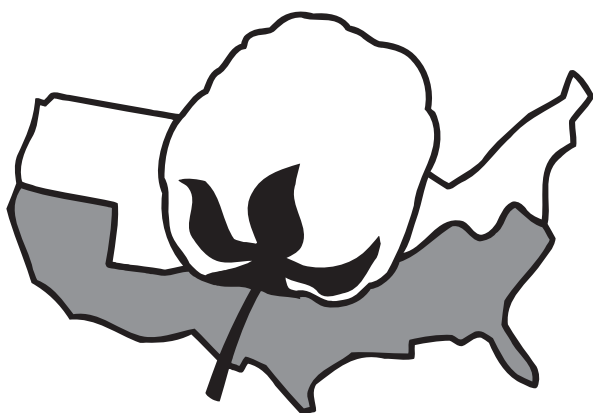


Beltwide Cotton Conferences



January 5-7, 2021
Virtual Live-Stream Event

**National
Cotton
Council** 
OF AMERICA

Schedule of Events

Tuesday, January 5, 2021	
8:00a- 12:05p	Consultants Conference General Session
8:00a- 5:00p	Technical Conferences Poster Board Session
1:00p- 3:00p	Cotton Agronomy, Physiology & Soils Conference
1:00p- 3:00p	Cotton Disease Council - Student Paper Competition
1:00p- 3:00p	Cotton Economic Outlook Symposium
1:00p- 3:00p	Cotton Engineering-Systems Conference
1:00p- 3:00p	Cotton Improvement Conference
1:00p- 3:00p	Cotton Sustainability Conference
3:00p- 3:30p	Break- Beltwide Sponsor Advertisements
3:30p- 5:00p	Cotton Agronomy, Physiology & Soils Conference
3:30p- 5:00p	Cotton Disease Council
3:30p- 5:00p	Cotton Economics and Marketing Conference
3:30p- 5:00p	Cotton Engineering-Systems Conference
3:30p- 5:00p	Cotton Improvement Conference
3:30p- 5:00p	Cotton Sustainability Conference
Wednesday, January 6, 2021	
8:00a- 5:00p	Technical Conferences Poster Board Session
8:00a- 10:00a	Cotton Agronomy, Physiology & Soils Conference
8:00a- 10:00a	Cotton Disease Council
8:00a- 10:00a	Cotton Improvement Conference
8:30a- 10:00a	Cotton Sustainability Conference
8:30a- 10:00a	Cotton Weed Science Research Conference
10:00a- 10:30a	Break- Beltwide Sponsor Advertisements
10:30a- 11:45a	Cotton Disease Council
10:30a- 12:00p	Cotton Agronomy, Physiology & Soils Conference
10:30a- 12:00p	Cotton Economics and Marketing Conference
10:30a- 12:00p	Cotton Engineering-Systems Conference
10:30a- 12:00p	Cotton Improvement Conference
10:30a- 12:00p	Cotton Weed Science Research Conference
10:30a- 12:00p	Cotton Sustainability Conference
1:00p- 2:00p	Cotton Disease Council
1:00p- 3:00p	Cotton Agronomy, Physiology & Soils Conference
1:00p- 3:00p	Cotton Ginning Conference
1:00p- 3:00p	Cotton Improvement Conference
1:00p- 3:00p	Cotton Insect Research & Control Conference
1:00p- 3:00p	Cotton Quality Measurements Conference
1:00p- 3:00p	Cotton Sustainability Conference
1:00p- 3:00p	Cotton Weed Science Research Conference
1:30p- 3:00p	Cotton Economics and Marketing Conference

Schedule of Events

2:00p- 3:00p	Cotton Disease Council - Business Meeting
3:00p- 3:30p	Break- Beltwide Sponsor Advertisements
3:30p- 5:00p	Cotton Agronomy, Physiology & Soils Conference
3:30p- 5:00p	Cotton Improvement Conference
3:30p- 5:00p	Cotton Insect Research & Control Conference
3:30p- 5:00p	Cotton Sustainability Conference
3:30p- 5:15p	Cotton Ginning Conference
Thursday, January 7, 2021	
8:00a- 5:00p	Technical Conferences Poster Board Session
8:00a- 10:00a	Cotton Agronomy, Physiology & Soils Conference
8:00a- 10:00a	Cotton Ginning Conference
8:30a- 10:00a	Cotton Sustainability Conference
9:00a- 12:00p	Cotton Insect Research & Control Conference
10:00a- 10:30a	Break- Beltwide Sponsor Advertisements
10:30a- 12:00p	Cotton Agronomy, Physiology & Soils Conference
10:30a- 12:00p	Cotton Sustainability Conference
1:00p- 2:45p	Cotton Insect Research & Control Conference
3:00p- 3:30p	Break- Beltwide Sponsor Advertisements
3:00p- 5:00p	Cotton Insect Research and Control Conference Business Meeting and Awards

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 & 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 & Forestry, Office of Agricultural & 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 & 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. & 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 & 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 & 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 & 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;
Phone: 512-463-8713

Tuesday, January 5, 2021

Cotton Consultants Conference

CONSULTANTS CONFERENCE GENERAL SESSION

8:00 AM-12:05 PM

8:00 AM Introduction and Acknowledgements

Hank Jones, Chairman Consultants Conference, Winnsboro, LA

8:05 AM Sponsor Message from Bayer

David W Albers, Bayer Crop Science, St. Louis, MO

8:10 AM Sponsor Message from PhytoGen

Joel C Faircloth, PhytoGen Seed Company, LLC, Clemmons, NC

8:15 AM Sponsor Message from FMC

Eric Castner, FMC, Pauls Valley, OK

8:20 AM Sponsor Message from Syngenta

Jeff Mink, Syngenta, Collierville, TN

8:25 AM Sponsor Message from BASF

Steve Nichols, BASF, Lubbock, TX

8:30 AM Weather Forecasting

Eric Snodgrass, Nutrien Ag Solutions, Champaign, IL

9:15 AM Physiological Aspects of Cotton Fruit Shed

John L. Snider, University of Georgia, Tifton, GA

10:00 AM Break - Beltwide Sponsor Advertisements

10:30 AM Update on EPA's Pesticide Program Activities

Michael L. Goodis, P.E., U.S. Environmental Protection Agency, Washington, DC

11:10 AM Bt Resistance Management Panel (A)

Rogers Leonard, Louisiana State University Ag Center, Baton Rouge, LA

11:26 AM Bt Resistance Management Panel (B)

David Kerns, Texas A&M University, College Station, TX

11:43 AM Bt Resistance Management Panel (C)

Jeff Gore, Mississippi State University, Stoneville, MS

12:00 PM Closing Remarks

Hank Jones, Chairman Consultants Conference, Winnsboro, LA

Cotton Agronomy, Physiology & Soil Conference

COTTON AGRONOMY, PHYSIOLOGY & SOILS -
TUESDAY EARLY AFTERNOON

1:00 PM-3:00 PM

1:00 PM Evaluation of Cotton Nutrient Content Under Various Soil-Applied Fertility Programs

Andrea J Althoff¹, Bradley R. Wilson¹, Cayden B. Catlin¹, Brian Arnall¹, Katie L. Lewis² and Seth A. Byrd¹, (1)Oklahoma State University, Stillwater, OK, (2) Texas A&M AgriLife Research Center, Lubbock, TX

1:15 PM Agronomic Effects of Various Small Grain Cover Crops on Dryland Cotton Production in Oklahoma

Bradley R. Wilson¹, Cayden B. Catlin¹, Andrea J Althoff¹, Jason Warren¹, Bobby Weidenmaier² and Seth A. Byrd¹, (1)Oklahoma State University, Stillwater, OK, (2)Oklahoma State University, Fort Cobb, OK

1:30 PM Impact of Row Spacing and Variety on Cotton Fruit Distribution and Yield

Steven D. Hall¹, Darrin M. Dodds¹, Brian K. Pieralisi², Bradley Norris¹, William J Rutland¹, Jacob P. McNeal¹ and John J. Williams¹, (1)Mississippi State University, Mississippi State, MS, (2)Mississippi State University, Starkville, MS

1:45 PM A New Technique for Informing the Cotton Replanting Decision

Enrique Martinez, North Carolina State University, Raleigh, NC, Jason K Ward, NC State University, Raleigh, NC and Guy D. Collins, NC State University, Rocky Mount, NC

2:00 PM The Effects of Residual Herbicide Injury and Seed Quality on Cotton Growth, Development, and Yield

Mitchell K Williams¹, Keith L. Edmisten², Guy D. Collins³, Lori Unruh Snyder², Charlie Cahoon², Emily H Griffith², Phillip S. Lassiter² and Ethan R Foote², (1) North Carolina State University, Sanford, NC, (2)North Carolina State University, Raleigh, NC, (3)North Carolina State University, Rocky Mount, NC

2:15 PM Cover Crop Management to Optimize Yield of Texas High Plains Cotton

C.D. Ray White, Texas A&M AgriLife Research, Lubbock, TX, Katie L. Lewis, Texas A&M AgriLife Research and Extension Center, Lubbock, TX and J. Wayne Keeling, Texas A&M AgriLife Research Center, Lubbock, TX

2:30 PM Tracking Maturity Rates in Cotton Subjected to Different Nitrogen Treatments Using Multi-Spectral Aerial Imagery: Predicting Yield and Time of Harvest

Vaishali Swaminathan¹, J. Alex Thomasson², Nithya Rajan¹, Amrit Shrestha¹, Jeff Siegfried¹, Xiongze Han³ and Karem Meza Capcha¹, (1)Texas A&M University, College Station, TX, (2)Mississippi State University, Starkville, MS, (3)Kangwon National University, Chuncheon, Korea, Republic of (South)

**COTTON AGRONOMY, PHYSIOLOGY & SOILS -
TUESDAY LATE AFTERNOON**

3:30 PM-5:00 PM

3:30 PM Nitrogen Dynamics Following Cover Crops in Texas High Plains Cotton

Joseph Alan Burke, Texas A&M University, College Station, TX, Katie L. Lewis, Texas A&M AgriLife Research and Extension Center, Lubbock, TX and Jamie Foster, Texas A&M AgriLife Research, Corpus Christi, TX

3:45 PM Change in the Nutrient Acquisition and Root Characteristics over 70 Years of Breeding in Cotton

Jagdeep Singh, Audrey V. Gamble, Jenny Koebernick, Steve M Brown and Alvaro Sanz-Saez, Auburn University, Auburn, AL

4:00 PM Impact of Cultivar Variation in Cotton Seed Characteristics and Nitrogen Application Rate on Yield Component Responses

Matthew Aaron Bruce¹, John L. Snider¹, Alessandro Ermanis², Jared R. Whitaker¹ and Guy D. Collins³, (1)University of Georgia, Tifton, GA, (2)University of Padova, Legnaro, Italy, (3)North Carolina State University, Rocky Mount, NC

4:15 PM Spatial and Temporal Dynamics of Soil Nitrogen in Dryland Cotton in the Southern High Plains

Haibin Gu¹, Wenxuan Guo¹, Glen Ritchie¹, Katie L. Lewis², Sanjit Deb¹ and Chenggang Wang³, (1)Department of Plant & Soil Science, Texas Tech University, Lubbock, TX, (2)Texas A&M AgriLife Research and Extension Center, Lubbock, TX, (3)Department of Agricultural and Applied Economics, Texas Tech University, Lubbock, TX

4:30 PM Do Nitrogen and Calcium Play Nice in Cotton?

Amee Bumguardner, Texas Tech University, Lubbock, TX, Texas A&M AgriLife Research, Lubbock, TX, Katie L. Lewis, Texas A&M AgriLife Research and Extension Center, Lubbock, TX, Glen Ritchie, Texas Tech University, Lubbock, TX and Trey Cutts, Yara North America, Inc., Tampa, FL

Cotton Disease Council

COTTON DISEASE COUNCIL - STUDENT PAPER COMPETITION

1:00 PM-3:00 PM

1:00 PM Fungicide Sensitivity and Screening of Target Spot in Tennessee Cotton

Ty Smith and Heather M Kelly, University of Tennessee, Jackson, TN

1:15 PM Characterization of Seeding Wilting Symptoms Associated with Cotton Leafroll Dwarf Virus (CLRDV)

Divya Bhanu Sharma, University of Georgia, Tifton, GA

1:30 PM The Influence of Root Knot Nematodes and Clrdv on Commercial Cotton Varieties in South, AL

Drew Schrimsher¹, Kathy Lawrence², Judith K Brown³, Kara Gordon² and Ashton Kate Turner⁴, (1)Agri-AFC, LLC, Decatur, AL, (2)Auburn University, Auburn University, AL, (3)University of Arizona, Tucson, AZ, (4)Auburn University, Auburn, AL

1:45 PM Design and Implementation of a Robust Metric to Quantify Soilborne Fusarium Oxysporum f. Sp. Vasinfectum Race 4 Inoculum Density

Roy Davis, Thomas Isakeit and Thomas M. Chappell, Texas A&M University, College Station, TX

2:00 PM Screening Commercial Cotton Varieties for Fusarium Wilt and Root-Knot Nematode Resistance

Jessica Dotray¹, Cecilia Monclova-Santana², Terry A. Wheeler³, Jennifer Chagoya⁴ and Jonathan Shockey⁴, (1)Texas Tech University, Lubbock, TX, (2) Texas A&M AgriLife Extension, Lubbock, TX, (3)Texas A&M AgriLife Research, Lubbock, TX, (4)Texas A&M AgriLife Extension Service, Lubbock, TX

2:15 PM Augmented Fertilizer and Nematicide Combinations Applied on Upland Cotton to Increase Yield in Rotylenchulus Reniformis and Meloidogyne Incognita Populated Fields.

Kara Gordon¹, Kathy Lawrence¹, Brad Meyer² and Drew Schrimcher³, (1) Auburn University, Auburn University, AL, (2)GreenPoint Ag, Decatur, AL, (3) GreenPoint Ag, Slocumb, AL

2:30 PM Evaluation of Root Knot and Reniform Nematode Resistant PhytoGen Cotton Cultivars with Supplemental Corteva Agriscience Nematicides

Ashton Kate Turner¹, Kathy Lawrence¹ and John Richburg², (1)Auburn University, Auburn, AL, (2)Corteva Agriscience, Headland, AL

2:45 PM An Assessment of Small Grain Cover Crops as Potential Rotation Crops for Root-Knot and Reniform Nematode Infested Alabama Cotton Fields

Sloane McPeak, Auburn University, Auburn, AL, Kathy Lawrence, Auburn University, Auburn University, AL and Dustin Herb, OreGro Seeds Inc., Albany, OR

Tuesday, January 5, 2021

COTTON DISEASE COUNCIL - TUESDAY LATE AFTERNOON

3:30 PM-5:00 PM

3:30 PM Evaluation of Root Knot and Reniform Resistant Phytoen Cotton Cultivars with Supplemental Corteva Agriscience Nematicides
Ashton Kate Turner¹, Kathy Lawrence¹ and John Richburg², (1)Auburn University, Auburn, AL, (2)Corteva Agriscience, Headland, AL

3:45 PM Variety Response to Verticillium Wilt and Bacterial Blight in the Southern High Plains of Texas
Terry A. Wheeler, Texas A&M AgriLife Research, Lubbock, TX and Jane K Dever, Texas A&M AgriLife Research and Extension Center, Lubbock, TX

4:00 PM Understanding the Genomic Diversity and Pathogenicity of Cotton Fusarium Wilt
Libo Shan, Texas A&M University, College Station, TX

4:15 PM FOV4 Inoculum Density Dynamics and Year-to-Year Variation in Fusarium Wilt Risk
Thomas M. Chappell, Thomas Isakeit and Roy Davis, Texas A&M University, College Station, TX

4:30 PM FOV4 and Fusaria Causing Symptoms in Cotton
Cecilia Monclova-Santana, Texas A&M AgriLife Extension, Lubbock, TX

Cotton Economics and Marketing Conference

COTTON ECONOMIC OUTLOOK SYMPOSIUM

1:00 PM-3:00 PM

1:00 PM Cotton Marketer of the Year Award
O.A. Cleveland, Mississippi State University, Mississippi State, MS

1:30 PM Update on U.S. Ag Policy
Bart L. Fischer, Texas A & M University, College Station, TX

2:00 PM U.S. Cotton Market Outlook
Jody Campiche, National Cotton Council of America, Cordova, TN

2:30 PM International Cotton Outlook
Stephen MacDonald, USDA-OCE, Washington, DC

COTTON ECONOMICS AND MARKETING - TUESDAY LATE AFTERNOON

3:30 PM-5:00 PM

3:30 PM COVID & Cotton Supply Chains
Jon Devine, Cotton Incorporated, Cary, NC

3:50 PM A Tarrifying Thought: Imposing Tariffs on U.S. Apparel Imports from China
Bing Liu¹, Darren Hudson¹ and Jon Devine², (1)Texas Tech University, Lubbock, TX, (2)Cotton Incorporated, Cary, NC

4:10 PM COVID-19 and Cotton Demand in China: Implications for U.S. Exports
Andrew Muhammad¹, Aaron Smith¹ and Edward Yu², (1)University of Tennessee, Knoxville, TN, (2)UTIA, Knoxville, TN

4:30 PM Economic Impacts of the COVID19 Pandemic on Tennessee Cotton Producers and Rural Economies
Aaron Smith, Burt English, Jamey Menard, David Hughes and Kim Jensen, University of Tennessee, Knoxville, TN

Cotton Engineering-Systems Conference

COTTON ENGINEERING-SYSTEMS - TUESDAY EARLY AFTERNOON

1:00 PM-3:00 PM

1:00 PM Introductory Remarks

1:15 PM Using Information from the John Deere Cotton HID System to Aid in Making Production Decisions

Luke McLeod Fuhrer¹, Wesley M Porter¹, Edward M. Barnes², Simerjeet Virk¹, Glen C. Rains¹, John L. Snider¹, Amanda R Smith³, Yangxuan Liu³ and Chaz Holt⁴, (1)University of Georgia, Tifton, GA, (2)Cotton Incorporated, Cary, NC, (3)Extension Economists, Department of Agricultural & Applied Economics, Tifton, GA, (4)Quail Forever, St. Paul, MN

1:30 PM Real-Time Calibrated Cotton Yield Monitor

Jianing He, Texas A&M University, College Station Texas, TX

1:45 PM Design and Test Different End Effectors for Robotic Cotton Harvesting

Hussein Gharakhani, Texas A&M University, College Station, TX and J. Alex Thomasson, Mississippi State University, Starkville, MS

2:00 PM Variability in Non-Fiber Materials Assessed Using Cotton Fiber Quality Mapping

Lucas Mitchell¹, Jason K Ward¹ and Edward M. Barnes², (1)NC State University, Raleigh, NC, (2)Cotton Incorporated, Cary, NC

2:15 PM Real-Time Weed Detection and Removal Using Deep Learning and Laser

Canicius Mwitwa and Glen C. Rains, University of Georgia, Tifton, GA

2:30 PM UAS Multispectral Image Based Detection of 2,4-D Injury in Cotton

Ubaldo Torres, Texas Tech University, Lubbock, TX, Peter A. Dotray, Texas Tech University, Texas A&M AgriLife Research and Extension Service, Lubbock, TX, Kyle Russell, Texas A&M AgriLife Research, Lubbock, TX, Wenxuan Guo, Texas Tech University, Lubbock, TX, Department of Plant & Soil Science, Texas Tech University, Lubbock, TX and Murilo Maeda, Texas A&M AgriLife Extension, Lubbock, TX

2:45 PM Variety Trial Validation: A Framework to Incorporate on-Farm Data

Raul Sebastian¹, Robert G. Hardin¹, Edward M. Barnes², Jason K Ward³, Wesley M Porter⁴, Michael T. Plumblee⁵ and John D. Wanjura⁶, (1)Texas A&M University, College Station, TX, (2)Cotton Incorporated, Cary, NC, (3)NC State University, Raleigh, NC, (4)University of Georgia, Tifton, GA, (5)Clemson University, Blackville, SC, (6)USDA-ARS Cotton Production and Processing Research Unit, Lubbock, TX

Tuesday, January 5, 2021

COTTON ENGINEERING-SYSTEMS - TUESDAY LATE AFTERNOON

3:30 PM-5:00 PM

3:30 PM Opportunities for Robotic Systems and Automation in Cotton Production

Edward M. Barnes¹, Gaylon Morgan¹, Kater Hake¹, Jon Devine¹, Ryan W Kurtz¹, Terry W Griffin², Gregory Ibendahl², Ajay Sharda², Glen C. Rains³, John L. Snider³, Joe Mari J. Maja⁴, James A. Griffin⁵, Robert G. Hardin⁶, Emi Kimura⁷, J. Alex Thomasson⁸, Hussein Gharakhani⁶, Yuzhen Lu⁹, Tyson B Raper¹⁰, Sierra Young¹¹, Kadedge Goodluck Fue¹¹, Mathew G. Pelletier¹², John D Wanjura¹² and Greg A. Holt¹², (1)Cotton Incorporated, Cary, NC, (2)Kansas State University, Manhattan, KS, (3)University of Georgia, Tifton, GA, (4)Clemson University, Blackville, SC, (5)Texas A&M Cotton Extension, College Station, TX, (6)Texas A&M University, College Station, TX, (7)Texas A&M AgriLife Research and Extension Service, Vernon, TX, (8)Mississippi State University, Starkville, MS, (9)Mississippi State University, Mississippi State, MS, (10)University of Tennessee, Jackson, TN, (11)North Carolina State University, Raleigh, NC, (12) USDA-ARS Cotton Production and Processing Research Unit, Lubbock, TX

3:45 PM Mobile Robot Weeder and Harvester Prototype for Cotton Production

Joe Mari J. Maja¹, Matthew Cutulle², Jake Enloe³, Jakob Weber³ and Edward M. Barnes⁴, (1)Clemson University, Blackville, SC, (2)Clemson University, Charleston, SC, (3)Clemson University, Clemson, SC, (4)Cotton Incorporated, Cary, NC

4:00 PM Modern Geospatial Technologies for Cotton Irrigation Management

Kelly R. Thorp¹, Daa Elshikha¹, Duke Pauli² and Pedro Andrade-Sanchez³, (1) USDA-ARS, Maricopa, AZ, (2)University of Arizona, Tucson, AZ, (3)University of Arizona, Maricopa, AZ

4:15 PM On-Farm Demonstration of Sensor-Based Irrigation Scheduling in South Carolina

Jose Payero¹, Bayleah Cooper¹, Rebecca Hitchcock Davis², Jonathan K Croft³, Nathan B Smith⁴ and Michael W. Marshall⁵, (1)Clemson University, Blackville, SC, (2)Clemson University, Bamberg, SC, (3)Clemson University, Orangeburg, SC, (4)Clemson University, Columbia, SC, (5)Clemson University - Edisto REC, Blackville, SC

Cotton Improvement Conference

COTTON IMPROVEMENT - TUESDAY EARLY AFTERNOON

1:00 PM-3:00 PM

1:00 PM Welcoming Remarks

1:05 PM The Mystery Solved: A-Genome Origin of Cultivated Diploid and Tetraploid Cottons

John Z Yu, USDA-ARS, College Station, TX

1:20 PM Cottongen: A Central Data Repository and Analysis Resource for Cotton Community

Jing Yu¹, Don Jones² and Dorrie Main¹, (1)Washington State University, Pullman, WA, (2)Cotton Incorporated, Cary, NC

1:35 PM Partnerships for Data Innovation (PDI) Cotton

Christopher D. Delhom¹, **Mauricio Ulloa**², James R. Mahan³, Edward M. Barnes⁴, Ryan W Kurtz⁴, Gaylon Morgan⁴, Tina Gray Teague⁵, Lindsey Messinger⁶, Grant Zoch⁶, Bruce Vandenberg⁶ and Michael D. Buser⁷, (1) USDA-ARS, New Orleans, LA, (2)USDA-ARS, PA, CSRL, Plant Stress and Germplasm Development Research, Lubbock, TX, (3)USDA/ARS, Lubbock, TX, (4)Cotton Incorporated, Cary, NC, (5)Ark State Univ / Univ Ark Agri Exp Sta, State University, AR, (6)USDA-ARS, Fort Collins, CO, (7)USDA Agricultural Research Service, Beltsville, MD

1:50 PM Development of Core Collections to Better Utilize Available Diversity within the U.S. National Cotton Germplasm Collection

Lori Hinze and James Frelichowski, USDA-ARS, College Station, TX

2:05 PM Status of the National Cotton Germplasm Collection

James Frelichowski¹, Janna Love¹, Lori Hinze¹, Joshua Udall¹, Don Jones² and Jodi Scheffler³, (1)USDA-ARS, College Station, TX, (2)Cotton Incorporated, Cary, NC, (3)USDA ARS, Stoneville, MS

2:20 PM Development of a Cotton Yield Component Index

Fred M. Bourland¹, Don Jones² and Edward M. Barnes², (1)University of Arkansas-NEREC, Keiser, AR, (2)Cotton Incorporated, Cary, NC

2:45 PM Discussion

COTTON IMPROVEMENT - TUESDAY LATE AFTERNOON

3:30 PM-5:00 PM

3:30 PM Deltapine Class of 21 Cotton Varieties

David W Albers, Bayer Crop Science, St. Louis, MO, Keylon Gholston, Bayer Crop Science, Baldwin, MS, Darren Jones, Bayer Crop Science, Lubbock, TX and Dawn Fraser, Bayer Crop Science, Mount Olive, NC

3:45 PM Latest Nexgen Varieties for 2021

Douglas J. Jost, Americot, Garden City, TX

4:00 PM Dyna-Gro Varieties for 2021

Frank Groves, Nutrien, Little Rock, AR

4:15 PM New Variety Offerings from BASF for 2021

Cody W Mull, BASF, Idalou, TX

4:30 PM New Variety Advancements from BASF for 2021

4:45 PM Discussion

Sustainability

COTTON SUSTAINABILITY - TUESDAY EARLY AFTERNOON

1:00 PM-3:00 PM

1:00 PM Opportunities for Soil Health and Regenerative Agriculture in Cotton

Cristine Morgan, Soil Health Institute, Morrisville, NC

1:30 PM Building Microbial Diversity in Semi-Arid Cotton Production Systems for Soil Health - What Is Achievable?

John Zak, Texas Tech University, Lubbock, TX

2:00 PM Impact of Conservation Management Practices on Soil Health in Cotton-Based Cropping Systems

Sindhu Jagadamma¹, Lori Duncan¹ and Tyson B Raper², (1)University of Tennessee, Knoxville, TN, (2)University of Tennessee, Jackson, TN

2:15 PM Conservation Management Practices for Reducing Sediment Losses in Arkansas Cotton

Arlene Adviento AdvientoBorbe, DWMRU USDA-ARS, State University, AR, Benjamin M Levenbach, Arkansas State University, Jonesboro, AR, Richard Woodruff, University of Arkansas, University Park, AR, Tina Gray Teague, Ark State Univ / Univ Ark Agri Exp Sta, State University, AR and Michele L. Reba, USDA-ARS, Jonesboro, AR

2:30 PM Soil Health - Grower Panel Discussion

Gaylon Morgan, Cotton Incorporated, Cary, NC

COTTON SUSTAINABILITY - TUESDAY LATE AFTERNOON

3:30 PM-5:00 PM

3:30 PM Increasing Soil Health Building Practices through Smartphone Apps

Kater Hake, Cotton Incorporated, Cary, NC

4:00 PM Lessons Learned from 40 Years of Increasing the Water Productivity of U.S. Cotton

Edward M. Barnes, Cotton Incorporated, Cary, NC

4:30 PM U.S. Cotton NASS Pesticide and Fertilizer Trends

Steven Pires, Cotton Incorporated, Cary, NC

Wednesday, January 6, 2021

Cotton Agronomy, Physiology & Soil Conference

COTTON AGRONOMY, PHYSIOLOGY & SOILS -
WEDNESDAY EARLY MORNING

8:00 AM-10:00 AM

8:00 AM The Influence of Application Timing on Harvest Aid Efficacy and Fiber Quality

Cayden B. Catlin¹, Wade Young¹, Bradley R. Wilson¹, Andrea J Althoff¹, John M Long¹, Hailin Zhang¹, Bobby Weidenmaier² and Seth A. Byrd¹, (1)Oklahoma State University, Stillwater, OK, (2)Oklahoma State University, Fort Cobb, OK

8:15 AM Herbicide Drift Injury Mapping and Yield Loss Prediction in Cotton Using Remote Sensing Tools

Bishwa Sapkota¹, Zachary Howard¹, Scott Nolte¹, Nithya Rajan¹, Peter A. Dotray², Gaylon Morgan³ and Muthukumar V Bagavathiannan¹, (1)Texas A&M University, College Station, TX, (2)Texas Tech University, Texas A&M AgriLife Research and Extension Service, Lubbock, TX, (3)Cotton Incorporated, Cary, NC

8:30 AM Cotton Defoliation as Affected by Droplet Size and Carrier Volume

Jacob P. McNeal¹, Darrin M. Dodds¹, Brian K. Pieralisi², Greg R. Kruger³, Bradley Norris¹, John J. Williams¹, William J Rutland¹ and Steven D. Hall¹, (1)Mississippi State University, Mississippi State, MS, (2)Mississippi State University, Starkville, MS, (3)University of Nebraska - Lincoln, North Platte, NE

8:45 AM Vegetation Indices to Quantify in-Field Cotton Yield Variability

Jeff Siegfried¹, Nithya Rajan¹, Curtis B. Adams², Steve Hague¹, Robert G. Hardin¹ and Ronnie Schnell³, (1)Texas A&M University, College Station, TX, (2)Texas A&M AgriLife Research, Vernon, TX, (3)Texas A&M AgriLife Extension Service, College Station, TX

9:00 AM Assessment of Auxin-Injured Cotton Using Vegetative Indices to Predict Yield Penalties

Savana D Denton¹, Tyson B Raper¹, Darrin M. Dodds², Chris L Main³ and Freeman Brown¹, (1)University of Tennessee, Jackson, TN, (2)Mississippi State University, Mississippi State, MS, (3)PhytoGen, Medina, TN

COTTON AGRONOMY, PHYSIOLOGY & SOILS -
WEDNESDAY LATE MORNING

10:30 AM-12:00 PM

10:30 AM Effect of Planting Date, Seeding Rate, and Seed Size on Cotton Growth and Yield

Matthew D Inman, Clemson University, Florence, SC

10:45 AM Planting Date Effects on Cotton Lint Yield and Fiber Quality in the U.S. Southern High Plains

Steven A Mauget, USDA-ARS, Lubbock, TX, Mauricio Ulloa, USDA-ARS, PA, CSRL, Plant Stress and Germplasm Development Research, Lubbock, TX and Jane K Dever, Texas A&M AgriLife Research and Extension Center, Lubbock, TX

11:00 AM A Beltwide Seed Quality Survey; An Extension Cotton Specialists Project

Murilo Maeda¹, Steve M Brown², Seth A. Byrd³, D. Scott Carlson⁴, Kent Chapman⁵, Guy D. Collins⁶, Keith Edmisten⁷, Phillip Edwards⁸, Hunter Frame⁹, Guy Hancock¹⁰, Michael A. Jones¹¹, Jeremy M. Kichler¹², Benjamin M. McKnight¹³, Calvin D Meeks¹⁴, Gaylon Morgan¹⁵, Randy Norton¹⁶, Brian K. Pieralisi¹⁷, Tucker Price¹⁰, Tyson B Raper¹⁸, Bill Robertson¹⁹, Tyler Sandlin²⁰, John L. Snider²¹, Lori Unruh Snyder⁷ and David L. Wright²², (1)Texas A&M AgriLife Extension, Lubbock, TX, (2)Auburn University, Auburn, AL, (3)Oklahoma State University, Stillwater, OK, (4)University of Georgia Cooperative Extension, Sylvester, GA, (5)University of North Texas, Denton, TX, (6)North Carolina State University, Rocky Mount, NC, (7)North Carolina State University, Raleigh, NC, (8)University of Georgia Cooperative Extension, Ocilla, GA, (9)Virginia Polytechnic Institute & State University, Blacksburg, VA, (10)University of Georgia, Athens, GA, (11)Clemson University, Florence, SC, (12)University of Georgia Cooperative Extension, Moultrie, GA, (13)Texas A&M University, College Station, TX, (14)University of Missouri, Portageville, MO, (15)Cotton Incorporated, Cary, NC, (16)University of Arizona, Safford, AZ, (17)Mississippi State University, Starkville, MS, (18)University of Tennessee, Jackson, TN, (19)University of Arkansas, Newport, AR, (20)Auburn University, Belle Mina, AL, (21)University of Georgia, Tifton, GA, (22)University of Florida, Quincy, FL

11:15 AM A Beltwide Evaluation of Cotton Seed Quality Parameters

Lori Unruh Snyder¹, Steven M Brown², Seth A. Byrd³, Kent D. Chapman⁴, Guy D. Collins⁵, Michael K. Dowd⁶, Keith Edmisten¹, Hunter Frame⁷, Michael A. Jones⁸, Murilo Maeda⁹, Ben McKnight¹⁰, Calvin D Meeks¹¹, Gaylon Morgan¹², Randy Norton¹³, Brian K. Pieralisi¹⁴, Tyson B Raper¹⁵, Bill Robertson¹⁶, Tyler Sandlin¹⁷, John L. Snider¹⁸ and David L. Wright¹⁹, (1)North Carolina State University, Raleigh, NC, (2)Auburn University, Auburn, AL, (3)Oklahoma State University, Stillwater, OK, (4)University of North Texas, Denton, TX, (5)North Carolina State University, Rocky Mount, NC, (6)USDA-ARS Southern Regional Research Center, New Orleans, LA, (7)Virginia Polytechnic Institute & State University, Blacksburg, VA, (8)Clemson University, Florence, SC, (9)Texas A&M AgriLife Extension, Lubbock, TX, (10)Texas A&M University, College Station, TX, (11)University of Missouri, Portageville, MO, (12)Cotton Incorporated, Cary, NC, (13)University of Arizona, Safford, AZ, (14)Mississippi State University, Starkville, MS, (15)University of Tennessee, Jackson, TN, (16)University of Arkansas, Newport, AR, (17)Auburn University, Belle Mina, AL, (18)University of Georgia, Tifton, GA, (19)University of Florida, Quincy, FL

11:30 AM Leaf Osmotic Potential and Morphological Traits of 43 Cotton Varieties Growing in a Rainfall Gradient from Southwest to Central Texas

Xuejun Dong, Texas A&M AgriLife Research, Uvalde, TX and Dale A. Mott, Texas A&M AgriLife Extension Service, College Station, TX

11:45 AM Preliminary Results of an on-Farm Irrigation Scheduling Demonstration Using Canopy Temperature and Soil Probes

James R. Mahan, USDA/ARS, Lubbock, TX and Paxton Payton, United States Department of Agriculture, Lubbock, TX

**COTTON AGRONOMY, PHYSIOLOGY & SOILS -
WEDNESDAY EARLY AFTERNOON**

1:00 PM-3:00 PM

1:00 PM Effects of Cultivar, Irrigation Management, and PGR Strategy on Cotton Yield and Maturity

John L. Snider¹, George Vellidis¹, Alessandro Ermanis², Lorena N. Lacerda¹, Yafit Cohen³ and Guy D. Collins⁴, (1)University of Georgia, Tifton, GA, (2)University of Padova, Legnaro, Italy, (3)Agricultural Research Organization (ARO), Bet-Dagan, Israel, (4)North Carolina State University, Rocky Mount, NC

1:15 PM Impacts of Moderate Deficit Irrigation on Pima Versus Upland Cotton Varieties

Robert B Hutmacher, University of California Cooperative Extension, Five Points, CA, Mark Keeley, University of California Cooperative Extension, Shafter, CA and Jorge Angeles, University of CA Plant Sci Dept, Five Points, CA

1:30 PM Estimating Cotton Stand Count Using UAV-Based Imagery

Ahmed Harb Rabia, Department of Plant & Soil Science, Texas Tech University, Lubbock, TX, Department of Natural Resources & Agricultural Engineering, Faculty of Agriculture, Damanhour University, Damanhour, Egypt, Zhe Lin, Texas Tech University, Department of Plant and Soil Science, Lubbock, TX and Wenxuan Guo, Department of Plant & Soil Science, Texas Tech University, Lubbock, TX, Texas Tech University, Lubbock, TX

1:45 PM Predicting Optimal Nitrogen Rate Using NDVI and Uav's in the Upper Southeast Coastal Plain

Hunter Frame, Virginia Tech Tidewater Agricultural Extension Center, Suffolk, VA

2:00 PM Cotton Stand Count with UAS Imagery Using Image Processing Tools and Deep Learning Algorithm

Zhe Lin¹, Wenxuan Guo² and Ahmed Harb Rabia¹, (1)Department of Plant & Soil Science, Texas Tech University, Lubbock, TX, (2)Department of Plant & Soil Science, Texas Tech University, Lubbock, TX, Texas Tech University, Lubbock, TX

2:15 PM Estimating the Time and Rate of Harvest Aid Chemicals Using an Unmanned Aircraft System

Juan Landivar, Texas A&M AgriLife Research, Corpus Christi, TX, Murilo Maeda, Texas A&M AgriLife Extension, Lubbock, TX, Anjin Chang, Texas A&M University - Corpus Christi, Corpus Christi, TX, Jinha Jung, Purdue University, West Lafayette, IN, Josh McGinty, Texas A&M AgriLife Extension Service, Corpus Christi, TX and Craig Bednarz, Texas A&M AgriLife Research and West Texas A&M University, Canyon, TX

2:30 PM Unmanned Aerial System (UAS)-Based Plant Stand Monitoring for FOV4 Resistance Evaluation

Jinha Jung¹, Juan Landivar², Anjin Chang³, Jane K Dever⁴, John Zwonitzer⁴, Andrea Maeda⁴ and Murilo Maeda⁵, (1)Purdue University, West Lafayette, IN, (2)Texas A&M AgriLife Research, Corpus Christi, TX, (3)Texas A&M University - Corpus Christi, Corpus Christi, TX, (4)Texas A&M AgriLife Research, Lubbock, TX, (5)Texas A&M AgriLife Extension, Lubbock, TX

2:45 PM Partnerships for Data Innovation (PDI) Cotton - Opportunities for Agronomic and Variety Data Aggregation and Visualization

Gaylon Morgan¹, Edward M. Barnes¹, Ryan W Kurtz¹, Tina Gray Teague², Christopher D. Delhom³, Lindsey Messinger⁴, Grant Zoch⁴, Michael D. Buser⁵, James R. Mahan⁶ and Bruce Vandenberg⁴, (1)Cotton Incorporated, Cary, NC, (2)Ark State Univ / Univ Ark Agri Exp Sta, State University, AR, (3)USDA-ARS, New Orleans, LA, (4)USDA-ARS, Fort Collins, CO, (5)USDA Agricultural Research Service, Beltsville, MD, (6)USDA/ARS, Lubbock, TX

**COTTON AGRONOMY, PHYSIOLOGY & SOILS -
WEDNESDAY LATE AFTERNOON**

3:30 PM-5:00 PM

3:30 PM The Effect of Gin Sampling Frequency on Cotton Variety Trial Results

Guy D. Collins¹, Keith L. Edmisten², Charlie Cahoon², Mitch K Williams³ and Lori Unruh Snyder², (1)NC State University, Rocky Mount, NC, (2)North Carolina State University, Raleigh, NC, (3)North Carolina State University, Sanford, NC

3:45 PM Evaluation of STO-1106 to Reduce Heat Stress Related Fruiting Structure Loss

Michael D. Rethwisch¹, Cassandra W. Allan¹, Aaron Palmer² and Grant Chaffin³, (1)University of California Cooperative Extension, Blythe, CA, (2) Bryce Farms, Blythe, CA, (3)Chaffin Farms, Blythe, CA

4:00 PM Stalk Application as an Alternative Method of Applying Cotton Harvest Aids

Josh McGinty¹, Gaylon Morgan² and Clinton Livingston¹, (1)Texas A&M AgriLife Extension Service, Corpus Christi, TX, (2)Cotton Incorporated, Cary, NC

4:15 PM Evaluation of Stalk Destruction Programs for 2,4-D Tolerant Cotton in South Texas

Benjamin M. McKnight, Texas A&M University, College Station, TX, Josh McGinty, Texas A&M AgriLife Extension Service, Corpus Christi, TX, Danielle Sekula, Texas A&M AgriLife Extension Service, Weslaco, TX, Dale A. Mott, Texas A&M AgriLife Extension Service, College Station, TX and Gaylon Morgan, Cotton Incorporated, Cary, NC

4:30 PM Effect of P and K Application Rate on Cotton Nutrient Removal Rates

Morteza Mozaffari, Northeast Research and Education Center -University of Arkansas of AR of Arkansas, Keiser, AR

4:45 PM Effect of Timing and Rate of Application of Urea and ESN on Cotton

Morteza Mozaffari, Northeast Research and Education Center -University of Arkansas of AR of Arkansas, Keiser, AR

Cotton Disease Council

COTTON DISEASE COUNCIL - WEDNESDAY EARLY MORNING

8:00 AM-10:00 AM

8:00 AM Root-Knot Nematodes Interact with Fov Race 4 and Increase Disease Severity in Three Cotton Varieties in Growth Chamber Assays

Tanya A Wagner¹, Shayla M Davie¹, Clint W Magill² and Jinggao Liu³, (1) USDA-ARS-ICCDRU, College Station, TX, (2)Texas A&M University, College Station, TX, (3)USDA-ARS ICCDRU, College Station, TX

8:15 AM Cropping System Effects on Cotton Variety Performance in the Presence of Root-Knot Nematodes in the Southern High Plains of Texas

Clay M Braden¹, Donna M McCallister¹, J. Wayne Keeling², Will Keeling³ and Katie L. Lewis⁴, (1)Texas Tech University, Lubbock, TX, (2)Texas A&M AgriLife Research Center, Lubbock, TX, (3)Texas A&M AgriLife Extension, Lubbock, TX, (4)Texas A&M AgriLife Research and Extension Center, Lubbock, TX

8:30 AM Development of Management Strategies to Reduce Meloidogyne Enterolobii Impacts in Cotton

Lindsey D. Thiessen, NC State University, Raleigh, NC

8:45 AM Field-Level Nematode Damage Phenotyping in Row Crop Production Using Aerial Visual and Multi-Spectral Imagery

Chang Liu¹, Ian Small², Rebecca Barocco², David L. Wright², James Clohessy² and Zane J. Grabau¹, (1)University of Florida, Gainesville, FL, (2) University of Florida, Quincy, FL

**9:00 AM Beltwide Nematode Research and Education Committee:
Field Performance of Seed- and Soil-Applied Nematicides, 2020**

Travis R. Faske, University of Arkansas Division of Agriculture, Lonoke, AR, Thomas W. Allen, Mississippi State University, Delta Research and Extension Center, Stoneville, MS, Zane J. Grabau, University of Florida, Gainesville, FL, J. Hu, University of Arizona, Solomon, AZ, Robert Kemerait, University of Georgia, Tifton, GA, David B. Langston, Virginia Tech, Suffolk, VA, Kathy Lawrence, Auburn University, Auburn, AL, John Mueller, Clemson University, Blackville, SC, Paul Price, Louisiana State University, Winnsboro, LA, Lindsey D. Thiessen, NC State University, Raleigh, NC, Terry A. Wheeler, Texas A&M AgriLife Research, Lubbock, TX and Tessie H. Wilkerson, Mississippi State University, Stoneville, MS

COTTON DISEASE COUNCIL - WEDNESDAY LATE MORNING

10:30 AM-11:45 AM

10:30 AM Status of Virus Diseases Infecting Cotton in the Mid-Southern States

Akhtar Ali, Department of Biological Science, The University of Tulsa, Tulsa, OK

10:45 AM Incidence and Impact of Cotton Leaf Roll Dwarf Virus (CLR-DV) in the USA Cotton Belt

Marcio Zaccaron¹, Jeremy Greene², Austin K. Hagan¹, Amanda Smitherman³, Thomas W. Allen⁴, Jenny Koebernick¹, Alana Lynn Jacobson¹, Kira L. Bowen¹, Travis R. Faske⁵, Paul Price⁶, Ian Small⁷, Michael J. Mulvaney⁸, Robert Kemerait⁹, Anders S. Huseth¹⁰, Heather M Kelly¹¹, David Kerns¹², Sally Taylor¹³ and Hehe Wang², (1)Auburn University, Auburn, AL, (2)Clemson University, Blackville, SC, (3)Auburn University, Auburn, AL, (4)Mississippi State University, Delta Research and Extension Center, Stoneville, MS, (5)University of Arkansas Division of Agriculture, Lonoke, AR, (6)Louisiana State University, Winnsboro, LA, (7)University of Florida, Quincy, FL, (8)University of Florida, Jay, FL, (9)University of Georgia, Tifton, GA, (10)North Carolina State University, Raleigh, NC, (11)University of Tennessee, Jackson, TN, (12)Texas A&M University, College Station, TX, (13)Virginia Tech University, Suffolk, VA

11:00 AM Occurrence of Cotton Leafroll Dwarf Disease as Impacted by Cotton Cultivar and Planting Date in Alabama

Amanda L Strayer-Scherer¹, Austin K Hagan¹, Katherine Burch¹, Kassie Conner¹, Steven M Brown¹, Marcio Zaccaron¹, Jenny Koebernick¹, H. Brad Miller² and Don Moore³, (1)Auburn University, Auburn, AL, (2)Brewton Agricultural Research Unit, Brewton, AL, (3)Prattville Agricultural Research Unit, Prattville, AL

11:15 AM Assessment of Yield Loss Attributed to Cotton Leafroll Dwarf Disease in Alabama Cotton.

Austin K Hagan¹, Amanda Strayer-Scherer¹, Katherine Burch¹, Kassie Conner¹, H. Brad Miller², Clint Mclemoyl³ and Jason Burkett⁴, (1)Auburn University, Auburn, AL, (2)Brewton Agricultural Research Unit, Brewton, AL, (3) Sand Mountain Research and Extension Center, Crossville, AL, (4)E. V. Smith Research Center, Tallassee, AL

11:30 AM Study of Cotton Leafroll Dwarf Virus in Mississippi: State of the Art (2020)

Nina Aboughanem¹, Thomas W. Allen¹, Tessie H. Wilkerson¹, Jodi Scheffler² and Sead Sabanadzovic¹, (1)Mississippi State University, Mississippi State, MS, (2)USDA ARS, Stoneville, MS

COTTON DISEASE COUNCIL - WEDNESDAY EARLY AFTERNOON

1:00 PM-2:00 PM

1:00 PM Genome Sequence of Cotton Leafroll Dwarf Virus (CLR-DV) Infecting Cotton in Georgia, US

Afsha Tabassum, Sudeep Bag, Robert Kemerait and Phillip Roberts, University of Georgia, Tifton, GA

Wednesday, January 6, 2021

1:15 PM Reverse Transcription Loop-Mediated Isothermal Amplification (RT-LAMP) Assay for Rapid Detection of Cotton Leafroll Dwarf Virus (CLRDV) in Cotton

Bisho Ram Lawaju, Marina Nunes Rondon and Kathy Lawrence, Auburn University, Auburn, AL

1:30 PM Rapid Screening for Resistance to Clrdv: Development of an Aphid Assay

Brianna Heilsnis, Jenny Koebernick, Kassie Conner and Alana Lynn Jacobson, Auburn University, Auburn, AL

1:45 PM Cotton Yield Response and Target Spot Control with Selected Fungicides

Austin K Hagan¹, Amanda Strayer-Scherer¹, Katherine Burch¹ and H. Brad Miller², (1)Auburn University, Auburn, AL, (2)Brewton Agricultural Research Unit, Brewton, AL

COTTON DISEASE COUNCIL - BUSINESS MEETING

2:00 PM-3:00 PM

Cotton Economics and Marketing Conference

COTTON ECONOMICS AND MARKETING - WEDNESDAY LATE MORNING

10:30 AM-12:00 PM

10:30 AM Consumers' Willingness to Pay for Ethically Produced Cotton Apparel

Sawssan Boufous, Darren Hudson and Carlos Carpio, Texas Tech University, Lubbock, TX

10:50 AM Distributed Ledger Technology for the Cotton Supply Chain, Discussing Forthcoming Literature

Jessica A Richard, Oklahoma State University, Stillwater, OK and Terry W Griffin, Kansas State University, Manhattan, KS

11:10 AM Economic Analysis of High-Speed Roller Ginning

Pratima Bhandari, NMSU, Las Cruces, NM, Ram N Acharya, New Mexico State University, Las Cruces, NM and Carlos Armijo, USDA/ARS, Las Cruces, NM

COTTON ECONOMICS AND MARKETING - WEDNESDAY EARLY AFTERNOON

1:30 PM-3:00 PM

1:30 PM Regional Crop Enterprise and Farm Program Selection on Whole Farm Net Returns Under Risk

Michael A. Deliberto and Brian Hilbun, LSU AgCenter, Baton Rouge, LA

1:50 PM Economic and Risk Analysis Comparison of Cotton Tillage Systems with Different Irrigation Levels.

Francisco J Abello, Texas A&M AgriLife Extension Service, Vernon, TX, Paul DeLaune, Texas A&M AgriLife Research, Vernon, TX and Luis A. Ribera, Texas A&M University, College Station, TX

2:10 PM Risk Effects on Optimal Irrigation Strategies and Investment in Irrigation Technology for Cotton Under Climate Change

Wen Liu, University of Tennessee, Knoxville, TN

Wednesday, January 6, 2021

Cotton Engineering-Systems Conference

COTTON ENGINEERING-SYSTEMS - WEDNESDAY LATE MORNING

10:30 AM-12:00 PM

10:30 AM Partnerships for Data Innovation (PDI) Cotton - the Potential for Precision Data Collection and Aggregation

Edward M. Barnes¹, Gaylon Morgan¹, Ryan W Kurtz¹, Tina Gray Teague², Christopher D. Delhom³, Michael D. Buser⁴, Mauricio Ulloa⁵, James R. Mahan⁶, Bruce Vandenberg⁷, Lindsey Messinger⁷ and Grant Zoch⁷, (1)Cotton Incorporated, Cary, NC, (2)Ark State Univ / Univ Ark Agri Exp Sta, State University, AR, (3)USDA-ARS, New Orleans, LA, (4)USDA Agricultural Research Service, Beltsville, MD, (5)USDA-ARS, PA, CSRL, Plant Stress and Germplasm Development Research, Lubbock, TX, (6)USDA/ARS, Lubbock, TX, (7)USDA-ARS, Fort Collins, CO

10:45 AM Evaluation of Maggrow Technology for Defoliating Cotton in Mississippi and Georgia

Simerjeet Virk¹, Brian K. Pieralisi², Wesley M Porter¹, Jeremy Register³, Gaylon Morgan⁴ and Edward M. Barnes⁴, (1)University of Georgia, Tifton, GA, (2)Mississippi State University, Starkville, MS, (3)UGA Cooperative Extension, Vienna, GA, (4)Cotton Incorporated, Cary, NC

11:00 AM Evaluating Planting Parameters for Fields with Highly Variable Soil Electrical Conductivity

John M Long, Gavin McCullough and Seth A. Byrd, Oklahoma State University, Stillwater, OK

11:15 AM Parameters for Drone Detection of Plastic Contamination in Cotton Fields

Cody D. Blake, USDA-ARS Cotton Ginning Research Lab, Stoneville, MS, Christopher D. Delhom, USDA-ARS, New Orleans, LA and Joe W. Thomas, USDA ARS, Stoneville, MS

11:30 AM Using Unmanned Aircraft Systems to Evaluate Application Timing of Harvest Aids in Stripper Cotton

William Wade Young, Cayden B. Catlin, Seth A. Byrd, Ning Wang and John M Long, Oklahoma State University, Stillwater, OK

11:45 AM Cotton Irrigation Scheduling Methods: Which Method Is a Best Fit?

Wesley M Porter¹, Calvin Perry² and John L. Snider¹, (1)University of Georgia, Tifton, GA, (2)Superintendent, Stripling Irrigation Research Park, University of Georgia, Camilla, GA

Cotton Ginning Conference

COTTON GINNING - WEDNESDAY EARLY AFTERNOON

1:00 PM-3:00 PM

1:00 PM Quality of 2020 Cotton Crop

Robbie L Seals, USDA, AMS Cotton and Tobacco Program, Memphis, TN

1:15 PM The Effect of Alternative Lint Cleaning Processes on Fiber Length Uniformity Index

Carlos B. Armijo¹, Christopher D. Delhom², Derek P. Whitelock¹, Paul A. Funk¹, John D Wanjura³, Gregory A. Holt³, Ruixiu Sui⁴, Vikki B. Martin⁵, Neha Kothari⁵, Cody D. Blake⁶ and Mathew G. Pelletier³, (1)USDA-ARS Southwestern Cotton Ginning Research Laboratory, Mesilla Park, NM, (2)USDA-ARS, New Orleans, LA, (3)USDA-ARS Cotton Production and Processing Research Unit, Lubbock, TX, (4)USDA-ARS, Stoneville, MS, (5)Cotton Incorporated, Cary, NC, (6)USDA-ARS Cotton Ginning Research Lab, Stoneville, MS

1:30 PM The Cost of Ginning Cotton - 2019 Survey Results

Greg A. Holt, USDA-ARS Cotton Production and Processing Research Unit, Lubbock, TX, Harrison Ashley, National Cotton Council, Cordova, TN, J. Kelley Green, Texas Cotton Ginners Association, Austin, TX, Dennis S. Findley, Jr., Southeastern Cotton Ginners Association, Dawsonville, GA, Timothy L. Price, Southern Cotton Ginners Association, Memphis, TN and Roger A. Isom, California Cotton Ginners and Growers Association, Fresno, CA

1:45 PM Update on Variety and Production Trends Impacting Seed Size

Jane K Dever, Texas A&M AgriLife Research and Extension Center, Lubbock, TX, Carol Mason Kelly, Texas A&M AgriLife Research, Lubbock, TX and Valerie Morgan, Texas, Lubbock, TX

2:00 PM Update on the Cotton Ginning Data Standard

Edward M. Barnes¹, David Blakemore², Mathew G. Pelletier³, John D Wanjura³, Greg A. Holt³, Harrison Ashley⁴, Robert G. Hardin⁵, Jason K Ward⁶, Christopher D. Delhom⁷ and Paul A. Funk⁸, (1)Cotton Incorporated, Cary, NC, (2)Blakemore Cotton & Grain, Campbell, MO, (3)USDA-ARS Cotton Production and Processing Research Unit, Lubbock, TX, (4)National Cotton Council, Cordova, TN, (5)Texas A&M University, College Station, TX, (6)NC State University, Raleigh, NC, (7)USDA-ARS, New Orleans, LA, (8)USDA-ARS Southwestern Cotton Ginning Research Laboratory, Mesilla Park, NM

2:15 PM Plastic Contamination Mitigation Research Update 2020

Mathew G. Pelletier¹, Greg A. Holt¹, John D Wanjura¹, Paul A. Funk², Derek P. Whitelock², Carlos B. Armijo², Gabe J. Sweers³ and Ross D. Rutherford⁴, (1) USDA-ARS Cotton Production and Processing Research Unit, Lubbock, TX, (2)USDA-ARS Southwestern Cotton Ginning Research Laboratory, Mesilla Park, NM, (3)Bratney Companies, Des Moines, IA, (4)Lummus Ag Technology, Lubbock, TX

2:30 PM An Integrated Module Feeder Monitoring System to Mitigate Plastic Contamination

John D Wanjura¹, Mathew G. Pelletier¹, Greg A. Holt¹, Edward M. Barnes², Jeffrey S Wigdahl³ and Nachem Doron⁴, (1)USDA-ARS Cotton Production and Processing Research Unit, Lubbock, TX, (2)Cotton Incorporated, Cary, NC, (3)John Deere Des Moines Works, Ankeny, IA, (4)Tama Plastic Industry, Kibbutz Mishmar HaEmek, Israel

COTTON GINNING - WEDNESDAY LATE AFTERNOON

3:30 PM-5:15 PM

3:30 PM Comparison of the Goldenlion Contamination Cleaner with Standard Seed Cotton Cleaning Machinery

Derek P. Whitelock¹, Carlos B. Armijo¹, Paul A. Funk¹, Mathew G. Pelletier², John D Wanjura², Greg A. Holt², Neha Kothari³ and Vikki B. Martin³, (1) USDA-ARS Southwestern Cotton Ginning Research Laboratory, Mesilla Park, NM, (2)USDA-ARS Cotton Production and Processing Research Unit, Lubbock, TX, (3)Cotton Incorporated, Cary, NC

3:45 PM Field Evaluation Update on the VIPR™ System

Ross D. Rutherford¹, David L. Arthur¹, Gabe J. Sweers² and Mark D. Cory³, (1)Lummus Ag Technology, Lubbock, TX, (2)Bratney Companies, Des Moines, IA, (3)Lummus Ag Technology, Savannah, GA

4:00 PM Potential Textile Testing Methodologies to Support the Development of a Performance Standard for Round Module Wrap.

Mary Ankeny¹, Vikki B. Martin¹, John D Wanjura², Suzanne Holmes¹, Matt Farrell¹ and Edward M. Barnes¹, (1)Cotton Incorporated, Cary, NC, (2)USDA-ARS Cotton Production and Processing Research Unit, Lubbock, TX

4:15 PM A Status Report on the State of the USDA-ARS Cotton Gin Research Unit (CGRU) at Stoneville, Mississippi

Joe W. Thomas, USDA ARS, Stoneville, MS and Christopher D. Delhom, USDA-ARS, New Orleans, LA

4:30 PM Tama Update

Mike Bieber, Tama USA, Boonville, MO

4:45 PM John Deere C690 Calibrations: Round Module Weighing and Moisture Sensor

Christopher Murray, John Deere Des Moines Works, Ankeny, IA

5:00 PM Preliminary Study of the Behavior of Alternative Round Module Wrap Materials

Christopher D. Delhom, USDA-ARS, New Orleans, LA, Cody D. Blake, USDA-ARS Cotton Ginning Research Lab, Stoneville, MS, John D Wanjura, USDA-ARS Cotton Production and Processing Research Unit, Lubbock, TX and Joe W. Thomas, USDA ARS, Stoneville, MS

Cotton Improvement Conference

COTTON IMPROVEMENT - WEDNESDAY EARLY MORNING

8:00 AM-10:00 AM

8:00 AM Use of the Dominant Male Sterility Gene (M_s4) in Cotton Breeding

Don L Keim, USDA-ARS, Leland, MS and Jodi Scheffler, USDA ARS, Stoneville, MS

8:15 AM Progress Developing Improved Texas Upland Cotton Germplasm for Improved Yarn Quality

C. Wayne Smith¹, Eric F. Hequet², Brendan Kelly², Steve Hague¹, Jake Gendron³ and Alexandra Ullrich³, (1)Texas A&M University, College Station, TX, (2)Texas Tech University, Lubbock, TX, (3)Texas A&M University, COLLEGE STATION, TX

8:30 AM Genetic Variation in Seed Size and Fuzz Content in Commercial Cultivars and Breeding Lines of Upland Cotton

Kyle Moore¹, Yi Zhu¹, Abdelraheem Abdelraheem¹, Derek P. Whitelock², Carlos B. Armijo², Paul A. Funk², Tom Wedegaertner³ and Jinfa Zhang¹, (1) New Mexico State University, Las Cruces, NM, (2)USDA-ARS Southwestern Cotton Ginning Research Laboratory, Mesilla Park, NM, (3)Cotton Incorporated, Cary, NC

8:45 AM Effects of Leaf and Bract Pubescence on Fiber Quality of Normal and Okra Leaf Cotton

Bradley R. Wilson¹, Jane K Dever², Carol Mason Kelly³, Steve Hague⁴ and Seth A. Byrd¹, (1)Oklahoma State University, Stillwater, OK, (2)Texas A&M AgriLife Research and Extension Center, Lubbock, TX, (3)Texas A&M AgriLife Research, Lubbock, TX, (4)Texas A&M University, College Station, TX

9:00 AM Higher Proportions of Unsaturated Fatty Acids in Seeds Improve Cold Germination Ability in Upland Cotton (*Gossypium hirsutum*) Mutants

Lakhvir Kaur, Junghyun Shim, Benildo G de los Reyes and Rosalyn B Angeles-Shim, Texas Tech University, Lubbock, TX

9:15 AM Utilization of Novel Alleles Found in Obsolete Germplasm for the Improvement of Upland Cotton

Alexandra Ullrich, Texas A&M University, College Station,, TX

9:30 AM Identifying Cotton Germplasm with Resistance to Fusarium Wilt in Georgia

Edward Beasley¹, Nelson Dias Suassuna², Robert Kemerait¹, B. Todd Campbell³, Don Jones⁴ and Peng Chee¹, (1)University of Georgia, Tifton, GA, (2)Brazilian Agricultural Research Corporation - EMBRAPA, Santo Antonio de Goias - GO, Brazil, (3)USDA-ARS, Florence, SC, (4)Cotton Incorporated, Cary, NC

9:45 AM Discussion

COTTON IMPROVEMENT - WEDNESDAY LATE MORNING

10:30 AM-12:00 PM

10:30 AM Origin and Worldwide Distribution of Fusarium Race 4 (FOV4)
Jim Olvey, O&A Enterprises, Maricopa, AZ

10:45 AM Fusarium Race 4 (FOV4) Upland Screening and Evaluation
Mike Olvey, O&A Enterprises, Maricopa, AZ

11:00 AM Genetic Mapping for Resistance to Fusarium Wilt (*Fusarium oxysporum* f. sp. *vasinfectum*) Race 4 in Two Introgressed Populations of Upland Cotton (*Gossypium hirsutum*)

Abdelraheem Abdelraheem¹, Yi Zhu¹, Terry Wheeler², Jane K Dever³, Jiwen Yu⁴, Youlu Yuan⁵, Shi Yuzhen⁶, Jianjiang Ma⁷, Tom Wedegaertner⁸ and Jinfa Zhang¹, (1)New Mexico State University, Las Cruces, NM, (2)Texas A&M AgriLife Research, Lubbock, TX, (3)Texas A&M AgriLife Research and Extension Center, Lubbock, TX, (4)cotton research center, Jinan, China, (5)Institute of Cotton Research, Chinese Academy of Agricultural Sciences, Anyang, China, (6)State Key Laboratory of Cotton Biology, Key Laboratory of Biological and Genetic Breeding of Cotton, Anyang, China, (7)State Key Laboratory of Cotton Biology, Cotton Institute of the Chinese Academy of Agricultural Sciences, Anyang, China, (8)Cotton Incorporated, Cary, NC

11:15 AM An in Vitro Co-Culture System and Rapid Differential Responses to Fusarium Oxysporum f.Sp. Vasinfectum Race 4 in Domesticated Cotton
Stephen Parris¹, Jim Olvey², Mike Olvey², Don Jones³, Joshua Udall⁴ and Christopher Saski¹, (1)Clemson University, Clemson, SC, (2)O&A Enterprises, Maricopa, AZ, (3)Cotton Incorporated, Cary, NC, (4)USDA-ARS, College Station, TX

11:30 AM Deciphering Genetic Resistance Mechanisms to Fusarium Oxysporum Race 4 in Domesticated Cotton

Christopher Saski¹, Stephen Parris¹, Jim Olvey², Mike Olvey², Joshua Udall³ and Don Jones⁴, (1)Clemson University, Clemson, SC, (2)O&A Enterprises, Maricopa, AZ, (3)USDA-ARS, College Station, TX, (4)Cotton Incorporated, Cary, NC

11:45 AM Discussion

COTTON IMPROVEMENT - WEDNESDAY EARLY AFTERNOON

1:00 PM-3:00 PM

1:00 PM Comparative Morphological Analysis of Infection Process in Cotton Differing in Resistance to Fusarium Wilt Caused by *Fusarium oxysporum* f. Sp. *Vasinfectum* Race 4

Yi Zhu¹, Abdelraheem Abdelraheem¹, Peter Cooke¹, Terry Wheeler², Jane K Dever³, Tom Wedegaertner⁴ and Jinfa Zhang¹, (1)New Mexico State University, Las Cruces, NM, (2)Texas A&M AgriLife Research, Lubbock, TX, (3) Texas A&M AgriLife Research and Extension Center, Lubbock, TX, (4)Cotton Incorporated, Cary, NC

1:15 PM Identification of Resistance Sources to Fusarium Wilt (*Fusarium oxysporum* f. sp. *vasinfectum*) Race 4 in *Gossypium barbadense* and Cultivated Diploid Cotton Species

Abdelraheem Abdelraheem¹, Yi Zhu¹, Kyle Moore¹, Jane K Dever², Terry A. Wheeler³, Tom Wedegaertner⁴ and Jinfa Zhang¹, (1)New Mexico State University, Las Cruces, NM, (2)Texas A&M AgriLife Research and Extension Center, Lubbock, TX, (3)Texas A&M AgriLife Research, Lubbock, TX, (4)Cotton Incorporated, Cary, NC

1:30 PM Resistance/Tolerance to Fusarium Wilt Race 4 (FOV4) in Upland (*Gossypium hirsutum* L.) Cotton for Germplasm Public Release
Mauricio Ulloa¹, Robert B Hutmacher², Philip A. Roberts³, Margaret L. Ellis⁴, TariLee Frigulti⁵, Jane K Dever⁶, Terry A. Wheeler⁶, Jinfa Zhang⁷, Steve Hague⁸, Soum Sanogo⁷, Paxton Payton⁹ and Robert L. Nichols¹⁰, (1) USDA-ARS, PA, CSRL, Plant Stress and Germplasm Development Research, Lubbock, TX, (2)University of California Cooperative Extension, Five Points, CA, (3)University of California, Riverside, CA, (4)California State University, Fresno, Fresno, CA, (5)University of California Cooperative Extension, Tulare, CA, (6)Texas A&M AgriLife Research, Lubbock, TX, (7)New Mexico State University, Las Cruces, NM, (8)Texas A&M University, College Station, TX, (9)United States Department of Agriculture, Lubbock, TX, (10)Cotton Incorporated, Cary, NC

1:45 PM Yield of Select Upland Cotton Varieties Grown in Moderate to High Disease Pressure of Fusarium Race 4 (FOV4): 2018 to 2020
David W Albers, Bayer Crop Science, St. Louis, MO and Mike Olvey, O&A Enterprises, Maricopa, AZ

2:00 PM Public Release of Conventional Upland Germplasm Highly Tolerant/Resistant to Fusarium Race 4 By O&A
Jim Olvey¹, Mike Olvey¹, Don Jones² and Geoff Toledo³, (1)O&A Enterprises, Maricopa, AZ, (2)Cotton Incorporated, Cary, NC, (3)CCGGA, Fresno, CA

2:15 PM A Private/Public Sector Partnership to Address FOV4
Don Jones¹, Mike Olvey² and Jim Olvey², (1)Cotton Incorporated, Cary, NC, (2)O&A Enterprises, Maricopa, AZ

2:30 PM Discussion

COTTON IMPROVEMENT - WEDNESDAY LATE AFTERNOON

3:30 PM-5:00 PM

3:30 PM Repeatability of HVI Fibrograms across Multiple Instruments
Addisu Ferede Tesema¹, Brendan Kelly² and Eric F. Hequet¹, (1)Texas Tech University, Lubbock, TX, (2)Texas Tech University, Lubbock, TX, Texas A&M Agrilife Research, Lubbock, TX

3:45 PM Estimating Short Fiber Content Using the High Volume Instrument
Md Abu Sayeed and Eric F. Hequet, Texas Tech University, Lubbock, TX

4:00 PM Transcriptome Analysis of *Gossypium hirsutum* Responses to *Meloidogyne Incognita* during Compatible and Incompatible Interactions
Sameer Khanal¹, Pawan Kumar², Samantha Jo Wegener¹, Richard Davis³, Robert L. Nichols⁴ and Peng Chee¹, (1)University of Georgia, Tifton, GA, (2) USDA-ARS, Salinas, CA, (3)USDA-ARS, Tifton, GA, (4)Cotton Incorporated, Cary, NC

4:15 PM Concluding Remarks

4:20 PM Business Meeting

Cotton Insect Research and Control Conference

COTTON INSECT RESEARCH & CONTROL CONFERENCE - WEDNESDAY EARLY AFTERNOON

1:00 PM-3:00 PM

1:00 PM Efficacy of Pesticides Used in Cotton When Applied at Specific Droplet Sizes
Tyler S. Soignier, Clemson University, Blackville, SC

1:12 PM Evaluation of Moth Trapping Trends in Arkansas

T. Harris¹, Gus Lorenz², Nick R. Bateman³, Benjamin C Thrash¹, Nichole Taillon⁴, Wes Plummer⁵, Chase A Floyd¹, Caleb Rice¹, Garrett Felts⁶, Trevor Newkirk¹, Adam Whitfield⁵ and G. Maris¹, (1)University of Arkansas, Lonoke, AR, (2)The University of Arkansas, Lonoke, AR, (3)University of Arkansas - RREC, Stuttgart, AR, (4)University of Arkansas CES, Lonoke, AR, (5)UA-CES, Lonoke, AR, (6)University of Arkansas- RREC, Stuttgart, AR

1:24 PM Impact of Rainfall on Insecticide Performance in Cotton

Sara Barrett¹, Jeff Gore², Angus Catchot³, Don Cook² and Whitney Crow², (1) Mississippi State University, Department of Biochemistry, Molecular Biology, Entomology, and Plant Pathology, Starkville, MS, (2)Mississippi State University, Stoneville, MS, (3)Mississippi State University, Mississippi State, MS

1:36 PM Monitoring Potential Lambda-Cyhalothrin Resistant Rice Stink Bug, Oebalus Pugnax Populations in Arkansas Rice Production

Trevor Newkirk¹, Nick R. Bateman², Gus Lorenz³, Benjamin C Thrash¹, Neelendra Joshi⁴, Garrett Felts⁵, Nichole Taillon⁶, Wes Plummer⁷, Chase A Floyd¹ and Caleb Rice¹, (1)University of Arkansas, Lonoke, AR, (2)University of Arkansas - RREC, Stuttgart, AR, (3)The University of Arkansas, Lonoke, AR, (4)University of Arkansas, Fayetteville, AR, (5)University of Arkansas- RREC, Stuttgart, AR, (6) University of Arkansas CES, Lonoke, AR, (7)UA-CES, Lonoke, AR

1:48 PM Impact of Late Season Management Approaches for Tarnished Plant Bug in Mid-South Cotton

Ryan Mann¹, Angus Catchot¹, Whitney Crow², Jeff Gore², Don Cook² and Tyler B Towles³, (1)Mississippi State University, Mississippi State, MS, (2) Mississippi State University, Stoneville, MS, (3)LSU AgCenter, Winnsboro, LA

2:00 PM Efficacy of Chinnpv for Control of Soybean Looper, Chryso-deixis Includens, in Arkansas Soybean Production

Caleb Rice¹, Gus Lorenz², Benjamin C Thrash¹, Nick R. Bateman³, Nichole Taillon⁴, Garrett Felts⁵, Wes Plummer⁶, Chase A Floyd¹ and Trevor Newkirk¹, (1)University of Arkansas, Lonoke, AR, (2)The University of Arkansas, Lonoke, AR, (3)University of Arkansas - RREC, Stuttgart, AR, (4)University of Arkansas CES, Lonoke, AR, (5) University of Arkansas- RREC, Stuttgart, AR, (6)UA-CES, Lonoke, AR

2:12 PM Evaluation of Action Thresholds for Bollworm Control in Cotton

Michael Cade Francis¹, Jeff Gore², Angus Catchot¹, Whitney Crow² and Don Cook², (1)Mississippi State University, Mississippi State, MS, (2)Mississippi State University, Stoneville, MS

2:24 PM Efficacy of Selected Insecticides for Control of Lepidopteran Pests in Soybeans

G. Maris¹, Gus Lorenz², Nick R. Bateman³, Benjamin C Thrash¹, Nichole Taillon⁴, Wes Plummer⁵, Chase A Floyd¹, Caleb Rice¹, Garrett Felts⁶, Trevor Newkirk¹, Adam Whitfield⁵ and T. Harris¹, (1)University of Arkansas, Lonoke, AR, (2)The University of Arkansas, Lonoke, AR, (3)University of Arkansas - RREC, Stuttgart, AR, (4)University of Arkansas CES, Lonoke, AR, (5)UA-CES, Lonoke, AR, (6)University of Arkansas- RREC, Stuttgart, AR

2:36 PM Determining Chlorantraniliprole Residual Activity Against Bollworm (Helicoverpa Zea) in Cotton

Jacob Smith¹, Whitney Crow², Angus Catchot¹, Jeff Gore² and Don Cook², (1)Mississippi State University, Mississippi State, MS, (2)Mississippi State University, Stoneville, MS

2:48 PM Efficacy of Selected Insecticides for Control of Tarnished Plant Bugs, Lygus Lineolaris, in Arkansas

Adam Whitfield¹, Gus Lorenz², Nick R. Bateman³, Benjamin C Thrash⁴, Nichole Taillon⁵, Wes Plummer¹, Chase A Floyd⁴, Caleb Rice⁴, Garrett Felts⁶, Trevor Newkirk⁴, T. Harris⁴ and G. Maris⁴, (1)UA-CES, Lonoke, AR, (2)The University of Arkansas, Lonoke, AR, (3)University of Arkansas - RREC, Stuttgart, AR, (4) University of Arkansas, Lonoke, AR, (5)University of Arkansas CES, Lonoke, AR, (6)University of Arkansas- RREC, Stuttgart, AR

COTTON INSECT RESEARCH & CONTROL CONFERENCE -
WEDNESDAY LATE AFTERNOON

3:30 PM-5:00 PM

3:30 PM Differentiation between Tobacco Budworm (*Heliothis virescens*) and Bollworm (*Helicoverpa zea*) Eggs at the Organismal Level: New Perspectives

Roger D. Lawrie¹, Kaiying Chen², Jean Marcel Deguenon¹, Loganathan Pon-nusamy¹, Ryan W Kurtz³, DeShae Dillard⁴, Daniela T Pezzini¹, Dominic Reisig⁵, Nithin M. Ganji², Hannah Burrack², Batool Karim-Delavar², Coby Schal², Rick Santangelo² and R. Michael Roe¹, (1)North Carolina State University, Raleigh, NC, (2)NC State University, Raleigh, NC, (3)Cotton Incorporated, Cary, NC, (4)NC State University, Plymouth, NC, (5)North Carolina State University, Plymouth, NC

3:42 PM Quantifying Imidacloprid Susceptibility in Alabama Populations of *Aphis gossypii*

John W. Mahas¹, Anders S. Huseeth² and Alana Lynn Jacobson¹, (1)Auburn University, Auburn, AL, (2)North Carolina State University, Raleigh, NC

3:54 PM Plant-Associated Fungi Effects on Boll Weevil Growth and Survival

Janaina Camara Siqueira da Cunha and Gregory A. Sword, Texas A&M University, College Station, TX

4:06 PM Novel Insecticides Support Conservation Biological Control in Cotton

Isadora Bordini¹, Peter C Ellsworth¹ and Steve Naranjo², (1)University of Arizona, Maricopa, AZ, (2)USDA-ARS, Maricopa, AZ

4:18 PM Palmer Amaranth (*Amaranthus palmeri*) and Thrips (*Thrips sp.*) Control with Various Dicamba + Insecticide Tank-Mixes in Cotton

Jacob P. McNeal¹, Darrin M. Dodds¹, Brian K. Pieralisi², Jeff Gore³, Angus Catchot¹, Greg R. Kruger⁴, Bradley Norris¹, John J. Williams¹, William J Rutland¹ and Steven D. Hall¹, (1)Mississippi State University, Mississippi State, MS, (2)Mississippi State University, Starkville, MS, (3)Mississippi State University, Stoneville, MS, (4)University of Nebraska - Lincoln, North Platte, NE

4:30 PM Frequency of Alleles Confering Resistance to BT Proteins in *Helicoverpa Zea* in Texas

Jose Santiago¹, Fei Yang² and David Kerns², (1)Texas A&M, College Station, TX, (2)Texas A&M University, College Station, TX

4:42 PM Evaluation of Insecticide Seed Treatments in Furrow Irrigated Rice for Control of Rice Billbug, *Sphenophorus Pertinax*, in Arkansas

Chase A Floyd¹, Gus Lorenz², Nick R. Bateman³, Benjamin C Thrash¹, Nichole Taillon⁴, Garrett Felts⁵, Wes Plummer⁶, Caleb Rice¹ and T. Newkirk¹, (1) University of Arkansas, Lonoke, AR, (2)The University of Arkansas, Lonoke, AR, (3)University of Arkansas - RREC, Stuttgart, AR, (4)University of Arkansas CES, Lonoke, AR, (5)University of Arkansas- RREC, Stuttgart, AR, (6)UA-CES, Lonoke, AR

Wednesday, January 6, 2021

Cotton Quality Measurements Conference

COTTON QUALITY MEASUREMENTS -
WEDNESDAY EARLY AFTERNOON

1:00 PM-3:00 PM

1:00 PM Introductory Remarks

1:15 PM Partnerships for Data Innovation (PDI) Cotton - Cotton Quality Dashboards

Christopher D. Delhom¹, Holly A King¹, Neha Kothari², Eric F. Hequet³, Carlos B. Armijo⁴, Lindsey Messinger⁵, Grant Zoch⁵, Bruce Vandenberg⁵ and Michael D. Buser⁶, (1)USDA-ARS, New Orleans, LA, (2)Cotton Incorporated, Cary, NC, (3)Texas Tech University, Lubbock, TX, (4)USDA-ARS Southwestern Cotton Ginning Research Laboratory, Mesilla Park, NM, (5)USDA-ARS, Fort Collins, CO, (6)USDA Agricultural Research Service, Beltsville, MD

1:30 PM Suitability of US Cotton for Vortex Spinning

Eric F. Hequet, Texas Tech University, Lubbock, TX

1:45 PM A Principle Components Study of Yarn Strength in Upland Cotton

Alexandra Ullrich, Texas A&M University, COLLEGE STATION, TX

2:00 PM A Comparative Study of the Proposed Mechanisms of Cotton Fiber Yellowing

Michael K. Dowd and Christopher D. Delhom, USDA-ARS, New Orleans, LA

2:15 PM Reliability of Cotton Fiber Length Distributions Measured by Dual-Beard Fibrography and Advanced Fiber Information System

Bugao Xu and Jinfeng Zhou, University of North Texas, Denton, TX

2:30 PM Stelometer and High Volume Instrument Strength Measurements of Different Upland Cotton Fibers

Yongliang Liu, USDA-ARS, New Orleans, LA

2:45 PM Polymer Blends Involving Cottonseed Protein and Cottonseed Meal

Huai N Cheng¹, Zhongqi He¹, Michael K. Dowd² and K. Thomas Klasson¹, (1) USDA Agricultural Research Service, New Orleans, LA, (2)USDA-ARS, New Orleans, LA

Cotton Weed Science Research Conference

COTTON WEED SCIENCE RESEARCH - WEDNESDAY EARLY MORNING

8:30 AM-10:00 AM

8:30 AM Weed Management and Crop Response Using Isoxaflutole in HPPD Tolerant Cotton

Delaney C. Foster¹, Peter A. Dotray¹, Corey N. Thompson², Gregory Baldwin³ and Frederick T. Moore², (1)Texas Tech University, Texas A&M AgriLife Research and Extension Service, Lubbock, TX, (2)BASF, Lubbock, TX, (3)BASF, Durham, NC

8:45 AM Tillage, Rotation and Herbicide Input Impact Weed Control in Xtendflex Cotton

Rohith Vulchi¹, Josh McGinty², Muthu Bagavathiannan³ and Scott Nolte³, (1)Texas A&M University, College Station, College Station, TX, (2)Texas A&M AgriLife Extension Service, Corpus Christi, TX, (3)Texas A&M University, College Station, TX

9:00 AM Economic and Ecological Impact of Integrated Weed Management Strategies on Palmer Amaranth in Cotton

Rodger B. Farr¹, Jason K Norsworthy¹, Tom Barber², Lawson Priess¹, Mason Castner¹ and James W Beesinger¹, (1)University of Arkansas, Fayetteville, AR, (2)University of Arkansas-Extension, Lonoke, AR

9:15 AM Investigating the Numbers: Can We Protect Postemergence Herbicides through a Combination of Preemergence Herbicides, Cover Crops, and Timely Applications?

Taylor M Randell, Jenna C Vance and A. Stanley Culpepper, University of Georgia, Tifton, GA

9:30 AM Multiple Exposures of 2,4-D (Enlist One) to Non-Tolerant Cotton

Andrew Cole Blythe¹, Charlie Cahoon², Larry Steckel³, Zack Taylor⁴, Guy D. Collins⁵, W J Everman⁴ and Joshua Daniel Joyner⁶, (1)NC State University, Denver, NC, (2)North Carolina State University, Raleigh, NC, (3)University of Tennessee, Jackson, TN, (4)NC State University, Raleigh, NC, (5)North Carolina State University, Rocky Mount, NC, (6)NC State University, Mount Olive, NC

9:45 AM Efficacy of Phosphite Fertilization for Weed Suppression in the Ptxd Cotton System

Shilpa Singh¹, Devendra Pandeya², Keerti Rathore², Kater Hake³ and Muthukumar V Bagavathiannan⁴, (1)Texas A&M University, College Station, TX, (2)Texas A & M University, College Station, TX, (3)Cotton Incorporated, Cary, NC, (4)Texas A&M University, College Station, TX

COTTON WEED SCIENCE RESEARCH - WEDNESDAY LATE MORNING

10:30 AM-12:00 PM

10:30 AM 2,4-D Antagonizes Cutleaf Groundcherry (*Physalis Angulata* L.) Control by Glyphosate

Joshua Daniel Joyner¹, Charlie Cahoon², Zack Taylor³, W J Everman³, Guy D. Collins⁴ and Andrew Cole Blythe⁵, (1)NC State University, Mount Olive, NC, (2)North Carolina State University, Raleigh, NC, (3)NC State University, Raleigh, NC, (4)North Carolina State University, Rocky Mount, NC, (5)NC State University, Denver, NC

10:45 AM Does Potassium Borate Reduce Efficacy of Dicamba?

Mason Castner, Jason K Norsworthy, Trenton L Roberts, Rodger B. Farr and Lawson Priess, University of Arkansas, Fayetteville, AR

11:00 AM Influence of Palmer Amaranth Size and Nozzle Selection on Glufosinate, Dicamba, and 2,4-D Combinations

James W Beesinger¹, Jason K. Norsworthy¹, Thomas R Butts² and Leonard B Piveta¹, (1)University of Arkansas, Fayetteville, AR, (2)University of Arkansas, Lonoke, AR

11:15 AM Cotton Fruiting Response to Low Rates of 2,4-D

Kyle Russell, Texas Tech University, Lubbock, TX, Texas A&M AgriLife Research, Lubbock, TX, Peter A. Dotray, Texas Tech University, Texas A&M AgriLife Research and Extension Service, Lubbock, TX, Irish Lorraine B Pabuayon, Texas Tech University, Lubbock, TX and Glen Ritchie, Department of Plant & Soil Science, Texas Tech University, Lubbock, TX

11:30 AM Effects of Weed Size on Effectiveness of Sequential Applications of Dicamba & Glufosinate

Navdeep Godara, Jason Norsworthy, Lawson Priess, Mason Castner, Rodger B. Farr and Bodie Cotter, University of Arkansas, Fayetteville, AR

11:45 AM Improving Glufosinate By Eliminating Environmental Variability

Lawson Priess¹, Jason K. Norsworthy¹, Rodger B. Farr¹, Mason Castner¹, James W Beesinger¹, Navdeep Godara¹ and Tom Barber², (1)University of Arkansas, Fayetteville, AR, (2)University of Arkansas-Extension, Lonoke, AR

Wednesday, January 6, 2021

**COTTON WEED SCIENCE RESEARCH -
WEDNESDAY EARLY AFTERNOON**

1:00 PM-3:00 PM

1:00 PM Optimizing Sequential Applications of Dicamba and Glufosinate for the Xtendflex System

Jacob A Fleming¹, Jason K Norsworthy¹, Tom Barber², Lawson Priess¹, Mason Castner¹ and Rodger B. Farr¹, (1)University of Arkansas, Fayetteville, AR, (2) University of Arkansas-Extension, Lonoke, AR

1:15 PM A Beltwide Study to Evaluate Long-Term Impact of Integrated Palmer Amaranth Management Tactics in Cotton

Sarah E. Kezar¹, Delaney C. Foster², Michael M. Houston³, Fernando Oreja⁴, Peter A. Dotray², Jason Norsworthy³, Ramon Leon Gonzalez⁴, Gaylon Morgan⁵ and Muthukumar V Bagavathiannan⁶, (1)Texas A&M, College Station, TX, (2)Texas Tech University, Texas A&M AgriLife Research and Extension Service, Lubbock, TX, (3)University of Arkansas, Fayetteville, AR, (4)North Carolina State University, Raleigh, NC, (5)Cotton Incorporated, Cary, NC, (6) Texas A&M University, College Station, TX

1:30 PM Cotton Tolerance to Non-Labeled Herbicides in Mississippi

Zaim Ugljic¹, Connor Ferguson¹, Daniel B. Reynolds¹, Brian K. Perialisi², Darrin M. Dodds¹ and Gaylon Morgan³, (1)Mississippi State University, Mississippi State, MS, (2)Mississippi State University, Starkville, MS, (3)Cotton Incorporated, Cary, NC

1:45 PM Where Does Isoxaflutole Fit into Cotton Weed Management?

Charlie Cahoon¹, Joshua Daniel Joyner², Guy D. Collins³, W J Everman⁴, Andrew Cole Blythe⁵ and Zack Taylor⁴, (1)North Carolina State University, Raleigh, NC, (2)NC State University, Mount Olive, NC, (3)North Carolina State University, Rocky Mount, NC, (4)NC State University, Raleigh, NC, (5)NC State University, Denver, NC

2:00 PM Cotton Tolerance to Dimethenamid-P, S-Metolachlor, and Acetochlor Preemergence and in Replant Situations

Lavesta C. Hand, Jenna C Vance and A. Stanley Culpepper, University of Georgia, Tifton, GA

Sustainability

COTTON SUSTAINABILITY - WEDNESDAY EARLY MORNING

8:30 AM-10:00 AM

8:30 AM U.S. Cotton Trust Protocol Is Now Launched! an Update from Gary Adams

Gary Adams, National Cotton Council, Cordova, TN

8:50 AM Hear from Our Customers: How the Trust Protocol Will Help Fuel Demand for US Cotton (Panel Discussion)

Jesse Daystar, Cotton Incorporated, Cary, NC

9:25 AM Hear from the Experts: Sustainable Fiber Matters (Panel Discussion)

Andrew Jordan, Jordan Associates Ag and Bio Engineering Services, Cordova, TN

COTTON SUSTAINABILITY - WEDNESDAY LATE MORNING

10:30 AM-12:00 PM

10:30 AM Grower Enrollment: A Short Tutorial on How to Enroll Growers in the US Cotton Trust Protocol

Ken Burton, National Cotton Council, Cordova, TN

10:50 AM Hear Direct from Protocol Growers: Benefits to Participant Growers (Panel Discussion)

Steven Pires, Cotton Incorporated, Cary, NC

11:25 AM Field to Market and the Cotton Trust Protocol: Partnering to Measure and Advance the Sustainability of US Cotton

Rod Snyder, Field to Market, Washington, DC, DC

COTTON SUSTAINABILITY - WEDNESDAY EARLY AFTERNOON

1:00 PM-3:00 PM

1:00 PM US Cotton Trust Protocol Verification Procedures: Update from the 2019 Pilot Phase

Robert Demianew, Control Union, Plantation, FL

1:30 PM Q&A with the U.S. Cotton Trust Protocol: Your Chance to Ask Questions

Jesse Daystar, Cotton Incorporated, Cary, NC

2:00 PM Sustainability Matters to US Cotton

Gary Adams, National Cotton Council, Cordova, TN

COTTON SUSTAINABILITY - WEDNESDAY LATE AFTERNOON

3:30 PM-5:00 PM

3:30 PM Textile Exchange Climate+ Strategy and Impact Incentive Overview

La Rhea Pepper, Textile Exchange, Lander, WY

4:00 PM US Cotton and the Conscientious Consumer: Why Brands Must Now Prove Sustainability, and How Verified Growers Are Leading the Way (Panel Discussion)

April Kappler, Better Cotton Initiative, London, United Kingdom

4:40 PM Organic Cotton: Production and Market Trends in the U.S. and Globally

Sandra Marquardt, Textile Exchange, Silver Spring, MD

Thursday, January 7, 2021

Cotton Agronomy, Physiology & Soil Conference

COTTON AGRONOMY, PHYSIOLOGY & SOILS -
THURSDAY EARLY MORNING

8:00 AM-10:00 AM

8:00 AM A Meta-Analysis of Cotton Response to Plant Growth Regulators from the Scott Learning Center - 2011-2020

Jay Mahaffey, Blake Edwards, Scott Horton and Joseph Cummins, Bayer Crop Science, Scott, MS

8:15 AM Soil Health Conditions Under Cotton Production in North Carolina

Alan J Franzluebbers, USDA-ARS, Raleigh, NC

8:30 AM Initial Effect of Cover Crop Species and Seeding Rate on Texas Dryland Cotton Production

Paul DeLaune¹, Emi Kimura², Katie L. Lewis³, Charles Coufal¹ and Anthony Pennartz¹, (1)Texas A&M AgriLife Research, Vernon, TX, (2)Texas A&M AgriLife Research and Extension Service, Vernon, TX, (3)Texas A&M AgriLife Research and Extension Center, Lubbock, TX

8:45 AM Cotton Yield Response to Nitrogen Rates in Long-Term Conventional- and Conservation-Tillage Plots in Georgia

Glendon Harris, University of Georgia, Tifton, GA

9:00 AM Greenhouse Gas Emissions and Nitrogen Dynamics in Texas High Plains Cotton

Christopher Cobos, Texas A&M AgriLife Research, Lubbock, TX, Katie L. Lewis, Texas A&M AgriLife Research and Extension Center, Lubbock, TX, Mark McDonald, Texas Tech University, Department of Plant and Soil Science, Lubbock, TX and Paul DeLaune, Texas A&M AgriLife Research, Vernon, TX

9:15 AM Evaluation of the Effects of Winter Wheat Cover Crop on Soil Health in Cotton Production Systems of the Texas Rolling Plains

Sushil Kumar Himanshu¹, Srinivasulu Ale¹, Jasdeep Singh¹, Paul DeLaune¹ and Edward M. Barnes², (1)Texas A&M AgriLife Research, Vernon, TX, (2)Cotton Incorporated, Cary, NC

COTTON AGRONOMY, PHYSIOLOGY & SOILS -
THURSDAY LATE MORNING

10:30 AM-12:00 PM

10:30 AM Impact of Nitrogen Fertilizer Sources on Ammonia Volatilization and Lint Yield in an Unirrigated Cotton Field

Nutifafa Adotey, University of Tennessee, Jackson, TN and Tyson B Raper, University of Tennessee, Jackson, TN

10:45 AM Optimizing Nitrogen Management across Cotton Cropping Systems

Katie L. Lewis, Texas A&M AgriLife Research and Extension Center, Lubbock, TX, J. Wayne Keeling, Texas A&M AgriLife Research Center, Lubbock, TX, Paul DeLaune, Texas A&M AgriLife Research, Vernon, TX, Joseph Alan Burke, Texas A&M University, College Station, TX, Ameer Bumguardner, Texas Tech University, Lubbock, TX and Christopher Cobos, Texas A&M AgriLife Research, Lubbock, TX

11:00 AM Soil Potassium Dynamics of Upland Cotton: A Three Year Study

Hunter Frame¹, Gaylon Morgan², Darrin M. Dodds³, Randy Norton⁴, Katie L. Lewis⁵, Michael A. Jones⁶, Tyson B Raper⁷, Robert L. Nichols², Bill Robertson⁸ and Andrea S. Jones⁹, (1)Virginia Polytechnic Institute & State University, Blacksburg, VA, (2)Cotton Incorporated, Cary, NC, (3)Mississippi State University, Mississippi State, MS, (4)University of Arizona, Safford, AZ, (5)Texas A&M AgriLife Research Center, Lubbock, TX, (6)Clemson University, Florence, SC, (7)University of Tennessee, Jackson, TN, (8)University of Arkansas, Newport, AR, (9)University of Missouri, Portageville, MO

11:15 AM Soil Organic C and N Fractions and Chemical Properties across a Diversity of Cotton Nitrogen Trials in 2020

Alan J Franzluebbers¹, Richard L. Haney², Tyson B Raper³, Brian K. Pieralisi⁴, Gaylon Morgan⁵, Calvin D Meeks⁶, Benjamin M. McKnight⁷, Murilo Maeda⁸, Katie L. Lewis⁹, Julie A. Howe¹⁰, James W. Heiser⁶, Hunter Frame¹¹, Bhupinder S. Farmaha¹² and Brian Arnall¹³, (1)USDA-ARS, Raleigh, NC, (2)USDA-ARS, Temple, TX, (3)University of Tennessee, Jackson, TN, (4)Mississippi State University, Starkville, MS, (5)Cotton Incorporated, Cary, NC, (6)University of Missouri, Portageville, MO, (7)Texas A&M University, College Station, TX, (8) Texas A&M AgriLife Extension, Lubbock, TX, (9)Texas A&M AgriLife Research and Extension Center, Lubbock, TX, (10)Texas AgriLife Research, College Station, TX, (11)Virginia Polytechnic Institute & State University, Blacksburg, VA, (12)Clemson University, Blackville, SC, (13)Oklahoma State University, Stillwater, OK

11:30 AM Evaluation of Cotton Yield Response to Nitrogen Fertilizer Application across the US Cotton Belt

Bhupinder S. Farmaha¹, Brian Arnall², Hunter Frame³, Alan J Franzluebbers⁴, Richard L. Haney⁵, James W. Heiser⁶, Julie A. Howe⁷, Katie L. Lewis⁸, Murilo Maeda⁹, Benjamin M. McKnight¹⁰, Calvin D Meeks⁶, Gaylon Morgan¹¹, Brian K. Pieralisi¹² and Tyson B Raper¹³, (1)Clemson University, Blackville, SC, (2)Oklahoma State University, Stillwater, OK, (3)Virginia Polytechnic Institute & State University, Blacksburg, VA, (4)USDA-ARS, Raleigh, NC, (5)USDA-ARS, Temple, TX, (6)University of Missouri, Portageville, MO, (7)Texas AgriLife Research, College Station, TX, (8)Texas A&M AgriLife Research and Extension Center, Lubbock, TX, (9)Texas A&M AgriLife Extension, Lubbock, TX, (10)Texas A&M University, College Station, TX, (11)Cotton Incorporated, Cary, NC, (12)Mississippi State University, Starkville, MS, (13)University of Tennessee, Jackson, TN

11:45 AM Twenty Years of Cotton Nitrogen Management and Cycling Trials in Texas and Arizona: What Have We Learned?

Kevin F. Bronson, USDA-ARS, Maricopa, AZ

Cotton Ginning Conference

COTTON GINNING - THURSDAY EARLY MORNING

8:00 AM-10:00 AM

8:00 AM Assuring Cotton Quality from Field to Mill- the Importance of an Integrated Approach

Marinus H.J van der Sluijs, Textile Technical Services, Geelong, VIC, Australia

8:15 AM New Product Developments from Lummus

Mark D. Cory, Lummus Ag Technology, Savannah, GA and Ross D. Rutherford, Lummus Ag Technology, Lubbock, TX

8:30 AM Improving Energy Efficiency in Seed Cotton Conveying and Drying

Sunil Kumar, Robert G. Hardin and Maria D. King, Texas A&M University, College Station, TX

8:45 AM Design of a Plastic Removal System for a Cotton Gin Module Feeder

Adeyemi Adeleke¹, Robert G. Hardin¹ and Mathew G. Pelletier², (1)Texas A&M University, College Station, TX, (2)USDA-ARS Cotton Production and Processing Research Unit, Lubbock, TX

9:00 AM Measurement of Emission Factors for Cotton Gin Trash Piles

Garrett Shaw¹, Maria D. King¹, J. Kelley Green², Derek P. Whitelock³ and John D Wanjura⁴, (1)Texas A&M University, College Station, TX, (2)Texas Cotton Ginners Association, Austin, TX, (3)USDA-ARS Southwestern Cotton Ginning Research Laboratory, Mesilla Park, NM, (4)USDA-ARS Cotton Production and Processing Research Unit, Lubbock, TX

9:15 AM Round Modules: Handling Logistics and Cover Damage, 2nd Year

Md Zafar Iqbal¹, Robert G. Hardin¹, Tianyi Wang², Jason K Ward³ and John D. Wanjura⁴, (1)Texas A&M University, College Station, TX, (2)Texas A&M AgriLife Research, Dallas, TX, (3)NC State University, Raleigh, NC, (4)USDA-ARS Cotton Production and Processing Research Unit, Lubbock, TX

Cotton Insect Research and Control Conference

COTTON INSECT RESEARCH & CONTROL CONFERENCE - THURSDAY MORNING

9:00 AM-12:00 PM

9:00 AM Cotton Yield Response to Simulated Cotton Fleahopper and Western Tarnished Plant Bug Infestations as Influenced by Irrigation Level

Dol P. Dhakal, Abdul Hakeem, J. Wayne Keeling and Megha N. Parajulee, Texas A&M AgriLife Research Center, Lubbock, TX

9:15 AM Three Years of ThyrvOn™ Technology

Timothy Dabbert, Bayer Crop Science, Creve Couer, MO

9:30 AM Shaping the Future of Cotton Insect Pest Management Together

Waseem Akbar, Aqeel Ahmad, Jason W Stelzer, Scott Bollman and Michael Grosz, Bayer Company, Chesterfield, MO

9:45 AM Managing Early Versus Late Season Insects in Limited Irrigation Cotton

Megha N. Parajulee¹, Abdul Hakeem¹, Dol P. Dhakal¹, Suhas Vyavhare², Michael Toews³, Donna McCallister¹ and Katie L. Lewis¹, (1)Texas A&M AgriLife Research Center, Lubbock, TX, (2)Texas A&M AgriLife Extension Service, Lubbock, TX, (3)University of Georgia, Tifton, GA

10:00 AM Interactions of Nitrogen Fertilizer, Cotton Seeding Rate, and Late Season Insecticide for Tarnished Plant Bug Control in Midsouth Cotton.

Tina Gray Teague¹, N. Ray Benson², Andrew J. Baker³, Amanda M. Mann³ and John W. Nowlin⁴, (1)Ark State Univ / Univ Ark Agri Exp Sta, State University, AR, (2)University of Arkansas Coop Extension Service, Little Rock, AR, (3)University of Arkansas System Division of Agriculture, State University, AR, (4)Arkansas State University, State University, AR

10:15 AM Monitoring Population Dynamics of Aphids across the Cotton Belt

Alana Lynn Jacobson¹, Charles Ray¹, Phillip Roberts², Michael Toews², Jeremy Greene³, Anders S. Huseth⁴, George G. Kennedy⁴, Sally Taylor⁵, Silvana Paula-Moraes⁶, Sebe Brown⁷, Jeff Gore⁸, Whitney Crow⁸, Scott D. Stewart⁹, David Kerns¹⁰, Suhas Vyavhare¹¹, Scott H. Graham¹², Ron Smith¹ and Katelyn Kesheimer¹, (1)Auburn University, Auburn, AL, (2)University of Georgia, Tifton, GA, (3)Clemson University, Blackville, SC, (4)North Carolina State University, Raleigh, NC, (5)Virginia Tech University, Suffolk, VA, (6)University of Florida, Jay, FL, (7)LSU AgCenter, Winnsboro, LA, (8)Mississippi State University, Stoneville, MS, (9)The University of Tennessee, Jackson, TN, (10) Texas A&M University, College Station, TX, (11)Texas A&M AgriLife Extension Service, Lubbock, TX, (12)Auburn University, Auburn University, AL

10:30 AM Cotton Aphid Insecticide Efficacy in the Southeast: A Two Year Summary

Phillip Roberts¹, Michael Toews¹, Sally Taylor², Dominic Reisig³, Anders S. Huseth⁴, Francis Reay-Jones⁵, Jeremy Greene⁶, Silvana Paula-Moraes⁷, Alana Lynn Jacobson⁸, Scott Graham⁸ and Ron Smith⁸, (1)University of Georgia, Tifton, GA, (2)Virginia Tech University, Suffolk, VA, (3)North Carolina State University, Plymouth, NC, (4)North Carolina State University, Raleigh, NC, (5) Clemson University, Florence, SC, (6)Clemson University, Blackville, SC, (7) University of Florida, Jay, FL, (8)Auburn University, Auburn, AL

10:45 AM Honey Bees Experience Forage Opportunities and Pesticide Exposure in a Row Crop Environment

Sally Taylor, Virginia Tech University, Suffolk, VA, Margaret Couvillon, Virginia Polytechnic Institute and State University, Blacksburg, VA and Roger Schurch, Virginia Tech, Blacksburg, VA

11:00 AM Benefits of a Native Bee Pollinator *Melissodes tepaneca* (Hymenoptera: Apidae) on Cotton Yield

Isaac L. Esquivel and Michael J. Brewer, Texas A&M AgriLife Research, Department of Entomology, Corpus Christi, TX

11:15 AM Comparison of Sentinel-2, Landsat, and Airborne Imagery for Early Identification of Cotton Fields for Boll Weevil Eradication

Chenghai Yang, USDA-ARS, College Station, TX and Charles P.-C. Suh, USDA-ARS ICCDRU, College Station, TX

11:30 AM A Comparison of Tools for Documenting the Demography of Boll Weevil Reinfestations

Lindsey C Perkin¹, Charles P.-C. Suh¹, Tyler Jay Raszick² and Gregory A. Sword², (1)USDA-ARS ICCDRU, College Station, TX, (2)Texas A&M University, College Station, TX

11:45 AM Development Toward Rapid Diagnostic Tools for Boll Weevil Identification and Source Estimation

Tyler Jay Raszick¹, Lindsey C Perkin², Alejandra Godoy³, Raul Ruiz-Arce³, Charles P.-C. Suh², Xanthe A. Shirley⁴ and Gregory A. Sword¹, (1)Texas A&M University, College Station, TX, (2)USDA-ARS ICCDRU, College Station, TX, (3)USDA-APHIS, Edinburg, TX, (4)USDA-APHIS, College Station, TX

COTTON INSECT RESEARCH & CONTROL CONFERENCE - THURSDAY EARLY AFTERNOON

1:00 PM-2:45 PM

1:00 PM Influence of Planting Date on Bollworm Incidence and Damage in Cotton

Dominic Reisig, North Carolina State University, Plymouth, NC, Jeremy Greene, Clemson University, Blackville, SC, Phillip Roberts, University of Georgia, Tifton, GA and Sally Taylor, Virginia Tech University, Suffolk, VA

1:15 PM What Ever Happened to Old World Bollworm Invasion of the US?

Gregory A. Sword and Zhen Fu, Texas A&M University, College Station, TX

1:30 PM Partnerships for Data Innovation (PDI) Cotton - the Potential for Entomological Data Collection and Aggregation

Ryan W Kurtz¹, Edward M. Barnes¹, Gaylon Morgan¹, Tina Gray Teague², Christopher D. Delhom³, Michael D. Buser⁴, Mauricio Ulloa⁵ and James R. Mahan⁶, (1)Cotton Incorporated, Cary, NC, (2)Ark State Univ / Univ Ark Agri Exp Sta, State University, AR, (3)USDA-ARS, New Orleans, LA, (4)USDA Agricultural Research Service, Beltsville, MD, (5)USDA-ARS, PA, CSRL, Plant Stress and Germplasm Development Research, Lubbock, TX, (6)USDA/ARS, Lubbock, TX

1:45 PM Effectiveness of Insecticide Oversprays for Control of Bollworm and Stink Bugs on Bt Cotton Technology in South Carolina

Jeremy Greene¹, Francis Reay-Jones², Dan Robinson¹ and Katie Seavey¹, (1) Clemson University, Blackville, SC, (2)Clemson University, Florence, SC

2:00 PM Genomic Mechanisms for the Evolution of Bt/Insecticide Resistance in US Cotton Bollworms: Humans to Insects

R. Michael Roe¹, Roger D Lawrie¹, Robert D. Mitchell III¹, Jean Marcel Degue-non¹, Loganathan Ponnusamy¹, Dominic Reisig², Alejandro Del Pozo-Valdivia³ and Ryan W Kurtz⁴, (1)North Carolina State University, Raleigh, NC, (2) North Carolina State University, Plymouth, NC, (3)University of California Cooperative Extension & UC Statewide IPM Program, Salinas, CA, (4)Cotton Incorporated, Cary, NC

2:15 PM Managing Wireworms in Texas High Plains Cotton

Suhas Vyavhare, Texas A&M AgriLife Extension Service, Lubbock, TX and Blayne Reed, Texas A&M AgriLife Extension, Plainview, TX

2:30 PM Insect Pest Management in Texas Cotton

Abdul Hakeem¹, Megha N. Parajulee¹ and Dol P. Dhakal², (1)Texas A&M AgriLife Research and Extension Center, Lubbock, TX, (2)Texas A&M AgriLife Research Center, Lubbock, TX

COTTON INSECT RESEARCH & CONTROL CONFERENCE - THURSDAY LATE AFTERNOON

3:00 PM-5:00 PM

3:00 PM Cotton Insect Research and Control Conference Business Meeting and Awards

Jeff Gore, Mississippi State University, Stoneville, MS and Nathan S. Little, USDA-ARS SIMRU, Stoneville, MS

Sustainability

COTTON SUSTAINABILITY - THURSDAY EARLY MORNING

8:30 AM-10:00 AM

8:30 AM Distinguished Lecture: Transitioning Food and Agricultural Systems to Circular Economies

Jim Jones, University of Florida, Gainesville, FL

9:00 AM International Standards Organization TC323 Update: Defining a Standard in Circularity

Michele Wallace, Cotton Inc., Cary, NC

9:30 AM Contributions of the Apparel Industry to Plastic Leakage

Sophie Chalumeau, Quantis, Lausanne, Switzerland

COTTON SUSTAINABILITY - THURSDAY LATE MORNING

10:30 AM-12:00 PM

10:30 AM Sustainability Metrics Research and Development

Allison Thomson, Field to Market, Washington, DC, DC

10:45 AM Evaluating and Working to Improve Georgia Cotton and Peanut Sustainability Practices Using the Fieldprint Calculator

Kaylyn Groce and Wesley M Porter, University of Georgia, Tifton, GA

11:00 AM Field-Scale Greenhouse Gas Emissions: Significance of Cover Cropping and Soil Methane Sequestration

Nithya Rajan¹, Sk. Musfiq-Us- Salehin¹ and Kenneth Casey², (1)Texas A&M University, College Station, TX, (2)Texas A&M Agrilife Research, Amarillo, TX

11:15 AM Impacts of Conservation Practices and Irrigation on Greenhouse Gas Emissions in Mid-South Cotton

Arlene Adviento AdvientoBorbe, DWMRU USDA-ARS, State University, AR, **Sandhya Karki**, University of Arkansas, Jonesboro, AR, Michele L. Reba, USDA-ARS, Jonesboro, AR and Tina Gray Teague, Ark State Univ / Univ Ark Agri Exp Sta, State University, AR

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Cotton Agronomy, Physiology & Soil Conference

COTTON AGRONOMY, PHYSIOLOGY & SOILS CONFERENCE POSTERS

Comparison of on-Board Harvester Scale Systems to Ground Scale Systems in Cotton Yield Measurements

Guy D. Collins¹, Keith L. Edmisten², Mitch K Williams³, Charlie Cahoon² and Lori Unruh Snyder², (1)NC State University, Rocky Mount, NC, (2)North Carolina State University, Raleigh, NC, (3)North Carolina State University, Sanford, NC

Effects of Handling of Cotton Seed on Stand Establishment and Crop Yield

Dalton E Barber, Steven M Brown and Jenny Koebernick, Auburn University, Auburn, AL

Preliminary Results for 48-Inch Row Spacing in Cotton in South Alabama

Steven M Brown and Dalton E Barber, Auburn University, Auburn, AL

Preliminary Results for Seeding Rate Studies in Cotton in South Alabama

Steven M Brown and Dalton E Barber, Auburn University, Auburn, AL

Evaluation of Cotton in Large-Plot on-Farm Variety Testing in Arkansas for 2020

Bill Robertson, Joe McAlee, Amanda Free and Whitney Haigwood, University of Arkansas, Newport, AR

Evaluation of Cotton Yield to in-Season Soil Applied Potassium

Bill Robertson, Amanda Free, Joe McAlee and Whitney Haigwood, University of Arkansas, Newport, AR

Greenhouse Gas Emissions, Soil Moisture and Temperature Dynamics with Different Cover Crops in Organic Cotton

Sk. Musfiq-Us- Salehin¹, Nithya Rajan¹, Kenneth Casey², Peter Tomlinson³, Jake Mowrer⁴ and Muthu Bagavathiannan¹, (1)Texas A&M University, College Station, TX, (2)Texas A&M Agrilife Research, Amarillo, TX, (3)Kansas State University, Manhattan, KS, (4)Texas A&M AgriLife Extension Service, College Station, TX

Cotton Maturity and Yield Response to Various Irrigation Schedules in the Oklahoma Panhandle

Andrea J Althoff¹, Bradley R. Wilson¹, Cayden B. Catlin¹, Jason Warren¹, Sumit Sharma², Cameron Murley², Randy Norton³ and Seth A. Byrd¹, (1)Oklahoma State University, Stillwater, OK, (2)Oklahoma State University, Goodwell, OK, (3)University of Arizona, Safford, AZ

Comparison of Multiple and Single Pass Harvest Systems Effect on Cotton Yield and Fiber Quality

James A. Griffin¹, Gaylon Morgan², Robert G. Hardin³, Emi Kimura⁴, John L. Snider⁵, Tyson B Raper⁶ and Edward M. Barnes², (1)Texas A&M Cotton Extension, College Station, TX, (2)Cotton Incorporated, Cary, NC, (3)Texas A&M University, College Station, TX, (4)Texas A&M AgriLife Research and Extension Service, Vernon, TX, (5)University of Georgia, Tifton, GA, (6)University of Tennessee, Jackson, TN

Effect of Temperature Extremes on Seedling Growth and Photosynthetic Performance of Different Cotton Genotypes

Gurpreet Virk, John L. Snider and Peng Chee, University of Georgia, Tifton, GA

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Nitrogen and Cover Crop Effects on Yield and Fiber Quality of Irrigated Cotton

Ruixiu Sui and Jonnie L. Baggard, USDA-ARS, Stoneville, MS

Optimizing Cover Crop Overseeding for Continuous Cotton in the Mississippi Delta

Gurpreet Kaur and Gurbir Singh, Mississippi State University, Stoneville, MS

Yield Partitioning Effects of Low-Rate Auxin Applications on Sensitive Cotton

Savana D Denton¹, Tyson B Raper¹, Darrin M. Dodds², Chris L Main³ and Freeman Brown¹, (1)University of Tennessee, Jackson, TN, (2)Mississippi State University, Mississippi State, MS, (3)PhytoGen, Medina, TN

Replicated Agronomic Cotton Evaluation (RACE) Trial in the Rolling Plains of Texas-2020

Jonathan H. Ramirez¹, Emi Kimura¹ and Paul DeLaune², (1)Texas A&M AgriLife Research and Extension Service, Vernon, TX, (2)Texas A&M AgriLife Research, Vernon, TX

2020 Texas Upper Gulf Coast Replicated Agronomic Cotton Evaluation (RACE) - Trial Summary

Dale A. Mott¹, Ben McKnight², Aaron Sumrall³, Corrie Bowen⁴, Kate Harrell-Crumley⁴, Laramie Naumann⁵ and Mike Hiller⁶, (1)Texas A&M AgriLife Extension Service, College Station, TX, (2)Texas A&M University, College Station, TX, (3)Texas A&M AgriLife Extension Service, Bay City, TX, (4)Texas A&M AgriLife Extension Service, Wharton, TX, (5)Texas A&M AgriLife Extension Service, Columbus, TX, (6)Texas A&M AgriLife Extension Service, Edna, TX

Effect of Temperature Fluctuations on Early Season Growth and Development of Cotton (*Gossypium hirsutum*)

Harsimran Kaur Kapoor, Texas Tech University, Lubbock, TX

Cotton Phenotyping and Physiological Monitoring with a Simple Proximal Remote Sensing System

Curtis B. Adams, Texas A&M AgriLife Research, Vernon, TX, **Glen Ritchie**, Department of Plant & Soil Science, Texas Tech University, Lubbock, TX and Nithya Rajan, Texas A&M University, College Station, TX

Cotton Production: Plant Growth Regulators Management Under Rain-fed and Irrigation Conditions

Kurt Wedegaertner, Avat Shekoofa, Kendall Sheldon, Sam Purdom, Tyson B Raper and Freeman Brown, University of Tennessee, Jackson, TN

Variable Rate Seeding in Cotton

Michael T. Plumblee, Kendall R. Kirk and Tyler S. Soignier, Clemson University, Blackville, SC

Demonstration and Evaluation of Cotton Module Traceability and on-Machine Module Weighing Capabilities

Michael T. Plumblee¹, Kendall R. Kirk¹, Tyler S. Soignier¹ and Edward M. Barnes², (1)Clemson University, Blackville, SC, (2)Cotton Incorporated, Cary, NC

Evaluating Variety Placement in Cotton Using Precision Multi-Variety Planting Technologies

Julianna B. Corbin, Michael T. Plumblee, Kendall R. Kirk and Tyler S. Soignier, Clemson University, Blackville, SC

Evaluating Various Soil Moisture Sensor Thresholds in Cotton in South Carolina

Wendy Buchanan¹, Michael T. Plumblee¹, Kendall R. Kirk¹, Cal Sawyer², Gilbert A. Miller¹ and Tyler S. Soignier¹, (1)Clemson University, Blackville, SC, (2)Clemson University, Clemson, SC

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Cotton Leaf Mn Concentration and Lint Yield in Acidic Soils

Haile Tewolde and Johnnie N. Jenkins, USDA-ARS, Mississippi State, MS

Evaluation of Cotton Varieties on-Farm in Florida

Ethan Carter, University of Florida Jackson County, Marianna, FL, Libbie Johnson, University of Florida Escambia County, Cantonment, FL, David L. Wright, University of Florida, Quincy, FL and Drew Schrimsher, Auburn University, Auburn University, AL

Validation of UAV Estimates of Canopy Height and Boll Count with Manual Measurements for Two Cotton Cultivars

Srinivasulu Ale¹, Sushil Kumar Himanshu¹, Sayantan Samanta², Anjin Chang³, JungJin Kim⁴, James P. Bordovsky⁵, Jinha Jung⁶ and Edward M. Barnes⁷, (1) Texas A&M AgriLife Research, Vernon, TX, (2) Texas A&M University, College Station, TX, (3) Texas A&M University - Corpus Christi, Corpus Christi, TX, (4) Seoul National University of Science and Technology, Seoul, Korea, Republic of (South), (5) Texas A&M AgriLife Research Center, Lubbock, TX, (6) Purdue University, West Lafayette, IN, (7) Cotton Incorporated, Cary, NC

The Effect of Nitrogen Rate on Uptake and Partitioning and Reniform Nematode Reproduction in *Gossypium hirsutum*.

Daryl Chastain, Mississippi State University, Stoneville, MS, John L. Snider, University of Georgia, Tifton, GA, Alvaro Sanz-Saez, Auburn University, Auburn, AL and Reuben K Alawode, Mississippi State University, Delta Research and Extension Center, Greenville, MS

Last Effective Bloom Date for Cotton in Georgia

Brian W. Hayes, University of Georgia Cooperative Extension, Camilla, GA

Effect of Cotton Seed Size and Seeding Rate on Cotton Growth, Development and Yield

Steven D. Hall¹, Darrin M. Dodds¹, Brian K. Pieralisi², Bradley Norris¹, William J Rutland¹, Jacob P. McNeal¹, John J. Williams¹ and Tyson B Raper³, (1) Mississippi State University, Mississippi State, MS, (2) Mississippi State University, Starkville, MS, (3) University of Tennessee, Jackson, TN

Refinement of Cotton Nitrogen Use Recommendations in Texas

Joshua M Doria, Texas A&M AgriLife Research, College Station, TX, Julie A. Howe, Texas AgriLife Research, College Station, TX, Gaylon Morgan, Cotton Incorporated, Cary, NC and Benjamin M. McKnight, Texas A&M University, College Station, TX

Photosynthetic Cold Acclimation in Cotton Seedlings

John L. Snider¹, Cristiane Pilon¹, Wei Hu², Haimiao Wang¹, Viktor Tishchenko³, William Slaton⁴ and Daryl Chastain⁵, (1) University of Georgia, Tifton, GA, (2) Nanjing Agricultural University, Nanjing, China, (3) University of Georgia, Griffin, GA, (4) University of Central Arkansas, Conway, AR, (5) Mississippi State University, Stoneville, MS

2020 Cotton Variety and Agronomy Evaluation in Northeast Texas

David R. Drake, Texas A&M AgriLife Extension Service, Commerce, TX, Amy D. Braley, Texas A&M - Commerce, Commerce, TX and Scott Stewart, Texas A&M University - Commerce, Commerce, TX

Right Balance of Macros and Micros in Modern Cotton Cultivars

Irish Lorraine B Pabuayon¹, Katie L. Lewis² and Glen Ritchie¹, (1) Texas Tech University, Lubbock, TX, (2) Texas A&M AgriLife Research and Extension Center, Lubbock, TX

Impact of Soil Acidity on Cotton Production

Raedan L Sharry, Vaughn L Reed, Bronc Finch, Michaela Smith, Joao Bigatao Souza, Seth A. Byrd and Brian Arnall, Oklahoma State University, Stillwater, OK

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Zinc Sulfate and Urea Ammonium Nitrate Interaction Effects on Corn-Cotton Production System

Gurbir Singh, Wayne Ebelhar and Gurpreet Kaur, Mississippi State University, Stoneville, MS

Influence of Multiple Potassium Rates on Cotton Yield across Different Cultivars

William Joseph Rutland¹, Brian K. Pieralisi¹, Bradley Norris², Jacob P. McNeal², Steven D. Hall² and John J. Williams², (1)Mississippi State University, Starkville, MS, (2)Mississippi State University, Mississippi State, MS

Variability of Cotton Lint Yield as Predicted by Boll Counts

Wyatt Medina, Bradley R. Wilson, Cayden B. Catlin, Andrea J Althoff and Seth A. Byrd, Oklahoma State University, Stillwater, OK

Cotton Disease Council

COTTON DISEASE COUNCIL POSTERS

Cotton Disease Loss Estimate Committee Report, 2020.

Kathy S. Lawrence¹, Amanda Lawrence¹, Randy Norton², Jiahuai Hu³, Travis R. Faske⁴, Robert Hutmacher⁵, John Muller⁶, Ian Small⁷, Zane J. Grabau⁸, Robert C. Kemerait⁹, Paul Price¹⁰, Thomas W. Allen¹¹, Sam Atwell¹², John Idowu¹³, Lindsey D. Thiessen¹⁴, Seth A. Byrd¹⁵, Jerry Goodson¹⁶, Heather M Kelly¹⁷, Terry A Wheeler¹⁸, Thomas Isakeit¹⁹ and Hillary L. Mehl²⁰, (1)Auburn University, Auburn, AL, (2)University of Arizona, Safford, AZ, (3)University of Arizona, Tucson, AZ, (4)University of Arkansas Division of Agriculture, Lonoke, AR, (5) University of California, Shafter, CA, (6)Clemson University, Blackville,, SC, (7) University of Florida, Quincy, FL, (8)University of Florida, Gainesville, FL, (9) University of Georgia, Tifton, GA, (10)Louisiana State University, Winnsboro, LA, (11)Mississippi State University, Delta Research and Extension Center, Stoneville, MS, (12)University of Missouri, New Madrid, MO, (13)New Mexico State University, Las Cruces, NM, (14)NC State University, Raleigh, NC, (15) Oklahoma State University, Stillwater, OK, (16)OSU Southwest Research and Extension Center, Altus, OK, (17)University of Tennessee, Jackson, TN, (18)Texas A&M AgriLife Research and Extension Center, Lubbock, TX, (19) Texas A&M University, College Station, TX, (20)Virginia Tech Tidewater AREC, Suffolk, VA

Cotton Cultivar Disease Incidence, Severity, and Yields When Challenged with Verticillium Wilt in the Tennessee Valley Region, 2020

Kathy S. Lawrence¹, Tyler Sandlin², Andy Page¹, Tyson B Raper³, Heather M Kelly³, Brad Meyer⁴ and Nathan Silvey⁵, (1)Auburn University, Auburn, AL, (2) Auburn University, Belle Mina, AL, (3)University of Tennessee, Jackson, TN, (4) GreenPoint AG, Decatur, AL, (5)Madison County Co-op, Decatur, AL

Evaluation of Effectiveness and Economic Returns Associated with Fungicide Applications for Control of Areolate Mildew

Stephanie Hollifield¹, Robert Kemerait² and Jared R. Whitaker², (1)University of Georgia, Quitman, GA, (2)University of Georgia, Tifton, GA

Comparative Genomics of Fov (*Fusarium oxysporum* f. sp. vasinfectum) in US Cotton Provides Insights into Race-Specific Regions Related to Pathogenicity and Evolution

Catherine Danmaigona Clement¹, Lin Zhang¹, Zunyong Liu¹, Steve Hague¹, Terry Wheeler², Jane K Dever³, Ping He¹ and Libo Shan¹, (1)Texas A&M University, College Station, TX, (2)Texas A&M AgriLife Research, Lubbock, TX, (3) Texas A&M AgriLife Research and Extension Center, Lubbock, TX

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Efficacy of Phytoen Seed Treatment Products and Cultivars to Manage the Reniform Nematode in Mississippi

Tessie H. Wilkerson, Mississippi State University, Stoneville, MS, Thomas W. Allen, Mississippi State University, Delta Research and Extension Center, Stoneville, MS and Thomas Eubank, Phytoen, Greenville, MS

Efficacy of Reniform Resistant Cultivars and Commercially Available Nematicides to Manage the Reniform Nematode

Tessie H. Wilkerson¹, Thomas W. Allen², Daryl Chastain¹, Sally Stetina³, Jack C. McCarty⁴ and Nicholus Tadlock⁵, (1)Mississippi State University, Stoneville, MS, (2)Mississippi State University, Delta Research and Extension Center, Stoneville, MS, (3)USDA-ARS, Stoneville, MS, (4)USDA-ARS, Mississippi State, MS, (5)Mississippi State University-Delta Research and Extension Center, Stoneville, MS

Quantification of FOV4 in Soils with Susceptible or Tolerant Cotton Cultivars

Jennifer Chagoya¹, Heather Arce², Joel Arce³, Roy Davis³, Thomas M. Chappell³, Mauricio Ulloa⁴ and Cecilia Monclova-Santana⁵, (1)Texas A&M AgriLife Research, Lubbock, TX, (2)Texas A&M AgriLife Research, El Paso, TX, (3)Texas A&M University, College Station, TX, (4)USDA-ARS, Lubbock, TX, (5)Texas A&M AgriLife Extension, Lubbock, TX

Fitness Penalty of Qoi-Resistant Isolates of *C. cassicola* and Sensitivity Profile to Five Fungicides

Marina Nunes Rondon, Bisho Ram Lawaju and Kathy Lawrence, Auburn University, Auburn, AL

Cultivar Response to Inoculation with *Xanthomonas Citri* Subsp. *Malvacearum* in Mississippi during 2020

Thomas W. Allen, Mississippi State University, Delta Research and Extension Center, Stoneville, MS

Cotton Damage Thresholds of *M. Enterolobii* in the Presence of *Fusarium Oxysporum*

Ashley Joyce, North Carolina State University, Raleigh, NC

Evaluation of Upland Cotton Varieties for Reaction to *Fusarium Wilt Race 4* in El Paso County, Texas

Thomas Isakeit, Texas A&M University, College Station, TX and Joel Arce, Texas A&M Agrilife Extension, El Paso, TX

Analyzation of the Benefits of Root-Knot Nematode Resistant Cotton Varieties within a Variety Trial

Jason E. Mallard, University of Georgia Cooperative Extension, Portal, GA and Robert Kemerait, University of Georgia, Tifton, GA

The Effect of Blocking Methylation of Sesquiterpenoids By Omt RNAi on Disease Resistance in Cotton

Tanya A Wagner¹, Lorraine Puckhaber², Alois A. Bell³, Clint W Magill⁴ and **Jinggao Liu**³, (1)USDA-ARS-ICCDRU, College Station, TX, (2) USDA-ARS, College Station, TX, (3)USDA-ARS ICCDRU, College Station, TX, (4)Texas A&M University, College Station, TX

Response of Root-Knot Nematode Resistant and Susceptible Varieties to Telone II Application in Root-Knot, Columbia Lance, and Lesion Nematode Infested Fields

Michael T. Plumlee, Tyler S. Soignier, Bill Bonnette and **John Mueller**, Clemson University, Blackville, SC

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Evaluating Genetic Resistance and Nematicides for Reniform Nematode Management in Cotton

Morgan N McCulloch¹, Jennifer Dudak¹, Thomas Isakeit¹, Terry Wheeler², Benjamin M. McKnight¹, Gaylon Morgan³ and Reagan L. Noland⁴, (1)Texas A&M University, College Station, TX, (2)Texas A&M AgriLife Research, Lubbock, TX, (3)Cotton Incorporated, Cary, NC, (4)Texas A&M Agrilife Extension Service, San Angelo, TX

2020 National Cottonseed Treatment Program

Rachel R. Guyer¹, Shelly Neill Pate¹, Heather M Kelly¹, Thomas W. Allen², Tessie H. Wilkerson³, M. B. Bayles⁴, Robert Kemerait⁵, Kathy Lawrence⁶, Cecilia Monclova-Santana⁷, Paul Price⁸, Alejandro Rojas⁹ and Terry Spurlock¹⁰, (1) University of Tennessee, Jackson, TN, (2)Mississippi State University, Delta Research and Extension Center, Stoneville, MS, (3)Mississippi State University, Stoneville, MS, (4)Oklahoma State University, Stillwater, OK, (5)University of Georgia, Tifton, GA, (6)Auburn University, Auburn University, AL, (7) Texas A&M AgriLife Extension, Lubbock, TX, (8)Louisiana State University, Winnsboro, LA, (9)University of Arkansas, Fayetteville, AR, (10)University of Arkansas, Monticello, AR

Cotton Economics and Marketing Conference

COTTON ECONOMICS AND MARKETING POSTERS

A Profitability Analysis Comparing Continuous Cotton to Alternative Crop Rotations Under Limited Irrigation in Texas High Plains

Rachel Elizabeth Buck¹, Donna McCallister², Eduardo Segarra², James P. Bordovsky³, J. T. Mustian⁴, David Winters⁵, Heath Johnson⁵ and Scott Jordan⁶, (1)Texas Tech University College of Agricultural Sciences & Natural Resources, Lubbock, TX, (2)Texas Tech University, Lubbock, TX, (3)Texas A&M AgriLife Research Center, Lubbock, TX, (4)Texas A&M AgriLife Research, Plainview, TX, (5)Texas A&M AgriLife Research & Extension Center at Lubbock - Halfway Location, Plainview, TX, (6)Texas A&M AgriLife Research and Extension Service, Lubbock, TX

Economics of Xtendflex Cotton by Tillage, Rotation, and Herbicide Input

Rohith Vulchi¹, John R.C. Robinson², Josh McGinty³, Muthu Bagavathianan² and Scott Nolte², (1)Texas A&M University, College Station, College Station, TX, (2)Texas A&M University, College Station, TX, (3)Texas A&M AgriLife Extension Service, Corpus Christi, TX

Cotton Engineering-Systems Conference

COTTON ENGINEERING-SYSTEMS POSTERS

Bench-Top Plastic Contaminant Detection in Cotton Using Deep Learning Neural Network Trained with Images Taken Under 4 Lighting Colors

Joshua H Tandio¹, Filip To¹ and Ruixiu Sui², (1)Mississippi State University, Mississippi State, MS, (2)USDA-ARS, Stoneville, MS

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Moisture Determination of Cotton in Static Conditions Via Capacitive Sensing

Lucas Gay¹, Filip To¹ and Ruixiu Sui², (1)Mississippi State University, Mississippi State, MS, (2)USDA-ARS, Stoneville, MS

Precision Nitrogen Fertigation Using NDVI Crop Sensors Integrated with a Lateral Move Irrigation System

Stewart M Bell¹, Bulent Koc¹, Joe Mari J. Maja², Jose Payero², Michael W. Marshall³ and Ahmad Khalilian², (1)Clemson University, Clemson, SC, (2)Clemson University, Blackville, SC, (3)Clemson University - Edisto REC, Blackville, SC

Demonstration of Cotton Module Traceability and on-Machine Module Weighing Capabilities

Michael T. Plumblee¹, Kendall R. Kirk¹, Tyler S. Soignier¹ and Edward M. Barnes², (1)Clemson University, Blackville, SC, (2)Cotton Incorporated, Cary, NC

A Wireless Soil Moisture Sensing Network to Automate Site-Specific Irrigation of Cotton Using a Lateral Move Irrigation System

Jose Payero¹, Rebecca Hitchcock Davis² and Bayleah Cooper¹, (1)Clemson University, Blackville, SC, (2)Clemson University, Bamberg, SC

Cotton Improvement Conference

COTTON IMPROVEMENT POSTERS

Temporal Changes in Membrane Lipid Composition of Upland Cotton (*Gossypium hirsutum*) Seeds in Response to Cold Water Imbibition

Lakhvir Kaur and Rosalyn B Angeles-Shim, Texas Tech University, Lubbock, TX

Dissecting Quantitative Variation Introgressed into Four Different Backgrounds of Upland Cotton Using Variance Components Analysis and Comparative Transcriptomics

Samantha Jo Wegener¹, Sameer Khanal¹, Nino Brown¹, Pawan Kumar², Andrew Paterson³, Neha Kothari⁴ and Peng Chee¹, (1)University of Georgia, Tifton, GA, (2)USDA-ARS, Salinas, CA, (3)College of Agricultural and Environmental Sciences, The University of Georgia, Athens, GA, (4)Cotton Incorporated, Cary, NC

Cotton Insect Research and Control Conference

COTTON INSECTS POSTERS

Effects of Plant Density on Thrips Injury to Cotton

Jessica Loren Krob, University of Tennessee, Jackson, TN and Scott D. Stewart, The University of Tennessee, Jackson, TN

Rearing Technic for *Nezara viridula* (Heteroptera: Pentatomidae) Using Semi-Solid Artificial Diet.

Maribel Portilla, USDA-ARS (SIMRU), Stoneville, MS

2020 Cotton Insect Losses Estimates

Don Cook, Mississippi State University, Stoneville, MS and Meg Threet, MSU, Stoneville, MS

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Effect of Okra Leaf Cotton on Canopy Microclimate and *Helicovera Zea* (Boddie) Survival

Ivan Tellez, Jane Pierce and Patricia Monk, New Mexico State University, Las Cruces, NM

Evaluation of Insecticides for *Lygus* Management in California Cotton

Ian M Grettenberger, University of California-Davis, Davis, CA, CA and Treanna Pierce, UC Cooperative Extension, Shafter, CA

Cotton Quality Measurements Conference

COTTON QUALITY MEASUREMENTS POSTERS

Does Low Rates of 2,4-D Affect Cotton Fiber Quality?

Kyle Russell, Texas Tech University, Lubbock, TX, Texas A&M AgriLife Research, Lubbock, TX, Peter A. Dotray, Texas Tech University, Texas A&M AgriLife Research and Extension Service, Lubbock, TX and Brendan Kelly, Texas Tech University, Lubbock, TX

Do Metals in Cotton Affect Dyeing Efficiency?

Chanel Angelique Fortier¹, Christopher D. Delhom² and Michael K. Dowd², (1)USDA, New Orleans, LA, (2)USDA-ARS, New Orleans, LA

Cotton Utilization Conference

COTTON UTILIZATION POSTERS

Examining Cotton Maturity Distribution in Small Fiber Bundles Using an Infrared Imaging System

Michael Santiago Cintron, USDA, New Orleans, LA and Terri Von Hoven, USDA-ARS-SRRC, New Orleans, LA

Water Sorption Behaviors of Cottonseed Meal, Washed Cottonseed Meal, and Cottonseed Protein Isolate

Zhongqi He¹, David Zhang² and H.N. Cheng², (1)USDA Agricultural Research Service, New Orleans, LA, (2)USDA-ARS-SRRC, New Orleans, LA

Cotton Weed Science Research Conference

COTTON WEED SCIENCE RESEARCH POSTERS

Utility of Isoxaflutole for Weed Control in Isoxaflutole-Resistant Cotton Systems

Rodger B. Farr, Jason K Norsworthy, James W Beesinger, Jacob Flemming and Lawson Priess, University of Arkansas, Fayetteville, AR

Use of Auxin Herbicides Other Than 2,4-D in Enlist Cotton

James W Beesinger, Jason K. Norsworthy, Rodger B. Farr, Mason Castner and Lawson Priess, University of Arkansas, Fayetteville, AR

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Sensitivity of Palmer Amaranth to Dicamba & Glufosinate

Navdeep Godara¹, Jason Norsworthy¹, Tom Barber², Larry Steckel³ and Lawson Priess¹, (1)University of Arkansas, Fayetteville, AR, (2)University of Arkansas-Extension, Lonoke, AR, (3)University of Tennessee, Jackson, TN

Determining the Optimum Rate of Potassium Borate Needed to Reduce Dicamba Volatility

Mason Castner, Jason K Norsworthy, Trenton L Roberts, Maria L Zaccaro and Jacob A Fleming, University of Arkansas, Fayetteville, AR

Evaluating Tolerance of HPPD-Tolerant Cotton to PRE and POST Applications of Isoxaflutole

Jacob A Fleming¹, Jason K Norsworthy¹, Tom Barber² and Rodger B. Farr¹, (1) University of Arkansas, Fayetteville, AR, (2)University of Arkansas-Extension, Lonoke, AR

Quantifying Reductions in Palmer Amaranth Groundcover Following an Auxin Herbicide Application

Lawson Priess¹, Jason K. Norsworthy¹, Rodger B. Farr¹, Mason Castner¹, Thomas R Butts² and Tom Barber³, (1)University of Arkansas, Fayetteville, AR, (2)University of Arkansas, Lonoke, AR, (3)University of Arkansas-Extension, Lonoke, AR

Performance of Tank Mix Partners with Isoxaflutole across the Cotton Belt

Delaney C. Foster¹, Peter A. Dotray¹, Todd A Baughman², Seth A. Byrd³, A. Stanley Culpepper⁴, Darrin M. Dodds⁵, Steven D. Hall⁵, Jacob P. McNeal⁵, Bradley Norris⁵, Reagan L. Noland⁶, Scott Nolte⁷, Mason House⁸, Jason K. Norsworthy⁹, Rodger B. Farr⁹, Larry Steckel¹⁰ and Corey N. Thompson¹¹, (1)Texas Tech University, Texas A&M AgriLife Research and Extension Service, Lubbock, TX, (2)Oklahoma State University, Ardmore, OK, (3)Oklahoma State University, Stillwater, OK, (4)University of Georgia, Tifton, GA, (5)Mississippi State University, Mississippi State, MS, (6)Texas A&M Agrilife Extension Service, San Angelo, TX, (7)Texas A&M University, College Station, TX, (8)Texas A&M Agrilife Extension, College Station, TX, (9)University of Arkansas, Fayetteville, AR, (10)University of Tennessee, Jackson, TN, (11)BASF, Lubbock, TX

Stoneville Cotton Response to Low Rates of Dicamba and 2-4-D

Taghi Bararpour and Ralph R. Hale, Mississippi State University, Stoneville, MS

Xtend Cotton Response to Low Rates of 2-4-D

Taghi Bararpour, Ralph R. Hale, Thomas W. Allen and Tessie H. Wilkerson, Mississippi State University, Stoneville, MS

Enlist Cotton Response to Low Rates of Dicamba

Taghi Bararpour, Ralph R. Hale, Tessie H. Wilkerson and Thomas W. Allen, Mississippi State University, Stoneville, MS

Utility of Cotoran, Dual Magnum, and Warrant in Two-Pass Enlist Weed Management Programs with Enlist One and Liberty

Donnie Miller and Marcie Mize, LSU AgCenter, St. Joseph, LA

Impact of Application Timing of Dual Magnum, Warrant, and Outlook on Weed Management and Crop Tolerance in Two-Pass Programs in Xtend Cotton

Donnie Miller and Marcie Mize, LSU AgCenter, St. Joseph, LA

Kochia Control with Engenia Pre/Post Combinations

C.D. Ray White, Texas A&M AgriLife Research, Lubbock, TX, J. Wayne Keeling, Texas A&M AgriLife Research Center, Lubbock, TX, Justin Lee Spradley, Texas A&M AgriLife, Lubbock, TX and Adam Hixson, BASF, Lubbock, TX

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Cotton Response to Imazapyr, Triclopyr, and Metsulfuron

Michael W. Marshall, Clemson University - Edisto REC, Blackville, SC

Controlling Volunteer Cotton in the Southwest

Todd A Baughman, Oklahoma State University, Ardmore, OK and Peter A. Dotray, Texas Tech University, Texas A&M AgriLife Research and Extension Service, Lubbock, TX

Sustainability

COTTON SUSTAINABILITY POSTERS

Economics and Sustainability Overview of Arkansas Cotton Research and Sustainability Program

Amanda Free¹, Bill Robertson¹, Matt Fryer², Mike Daniels², Breana Watkins² and David Lamm³, (1)University of Arkansas, Newport, AR, (2)University of Arkansas, Little Rock, AR, (3)Soil Health Institute, Morrisville, NC

A Comparison of the Effects of Synthetic and Cotton Microfibers on Growth Performance and Health in the Black Sea Bass, a Commercially Important Marine Finfish from Coastal Waters of the Eastern US.

Austin Schmidt¹, Wade Watanabe¹, Md Shah Alam¹, Patrick Carroll¹, Steven Piers², Jesse Daystar² and Mary Ankeny², (1)University of North Carolina Wilmington, Wilmington, NC, (2)Cotton Incorporated, Cary, NC

Improving Cotton Sustainability: Pilot Program to Demonstrate Implementation and Benefits of the US Cotton Trust Protocol and Better Cotton Initiative (BCI) Better Cotton Program

Bill Robertson¹, Amanda Free¹, Matt Fryer², Joe McAlee¹, Karen Wynne³, Jesse Daystar⁴, Andrew Jordan⁵, Steven Pires⁴ and Whitney Haigwood¹, (1) University of Arkansas, Newport, AR, (2)University of Arkansas, Little Rock, AR, (3)Better Cotton Initiative, Huntsville, AL, (4)Cotton Incorporated, Cary, NC, (5) Jordan Associates Ag and Bio Engineering Services, Cordova, TN