, GA, (2)College of Agricultural and Natural Resources Extension Service, University of Georgia, Dawson, GA, (3)Department of Agricultural and Applied Economics, University of Georgia, Tifton, GA
124. **Cover Crops Reduce Irrigation Water Use in Cotton**
Carson Roberts¹, Drew Gholson¹, Martin Locke², Dave Spencer³, Brian Perialisi³, Whitney Crow³, Nicolas Quintana-Ashwell³, (1) Mississippi State University, Stoneville, MS, (2)USDA-ARS National Sedimentation Laboratory, Oxford, MS, (3)Mississippi State University, Starkville, MS
125. **Yield Response of Dryland Cotton (*Gossypium hirsutum* L) to Micronutrients Application in the Mississippi Delta**
Ammar Bhandari, USDA-ARS, Stoneville, MS

Recorded Presentations

The Beltwide Cotton Conferences (BWCC) continue the tradition of putting leading edge information and innovations into attendees' hands to help with decision-making. The full 2024 BWCC Proceedings are scheduled to be posted in May. However, many of the forum's reports—gleaned from the Confex Podium presentation management/ recording service—are available online.*

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PhytoGen
COTTONSEED

Consultants Conference

<https://www.corteva.com>

Tama

Cotton Ginning Conference

<https://www.tama-usa.com>



JOHN DEERE

Cotton Engineering - Systems Conference

Cotton Sustainability Conference

<https://deere.com>

**GEORGIA
PEANUTS**

Special thanks to the **GEORGIA PEANUT COMMISSION** for providing the peanuts in the registration area.

<https://gapeanuts.com/>