

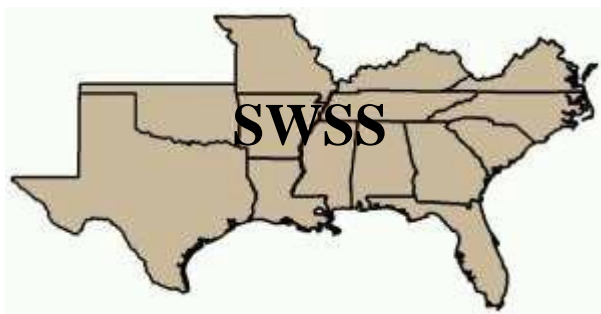
# Program

## 75<sup>th</sup>

## Annual Meeting

## Southern Weed Science Society

---



**Theme:**

*“Continued Resilience”*

**January 23-27, 2022**

**AT&T Hotel and Conference Center  
Austin, TX**

**PLEASE SUBMIT ABTRACTS TO WEBSITE PRIOR TO MEETING**

**PLEASE SUBMIT POWERPOINT FILES TO WEBSITE**

## **Local Arrangements Committee**

Luke Etheredge	Chair
Ben McKnight	Registration
Luke Etheredge	Audio Visual
Ben McKnight	Equipment Storage & Security
Kelley Mazur	Graduate Students & Room Reservations
Kelley Mazur	Information Booth & Message Coordinator
Kelley Mazur	Meal Functions
Luke Etheredge	Room Setup
Greg Steele	Signs and Exhibits
Greg Steele	Poster Setup

## **Special Events**

### **Endowment Function/Graduate Student Mixer & Social @ Top Golf**

Sunday, January 23, 2022  
6:00 p.m. – 9:00 p.m.

### **SWSS General Session – Zlotnik Ballroom 1/2/3**

Monday, January 24, 2022  
1:00 p.m. – 3:00 pm

### **Graduate Student Luncheon – Zlotnik Ballroom 1/2/3**

Tuesday, January 25, 2022  
12:30 p.m. – 2:00 p.m.

### **Women's Networking Event – Classroom 115**

Tuesday, January 25, 2022  
3:30 p.m. – 5:30 p.m.

### **Graduate Student Quiz Bowl – Zlotnik Ballroom 1/2/3**

Tuesday, January 25, 2022  
5:30 p.m. – 6:30 p.m.

### **Christian Fellowship Breakfast – Classroom 115**

Wednesday, January 26, 2022  
6:30 a.m. – 7:45 a.m.

### **SWSS Awards Luncheon – Zlotnik Ballroom 1/2/3**

Wednesday, January 26, 2022  
12:00 p.m. – 2:00 p.m.

### **Graduate Student Awards Reception and Mixer – Zlotnik Ballroom 1/2/3**

Wednesday, January 26, 2022  
5:00 p.m. – 8:00 p.m.

## **Future Meetings**

Renaissance Hotel  
Baton Rouge, LA – January 23 – 26, 2023

WSSA/SWSS Joint Meeting  
Hyatt Regency  
San Antonio, TX – January 22 – 25, 2024

## **Southern Weed Science Society Officers**

---

### **PRESIDENT**

Cletus Youmans  
BASF Corporation  
[cletus.youmans@basf.com](mailto:cletus.youmans@basf.com)  
(731) 445-8880

### **PRESIDENT ELECT**

Darrin Dodds  
Mississippi State University  
[dmd76@msstate.edu](mailto:dmd76@msstate.edu)  
(662) 325-2698

### **VICE PRESIDENT**

Eric Castner  
FMC  
[eric.castner@fmc.com](mailto:eric.castner@fmc.com)  
(817) 597-1852

### **PAST PRESIDENT**

Eric P Webster  
University. of Wyoming  
[ewebste2@uwyo.edu](mailto:ewebste2@uwyo.edu)  
(225) 281-9449

### **SECRETARY- TREASURER**

Hunter Perry  
Corteva Agriscience  
[hunter.perry@corteva.com](mailto:hunter.perry@corteva.com)  
(662) 686-9654

### **EDITOR**

Paul Tseng  
Mississippi State University  
[tt1024@msstate.edu](mailto:tt1024@msstate.edu)  
(662) 325-4725

## **MEMBERS-AT-LARGE (ACADEMIA)**

---

Shawn Askew  
Virginia Tech  
(540) 231-5807  
[saskew@vt.edu](mailto:saskew@vt.edu)

L. Thomas Barber  
University of Arkansas  
(501) 676-3124  
[tbarber@uada.edu](mailto:tbarber@uada.edu)

## **MEMBERS-AT-LARGE (INDUSTRY)**

---

Kelly Backscheider  
Corteva Agriscience  
[kelly.a.barnett@corteva.com](mailto:kelly.a.barnett@corteva.com)  
(317) 478 6974

Andy Kendig  
Independent Consultant  
[jakendig@sbcglobal.net](mailto:jakendig@sbcglobal.net)  
(314) 5808202

### **WSSA REPRESENTATIVE**

John Byrd  
Mississippi State University  
[jbyrd@pss.msstate.edu](mailto:jbyrd@pss.msstate.edu)  
(662) 325-4537

### **BUSINESS MANAGER (EX-OFFICIO)**

Kelley Mazur  
IMI Group  
[kelley@imigroup.org](mailto:kelley@imigroup.org)  
(303) 327-8016

### **CONSTITUTION AND OPERATING PROC (EX-OFFICIO)**

Carroll Johnson  
Whitetail Institute  
[carroll@whitetailinstitute.com](mailto:carroll@whitetailinstitute.com)  
(229) 402-1503

### **STUDENT REPRESENTATIVE (EX-OFFICIO)**

John Peppers  
Virginia Tech.  
[jmpeppers@vt.edu](mailto:jmpeppers@vt.edu)

## **Southern Weed Science Society**

### **Committees and Chairpersons**

2022 Program	Darrin Dodds
2023 Program	Eric Castner
Awards	Eric Webster
Business Manager/Sales Coordination	Kelley Mazur
Computer Application	Jim Brosnan
Constitution & Operating Procedures	Carroll Johnson
Education Units	Jacob Reed
Endowment Foundation	Gary Schwarzlose
Finance	Darrin Dodds
Graduate Student Organization	John Peppers
Historical	Andy Kendig
Legislative and Regulatory	Todd Baughman
Local Arrangements	Luke Etheredge
Long Range Planning	James Holloway
Newsletter Editor	Tommy Butts
Nominating	Eric Webster
Research Committee	Eric Castner
Resolutions and Necrology	David Black
Site Selection	Luke Etheredge
Southern Weed Contest	Drew Ellis
Student Program	Tommy Butts
Sustaining Membership	Kelly Backscheider
Weed Resistance and Technology Stewardship	Connor Ferguson

### **Program Section Chairs**

Agronomic Crops	Scott Nolte
Weed Management in Turf	John Brewer
Weed Management in Pastures & Rangeland	David Russell
Weed Management in Horticultural Crops	Peter Dittmar
Forest Vegetation Management	David Russell
Vegetation Management in Utilities, Railroads, & Highway Rights-of-Way; Industrial Sites	David Russell
Physiological and Biological Aspects of Weed Control	Sam Rustom
Educational Aspects of Weed Control	Connor Ferguson
Regulatory Aspects of Weed Control	Ben Sperry
Invasive Species	Ben Sperry
New Technologies	Shane Carver
Soil and Environmental Aspects of Weed Scienc4	Ben Sperry
Posters	Matthew Wiggins
Graduate Student Contest	Tommy Butts

## **Registration – Meeting Level 1 Foyer**

**MONDAY, January 24, 2022**

8:00 a.m. – 5:00 p.m.

**TUESDAY, January 25, 2022**

8:00 a.m. – 5:00 p.m.

**WEDNESDAY, January 26, 2022**

8:00 a.m. – 3:00 p.m.

## **Displays and Posters**

Set-up time for displays and the Poster Session is 10:00 am to noon on Monday, January 24, 2022, in the Zlotnik Ballroom 4/5/6. The poster area will be open from 3:00 pm to 5:00 pm on Monday, 7:00 am to 5:00 pm on Tuesday, and 7:00 am to 3:00 pm on Wednesday.

**Authors of even numbered posters will be present to discuss their posters from 7:00 am to 8:00 am on Tuesday.**

**Authors of odd numbered posters will be present from 7:00 am to 8:00 am on Wednesday.**

**Contest poster authors do not have to be present for judging.**

**Displays and Posters must be removed before 3:00 pm on Wednesday, January 26, 2022**

## **SWSS Endowment Silent Auction**

Silent Auction will take place in meeting level one foyer and will close on **Wednesday, January 26, 2022, at 1:00 pm**

Auction item pick up will immediately follow and close at approximately 3:00 pm

## **Location of Events**

SWSS Executive Board Meetings	Classroom 115
Local Arrangements	Classroom 102 B/C
Graduate Contest Judge's Breakfast	Classroom 115
Graduate Contest Judge's Work Room	Boardroom 100
General Session	Zlotnik Ballroom 1/2/3
SWSS Business Meeting	Classroom 104
SWSS Quiz Bowl	Zlotnik Ballroom 1/2/3
GSO Luncheon	Zlotnik Ballroom 1/2/3
Christian Fellowship Breakfast	Classroom 115
Women's Networking Mixer	Classroom 115
SWSS Luncheon	Zlotnik Ballroom 1/2/3
SWSS Student Award Reception	Zlotnik Ballroom 1/2/3

# PROGRAM OVERVIEW

## *Schedule of Events and Meetings*

### **SUNDAY, January 23, 2022**

---

6:00 pm – 9:00 pm	Endowment Function/Graduate Student Mixer & Social <i>Top Golf</i> <i>Sponsored by: BASF, Bayer, Syngenta Crop Protection</i>
8:00 am – 5:00 pm	Local Arrangements <i>102 B/C</i>
3:30 pm – 5:30 pm	SWSS Executive Board Meeting <i>Classroom 115</i>

### **MONDAY, January 24, 2022**

---

7:00 am – 5:00 pm	Local Arrangements <i>102 B/C</i>
8:00 am – 5:00 pm	Registration/Presentation Loading <i>Meeting Level 1 Foyer</i>
8:00 am – 9:00 am	Legislative & Regulatory Comm. <i>Classroom 107</i>
8:00 am – 9:00 am	Weed Resistance Resistant and Technology Stewardship Comm. <i>Classroom 108</i>
8:00 am – 9:00 am	Endowment Foundation Committee <i>Classroom 115</i>
9:00 am – 10:00 am	Site Selection Committee <i>Classroom 107</i>
9:00 am – 10:00 am	Weed Contest Committee <i>Classroom 108</i>
9:00 am – 10:00 am	Finance Committee <i>Classroom 115</i>
10:00 am – 11:00 am	Research Committee <i>Classroom 108</i>
11:00 am – Noon	SWSS Executive Board Meeting <i>Classroom 115</i>
<b>1:00 pm – 3:00 pm</b>	<b>General Session</b> <b><i>Zlotnik Ballroom 1/2/3</i></b>
5:00 pm – 6:00 pm	SWSS Business Meeting <i>Classroom 104</i>
Immediately after Business Meeting	Weed Contest Committee <i>Classroom 104</i>

## **TUESDAY, January 25, 2022**

6:00 am – 8:00 am	Graduate Student Contest Judges Breakfast <i>Classroom 115</i>
7:00 am – 7:00 pm	Local Arrangements <i>102 B/C</i>
8:00 am – 5:00 pm	Graduate Student Contest Judges Work Room <i>Boardroom 100</i>
8:00 am – 5:00	Registration/Presentation Loading <i>Meeting Level 1 Foyer</i>
12:30 – 2:00 pm	Graduate Student Luncheon <i>Zlotnik Ballroom 1/2/3</i> <i>Sponsored by: BASF, Bayer,</i> <i>Syngenta Crop Protection, Corteva</i> <i>Agriscience</i>
3:30 pm – 5:30 pm	Women's Networking Event <i>Classroom 115</i> <i>Sponsored by: Corteva Agriscience</i>
5:30 pm – 6:30 pm	Graduate Student Quiz Bowl <i>Zlotnik Ballroom 1/2/3</i> <i>Sponsored by: Bayer, Syngenta</i> <i>Crop Protection</i>

## **WEDNESDAY, January 26, 2022**

6:30 am – 7:45 am	Christian Fellowship Breakfast <i>Classroom 115</i>
8:00 am – 5:00 pm	Registration/Presentation Loading <i>Meeting Level 1 Foyer</i>
7:00 am – 5:00 pm	Local Arrangements <i>102 B/C</i>
Noon – 2:00 pm	SWSS Awards Luncheon <i>Zlotnik Ballroom 1/2/3</i>
5:00 pm – 6:00 pm	SWSS Mixer <i>Zlotnik Ballroom 1/2/3</i>
6:00 pm – 8:00 pm	SWSS Graduate Student Awards Reception <i>Zlotnik Ballroom 1/2/3</i>

## **THURSDAY, January 27, 2022**

7:00 am – 10:00 am	SWSS Executive Board Breakfast & Board Meeting <i>Classroom 115</i>
8:00 am – 9:00 am	Local Arrangements Committee <i>102 B/C</i>

# TECHNICAL PROGRAM OVERVIEW

## **MONDAY, January 24, 2022**

---

10:00 am – Noon	Poster Setup <i>Zlotnik Ballroom 4/5/6</i>
1:00 pm – 3:00 pm	General Session <i>Zlotnik Ballroom 1/2/3</i>
3:30 pm – 5:00 pm	Soil and Environmental Aspects of Weed Science <i>Classroom 105</i>
3:30 pm – 5:00 pm	New Technologies <i>Classroom 106</i>
3:00 pm – 5:00 pm	Posters - Available for Viewing <i>Zlotnik Ballroom 4/5/6</i>

## **TUESDAY, January 25, 2022**

---

7:00 am – 5:00 pm	Posters Session <i>Zlotnik Ballroom 4/5/6</i> <i>Even # Authors (7:00 – 8:00 am)</i>
7:30 am – 12:30 pm	Student Paper Contest <i>Classroom 103</i>
8:00 am – 11:00 am	Student Paper Contest <i>Classroom 104</i>
7:30 am – 12:30 pm	Student Paper Contest <i>Classroom 105</i>
7:30 am – 12:15 pm	Student Paper Contest <i>Classroom 106</i>

**\*All paper and poster judges please have completed score sheets to Tommy Butts by 5:00 pm on Tuesday**

2:00 pm – 3:45 pm	Forest Vegetation Management <i>Classroom 105</i>
2:00 pm – 3:00 pm	Weed Management in Horticultural Crops <i>Classroom 106</i>
4:15 pm – 4:45 pm	Weed Management in Pastures & Rangeland <i>Classroom 105</i>
4:15 pm – 4:45 pm	Educational Aspects of Weed Control <i>Classroom 106</i>

## **WEDNESDAY, January 26, 2022**

---

7:00 am – 3:00 pm	Posters Session <i>Zlotnik Ballroom 4/5/6</i> <i>Odd # Authors (7:00 – 8:00 am)</i> <b>Posters removed before 3:00 p.m.</b>
-------------------	--



**WEDNESDAY, January 26, 2022**

8:00 am – 11:45 am	Weed Management in Turf <i>Classroom 105</i>
8:00 am – 12:00 pm	Weed Management in Agronomic Crops <i>Classroom 106</i>
10:15 am – 10:45 pm	Regulatory Aspects of Weed Control <i>Classroom 104</i>
11:00 am – 11:30 am	Invasive Species <i>Classroom 104</i>
11:45 pm. – 12:00 pm	Physiological and Biological Aspects of Weed Control <i>Classroom 104</i>
2:00 pm – 5:00 pm	Weed Management in Agronomic Crops <i>Classroom 105</i>
2:00 pm – 5:00 pm	Weed Management in Agronomic Crops <i>Classroom 106</i>

**THURSDAY, January 27, 2022**

7:00 am – 10:00 am	SWSS Executive Board Breakfast & Meeting <i>Classroom 115</i>
8:00 am – 10:00 am	Local Arrangements <i>102 B/C</i>

### Notes:

[illegible]

# PROGRAM

## Poster Section

LOCATION: Zlotnik Ballroom  
4/5/6

CHAIR & MODERATOR: Matthew S. Wiggins  
FMC  
Friendship, TN

**\*PRESENTER    † STUDENT CONTEST**

**†Effects of Chaff Lining on *Amaranthus* Seed Viability.** KM Patterson\*<sup>1</sup>, G LaBiche<sup>1</sup>, NJ Arneson<sup>2</sup>, KL Gage<sup>3</sup>, V Kumar<sup>4</sup>, T Legleiter<sup>5</sup>, E Miller<sup>3</sup>, LM Lazaro<sup>1</sup>; <sup>1</sup>LSU Ag Center, Baton Rouge, LA, <sup>2</sup>University of Wisconsin-Madison, Madison, WI, <sup>3</sup>Southern Illinois University Carbondale, Carbondale, IL, <sup>4</sup>Kansas State University, Hays, KS, <sup>5</sup>University of Kentucky, Princeton, KY (1)

**†Soybean Harvest Index and its Impacts on Harvest Weed Seed Control.** BM Hampton\*<sup>1</sup>, MP Spoth<sup>2</sup>, ML Flessner<sup>2</sup>, LM Lazaro<sup>1</sup>; <sup>1</sup>LSU Ag Center, Baton Rouge, LA, <sup>2</sup>Virginia Tech, Blacksburg, VA (2)

**†Effects of Spray Volume and Nozzle on Cotton Response to Herbicide Tank Mixtures.** JC Forehand\*<sup>1</sup>, JH de Sanctis<sup>1</sup>, CW Cahoon<sup>1</sup>, ZR Taylor<sup>2</sup>; <sup>1</sup>North Carolina State University, Raleigh, NC, <sup>2</sup>North Carolina State University, Sanford, NC (3)

**†Cotton Response to Multiple Sublethal Exposures of 2,4-D.** AC Blythe\*<sup>1</sup>, CW Cahoon<sup>2</sup>, L Steckel<sup>3</sup>, GD Collins<sup>4</sup>, W Everman<sup>2</sup>, ZR Taylor<sup>5</sup>, JD Joyner<sup>6</sup>; <sup>1</sup>NC State University, Raleigh, NC, <sup>2</sup>North Carolina State University, Raleigh, NC, <sup>3</sup>University of Tennessee, Jackson, TN, <sup>4</sup>North Carolina State University, Rocky Mount, NC, <sup>5</sup>North Carolina State University, Sanford, NC, <sup>6</sup>NC State University, Mount Olive, NC (4)

**†Effects of Spray Droplet Size on Pronamide Control of *Poa annua*.** MJ Ignes\*; Mississippi State University, Starkville, MS (5)

†**Evaluation of Herbicide Resistance in Italian Ryegrass in Kentucky.** AL Herman\*, T Legleiter; University of Kentucky, Princeton, KY (6)

†**Integrating Isoxaflutole into Cotton Weed Management.** JD Joyner\*<sup>1</sup>, CW Cahoon<sup>2</sup>, ZR Taylor<sup>3</sup>, W Everman<sup>2</sup>, GD Collins<sup>4</sup>, AC Blythe<sup>5</sup>; <sup>1</sup>NC State University, Mount Olive, NC, <sup>2</sup>North Carolina State University, Raleigh, NC, <sup>3</sup>North Carolina State University, Sanford, NC, <sup>4</sup>North Carolina State University, Rocky Mount, NC, <sup>5</sup>NC State University, Raleigh, NC (7)

†**Pendimethalin for Late Season Residual Control of Texas Millet (*Urochloa texana*) in Corn.** BA Dean\*<sup>1</sup>, CW Cahoon<sup>1</sup>, EP Prostko<sup>2</sup>, JH de Sanctis<sup>1</sup>, ZR Taylor<sup>3</sup>; <sup>1</sup>North Carolina State University, Raleigh, NC, <sup>2</sup>University of Georgia, Tifton, GA, <sup>3</sup>North Carolina State University, Sanford, NC (8)

†**Does a Fenclorim Seed Treatment Safen Rice to a Delayed Preemergence Application of Microencapsulated Acetochlor on a Clay Soil?** SC Noe\*<sup>1</sup>, JK Norsworthy<sup>2</sup>, TH Avent<sup>2</sup>, TC Smith<sup>2</sup>, MM Houston<sup>2</sup>, TR Butts<sup>3</sup>; <sup>1</sup>University of Arkansas, Fayetteville, KY, <sup>2</sup>University of Arkansas, Fayetteville, AR, <sup>3</sup>University of Arkansas System Division of Agriculture, Lonoke, AR (9)

†**Cereal Rye Residue Effects on the Germination of Troublesome Southeastern Weeds.** A Kumari\*<sup>1</sup>, S Li<sup>1</sup>, AJ Price<sup>2</sup>; <sup>1</sup>Auburn University, Auburn, AL, <sup>2</sup>USDA-ARS-NSDL, Auburn, AL (10)

†**Impact of Drill Spacing and Nozzle Selection on Spray Coverage and Weed Control in Rice.** NH Reed\*<sup>1</sup>, TR Butts<sup>2</sup>, JK Norsworthy<sup>1</sup>, J Hardke<sup>3</sup>, T Barber<sup>2</sup>, JA Bond<sup>4</sup>, A Poncet<sup>1</sup>, BM Davis<sup>5</sup>, M Sumner<sup>5</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR, <sup>3</sup>University of Arkansas, Stuttgart, AR, <sup>4</sup>Mississippi State University, Stoneville, MS, <sup>5</sup>University of Arkansas, Lonoke, AR (11)

†**Wildflower Emergence Following Application of Pre-emergent Herbicides.** TH Duncan\*, KL Broster, JD Byrd, Jr.; Mississippi State University, Mississippi State, MS (12)

**†Does Coating Urea with Florpyrauxifen-Benzyl Reduce Risk for Damage to Adjacent Soybean?** B Cotter\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, MC Castner<sup>1</sup>, LB Piveta<sup>1</sup>, TR Butts<sup>2</sup>;  
<sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR (13)

**†Effect of Sub-Lethal Rates of Glyphosate on Provisia Rice Tolerance to Quizalofop.** N Godara\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, LB Piveta<sup>1</sup>, B Cotter<sup>1</sup>, TR Butts<sup>2</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR (14)

**†HPPD-Tolerant Cotton Response and Control of *Amaranthus palmeri* in Isoxaflutole-Based Systems.** ME Smith\*<sup>1</sup>, PA Dotray<sup>2</sup>, A Hixson<sup>3</sup>; <sup>1</sup>Texas Tech University, Lubbock, TX, <sup>2</sup>Texas Tech University and Texas A&M AgriLife Research and Extension Service, Lubbock, TX, <sup>3</sup>BASF Corporation, Lubbock, TX (15)

**†Control of Grassy Weeds Using New Sorghum Herbicide Technologies.** BA Patton\*<sup>1</sup>, PA Dotray<sup>2</sup>; <sup>1</sup>Texas Tech University, Lubbock, TX, <sup>2</sup>Texas Tech University and Texas A&M AgriLife Research and Extension Service, Lubbock, TX (16)

**†Field Surveys for Assessment of Weed Seedbank Addition Potential and Harvest Weed Seed Control Feasibility in Texas Rice.** I Ceperkovic\*<sup>1</sup>, Z Xin-Gen<sup>2</sup>, MV Bagavathiannan<sup>1</sup>; <sup>1</sup>Texas A&M University, College Station, TX, <sup>2</sup>Texas A&M University, Beaumont, TX (17)

**†Use of Unmanned Aerial System for Herbicide Spray Applications.** V Kumar\*, V Singh, D Srivastava; Virginia Tech, Painter, VA (18)

**†Gambit Applied with Different Formulations of Propanil for Weed Control in Rice.** JA Williams\*<sup>1</sup>, E Webster<sup>2</sup>, B Greer<sup>2</sup>, DC Walker<sup>1</sup>, C Webster<sup>1</sup>; <sup>1</sup>LSU AgCenter, Baton Rouge, LA, <sup>2</sup>Louisiana State University, Baton Rouge, LA (19)

**†A Deep Learning Approach for Detecting Common Ragweed in Soybean Using Unmanned Aerial System.** D Srivastava\*<sup>1</sup>, ML Flessner<sup>2</sup>, V Singh<sup>1</sup>; <sup>1</sup>Virginia Tech, Painter, VA, <sup>2</sup>Virginia Tech, Blacksburg, VA (20)

†**Sensitivity of Different Living Mulch Species to Pre-emergence Herbicides Used in Cotton.** HR Taylor\*<sup>1</sup>, MV Bagavathiannan<sup>1</sup>, D Hathcoat<sup>2</sup>; <sup>1</sup>Texas A&M University, College Station, TX, <sup>2</sup>Texas A&M AgriLife Research, College Station, TX (21)

†**Reducing Stress from Rice Foliar Herbicides with GWN10598.** S Karaikal\*, M Machado Noguera, IS Werle, N Roma-Burgos; University of Arkansas, Fayetteville, AR (22)

†**Comparison of Nitrification Inhibition Potential of Johnson Grass Biotypes in Contrasting Soil Types.** E Ghosh\*, N Rajan, NK Subramanian, MV Bagavathiannan; Texas A&M University, College Station, TX (23)

†**Interaction of Different Weed Species with Tomato (*Solanum Lycopersicum*) Cultivars.** F Chitra\*, KM Jennings, D Monks, F Louws, S Ippolito; North Carolina State University, Raleigh, NC (24)

†**Effect of Activated Charcoal as a Crop Safener for Flumioxazin in Sweetpotato.** CD Blankenship\*<sup>1</sup>, KM Jennings<sup>2</sup>, D Monks<sup>2</sup>, DL Jordan<sup>2</sup>, SL Meyers<sup>3</sup>, J Schultheis<sup>2</sup>, D Suchoff<sup>2</sup>; <sup>1</sup>NC State University, Raleigh, NC, <sup>2</sup>North Carolina State University, Raleigh, NC, <sup>3</sup>Purdue University, West Lafayette, IN (25)

†**Weed Suppression Potential of Cereal Rye Through Alteration of Soil Nutrient Dynamics.** G Camargo Silva\*<sup>1</sup>, MV Bagavathiannan<sup>2</sup>; <sup>1</sup>Texas A&M University, Department of Soil and Crop Sciences, College Station, TX, <sup>2</sup>Texas A&M University, College Station, TX (26)

†**Evaluation of Living Mulch Species and Their Effect on Weed Pressure in Cotton.** MJ Barth\*, MV Bagavathiannan; Texas A&M University, College Station, TX (27)

†**Interference of Palmer Amaranth (*Amaranthus Palmeri*) in Stevia (*Stevia Rebaudiana*).** S Ippolito\*<sup>1</sup>, KM Jennings<sup>2</sup>, D Monks<sup>2</sup>, S Chaudhari<sup>2</sup>, DL Jordan<sup>2</sup>, LD Moore<sup>2</sup>, CD Blankenship<sup>3</sup>, KC Sims<sup>4</sup>, F Chitra<sup>2</sup>; <sup>1</sup>North Carolina State University, Selma, NC, <sup>2</sup>North Carolina State University, Raleigh, NC, <sup>3</sup>NC State University, Raleigh, NC, <sup>4</sup>NC State University, Goldsboro, NC (28)

†**Sustainable Weed Control Programs in Peanut.** GA Stephens\*, DM Dodds, JS Calhoun, J Krutz; Mississippi State University, Mississippi State, MS (29)

†**Suppression of Weeds Via Cover Crops in Soybean.** SA Chu\*<sup>1</sup>, G LaBiche<sup>2</sup>, LM Lazaro<sup>2</sup>; <sup>1</sup>Louisiana State University, Baton Rouge, LA, <sup>2</sup>LSU Ag Center, Baton Rouge, LA (30)

†**Effect of Burial Depth on Seedbank Persistence of *Poa annua* L. (Annual Bluegrass) Across Climatic Gradients.** AW Osburn\*<sup>1</sup>, R Bowling<sup>2</sup>, MV Bagavathiannan<sup>1</sup>; <sup>1</sup>Texas A&M University, College Station, TX, <sup>2</sup>Texas A&M University, Dallas, TX (31)

†**Palmer Amaranth Seed Dormancy in Response to Red and Far-Red Light Exposure.** SE Kezar\*, MV Bagavathiannan, S Zhen; Texas A&M University, College Station, TX (32)

†**Dicamba and Group 15 Herbicide Combinations for Palmer Amaranth Control.** EC Russell\*, ML Flessner, KW Bamber, WC Greene; Virginia Tech, Blacksburg, VA (33)

†**Effect of Boom Height and Working Pressure on Pattern Distribution of Drift Reduction Nozzles.** AA Tavares\*<sup>1</sup>, J de Oliveira<sup>2</sup>, RB Oliveira<sup>3</sup>, GR Kruger<sup>4</sup>, DM Dodds<sup>1</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>University of Nebraska-Lincoln, North Platte, NE, <sup>3</sup>Northern Parana State University, Bandeirantes, Brazil, <sup>4</sup>BASF Corporation, Research Triangle Park, NC (34)

†**Automating Data Annotation and Curation for a Weed Image Repository.** M Kutugata\*<sup>1</sup>, PJ Ramos-Giraldo<sup>2</sup>, M Cangiano<sup>2</sup>, S Skovsen<sup>3</sup>, C Reberg-Horton<sup>2</sup>, SB Mirsky<sup>4</sup>, MV Bagavathiannan<sup>1</sup>; <sup>1</sup>Texas A&M University, College Station, TX, <sup>2</sup>North Carolina State University, Raleigh, NC, <sup>3</sup>Aarhus University, Aarhus, Denmark, <sup>4</sup>USDA ARS, Beltsville, MD (35)

†**Transplant Broccoli and Collard Response to the Residual Activity of Glyphosate Applied Preplant.** HE Wright\*<sup>1</sup>, TM Randell<sup>2</sup>, JC Vance<sup>2</sup>, A Culpepper<sup>2</sup>; <sup>1</sup>University of Georgia, Athens, GA, <sup>2</sup>University of Georgia, Tifton, GA (36)

**†Is Palmer Amaranth in Georgia Resistant to PPO-inhibiting Herbicides Applied PRE and POST?** TM Randell\*<sup>1</sup>, LC Hand<sup>1</sup>, JC Vance<sup>1</sup>, HE Wright<sup>2</sup>, A Culpepper<sup>1</sup>; <sup>1</sup>University of Georgia, Tifton, GA, <sup>2</sup>University of Georgia, Athens, GA (37)

**†Site-Specific Treatment of Late-Season Weed Escapes in Rice Using an RTK-GPS Guided Unmanned Aerial System.** B Gurjar\*<sup>1</sup>, BB Sapkota<sup>1</sup>, I Ceperkovic<sup>1</sup>, U Torres<sup>1</sup>, M Kutugata<sup>1</sup>, X Zhou<sup>1</sup>, DE Martin<sup>2</sup>, MV Bagavathiannan<sup>1</sup>; <sup>1</sup>Texas A&M university, College Station, TX, <sup>2</sup>United States Department of Agriculture, College Station, TX (38)

**†Field Evaluation of Cotton Chromosome Substitution Lines for Weed-Suppressive Potential.** W Segbefia\*<sup>1</sup>, GA Fuller<sup>1</sup>, J Kwetey<sup>2</sup>, KA Boateng<sup>1</sup>, PS Sharma<sup>1</sup>, T Tseng<sup>1</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>Mississippi State University, Starkville, MS (39)

**†Dislodgable 2,4-D and Dicamba Residue from Hybrid Bermudagrass Influenced by Herbicide Formulation, Rate, and Post-Application Time.** E Gomiero Polli\*<sup>1</sup>, MC LeCompte<sup>1</sup>, RR Rogers<sup>1</sup>, K Ahmed<sup>1</sup>, E Reasor<sup>2</sup>, T Gannon<sup>1</sup>; <sup>1</sup>North Carolina State University, Raleigh, NC, <sup>2</sup>PBI Gordon, Dallas, TX (40)

**†Use of Radio-Labeled Herbicides to Understand Interactions Between Dicamba and Glufosinate.** MC Castner\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, GL Priess<sup>1</sup>, P Carvalho-Moore<sup>1</sup>, J Hwang<sup>1</sup>, TR Butts<sup>2</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR (41)

**†Effect of Pre- and Post-Emergence Application of Phosphite on Multiple Crop and Weed Species.** S Singh\*<sup>1</sup>, K Hake<sup>2</sup>, G Morgan<sup>2</sup>, MV Bagavathiannan<sup>1</sup>; <sup>1</sup>Texas A&M University, College Station, TX, <sup>2</sup>Cotton Incorporated, Cary, NC (42)

**†Enhancing Pollinator Forage in Turfgrass with Native Weed Species in the Southeastern United States.** IG de Souza\*<sup>1</sup>, CJ Wang<sup>2</sup>, EB De Castro<sup>1</sup>, GM Henry<sup>2</sup>, DW Held<sup>3</sup>, JG Hill<sup>1</sup>, JD McCurdy<sup>1</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>University of Georgia, Athens, GA, <sup>3</sup>Auburn University, Auburn, AL (43)

**Identification of Goosegrass (*Eleusine indica*) Populations Resistant to Foramsulfuron and Sulfentrazone.** BC Johnson\*, J Harris, JS McElroy; Auburn University, Auburn, AL (44)

**Effect of Application Timing on Rice Tolerance to Fluridone.** CH Arnold\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, MC Castner<sup>1</sup>, T Barber<sup>2</sup>, TR Butts<sup>2</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR (45)

**Evaluation of Annual Grass Control of Clethodim and Glyphosate Based Treatments as Affected by Water Conditioners and Auxin Herbicides.** JT McCaghren\*, S Li, RD Langemeier, L Pereira; Auburn University, Auburn, AL (46)

**Cotton Response to High Rates of Preemergence-Applied Acetochlor and Diuron on a Clay Soil.** TC Smith\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, MM Houston<sup>1</sup>, T Barber<sup>2</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR (47)

**Do New Herbicide Technologies for Grain Sorghum Differ in Effectiveness on Johnsongrass Accessions.** JA Fleming\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, MV Bagavathiannan<sup>2</sup>, V Kumar<sup>3</sup>, MR Manuchehri<sup>4</sup>, T Barber<sup>5</sup>, TR Butts<sup>5</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>Texas A&M University, College Station, TX, <sup>3</sup>Kansas State University, Hays, KS, <sup>4</sup>Oklahoma State University, Stillwater, OK, <sup>5</sup>University of Arkansas System Division of Agriculture, Lonoke, AR (48)

**Comparison of Yellow (*Setaria pumila*) and Knotroot Foxtail (*Setaria parviflora*) Response to Herbicides.** MM Joseph\*, C Rutland, J Harris, JS McElroy; Auburn University, Auburn, AL (49)

**Effect of Planting Depth and a Fenclorim Seed Treatment on Rice Tolerance to Acetochlor Under Cold, Wet Conditions.** TH Avent\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, TL Roberts<sup>1</sup>, TR Butts<sup>2</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR (50)



**Performance of Sweetpotato Cultivars Under *Cyperus* spp. Interference.** IS Werle\*<sup>1</sup>, M Machado Noguera<sup>1</sup>, S Karaikal<sup>1</sup>, T Tseng<sup>2</sup>, N Roma-Burgos<sup>1</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>Mississippi State University, Mississippi State, MS (51)

**Does Inclusion of Foliar Fertilizers to Glyphosate + Dicamba + S-Metolachlor Tank Mix Increase Cotton Leaf Burn?** L Pereira\*, S Li, RD Langemeier, JT McCaghren; Auburn University, Auburn, AL (52)

**Isolation and Identification of Allelochemicals from Root Exudates of Cotton Chromosome Substitution Lines Known to Suppress Palmer Amaranth.** AL Miller\*, GA Fuller, Z Yue, T Tseng; Mississippi State University, Mississippi State, MS (53)

**Response of Palmer Amaranth Accessions to Selected Herbicides.** M Williams\*, MW Marshall; Clemson University, Blackville, SC (54)

**Peanut Response to Paraquat in the Southwest Growing Region.** ZR Treadway\*<sup>1</sup>, JL Dudak<sup>1</sup>, TA Baughman<sup>1</sup>, PA Dotray<sup>2</sup>, WJ Grichar<sup>3</sup>; <sup>1</sup>Oklahoma State University, Ardmore, OK, <sup>2</sup>Texas Tech University and Texas A&M AgriLife Research and Extension Service, Lubbock, TX, <sup>3</sup>Texas A&M AgriLife Research, Yoakum, TX (55)

**Post-Emergence Glufosinate Tank Mix Applications in Liberty-Link Soybeans.** JL Dudak\*, ZR Treadway, TA Baughman; Oklahoma State University, Ardmore, OK (56)

**Preemergence Control of Purple Nutsedge with Pyrimisulfan.** E Begitschke\*, KA Tucker, CJ Wang, GM Henry; University of Georgia, Athens, GA (57)

**Addition of Glutathione S-Transferases Inhibitors to Glufosinate as an Alternative Winter Burndown of *Lolium* Ssp.** P Carvalho-Moore\*, JK Norsworthy, M Zaccaro-Gruener, MC Castner, MM Houston, LB Piveta; University of Arkansas, Fayetteville, AR (59)

**Persistence of Dicamba and 2,4-D in Xtend and Enlist Soybean.** M Zaccaro-Gruener\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, LB Piveta<sup>1</sup>, A Mauromoustakos<sup>1</sup>, T Barber<sup>2</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR (60)

**Response of Cotton Chromosome Substitution Lines to Sublethal Doses of 2,4-D.** JC Argenta\*<sup>1</sup>, W Matte<sup>1</sup>, LM Perez<sup>2</sup>, T Tseng<sup>2</sup>; <sup>1</sup>Mississippi State University, Starkville, MS, <sup>2</sup>Mississippi State University, Mississippi State, MS (61)

**Interaction of Glufosinate Formulations and Novel Adjuvants on Glufosinate-Resistant Palmer Amaranth Control.** M Machado Noguera\*, GH Bessa de Lima, N Roma-Burgos; University of Arkansas, Fayetteville, AR (62)

**Effect of Soil Wetting Agents on Soil-Applied Herbicide Sorption and Efficacy.** JA Patterson\*, JS Calhoun, DM Dodds, J Krutz, D Spencer; Mississippi State University, Mississippi State, MS (63)

**New Technologies in Water-Seeded Rice Production.** C Webster\*<sup>1</sup>, B Greer<sup>2</sup>, E Webster<sup>2</sup>, DC Walker<sup>1</sup>, JA Williams<sup>1</sup>; <sup>1</sup>LSU AgCenter, Baton Rouge, LA, <sup>2</sup>Louisiana State University, Baton Rouge, LA (64)

**Confirmation of a Five-way Herbicide-resistant Waterhemp (*Amaranthus Tuberculatus*) Population in North Carolina.** EA Jones\*, RJ Andres, DJ Contreras, CW Cahoon, JC Dunne, KM Jennings, RG Leon, W Everman; North Carolina State University, Raleigh, NC (65)

**Fecundity Reductions of Palmer Amaranth Surviving Glufosinate Treatments in Cotton.** EA Jones\*, DJ Contreras, CW Cahoon, KM Jennings, RG Leon, W Everman; North Carolina State University, Raleigh, NC (66)

**Effect of Cover Crop Types, Termination Method and Herbicide Program on Weed Management in Cotton.** YR Upadhyaya\*<sup>1</sup>, P Devkota<sup>2</sup>, MJ Mulvaney<sup>3</sup>, W Hammond<sup>1</sup>, H Bayabil<sup>1</sup>; <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>University of Florida, Jay, FL, <sup>3</sup>Mississippi State University, Mississippi State, MS (67)

**Longevity of Residual Palmer Amaranth Control with Preemergence-applied Cotton Herbicides.** L Adams\*<sup>1</sup>, T Barber<sup>2</sup>, JK Norsworthy<sup>3</sup>, A Ross<sup>4</sup>, RC Doherty<sup>5</sup>;  
<sup>1</sup>University of Arkansas, Greenwood, MS, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR, <sup>3</sup>University of Arkansas, Fayetteville, AR, <sup>4</sup>University of Arkansas Cooperative Extension Service, Ward, AR, <sup>5</sup>University of Arkansas Division of Agriculture Research & Extension, Monticello, AR (68)

**Response of Johnsongrass and Nutsedge to Purestand Max and Weedmaster XHL.** ZS Howard\*<sup>1</sup>, J Boyd<sup>2</sup>, BA Sellers<sup>3</sup>, SA Nolte<sup>4</sup>; <sup>1</sup>Texas A & M University, College Station, TX, <sup>2</sup>University of Arkansas, North Little Rock, AR, <sup>3</sup>University of Florida, Ona, FL, <sup>4</sup>Texas A&M AgriLife Extension, College Station, TX (69)

**Weed Management Options for Vegetable Plasticulture Production in Southwest Florida.** R Tiwari\*<sup>1</sup>, N Boyd<sup>2</sup>, S Daroub<sup>3</sup>, R Kanissery<sup>1</sup>; <sup>1</sup>University of Florida/Institute of Food and Agricultural Sciences-Southwest Florida Research and Education Center, Immokalee, FL, <sup>2</sup>University of Florida/Institute of Food and Agricultural Sciences-Gulf Coast Research and Education Center, Wimauma, FL, <sup>3</sup>University of Florida/Institute of Food and Agricultural Sciences-Everglades Research and Education Center, Everglades, FL (70)

**Hydration Reservoir Durability After Exposure to Undiluted Herbicide.** KL Broster\*<sup>1</sup>, H Quick<sup>1</sup>, DP Russell<sup>2</sup>, JD Byrd, Jr.<sup>1</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>Auburn University, Madison, AL (71)

**Allelopathic Sweet Potato Varieties for Palmer Amaranth Growth Reduction.** V Varsha\*<sup>1</sup>, IS Werle<sup>2</sup>, MW Shankle<sup>3</sup>, SL Meyers<sup>4</sup>, T Tseng<sup>1</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>University of Arkansas, Fayetteville, AR, <sup>3</sup>Mississippi State University, Pontotoc, MS, <sup>4</sup>Purdue University, West Lafayette, IN (72)

**Developing a Low-cost, Portable System for Real-time Weed Detection with Unmanned Aerial Vehicles.** BB Sapkota\*, MV Bagavathiannan; Texas A&M university, College Station, TX (73)

**Characterization of Spatial Herbicide Injury Patterns in Cotton Using an Unmanned Aerial System.** U Torres\*<sup>1</sup>, BB Sapkota<sup>1</sup>, BM McKnight<sup>1</sup>, SA Nolte<sup>2</sup>, G Morgan<sup>3</sup>, PA Dotray<sup>4</sup>, MV Bagavathiannan<sup>1</sup>; <sup>1</sup>Texas A&M University, College Station, TX, <sup>2</sup>Texas A&M AgriLife Extension, College Station, TX, <sup>3</sup>Cotton Incorporated, Cary, NC, <sup>4</sup>Texas Tech University and Texas A&M AgriLife Research and Extension Service, Lubbock, TX (74)

**Effects of Burndown Applications Before Cover Crop Planting on Cover Crop Biomass and Weed Suppression.** C Sias\*, ML Flessner, KW Bamber, EC Russell, WC Greene, MP Spoth; Virginia Tech, Blacksburg, VA (75)

**Weed Management Programs for Peanut in South Texas.** JA McGinty\*<sup>1</sup>, WJ Grichar<sup>2</sup>; <sup>1</sup>Texas A&M AgriLife Extension Service, Corpus Christi, TX, <sup>2</sup>Texas A&M AgriLife Research, Yoakum, TX (76)

**Double Crop Soybean Yield Loss from Herbicides in Groups 14 and 15.** ML Flessner\*, KW Bamber; Virginia Tech, Blacksburg, VA (77)

**Is a Target Site Mutation Responsible for Resistance to Glufosinate in Palmer Amaranth (*Amaranthus palmeri*)?** F Gonzalez Torralva\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, P Carvalho-Moore<sup>1</sup>, LB Piveta<sup>1</sup>, GL Priess<sup>1</sup>, T Barber<sup>2</sup>, TR Butts<sup>2</sup>, JS McElroy<sup>3</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR, <sup>3</sup>Auburn University, Auburn, AL (78)

**Impact of Weed Management Practices on Palmer Amaranth Emergence and Population in XtendFlex and Enlist Soybean.** LB Piveta\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, TC Smith<sup>1</sup>, MM Houston<sup>1</sup>, T Barber<sup>2</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR (79)

**Lessons Learned from Annual Auxin Trainings in North Carolina.** ZR Taylor\*<sup>1</sup>, CW Cahoon<sup>2</sup>, W Everman<sup>2</sup>, DL Jordan<sup>2</sup>, AC York<sup>3</sup>; <sup>1</sup>North Carolina State University, Sanford, NC, <sup>2</sup>North Carolina State University, Raleigh, NC, <sup>3</sup>North Carolina State University, Liberty, NC (80)

**Will Certain Adjuvants Improve Pendimethalin and S-Metolachlor Activity?** WJ Grichar\*<sup>1</sup>, JA McGinty<sup>2</sup>; <sup>1</sup>Texas A&M AgriLife Research, Yoakum, TX, <sup>2</sup>Texas A&M AgriLife Extension Service, Corpus Christi, TX (81)

**Metabolism-Based Resistance of Palmer Amaranth (*Amaranthus palmeri* S. Wats) to S-Metolachlor.** J Hwang\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, P Carvalho-Moore<sup>1</sup>, T Barber<sup>2</sup>, TR Butts<sup>2</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR (82)

**Palmer Amaranth Control with PRE Herbicides Alone or in Combination with Dicamba.** CR White\*<sup>1</sup>, W Keeling<sup>1</sup>, PA Dotray<sup>2</sup>, JM Bell<sup>3</sup>, K Heflin<sup>3</sup>; <sup>1</sup>Texas A&M AgriLife Research, Lubbock, TX, <sup>2</sup>Texas Tech University and Texas A&M AgriLife Research and Extension Service, Lubbock, TX, <sup>3</sup>Texas A&M AgriLife, Amarillo, TX (83)

**Impact of Application Timing of Dual Magnum, Outlook, and Warrant on Weed Management and Crop Tolerance in Two-Pass Programs with Enlist One and Liberty.** D Miller\*, M Mize; LSU AgCenter, St Joseph, LA (84)

**Impact of Application Timing of Dual Magnum, Outlook, and Warrant on Weed Management and Crop Tolerance in Two-Pass Programs with Enlist Duo.** D Miller\*, M Mize; LSU AgCenter, St Joseph, LA (85)

**Impact of Dual Magnum, Outlook, and Warrant on Crop Injury and Yield from Reduced Rates of Enlist One in Xtend Soybean.** D Miller\*, M Mize; LSU AgCenter, St Joseph, LA (86)

**Elucidation of the Impact of Soil Nutrient Gradients on Weed Seedling Emergence and Growth.** V Kankarla\*, M Bagavathiannan; Texas A & M University, College Station, TX (87)

**Deep Learning-Based Weed Detection in Alfalfa.** J Yu\*<sup>1</sup>, J Yang<sup>2</sup>, MV Bagavathiannan<sup>1</sup>; <sup>1</sup>Texas A&M University, College Station, TX, <sup>2</sup>Nanjing Forestry University, Nanjing, China (88)

**Peanut Response to Reviton™ (Tiafenacil).** EP Prostko\*, C Abbott; University of Georgia, Tifton, GA (89)

**Influence of an Early-season Application of Non-Selective Plus Group 15 Herbicides on 2,4-D Tolerant Cotton Growth and Yield.** DO Stephenson\*, DB Franks, PD Newton; LSU Ag Center, Alexandria, LA (90)

**Transplant Method Influences Herbicide Injury in Broccoli and Collard.** A Culpepper\*<sup>1</sup>, JC Vance<sup>1</sup>, TM Randell<sup>1</sup>, HE Wright<sup>2</sup>; <sup>1</sup>University of Georgia, Tifton, GA, <sup>2</sup>University of Georgia, Athens, GA (91)

**Evaluation of Residual Herbicides for Broad-Spectrum Weed Control in Mississippi Corn.** JW Reister\*<sup>1</sup>, T Bararpour<sup>1</sup>, DA Bell<sup>2</sup>; <sup>1</sup>Mississippi State University, Stoneville, MS, <sup>2</sup>Mississippi State University, Leland, MS (92)

**Optimum Cover Crop Termination Timing in Corn Weed Control System.** A Ross\*<sup>1</sup>, T Barber<sup>2</sup>, LM Collie<sup>3</sup>, RC Doherty<sup>4</sup>, ZT Hill<sup>5</sup>; <sup>1</sup>University of Arkansas Cooperative Extension Service, Ward, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR, <sup>3</sup>University of Arkansas, Lonoke, AR, <sup>4</sup>University of Arkansas Division of Agriculture Research & Extension, Monticello, AR, <sup>5</sup>University of Arkansas Cooperative Extension Service, Monticello, AR (93)

**Comparing the Accuracy of Available Weather Resources for Pesticide Applicators Across Multiple States.** SA Nolte\*<sup>1</sup>, ZS Howard<sup>2</sup>, NJ Arneson<sup>3</sup>, N Arsenijevic<sup>3</sup>, M Bish<sup>4</sup>, KW Bradley<sup>4</sup>, IB Cuvaca<sup>5</sup>, KL Gage<sup>6</sup>, JT Ikley<sup>7</sup>, WG Johnson<sup>8</sup>, LM Lazaro<sup>9</sup>, S Lancaster<sup>10</sup>, T Legleiter<sup>11</sup>, M Loux<sup>12</sup>, E Miller<sup>6</sup>, BG Young<sup>13</sup>, R Werle<sup>3</sup>, M Zimmer<sup>8</sup>; <sup>1</sup>Texas A&M AgriLife Extension, College Station, TX, <sup>2</sup>Texas A & M University, College Station, TX, <sup>3</sup>University of Wisconsin-Madison, Madison, WI, <sup>4</sup>University of Missouri, Columbia, MO, <sup>5</sup>University of Nebraska-Lincoln, Lincoln, NE, <sup>6</sup>Southern Illinois University Carbondale, Carbondale, IL, <sup>7</sup>North Dakota State University, Fargo, ND, <sup>8</sup>Purdue University, West Lafayette, IN, <sup>9</sup>LSU Ag Center, Baton Rouge, LA, <sup>10</sup>Kansas State University, Manhattan, KS, <sup>11</sup>University of Kentucky, Princeton, KY, <sup>12</sup>The Ohio State University, Columbus, OH, <sup>13</sup>Purdue University, Brookston, IN (94)

**Growth Stage and Varietal Sensitivity of White Clover to Florpyrauxifen-benzyl-containing Herbicides.** WC Greene\*, ML Flessner; Virginia Tech, Blacksburg, VA (95)

**Evaluation of Corn Herbicide for Johnsongrass Control.** DA Bell\*<sup>1</sup>, T Bararpour<sup>2</sup>, JW Reister<sup>2</sup>; <sup>1</sup>Mississippi State University, Leland, MS, <sup>2</sup>Mississippi State University, Stoneville, MS (96)

**Effect of Cotton Herbicide Programs on Weed Species Populations Over Time.** FH Oreja\*, M Inman, DL Jordan, RG Leon; North Carolina State University, Raleigh, NC (97)

**Evaluation of Carve Herbicide for Buttonweed and Kyllinga Control in Bermudagrass.** D Westbury\*, P McCullough; University of Georgia, Griffin, GA (98)

**Response of Peanut Cultivars to Postemergence Herbicides.** P Devkota\*<sup>1</sup>, N Singh<sup>1</sup>, BL Tillman<sup>2</sup>; <sup>1</sup>University of Florida, Jay, FL, <sup>2</sup>University of Florida/IFAS NFREC, Marianna, FL (99)

**Evaluation of Corn Herbicide for Prickly Sida Control.** JW Reister\*, T Bararpour; Mississippi State University, Stoneville, MS (100)

**Kyber Clean: An Effective Solution for Managing Resistant Weeds in Enlist Soybean.** KA Backscheider\*<sup>1</sup>, J Armstrong<sup>2</sup>, DM Simpson<sup>2</sup>, D Johnson<sup>3</sup>, K Johnson<sup>4</sup>, K Rosenbaum<sup>5</sup>, F Meeks<sup>6</sup>; <sup>1</sup>Corteva Agriscience, Franklin, IN, <sup>2</sup>Corteva Agriscience, Indianapolis, IN, <sup>3</sup>Corteva Agriscience, Eagan, MN, <sup>4</sup>Corteva Agriscience, Lafayette, IN, <sup>5</sup>Corteva Agriscience, Coffee, MO, <sup>6</sup>Corteva Agriscience, Johnston, IA (101)

**Evaluation of Preemergence Herbicide Options for Fiber Hemp.** D Hathcoat\*<sup>1</sup>, JM McVane<sup>2</sup>, MV Bagavathiannan<sup>2</sup>; <sup>1</sup>Texas A&M AgriLife Research, College Station, TX, <sup>2</sup>Texas A&M University, College Station, TX (102)

**Nicosulfuron Resistance in a Weedy Sunflower (*Helianthus annuus* L.) Population from Southeast Texas.** NK Subramanian\*, MV Bagavathiannan; Texas A&M University, College Station, TX (103)

**Multi-State Emergence Modeling for Foxtail (*Setaria* Spp.) in Mixed-Grass Pastures.** NT Basinger\*<sup>1</sup>, T Reinhardt Piskackova<sup>2</sup>, DP Russell<sup>3</sup>, RG Leon<sup>4</sup>, ML Flessner<sup>5</sup>, WC Greene<sup>5</sup>, FH Oreja<sup>4</sup>; <sup>1</sup>University of Georgia, Athens, GA, <sup>2</sup>Czech University of Life Sciences Prague, Prague 6 - Suchdol, Czechia (Czech Republic), <sup>3</sup>Auburn University, Madison, AL, <sup>4</sup>North Carolina State University, Raleigh, NC, <sup>5</sup>Virginia Tech, Blacksburg, VA (104)

**Dicamba Residues in Leaves, Fruits, and Roots of Tomato Plants Treated with Low Rates of Dicamba at Different Growth Stages.** T Tseng\*<sup>1</sup>, T Bararpour<sup>2</sup>, Z Yue<sup>1</sup>, AL Miller<sup>1</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>Mississippi State University, Stoneville, MS (105)

**Response of Creeping Bentgrass and Common Turfgrass Weeds to Plant Growth Regulators.** GM Henry\*, KA Tucker; University of Georgia, Athens, GA (106)

**Tolerance of Iron Cutter Hybrid Bermudagrass to Postemergence Herbicides.** GM Henry\*, E Begitschke, KA Tucker; University of Georgia, Athens, GA (107)

**Prickly Sida Control in Cotton and Soybean.** JL Reeves\*<sup>1</sup>, L Steckel<sup>2</sup>; <sup>1</sup>The University of Tennessee, Jackson, TN, <sup>2</sup>University of Tennessee, Jackson, TN (108)

**Control of Ryegrass in Northeast Texas Wheat.** CA Jones\*<sup>1</sup>, AD Braley<sup>2</sup>, DR Drake<sup>3</sup>; <sup>1</sup>Texas A&M University, Commerce, TX, <sup>2</sup>Texas A&M University Commerce, Commerce, TX, <sup>3</sup>Texas A&M AgriLife Extension Service, Commerce, TX (109)

**Evaluation of Reviton (Tiafenacil) Herbicide in Preplant Burndown Programs.** DA Bell\*<sup>1</sup>, T Bararpour<sup>2</sup>, D Akin<sup>3</sup>; <sup>1</sup>Mississippi State University, Leland, MS, <sup>2</sup>Mississippi State University, Stoneville, MS, <sup>3</sup>Helm Agro, Murray, KY (110)

**Seedling Oat Response to Postemergence Residual Herbicides.** MW Marshall\*; Clemson University, Blackville, SC (111)

**Exploring the Mechanism of Resistance to Soil-applied Fomesafen in Palmer Amaranth.** G Rangani\*; University of Arkansas, Fayetteville, AR (112)



**Efficacy of Sicklepod Extract for Protection of Soybean from Soybean Loopers (*Chrysodeixis includens* (Walker)).** Z Yue\*, N Krishnan, T Tseng; Mississippi State University, Mississippi State, MS (113)

**2021 Survey Results for the Most Common and Troublesome Weeds in Aquatic and Non-Crop Areas.** L Van Wychen\*<sup>1</sup>, DE Carroll<sup>2</sup>, R Champagne<sup>3</sup>; <sup>1</sup>Weed Science Society of America, Alexandria, VA, <sup>2</sup>The University of Tennessee, Knoxville, TN, <sup>3</sup>The University of Maine, Orono, ME (114)

**Effect of Low Rate of Dicamba on Tomato at Different Growth Stages.** T Bararpour\*<sup>1</sup>, T Tseng<sup>2</sup>, R Hughes<sup>1</sup>; <sup>1</sup>Mississippi State University, Stoneville, MS, <sup>2</sup>Mississippi State University, Mississippi State, MS (115)

**No Seed Means No Weeds or No Herbicide-Resistant Weeds.** T Bararpour\*<sup>1</sup>, DA Bell<sup>2</sup>, JW Reister<sup>1</sup>, JD Peeples<sup>1</sup>; <sup>1</sup>Mississippi State University, Stoneville, MS, <sup>2</sup>Mississippi State University, Leland, MS (116)

**Brake, Valor, and Their Tank-Mixture Combinations with Residual Herbicides for Broad- Spectrum Weed Management Programs in Mississippi Peanut.** T Bararpour\*; Mississippi State University, Stoneville, MS (117)

**Evaluation of Reviton (Tiafenacil) Herbicide in Tank-Mixes for Italian Ryegrass Control.** T Bararpour\*<sup>1</sup>, D Akin<sup>2</sup>; <sup>1</sup>Mississippi State University, Stoneville, MS, <sup>2</sup>Helm Agro, Murray, KY (118)

**Cotton and Soybean Response to Low Rates of Dicamba, 2,4-D, and Loyant.** T Bararpour\*; Mississippi State University, Stoneville, MS (119)

---

---

## ***MONDAY AFTERNOON – JANUARY 24***

---

---

### **General Session**

LOCATION: Zlotnik Ballroom  
1/2/3  
TIME: 1:00 PM - 3:00 PM  
Central Time  
CHAIR & MODERATOR: Darrin Dodds  
Mississippi State  
University  
Mississippi State, MS

#### **\*SPEAKER**

- 01:00 PM Welcome and Announcements.** DM Dodds\*; Mississippi State University, Mississippi State, MS
- 01:05 PM Keynote Address.** J Borlaug\*; Norman Borlaug Institute for International Agriculture, College Station, TX
- 01:30 PM Presidential Address.** C Youmans\*; BASF Corp., Dyersburg, TN
- 01:45 PM 2021 SWSS Endowment Enrichment Scholarship Presentation.** S Kezar\*; Texas A&M University, College Station, TX
- 02:00 PM 2021 SWSS Endowment Enrichment Scholarship Presentation.** H Wright\*; University of Georgia, Tifton, GA
- 02:15 PM 2021 SWSS Endowment Enrichment Scholarship Presentation.** D Foster, University of Tennessee, Jackson, TN
- 02:30 PM Washington Policy Update.** L Van Wychen\*; Executive Director of Science Policy, Alexandria, VA
- 03:00 PM Adjourn**
- 03:00 PM Break – Zlotnik Ballroom 4/5/6**

---

---

**MONDAY AFTERNOON – JANUARY 24**

---

---

**Soil and Environmental Aspects of Weed  
Science**

LOCATION: Classroom 105  
TIME: 3:30 PM - 5:00 PM Central  
Time  
CHAIR: Benjamin P. Sperry  
US Army Corps of  
Engineers  
Gainesville, FL  
MODERATOR: Benjamin P. Sperry  
US Army Corps of  
Engineers  
Gainesville, FL

**\*SPEAKER**

- 03:30 PM Effect of Tillage, Tarping, and Post-application Irrigation on Methyl Isothiocyanate (MITC) Soil Air Distribution Following Dazomet Application in Sandy Soil.** E Gomiero Polli<sup>\*1</sup>, MC LeCompte<sup>1</sup>, RR Rogers<sup>1</sup>, K Ahmed<sup>1</sup>, C Silcox<sup>2</sup>, T Gannon<sup>1</sup>;  
<sup>1</sup>North Carolina State University, Raleigh, NC,  
<sup>2</sup>AMVAC, Lincoln University, PA **(120)**
- 03:45 PM Impact of Target Surface and Potassium Acetate on Secondary Movement of Dicamba.** M Zaccaro-Gruener<sup>\*</sup>, JK Norsworthy, MC Castner, TL Roberts;  
University of Arkansas, Fayetteville, AR **(121)**
- 04:00 PM Palmer Amaranth (*Amaranthus palmeri*) Reproductive Biology Under Variable Thermal and Soil Moisture Stresses.** A Maity<sup>\*</sup>, SE Kezar, MV Bagavathiannan; Texas A&M University, College Station, TX **(122)**

- 04:15 PM    Quantifying Herbicide Movement into the Transplant Hole After Irrigation.** KM Eason\*<sup>1</sup>, TL Grey<sup>2</sup>, A Culpepper<sup>2</sup>, NL Hurdle<sup>3</sup>, J de Souza Rodrigues<sup>2</sup>; <sup>1</sup>The University of Georgia, Tifton, GA, <sup>2</sup>University of Georgia, Tifton, GA, <sup>3</sup>University of Georgia, Collierville, TN **(123)**
- 04:30 PM    The Response of Palmer Amaranth, Large Crabgrass, and Soybean Grown Alone and in Competition to a Moisture Gradient.** W Everman\*<sup>1</sup>, MA Granadino<sup>1</sup>, DJ Contreras<sup>1</sup>, GM Henry<sup>2</sup>; <sup>1</sup>North Carolina State University, Raleigh, NC, <sup>2</sup>University of Georgia, Athens, GA **(124)**
- 04:45 PM    Quantifying Acetochlor Release from Microcapsules with Respect to Time and Temperature.** TL Grey\*<sup>1</sup>, KM Eason<sup>2</sup>, KS Rucker<sup>3</sup>, SJ Bowen<sup>1</sup>; <sup>1</sup>University of Georgia, Tifton, GA, <sup>2</sup>The University of Georgia, Tifton, GA, <sup>3</sup>Bayer, Tifton, GA **(125)**

---

---

**MONDAY AFTERNOON – JANUARY 24**

---

---

**New Technologies**

LOCATION: Classroom 106  
TIME: 3:30 PM - 5:00 PM Central Time  
CHAIR: Shane M. Carver  
Becks Hybrids  
Memphis, TN  
MODERATOR: Zachary R. Treadway  
Oklahoma State University  
Ardmore, OK

**\*SPEAKER**

- 03:30 PM Efficacy of Plant Based Sicklepod Deer Repellent in Soybean Production System.** Z Yue\*<sup>1</sup>, MW Shankle<sup>2</sup>, PS Sharma<sup>1</sup>, AL Miller<sup>1</sup>, T Tseng<sup>1</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>Mississippi State University, Pontotoc, MS (126)
- 03:45 PM Plant Sterols: Potential Pre-emergent Non-Synthetic Herbicides.** K Kumar\*<sup>1</sup>, LR Griffing<sup>2</sup>; <sup>1</sup>Griffing Biologics LLC, Hearne, TX, <sup>2</sup>Texas A&M University, College Station, TX (127)
- 04:00 PM Efficacy of Directed Energy on Weed Seeds.** LM Lazaro\*, G LaBiche; LSU Ag Center, Baton Rouge, LA (128)
- 04:15 PM Reviton and Other New Herbicides from Helm.** D Akin\*<sup>1</sup>, B Waggoner<sup>2</sup>, J Whitehead<sup>3</sup>; <sup>1</sup>Helm Agro, Murray, KY, <sup>2</sup>Helm Agro, Salem, IL, <sup>3</sup>Helm Agro, Oxford, MS (129)

- 04:30 PM Syngenta: New Products, Label Amendments, Stewardship Commitment, and Updates.** ET Parker\*<sup>1</sup>, M Kitt<sup>2</sup>, SA Strom<sup>3</sup>, JD Weems<sup>4</sup>; <sup>1</sup>Syngenta Crop Protection, Vero Beach, FL, <sup>2</sup>Syngenta Crop Protection, Greensboro, NC, <sup>3</sup>Syngenta Crop Protection, Champaign, IL, <sup>4</sup>Syngenta Crop Protection, Hermiston, WA **(130)**
- 04:45 PM Smart Spray Technology for Row Middle Weed Control in Vegetables.** N Boyd\*<sup>1</sup>, RK Sandhu<sup>2</sup>, A Schumann<sup>3</sup>; <sup>1</sup>University of Florida/Institute of Food and Agricultural Sciences-Gulf Coast Research and Education Center, Wimauma, FL, <sup>2</sup>University of Florida, Wimauma, FL, <sup>3</sup>University of Florida, Lake Alfred, FL **(131)**

---

---

***TUESDAY MORNING – JANUARY 25***

---

---

**Graduate Student Oral Presentation Contest**

LOCATION: Classroom 103  
TIME: 7:30 AM - 12:15 PM  
Central Time  
CHAIR: Thomas R. Butts  
University of Arkansas  
System Division of  
Agriculture  
Lonoke, AR  
MODERATOR: Spencer Samuelson  
Corteva Agriscience  
Bryan, TX

**\*SPEAKER    † STUDENT CONTEST**

- 07:30 AM    †Is Rice Tolerant to Early-Season Applications of Dicamba?** CH Arnold\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, P Carvalho-Moore<sup>1</sup>, LB Piveta<sup>1</sup>, T Barber<sup>2</sup>, TR Butts<sup>2</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR (132)
- 07:45 AM    †Hard Water and AMS Effect on Glyphosate-Based Grass Control in the Enlist Weed Control System.** JT McCaghren\*, S Li, RD Langemeier, L Pereira; Auburn University, Auburn, AL (133)
- 08:00 AM    †Effect of Adjuvant on Herbicidal Weed Control in Soybean (*Glycine max* L.).** DM Dodds, SC Baker\*; Mississippi State University, Mississippi State, MS (134)

- 08:15 AM** †**Duration of Weed Control Following Preemergence Herbicide Application in Soybean.** CK Meyer\*, DM Dodds, JS Calhoun, Z Ugljic, GA Stephens, JA Patterson; Mississippi State University, Mississippi State, MS (135)
- 08:30 AM** †**Evaluation of Pre-Emergence Johnsongrass Control in Sugarcane Seedlings.** CB Baucum\*<sup>1</sup>, LM Lazaro<sup>2</sup>, AJ Orgeron<sup>2</sup>; <sup>1</sup>Louisiana State University, Baton Rouge, LA, <sup>2</sup>LSU Ag Center, Baton Rouge, LA (136)
- 08:45 AM** †**Weed Suppression by Cotton Chromosome Substitution Lines at Different Cover Crop Production Systems.** AL Miller\*<sup>1</sup>, GA Fuller<sup>1</sup>, JC Argenta<sup>2</sup>, T Tseng<sup>1</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>Mississippi State University, Starkville, MS (137)
- 09:00 AM** †**Rice Exposure to a Sub-Lethal Concentration of Paraquat During Reproductive Growth Stages.** TD Burrell II\*, JA Bond; Mississippi State University, Stoneville, MS (138)
- 09:15 AM** †**Low-Dose Multiple Exposure Effects of Auxin Herbicides on Soybean.** G Oakley\*<sup>1</sup>, DB Reynolds<sup>1</sup>, KL Gage<sup>2</sup>, BG Young<sup>3</sup>, JK Norsworthy<sup>4</sup>, JA Bond<sup>5</sup>, M Loux<sup>6</sup>, KW Bradley<sup>7</sup>, GR Kruger<sup>8</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>Southern Illinois University Carbondale, Carbondale, IL, <sup>3</sup>Purdue University, Brookston, IN, <sup>4</sup>University of Arkansas, Fayetteville, AR, <sup>5</sup>Mississippi State University, Stoneville, MS, <sup>6</sup>The Ohio State University, Columbus, OH, <sup>7</sup>University of Missouri, Columbia, MO, <sup>8</sup>BASF Corporation, Research Triangle Park, NC (139)
- 09:30 AM** †**Evaluation of Non-Uniform Populations of Inbred and Hybrid Clearfield Rice Cultivars.** TW Eubank\*, JA Bond; Mississippi State University, Stoneville, MS (140)



- 09:45 AM** †**The Influence of Cover Crop Type and Establishment Method on Tall Waterhemp Suppression.** SR Reeves\*<sup>1</sup>, DB Reynolds<sup>1</sup>, JA Bond<sup>2</sup>, B Blackburn<sup>1</sup>, BJ Varner<sup>1</sup>, G Oakley<sup>1</sup>, NT Glenn<sup>1</sup>, AL Wilber<sup>1</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>Mississippi State University, Stoneville, MS **(141)**
- 10:00 AM** **Break – Zlotnik Ballroom 4/5/6**
- 10:15 AM** †**Cotton (*Gossypium hirsutum* L.) Tolerance to Non-labeled Herbicides in Mississippi.** AB Gaudin\*<sup>1</sup>, Z Ugljic<sup>1</sup>, DM Dodds<sup>1</sup>, DB Reynolds<sup>1</sup>, BK Pieralisi<sup>1</sup>, G Morgan<sup>2</sup>, J Krutz<sup>1</sup>, D Spencer<sup>1</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>Cotton Incorporated, Cary, NC **(142)**
- 10:30 AM** †**Sustainable Cotton Production: Optimizing Living Much Vegetation-Free Strip Width in Cotton.** S Shome\*, N Gaur, M Levi, NT Basinger; University of Georgia, Athens, GA **(143)**
- 10:45 AM** †**The Effect of Volatility Reducing Agents (VRA) on Dicamba Volatility.** NT Glenn\*<sup>1</sup>, KW Bradley<sup>2</sup>, JK Norsworthy<sup>3</sup>, DB Reynolds<sup>1</sup>, BG Young<sup>4</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>University of Missouri, Columbia, MO, <sup>3</sup>University of Arkansas, Fayetteville, AR, <sup>4</sup>Purdue University, Brookston, IN **(144)**
- 11:00 AM** †**Long-Term Management Strategies for Palmer Amaranth Control in Cotton.** TC Smith\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, T Barber<sup>2</sup>, JA Fleming<sup>1</sup>, MM Houston<sup>1</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR **(145)**
- 11:15 AM** †**Soybean Response to Multiple Dicamba Drift Events at Varying Time Intervals.** BN Hiatt\*<sup>1</sup>, LM Lazaro<sup>2</sup>, DO Stephenson<sup>3</sup>, D Miller<sup>4</sup>; <sup>1</sup>Louisiana State University, Baton Rouge, LA, <sup>2</sup>LSU Ag Center, Baton Rouge, LA, <sup>3</sup>LSU Ag Center, Alexandria, LA, <sup>4</sup>LSU AgCenter, St Joseph, LA **(146)**

- 11:30 AM** †**Classification of 2,4-D Salts and Formulation Components Using Machine Learning Models.** B Blackburn\*<sup>1</sup>, DB Reynolds<sup>1</sup>, A Brown<sup>1</sup>, D Sparks<sup>1</sup>, M Caprio<sup>2</sup>, DM Simpson<sup>3</sup>, BJ Varner<sup>1</sup>, G Oakley<sup>1</sup>, SR Reeves<sup>1</sup>, NT Glenn<sup>1</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>Mississippi State University, Starkville, MS, <sup>3</sup>Corteva Agriscience, Indianapolis, IN **(147)**
- 11:45 AM** †**Evaluation of Control of Failed Stands of Corn (*Zea mays* L) and Soybean (*Glycine max* (L.) Merr.).** GA Mangialardi\*<sup>1</sup>, JA Bond<sup>1</sup>, D Gholson<sup>1</sup>, T Allen<sup>2</sup>, J McCoy<sup>3</sup>; <sup>1</sup>Mississippi State University, Stoneville, MS, <sup>2</sup>Mississippi State University, Leland, MS, <sup>3</sup>Mississippi State University, Verona, MS **(148)**
- 12:00 PM** †**Sensitivity of Fluazifop-Resistant Grain Sorghum to ACCase-Inhibiting Herbicides.** JA Fleming\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, MV Bagavathiannan<sup>2</sup>, N Godara<sup>1</sup>, TC Smith<sup>1</sup>, T Barber<sup>3</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>Texas A&M University, College Station, TX, <sup>3</sup>University of Arkansas System Division of Agriculture, Lonoke, AR **(149)**

---

---

## ***TUESDAY MORNING – JANUARY 25***

---

---

### **Graduate Student Oral Presentation Contest**

LOCATION: Classroom 104  
TIME: 8:00 AM - 11:00 AM  
Central Time  
CHAIR: Thomas R. Butts  
University of Arkansas  
System Division of  
Agriculture  
Lonoke, AR  
MODERATOR: Lawson Priess  
Corteva Agriscience  
Fayetteville, AR

**\*SPEAKER    † STUDENT CONTEST**

- 08:00 AM    †Melatonin as a Potential Safener Against 2,4-D Injury in Cotton.** JC Argenta\*<sup>1</sup>, AL Miller<sup>2</sup>, T Tseng<sup>2</sup>; <sup>1</sup>Mississippi State University, Starkville, MS, <sup>2</sup>Mississippi State University, Mississippi State, MS **(150)**
- 08:20 AM    †Initial Insights into the Mechanism of Glufosinate Resistance in Palmer Amaranth.** P Carvalho-Moore\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, J Hwang<sup>1</sup>, F Gonzalez Torralva<sup>1</sup>, GL Priess<sup>1</sup>, T Barber<sup>2</sup>, TR Butts<sup>2</sup>, JS McElroy<sup>3</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR, <sup>3</sup>Auburn University, Auburn, AL **(151)**
- 09:20 AM    †Investigating Genetic Control of Inter-specific Hybridization Between *Sorghum bicolor* and *S. halepense* Using Recombinant Inbred Lines of Sorghum.** UR Pediredi\*, NK Subramanian, G Hodnett, P Klein, MV Bagavathiannan, W Rooney; Texas A&M University, College Station, TX **(154)**
- 10:00 AM    Break – Zlotnik Ballroom 4/5/6**

- 10:20 AM** †**Growth Analysis of Herbicide-resistant and Susceptible *Amaranthus palmeri* Biotypes.** J de Souza Rodrigues\*<sup>1</sup>, TL Grey<sup>1</sup>, KM Eason<sup>2</sup>; <sup>1</sup>University of Georgia, Tifton, GA, <sup>2</sup>The University of Georgia, Tifton, GA **(156)**
- 10:40 AM** †**Effect of Herbicide Concentration on Atrazine, Pyroxasulfone, and Saflufenacil Dissipation Under Field and Lab Conditions.** RL Landry\*<sup>1</sup>, L Steckel<sup>2</sup>, TC Mueller<sup>3</sup>; <sup>1</sup>University of Tennessee Knoxville, Knoxville, TN, <sup>2</sup>University of Tennessee, Jackson, TN, <sup>3</sup>University of Tennessee, Knoxville, TN **(157)**

---

---

**TUESDAY MORNING – JANUARY 25**

---

---

**Graduate Student Oral Presentation Contest**

LOCATION: Classroom 105  
TIME: 7:30 AM - 12:30 PM  
Central Time  
CHAIR: Thomas R. Butts  
University of Arkansas  
System Division of  
Agriculture  
Lonoke, AR  
MODERATOR: Matthew Wiggins  
FMC Corporation  
Friendship, TN

**\*SPEAKER † STUDENT CONTEST**

- 07:30 AM †A Bioassay to Determine *Poa annua* Responses to Indaziflam.** BD Pritchard\*<sup>1</sup>, J Brosnan<sup>2</sup>, JJ Vargas<sup>3</sup>; <sup>1</sup>University of Tennessee Knoxville, Knoxville, TN, <sup>2</sup>Univeristy of Tennessee, Knoxville, TN, <sup>3</sup>University of Tennessee, Knoxville, TN **(158)**
- 07:45 AM †Peanut Response to Forestry Herbicides: Imazapyr and Triclopyr.** C Abbott\*, EP Prostko; University of Georgia, Tifton, GA **(159)**
- 08:00 AM †Programmatic Approaches to Control Quinclorac-Resistant Smooth Crabgrass (*Digitaria ishaemum*) in Bermudagrass (*Cynodon Spp.*) Turf.** AD Putri\*; Mississippi State University, Mississippi State, MS **(160)**

- 08:15 AM †Distribution of Herbicide-Resistant Italian Ryegrass in Arkansas.** L Adams\*<sup>1</sup>, T Barber<sup>2</sup>, JK Norsworthy<sup>3</sup>, TR Butts<sup>2</sup>; <sup>1</sup>University of Arkansas, Greenwood, MS, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR, <sup>3</sup>University of Arkansas, Fayetteville, AR **(161)**
- 08:30 AM †Herbicide Program Evaluation for Control of Knotroot Foxtail (*Setaria parviflora*) in Bermudagrass (*Cynodon dactylon*) Pastures.** LM Dyer\*<sup>1</sup>, NT Basinger<sup>1</sup>, P McCullough<sup>2</sup>, GM Henry<sup>1</sup>; <sup>1</sup>University of Georgia, Athens, GA, <sup>2</sup>University of Georgia, Griffin, GA **(162)**
- 08:45 AM †Confirmation of Paraquat-resistant Italian Ryegrass (*Lolium multiflorum*) in North Carolina Row Crops.** JH de Sanctis\*<sup>1</sup>, CW Cahoon<sup>1</sup>, W Everman<sup>1</sup>, T Gannon<sup>1</sup>, ZR Taylor<sup>2</sup>, JC Forehand<sup>1</sup>; <sup>1</sup>North Carolina State University, Raleigh, NC, <sup>2</sup>North Carolina State University, Sanford, NC **(163)**
- 09:00 AM †Evaluation of Florpyrauxifen-benzyl & Aminopyralid in Florida Pastures.** CA R. Sales\*<sup>1</sup>, BA Sellers<sup>1</sup>, P Devkota<sup>2</sup>, MO Wallau<sup>3</sup>; <sup>1</sup>University of Florida, Ona, FL, <sup>2</sup>University of Florida, Jay, FL, <sup>3</sup>University of Florida, Gainesville, FL **(164)**
- 09:15 AM †Evaluation of Weed Control with Alite 27 in GLIXTP Cotton.** JL Dudak\*<sup>1</sup>, ZR Treadway<sup>1</sup>, TA Baughman<sup>1</sup>, T Barber<sup>2</sup>, CW Cahoon<sup>3</sup>, A Culpepper<sup>4</sup>, MW Marshall<sup>5</sup>, SA Nolte<sup>6</sup>, A Hixson<sup>7</sup>; <sup>1</sup>Oklahoma State University, Ardmore, OK, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR, <sup>3</sup>North Carolina State University, Raleigh, NC, <sup>4</sup>University of Georgia, Tifton, GA, <sup>5</sup>Clemson University, Blackville, SC, <sup>6</sup>Texas A&M AgriLife Extension, College Station, TX, <sup>7</sup>BASF Corporation, Lubbock, TX **(165)**

- 09:30 AM** †**Phosphorus Fertilization Influences Critical Period of Weed Control in Sweet Corn on Organic Soils.** AG Rodriguez\*, D Odero; University of Florida, Belle Glade, FL (166)
- 09:45 AM** †**Confirmation and Control of Auxin Resistant Palmer Amaranth in Tennessee.** DC Foster\*<sup>1</sup>, L Steckel<sup>1</sup>, PA Dotray<sup>2</sup>; <sup>1</sup>University of Tennessee, Jackson, TN, <sup>2</sup>Texas Tech University and Texas A&M AgriLife Research and Extension Service, Lubbock, TX (167)
- 10:00 AM** **Break – Zlotnik Ballroom 4/5/6**
- 10:15 AM** †**Cover Crops and Selected Cultivars for Weed Management in Organic Sweetpotato Production.** I Schlegel Werle\*, M Machado Noguera, S Karaikal, P Carvalho-Moore, J Kouame, N Roma-Burgos; University of Arkansas, Fayetteville, AR (168)
- 10:30 AM** †**Response of Louisiana Weedy Rice Accessions to Benzobicyclon.** B Greer\*<sup>1</sup>, C Webster<sup>2</sup>, DC Walker<sup>2</sup>, E Webster<sup>1</sup>, JA Williams<sup>2</sup>; <sup>1</sup>Louisiana State University, Baton Rouge, LA, <sup>2</sup>LSU AgCenter, Baton Rouge, LA (169)
- 10:45 AM** †**An Investigation into the Impacts of Pre-Emergent Herbicide Program on the Health and Productivity of HLB-Affected Citrus Trees.** N Timilsina\*<sup>1</sup>, O Batuman<sup>2</sup>, F Alferez<sup>2</sup>, D Kadyampakeni<sup>3</sup>, R Tiwari<sup>1</sup>, R Kaniserry<sup>1</sup>; <sup>1</sup>University of Florida/Institute of Food and Agricultural Sciences-Southwest Florida Research and Education Center, Immokalee, FL, <sup>2</sup>University of Florida, Immokalee, FL, <sup>3</sup>University of Florida, Lake Alfred, FL (170)
- 11:00 AM** †**Response of Non-Irrigated Peanut to Multiple Rates of Delayed Flumioxazin Applications.** NL Hurdle\*<sup>1</sup>, TL Grey<sup>2</sup>; <sup>1</sup>University of Georgia, Collierville, TN, <sup>2</sup>University of Georgia, Tifton, GA (171)

- 11:15 AM** †**Hydrilla Response to Intermittent-Pulse Herbicide Treatments.** TL Darnell\*<sup>1</sup>, BP Sperry<sup>2</sup>, CM Prince<sup>3</sup>; <sup>1</sup>University of Florida/ Center for Aquatic Invasive Plants, Gainesville, FL, <sup>2</sup>US Army Corps of Engineers, Gainesville, FL, <sup>3</sup>University of Florida, Gainesville, FL (172)
- 11:30 AM** †**Confirmation of Novel Multiple Herbicide-Resistant Redroot Pigweed (*Amaranthus retroflexus*) in North Carolina.** EA Jones\*, RJ Andres, DJ Contreras, CW Cahoon, JC Dunne, KM Jennings, RG Leon, W Everman; North Carolina State University, Raleigh, NC (173)
- 11:45 AM** †**Field Trial Evaluation of Herbicides for Control of Aquatic Sedge (*Cyperus blepharoleptos*).** J Jablonski\*<sup>1</sup>, CM Prince<sup>1</sup>, SF Enloe<sup>1</sup>, BP Sperry<sup>2</sup>, G MacDonald<sup>1</sup>; <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>US Army Corps of Engineers, Gainesville, FL (174)
- 12:00 PM** †**Evaluation of Glyphosate and Dicamba Antagonism on Annual Grasses.** RD Langemeier\*<sup>1</sup>, S Li<sup>1</sup>, DP Russell<sup>2</sup>, A Culpepper<sup>3</sup>, CW Cahoon<sup>4</sup>, P Devkota<sup>5</sup>, KJ Price<sup>1</sup>, JT McCaghren<sup>1</sup>, L Ianhez Pereira<sup>1</sup>; <sup>1</sup>Auburn University, Auburn, AL, <sup>2</sup>Auburn University, Madison, AL, <sup>3</sup>University of Georgia, Tifton, GA, <sup>4</sup>North Carolina State University, Raleigh, NC, <sup>5</sup>University of Florida, Jay, FL (175)
- 12:15 PM** †**Evaluating the Efficacy and Non-Target Injury Potential of Triclopyr When Applied as a Basal Bark Treatment.** CA Oberweiger\*<sup>1</sup>, SF Enloe<sup>2</sup>; <sup>1</sup>Center for Aquatic and Invasive Plants - University of Florida, Gainesville, FL, <sup>2</sup>University of Florida, Gainesville, FL (176)



---

---

***TUESDAY MORNING – JANUARY 25***

---

---

**Graduate Student Oral Presentation Contest**

LOCATION: Classroom 106  
TIME: 7:30 AM - 12:15 PM  
Central Time  
CHAIR: Thomas R. Butts  
University of Arkansas  
System Division of  
Agriculture  
Lonoke, AR  
MODERATOR: Pratap Devkota  
University of Florida  
Jay, FL

**\*SPEAKER    † STUDENT CONTEST**

**07:30 AM    †Evaluating Herbicide Antagonism Following Application of Dicamba, 2,4-D, Glyphosate, and Clethodim.** JA Patterson\*, DM Dodds, Z Ugljic, JH Hughes; Mississippi State University, Mississippi State, MS (177)

**07:45 AM    †Purple Nutsedge Tuber Production and Viability in Response to Postemergence Herbicides.** E Begitschke\*, KA Tucker, CJ Wang, GM Henry; University of Georgia, Athens, GA (178)

**08:00 AM    †Influence of Low Rates of 2,4-D on Cotton Fiber Quality.** KR Russell\*<sup>1</sup>, PA Dotray<sup>2</sup>, BR Kelly<sup>1</sup>; <sup>1</sup>Texas Tech University, Lubbock, TX, <sup>2</sup>Texas Tech University and Texas A&M AgriLife Research and Extension Service, Lubbock, TX (179)

- 08:15 AM** †**Impact of Species Selection on Plant Community, Sod Tensile Strength, and Translocation Rooting of a Pollinator-Garden Sod.** D Koo\*, S Askew, CG Goncalves, M Goatley, J Brewer, JM Craft, JM Peppers; Virginia Tech, Blacksburg, VA (180)
- 08:30 AM** †**Barnyardgrass Control with POST Herbicides Following Rice Exposure to Sub-Lethal Concentrations of Paraquat.** TL Sanders\*, HM Edwards, JD Peeples, JA Bond; Mississippi State University, Stoneville, MS (181)
- 08:45 AM** †**Response of Goosegrass and Smooth Crabgrass to PRE and POST-Applied Methiozolin.** JM Peppers\*, S Askew; Virginia Tech, Blacksburg, VA (182)
- 09:00 AM** †**Effect of Cereal Rye Termination Timing on Palmer Amaranth Emergence and Growth Rate. Implications for Optimizing Herbicide Programs.** C Sias\*, ML Flessner, KW Bamber, S Peters; Virginia Tech, Blacksburg, VA (183)
- 09:15 AM** †**Characterizing and Controlling Pronamide and PSII-inhibiting Herbicide Resistant *Poa annua*.** AL Wilber\*<sup>1</sup>, EB De Castro<sup>1</sup>, JD McCurdy<sup>1</sup>, MJ Igenes<sup>2</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>Mississippi State University, Starkville, MS (184)
- 09:30 AM** †**Performance of Residual Herbicide Combinations in Oklahoma Soybean.** ZR Treadway\*, JL Dudak, TA Baughman; Oklahoma State University, Ardmore, OK (185)
- 09:45 AM** †**Response of Green Antelopehorn Milkweed (*Asclepias viridis* W.) to Auxinic Herbicides.** KL Broster\*, H Quick, JD Byrd, Jr.; Mississippi State University, Mississippi State, MS (186)
- 10:00 AM** **Break – Zlotnik Ballroom 4/5/6**

- 10:15 AM** †**Sweet Potato Allelopathy, a Strategy for Sustainable Weed Management Under Field Conditions.** V Varsha\*<sup>1</sup>, IS Werle<sup>2</sup>, MW Shankle<sup>3</sup>, SL Meyers<sup>4</sup>, T Tseng<sup>1</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>University of Arkansas, Fayetteville, AR, <sup>3</sup>Mississippi State University, Pontotoc, MS, <sup>4</sup>Purdue University, West Lafayette, IN (187)
- 10:30 AM** †**Exploring the Use of Photosynthesis and Pigment Inhibiting Herbicides for Smutgrass (*Sporobolus Indicus*) Management.** ZS Howard\*<sup>1</sup>, WJ Stutzman<sup>2</sup>, SA Nolte<sup>3</sup>; <sup>1</sup>Texas A & M University, College Station, TX, <sup>2</sup>Texas A&M University Agrilife Extension, College Station, TX, <sup>3</sup>Texas A&M AgriLife Extension, College Station, TX (188)
- 10:45 AM** †**Long-Term Effect of Tillage, Crop Rotation, and Dicamba-based Herbicide Programs on Palmer Amaranth Control in Cotton.** R Vulchi\*<sup>1</sup>, JA McGinty<sup>2</sup>, MV Bagavathiannan<sup>1</sup>, SA Nolte<sup>3</sup>; <sup>1</sup>Texas A&M University, College Station, TX, <sup>2</sup>Texas A&M AgriLife Extension Service, Corpus Christi, TX, <sup>3</sup>Texas A&M AgriLife Extension, College Station, TX (189)
- 11:00 AM** †**Influence of Herbicides on Germination and Quality of Palmer Amaranth (*Amaranthus palmeri*) Seed.** LD Moore\*, KM Jennings, D Monks, RG Leon, MD Boyette, DL Jordan; North Carolina State University, Raleigh, NC (190)
- 11:15 AM** †**A Real-time Weed Escape Detection System and Web User Interface for Precision Weed Control Applications.** BB Sapkota\*, MV Bagavathiannan; Texas A&M university, College Station, TX (191)

- 11:30 AM** †**Combining Pre-Emergent Herbicides with Adjuvants/slow-release Carriers for Improving Weed Suppression and Crop Safety in Tomato Plasticulture Production.** R Tiwari\*<sup>1</sup>, N Boyd<sup>2</sup>, S Daroub<sup>3</sup>, N Timilsina<sup>1</sup>, R Kanissery<sup>1</sup>; <sup>1</sup>University of Florida/Institute of Food and Agricultural Sciences-Southwest Florida Research and Education Center, Immokalee, FL, <sup>2</sup>University of Florida/Institute of Food and Agricultural Sciences-Gulf Coast Research and Education Center, Wimauma, FL, <sup>3</sup>University of Florida/Institute of Food and Agricultural Sciences- Everglades Research and Education Center, Everglades, FL **(192)**
- 11:45 AM** †**Image-Based Detection and Site-Specific Control of Late-Season Weed Escapes in Cotton Using an RTK-GPS Guided Remotely Piloted Aerial Application System.** U Torres\*<sup>1</sup>, DE Martin<sup>2</sup>, BB Sapkota<sup>1</sup>, B Gurjar<sup>1</sup>, M Kutugata<sup>1</sup>, MV Bagavathiannan<sup>1</sup>; <sup>1</sup>Texas A&M University, College Station, TX, <sup>2</sup>USDA-ARS, College Station, TX **(193)**
- 12:00 PM** †**Postemergence Herbicides Screening for Tolerance in Lettuce.** S Vemula\*<sup>1</sup>, D Otero<sup>2</sup>, GV Sandoya<sup>2</sup>, R Kanissery<sup>3</sup>, G MacDonald<sup>4</sup>, HS Sandhu<sup>2</sup>; <sup>1</sup>University of Florida, Agronomy Department, Gainesville, FL, <sup>2</sup>University of Florida, Belle Glade, FL, <sup>3</sup>University of Florida/Institute of Food and Agricultural Sciences-Southwest Florida Research and Education Center, Immokalee, FL, <sup>4</sup>University of Florida, Gainesville, FL **(194)**

---

---

## ***TUESDAY AFTERNOON – JANUARY 25***

---

---

### **Forest Vegetation Management**

LOCATION: Classroom 105  
TIME: 2:00 PM - 3:45 PM Central Time  
CHAIR: David P. Russell  
Auburn University  
Madison, AL  
MODERATOR: David P. Russell  
Mississippi State University  
Mississippi State, MS

#### **\*SPEAKER**

- 02:00 PM    Tolerance of Loblolly Pine Seedlings to Increased Rates of Aminopyralid + Florpyrauxifen.** JE Ezell\*<sup>1</sup>, AB Self<sup>2</sup>, AW Ezell<sup>1</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>Mississippi State University, Grenada, MS **(195)**
- 02:15 PM    Old-Field Planted Longleaf Pine (*Pinus palustris*) Survival and Growth Response to Various Herbaceous Weed Control Herbicides and Application Timings After Eleven Years.** ED Dickens\*; University of Georgia, Athens, GA **(196)**
- 02:30 PM    Early Pine Control Response to July Applications of Different Glufosinate Products.** AW Ezell\*<sup>1</sup>, AB Self<sup>2</sup>, JE Ezell<sup>1</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>Mississippi State University, Grenada, MS **(197)**
- 02:45 PM    Evaluation of Two Application Timings of Choline Triclopyr, Fluroxypyr, and GF-3886 as Replacements for Glyphosate in the Control of Volunteer Pine in Forestry.** DC Clabo\*<sup>1</sup>, ED Dickens<sup>2</sup>; <sup>1</sup>University of Georgia, Tifton, GA, <sup>2</sup>University of Georgia, Athens, GA **(198)**

- 03:00 PM    Loblolly Pine Seedling Growth Following HWC Applications Using Oust XP, Arsenal AC, Arsenal, Velpar L, and Esplanade SC.** AW Ezell\*<sup>1</sup>, AB Self<sup>2</sup>, JE Ezell<sup>1</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>Mississippi State University, Grenada, MS (199)
- 03:15 PM    Middle and Late Summer Forestry Site Preparation Tank Mix Evaluations of Imazapyr with Choline Triclopyr or Fluroxypyr Applied as Two Spray Solutions.** DC Clabo\*<sup>1</sup>, ED Dickens<sup>2</sup>; <sup>1</sup>University of Georgia, Tifton, GA, <sup>2</sup>University of Georgia, Athens, GA (200)
- 03:30 PM    Site Preparation with Mixtures Using Triclopyr, Imazapyr, Triclopyr Choline, Fluroxypyr, and Aminopyralid + Florpyrauxifen.** AB Self\*<sup>1</sup>, AW Ezell<sup>2</sup>, JE Ezell<sup>3</sup>; <sup>1</sup>Mississippi State University, Grenada, MS, <sup>2</sup>Mississippi State Univ. - Retired, Mississippi State, MS, <sup>3</sup>Mississippi State University, Mississippi State, MS (201)
- 03:45 PM    Break – Zlotnik Ballroom 4/5/6**

---

---

***TUESDAY AFTERNOON – JANUARY 25***

---

---

**Weed Management in Pastures and Rangeland**

LOCATION: Classroom 105  
TIME: 4:15 PM - 4:45 PM Central Time  
CHAIR: David P. Russell  
Auburn University  
Madison, AL  
MODERATOR: Kayla Broster  
Mississippi State University  
Mississippi State, MS

**\*SPEAKER**

**04:15 PM Florpyrauxifen-benzyl Containing Herbicide Effects on Hayfield Sward Composition.** WC Greene\*, ML Flessner, MP Spoth, KW Bamber, C Sias; Virginia Tech, Blacksburg, VA **(202)**

**04:30 PM What We've Learned About Foxtail (*Setaria ssp.*) Management in Forages: A Multiyear Review.** DP Russell\*<sup>1</sup>, JD Byrd, Jr.<sup>2</sup>, M Zaccaro-Gruener<sup>3</sup>, H Quick<sup>2</sup>; <sup>1</sup>Auburn University, Madison, AL, <sup>2</sup>Mississippi State University, Mississippi State, MS, <sup>3</sup>University of Arkansas, Fayetteville, AR **(203)**

---

---

***TUESDAY AFTERNOON – JANUARY 25***

---

---

**Weed Management in Horticultural Crops**

LOCATION: Classroom 106  
TIME: 2:00 PM - 3:00 PM Central Time  
CHAIR: Peter J. Dittmar  
University of Florida  
Gainesville, FL  
MODERATOR: Peter J. Dittmar  
University of Florida  
Gainesville, FL

**\*SPEAKER**

- 02:00 PM Weed Control in Specialty Crops Using Bicyclopyrone.** P Eure<sup>1</sup>, TH Beckett<sup>1</sup>, JW Gordy<sup>\*2</sup>; <sup>1</sup>Syngenta Crop Protection, Greensboro, NC, <sup>2</sup>Syngenta Crop Protection, Pearland, TX **(204)**
- 02:15 PM Deposition Agents to Enhance Residual Herbicide Use in Horticulture Crops Grown in Sandy Soils.** R Kanissery\*; University of Florida/Institute of Food and Agricultural Sciences-Southwest Florida Research and Education Center, Immokalee, FL **(205)**
- 02:30 PM Influence of Planting Interval, Tillage, and Irrigation on the Residual Activity of Glyphosate in Bareground Squash.** TM Randell<sup>\*1</sup>, JC Vance<sup>1</sup>, LC Hand<sup>1</sup>, HE Wright<sup>2</sup>, A Culpepper<sup>1</sup>; <sup>1</sup>University of Georgia, Tifton, GA, <sup>2</sup>University of Georgia, Athens, GA **(206)**
- 02:45 PM Integrated Weed Management Using Flaming, Cultivation, and Hand Weeding in Organic Carrot Production Systems with Different Fertilizer Types.** PJ Dittmar<sup>\*1</sup>, DD Treadwell<sup>1</sup>, G Maltais-Landry<sup>2</sup>; <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>University of Florida, Soil and Water Sciences Department, Gainesville, FL **(207)**



---

---

***TUESDAY AFTERNOON – JANUARY 25***

---

---

**Educational Aspects of Weed Control**

LOCATION: Classroom 106  
TIME: 4:15 PM - 4:45 PM  
Central Time  
CHAIR & MODERATOR: J. Connor Ferguson  
Sesaco Corporation  
Yukon, OK

**\*SPEAKER**

- 04:15 PM    The Ninth Circuit Court, "Thoughts of a Weed Scientist".** TA Baughman\*; Oklahoma State University, Ardmore, OK **(208)**
- 04:30 PM    A Global Look at Herbicide-Resistant Rice Technology and Weedy Rice.** N Roma-Burgos\*; University of Arkansas, Fayetteville, AR **(209)**

---

---

## **WEDNESDAY MORNING – JANUARY 26**

---

---

### **Weed Management in Turf**

LOCATION: Classroom 105  
TIME: 8:00 AM - 11:45 PM  
Central Time  
CHAIR & MODERATOR: John R. Brewer  
Syngenta Crop  
Protection  
Vero Beach, FL

#### **\*SPEAKER**

- 08:00 AM A Decision-Support Tool to Facilitate Herbicide Mode of Action Diversity for Annual Bluegrass (*Poa Annua*) Control in Turfgrass Systems.** V Kankarla\*<sup>1</sup>, EB De Castro<sup>2</sup>, D Hathcoat<sup>3</sup>, R Grubbs<sup>4</sup>, JD McCurdy<sup>2</sup>; <sup>1</sup>Texas A & M University, College Station, TX, <sup>2</sup>Mississippi State University, Mississippi State, MS, <sup>3</sup>Texas A&M AgriLife Research, College Station, TX, <sup>4</sup>Texas A & M University, Dallas, TX (210)
- 08:15 AM The Use of Computer Vision for Weed Detection in Turfgrass.** J Yu\*, MV Bagavathiannan; Texas A&M University, College Station, TX (211)
- 08:30 AM Turfgrass and Weed Response to Flame Duration.** CG Goncalves\*, S Askew; Virginia Tech, Blacksburg, VA (212)
- 08:45 AM Dynamics of Foliar-and Soil-applied Pronamide Within Resistant *Poa annua*.** MJ Ignes\*; Mississippi State University, Starkville, MS (213)
- 09:00 AM ALS-Resistant Green Kyllinga in Turfgrass.** D Westbury\*<sup>1</sup>, P McCullough<sup>1</sup>, JS McElroy<sup>2</sup>; <sup>1</sup>University of Georgia, Griffin, GA, <sup>2</sup>Auburn University, Auburn, AL (214)

- 9:15 AM Late Season Control of Goosegrass and Kyllinga.** A Gore\*<sup>1</sup>, LB McCarty<sup>2</sup>, T Stoudemayer<sup>2</sup>; <sup>1</sup>Clemson University, Abbeville, SC, <sup>2</sup>Clemson University, Clemson, SC (215)
- 09:30 AM A New Turfgrass Herbicide from Bayer to Meet Customer Needs.** DE Carroll\*<sup>1</sup>, B Spesard<sup>2</sup>, JW Hempfling<sup>3</sup>, S Wells<sup>4</sup>, J Michel<sup>3</sup>, P Burgess<sup>5</sup>; <sup>1</sup>The University of Tennessee, Knoxville, TN, <sup>2</sup>Bayer Environmental Science, A Division of Bayer CropScience, Cary, NC, <sup>3</sup>Bayer Environmental Science, Cary, NC, <sup>4</sup>Bayer Crop Sciences, Milledgeville, GA, <sup>5</sup>Bayer R&D Services, Na, NJ (216)
- 9:45 AM Late Season Dallisgrass and Lespedeza Control in 'Tifway' Bermudagrass.** T Stoudemayer\*, LB McCarty; Clemson University, Clemson, SC (217)
- 10: AM Break – Zlotnik Ballroom 4/5/6**
- 10:15 AM Influence of Post-treatment Irrigation Timings and Herbicide Placement on Bermudagrass and Goosegrass Response to Topramezone and Metribuzin Programs.** S Askew\*, J Brewer; Virginia Tech, Blacksburg, VA (218)
- 10:30 AM Pre- and Post-Emergence *Poa annua* and Broadleaf Control in Bermudagrass.** JW Taylor\*, LB McCarty, T Stoudemayer; Clemson University, Clemson, SC (219)
- 10:45 AM Regional Response of Zoysiagrass Turf to Glyphosate and Glufosinate Applied Based on Accumulated Heat Units.** S Askew\*<sup>1</sup>, JM Craft<sup>1</sup>, JD McCurdy<sup>2</sup>; <sup>1</sup>Virginia Tech, Blacksburg, VA, <sup>2</sup>Mississippi State University, Mississippi State, MS (220)
- 11:00 AM Compatibility of Methiozolin and Several Plant Growth Regulators.** JM Peppers\*, S Askew; Virginia Tech, Blacksburg, VA (221)

**11:15 AM     Update on Herbicide-Resistant Goosegrass (*Eleusine indica*) Screening and Identification.** JS McElroy\*<sup>1</sup>, J Harris<sup>1</sup>, J Patel<sup>1</sup>, BC Johnson<sup>1</sup>, C Rutland<sup>1</sup>, B Spesard<sup>2</sup>; <sup>1</sup>Auburn University, Auburn, AL, <sup>2</sup>Bayer Environmental Science, A Division of Bayer CropScience, Cary, NC **(222)**

**11:30 AM     Response of Texas and Florida Populations of *Poa annua* L. (Annual Bluegrass) to Preemergence Herbicides.** AW Osburn\*<sup>1</sup>, R Bowling<sup>2</sup>, JB Unruh<sup>3</sup>, C McKeithen<sup>3</sup>, MV Bagavathiannan<sup>1</sup>; <sup>1</sup>Texas A&M University, College Station, TX, <sup>2</sup>Texas A&M University, Dallas, TX, <sup>3</sup>University of Florida, Jay, FL **(223)**

---

---

## ***WEDNESDAY MORNING – JANUARY 26***

---

---

### **Regulatory Aspects of Weed Control**

LOCATION: Classroom 104  
TIME: 10:15 AM - 10:45 AM  
Central Time  
CHAIR: Benjamin P. Sperry  
US Army Corps of  
Engineers  
Gainesville, FL  
MODERATOR: Benjamin P. Sperry  
US Army Corps of  
Engineers  
Gainesville, FL

#### **\*SPEAKER**

- 10:15 AM Dicamba and 2,4-D Residues in Palmer Amaranth: When Were the Herbicides Applied?** JK Norsworthy\*<sup>1</sup>, M Zaccaro-Gruener<sup>1</sup>, LB Piveta<sup>1</sup>, T Barber<sup>2</sup>, TR Butts<sup>2</sup>;  
<sup>1</sup>University of Arkansas, Fayetteville, AR,  
<sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR (224)
- 10:30 AM Aquatic Herbicide Spray Loss: Best Management Practices and Implications.** BP Sperry\*; US Army Corps of Engineers, Gainesville, FL (225)

---

---

**WEDNESDAY MORNING – JANUARY 26**

---

---

**Invasive Species**

LOCATION: Classroom 104  
TIME: 11:00 AM - 11:30 AM  
Central Time  
CHAIR: Darrin M. Dodds  
Mississippi State University  
Mississippi State, MS  
MODERATOR: Gray Turnage  
Mississippi State University  
Mississippi State, MS

**\*SPEAKER**

- 11:00 AM Refining Triclopyr Use Patterns to Minimize Non-target Injury in Natural Areas.** J Glueckert<sup>1</sup>, CA Oberweger<sup>2</sup>, SF Enloe<sup>\*3</sup>; <sup>1</sup>University of Florida, Boynton Beach, FL, <sup>2</sup>Center for Aquatic and Invasive Plants - University of Florida, Gainesville, FL, <sup>3</sup>University of Florida, Gainesville, FL **(226)**
- 11:15 AM Meso-Scale and Field Evaluations of Cuban Bulrush Response to Select Herbicide Treatments.** G Turnage\*, A McLeod; Mississippi State University, Mississippi State, MS **(227)**

---

---

**WEDNESDAY MORNING – JANUARY 26**

---

---

**Physiological and Biological Aspects of Weed Control**

LOCATION: Classroom 104  
TIME: 11:45 AM - 12:00 PM  
Central Time  
CHAIR: Samer Y. Rustom  
LSU AgCenter  
Baton Rouge, LA  
MODERATOR: Samer Y. Rustom  
LSU AgCenter  
Baton Rouge, LA

**\*SPEAKER**

**11:45 AM Metabolism of Aryloxyphenoxypropionic Acid Herbicides by Resistant Barnyardgrass [*Echinochloa crus-galli* (L.) P. Beauv.].** J Hwang\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, LB Piveta<sup>1</sup>, T Barber<sup>2</sup>, TR Butts<sup>2</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR **(228)**

---

---

## ***WEDNESDAY MORNING – JANUARY 26***

---

---

### **Weed Management in Agronomic Crops**

LOCATION: Classroom 106  
TIME: 8:00 AM - 12:00 PM  
Central Time  
CHAIR & MODERATOR: Scott A. Nolte  
Texas A&M AgriLife  
Extension  
College Station, TX

#### **\*SPEAKER**

- 08:00 AM Summer Cover Crop Mixes for Post-harvest Weed Suppression in Southeast Texas.** JM McVane\*, MV Bagavathiannan; Texas A&M University, College Station, TX (229)
- 08:15 AM Effect of Rye Biomass and Herbicide Program for Weed Control in Cotton.** YR Upadhyaya\*<sup>1</sup>, P Devkota<sup>2</sup>, N Singh<sup>2</sup>, MJ Mulvaney<sup>3</sup>, W Hammond<sup>1</sup>, H Bayabil<sup>1</sup>;  
<sup>1</sup>University of Florida, Gainesville, FL,  
<sup>2</sup>University of Florida, Jay, FL, <sup>3</sup>Mississippi State University, Mississippi State, MS (230)
- 08:30 AM Rye Cover Crop Termination Timing Effects on Weed Suppression in No-till Corn.** P Aryal\*<sup>1</sup>, CA Chase<sup>2</sup>; <sup>1</sup>University of Florida, Gainesville, FL, <sup>2</sup>University of Florida, Horticultural Sciences Department, Gainesville, FL (231)
- 08:45 AM Ryegrass Burndown Evaluations for Minimum Tillage Systems.** L Pereira\*, S Li, RD Langemeier, JT McCaghren; Auburn University, Auburn, AL (232)
- 09:00 AM The Effect of GWN10598 Seed Treatment on Rice Response to Pre-emergence Herbicides in Two Soil Types.** S Karaikal\*, IS Werle, M Machado Noguera, N Roma-Burgos; University of Arkansas, Fayetteville, AR (233)



- 09:15 AM Rice Cultivar Tolerance to Microencapsulated Acetochlor and a Fencloirim Seed Treatment.** TH Avent\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, JA Fleming<sup>1</sup>, M Zaccaro-Gruener<sup>1</sup>, TR Butts<sup>2</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR (234)
- 09:30 AM Coating Florpyrauxifen-benzyl on Urea for Control of Key Weeds in Rice.** B Cotter\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, CH Arnold<sup>1</sup>, TH Avent<sup>1</sup>, TR Butts<sup>2</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR (235)
- 09:45 AM Barnyardgrass and Weedy Rice Control in Response to Warrant Rate and Application Timing.** SC Noe\*<sup>1</sup>, JK Norsworthy<sup>2</sup>, TH Avent<sup>2</sup>, MM Houston<sup>2</sup>, TR Butts<sup>3</sup>; <sup>1</sup>University of Arkansas, Fayetteville, KY, <sup>2</sup>University of Arkansas, Fayetteville, AR, <sup>3</sup>University of Arkansas System Division of Agriculture, Lonoke, AR (236)
- 10:00 AM Break – Zlotnik Ballroom 4/5/6**
- 10:15 AM Cultural Weed Management Strategies for Rice: Effects of Drill Spacing and Rice Cultivar.** NH Reed\*<sup>1</sup>, TR Butts<sup>2</sup>, JK Norsworthy<sup>1</sup>, J Hardke<sup>3</sup>, T Barber<sup>2</sup>, JA Bond<sup>4</sup>, A Poncet<sup>1</sup>, BM Davis<sup>5</sup>, M Sumner<sup>5</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR, <sup>3</sup>University of Arkansas, Stuttgart, AR, <sup>4</sup>Mississippi State University, Stoneville, MS, <sup>5</sup>University of Arkansas, Lonoke, AR (237)
- 10:30 AM Tolerance of Provisia and Max-Ace Rice to Quizalofop.** N Godara\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, TH Avent<sup>1</sup>, T Barber<sup>2</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR (238)

- 10:45 AM      Effects of Rice Herbicides and Hormones Applied at Reproductive Stage on Seed Viability of Barnyardgrass (*Echinochloa crus-galli*). I Ceperkovic\*<sup>1</sup>, J Samford<sup>2</sup>, Z Xin-Gen<sup>3</sup>, MV Bagavathiannan<sup>1</sup>; <sup>1</sup>Texas A&M University, College Station, TX, <sup>2</sup>Texas A&M AgriLife Research, Sealy, TX, <sup>3</sup>Texas A&M University, Beaumont, TX (239)**
- 11:00 AM      Evaluation of Benzobicyclon Rates for the Control of Amazon Sprangletop and Rice Flatsedge in a Flooded Environment. ZT Hill\*<sup>1</sup>, T Barber<sup>2</sup>, RC Doherty<sup>3</sup>, LM Collie<sup>4</sup>, A Ross<sup>5</sup>; <sup>1</sup>University of Arkansas Cooperative Extension Service, Monticello, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR, <sup>3</sup>University of Arkansas Division of Agriculture Research & Extension, Monticello, AR, <sup>4</sup>University of Arkansas, Lonoke, AR, <sup>5</sup>University of Arkansas Cooperative Extension Service, Ward, AR (240)**
- 11:15 AM      Postemergence Herbicides for Broadleaf Weed Control in Sesame: The Good, The Bad, and The Ugly. J Ferguson\*<sup>1</sup>, ZA Carpenter<sup>2</sup>, G De La Fuente<sup>3</sup>, E Votava<sup>4</sup>; <sup>1</sup>Sesaco Corporation, Yukon, OK, <sup>2</sup>Oro Agri Inc., New Braunfels, TX, <sup>3</sup>Sesaco Corporation, San Antonio, TX, <sup>4</sup>Sesaco Corporation, Austin, TX (241)**
- 11:30 AM      Volunteer Rapeseed Issues and Management. V Kumar\*, V Singh; Virginia Tech, Painter, VA (242)**
- 11:45 AM      Evaluation of Reviton in Preplant Burndown Programs. LM Collie<sup>1</sup>, T Barber<sup>2</sup>, RC Doherty\*<sup>3</sup>, ZT Hill<sup>4</sup>, A Ross<sup>5</sup>; <sup>1</sup>University of Arkansas, Lonoke, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR, <sup>3</sup>University of Arkansas Division of Agriculture Research & Extension, Monticello, AR, <sup>4</sup>University of Arkansas Cooperative Extension Service, Monticello, AR, <sup>5</sup>University of Arkansas Cooperative Extension Service, Ward, AR (243)**

---

---

## ***WEDNESDAY AFTERNOON – JANUARY 26***

---

---

### **Weed Management in Agronomic Crops**

LOCATION: Classroom 105  
TIME: 2:00 PM - 5:00 PM Central Time  
CHAIR: Scott A. Nolte  
Texas A&M AgriLife Extension  
College Station, TX  
MODERATOR: Joshua McGinty  
Texas A&M University  
College Station, TX

#### **\*SPEAKER**

- 02:00 PM Utilizing Preemergence Herbicides to Maximize the Value of Machine-Vision Application Technology.** JW Adams\*<sup>1</sup>, P Berry<sup>2</sup>, R Wuerffel<sup>3</sup>, DL Bowers<sup>4</sup>; <sup>1</sup>Syngenta Crop Protection, Fargo, ND, <sup>2</sup>Syngenta Crop Protection, Monticello, IL, <sup>3</sup>Syngenta Crop Protection, Gerald, MO, <sup>4</sup>Syngenta Crop Protection, Greensboro, NC (244)
- 02:15 PM Quantifying the Impact of Herbicide Drift on Peanut Using UAV.** N Singh\*<sup>1</sup>, P Devkota<sup>1</sup>, J Iboyi<sup>1</sup>, MJ Mulvaney<sup>2</sup>; <sup>1</sup>University of Florida, Jay, FL, <sup>2</sup>Mississippi State University, Mississippi State, MS (245)
- 02:30 PM Unmanned Aerial System-Based Herbicide Applications in Agronomic Crops.** V Singh\*, D Srivastava, V Kumar; Virginia Tech, Painter, VA (246)
- 02:45 PM Influence of Speed on the Effectiveness of Herbicide Applications.** AA Tavares\*<sup>1</sup>, B Vukoja<sup>2</sup>, GR Kruger<sup>3</sup>, DM Dodds<sup>1</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>University of Nebraska-Lincoln, North Platte, NE, <sup>3</sup>BASF Corporation, Research Triangle Park, NC (247)

- 03:00 PM    Developing a Micro-Volume Herbicide Spraying System for Site-Specific Weed Management.** B Gurjar\*<sup>1</sup>, C Hu<sup>1</sup>, SB Mirsky<sup>2</sup>, R Hardin<sup>1</sup>, MV Bagavathiannan<sup>1</sup>; <sup>1</sup>Texas A&M university, College Station, TX, <sup>2</sup>USDA ARS, Beltsville, MD (248)
- 03:15 PM    First Year Summary of the Redekop Seed Control Unit for Harvest Weed Seed Control in Wheat and Soybean.** EC Russell\*, ML Flessner, WC Greene, MP Spoth, C Sias, KW Bamber; Virginia Tech, Blacksburg, VA (249)
- 03:30 PM    Break – Zlotnik Ballroom 4/5/6**
- 03:45 PM    Understanding the Resistance Mechanism of Palmer Amaranth to Trifluralin: Examination of Gene Amplification, Metabolism, and Target Site Mutations.** F Gonzalez Torralva\*, JK Norsworthy; University of Arkansas, Fayetteville, AR (250)
- 04:00 PM    Bioherbicidal Potential of Cotton Chromosome Substitution Lines on the Germination and Growth of Weeds.** W Segbefia\*<sup>1</sup>, GA Fuller<sup>1</sup>, PS Sharma<sup>1</sup>, KA Boateng<sup>1</sup>, J Kwetey<sup>2</sup>, T Tseng<sup>1</sup>; <sup>1</sup>Mississippi State University, Mississippi State, MS, <sup>2</sup>Mississippi State University, Starkville, MS (251)
- 04:15 PM    A Proactive Approach to Confirm the Glufosinate Resistance Before Widespread Evolution.** EA Jones\*, DJ Contreras, CW Cahoon, JC Dunne, KM Jennings, RG Leon, W Everman; North Carolina State University, Raleigh, NC (252)
- 04:30 PM    Potassium Borate as a Volatility Reducing Agent: What We Know Today.** MC Castner\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, TL Roberts<sup>1</sup>, T Barber<sup>2</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR (253)

**04:45 PM    Efficacy of Phosphite and Glufosinate Tank-mix for Controlling Palmer Amaranth and Johnsongrass.** S Singh\*<sup>1</sup>, D Hathcoat<sup>2</sup>, K Hake<sup>3</sup>, G Morgan<sup>3</sup>, MV Bagavathiannan<sup>1</sup>;  
<sup>1</sup>Texas A&M University, College Station, TX,  
<sup>2</sup>Texas A&M AgriLife Research, College Station, TX, <sup>3</sup>Cotton Incorporated, Cary, NC  
**(254)**

---

---

## ***WEDNESDAY AFTERNOON – JANUARY 26***

---

---

### **Weed Management in Agronomic Crops**

LOCATION: Classroom 106  
TIME: 2:00 PM - 5:00 PM Central Time  
CHAIR: Scott A. Nolte  
Texas A&M AgriLife Extension  
College Station, TX  
MODERATOR: Zachary S. Howard  
Texas A&M University  
College Station, TX

#### **\*SPEAKER**

- 02:00 PM Evaluation of Fluridone in a Peanut Weed Control Program.** LM Collie<sup>\*1</sup>, T Barber<sup>2</sup>, RC Doherty<sup>3</sup>, ZT Hill<sup>4</sup>, A Ross<sup>5</sup>, TR Butts<sup>2</sup>;  
<sup>1</sup>University of Arkansas, Lonoke, AR, <sup>2</sup>University of Arkansas System Division of Agriculture, Lonoke, AR, <sup>3</sup>University of Arkansas Division of Agriculture Research & Extension, Monticello, AR, <sup>4</sup>University of Arkansas Cooperative Extension Service, Monticello, AR, <sup>5</sup>University of Arkansas Cooperative Extension Service, Ward, AR (255)
- 02:15 PM Integrated Weed Management Practices to Control ALS and PPO-Inhibitor Resistant Palmer Amaranth in Peanut.** JT McCaghren\*, S Li, RD Langemeier, L Pereira; Auburn University, Auburn, AL (256)
- 02:30 PM Cotton Response to Non-Labeled Herbicides.** GA Stephens\*, DM Dodds, JS Calhoun, J Krutz; Mississippi State University, Mississippi State, MS (257)

- 02:45 PM Cotton Stalk Regrowth Management in Enlist Cotton Systems in South Texas.** S Samuelson\*<sup>1</sup>, M Lovelace<sup>2</sup>; <sup>1</sup>Corteva Agriscience, Bryan, TX, <sup>2</sup>Corteva Agriscience, Oklahoma City, OK (258)
- 03:00 PM A Beltwide Study Evaluating an Integrated Approach to Palmer Amaranth Management in Southern US Cotton.** SE Kezar\*<sup>1</sup>, MV Bagavathiannan<sup>1</sup>, PA Dotray<sup>2</sup>, JK Norsworthy<sup>3</sup>, RG Leon<sup>4</sup>, G Morgan<sup>5</sup>, FH Oreja<sup>4</sup>, DC Foster<sup>6</sup>, MM Houston<sup>3</sup>, D Hathcoat<sup>7</sup>, KR Russell<sup>8</sup>; <sup>1</sup>Texas A&M University, College Station, TX, <sup>2</sup>Texas Tech University and Texas A&M AgriLife Research and Extension Service, Lubbock, TX, <sup>3</sup>University of Arkansas, Fayetteville, AR, <sup>4</sup>North Carolina State University, Raleigh, NC, <sup>5</sup>Cotton Incorporated, Cary, NC, <sup>6</sup>University of Tennessee, Jackson, TN, <sup>7</sup>Texas A&M AgriLife Research, College Station, TX, <sup>8</sup>Texas Tech University, Lubbock, TX (259)
- 03:15 PM Response of Palmer Amaranth Accessions Across the U.S. to Dicamba and Glufosinate.** LB Piveta\*<sup>1</sup>, JK Norsworthy<sup>1</sup>, KW Bradley<sup>2</sup>, KL Gage<sup>3</sup>, DB Reynolds<sup>4</sup>, LM Lazaro<sup>5</sup>, L Steckel<sup>6</sup>, BG Young<sup>7</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR, <sup>2</sup>University of Missouri, Columbia, MO, <sup>3</sup>Southern Illinois University Carbondale, Carbondale, IL, <sup>4</sup>Mississippi State University, Mississippi State, MS, <sup>5</sup>LSU Ag Center, Baton Rouge, LA, <sup>6</sup>University of Tennessee, Jackson, TN, <sup>7</sup>Purdue University, Brookston, IN (260)
- 03:30 PM Break – Zlotnik Ballroom 4/5/6**
- 03:45 PM Comparison of Engenia/Liberty Tank-Mixes and Sequential Application.** CR White\*, W Keeling, J Spradley; Texas A&M AgriLife Research, Lubbock, TX (261)

- 04:00 PM    Acuron GT: Mesotrione Plus Bicyclopyrone for Enhanced Weed Control in GT Corn.**  
BD Black\*<sup>1</sup>, RD Lins<sup>2</sup>, M Saini<sup>3</sup>, M Kitt<sup>3</sup>;  
<sup>1</sup>Syngenta Crop Protection, Searcy, AR,  
<sup>2</sup>Syngenta Crop Protection, Rochester, MN,  
<sup>3</sup>Syngenta Crop Protection, Greensboro, NC  
(262)
- 04:15 PM    Soybean Weed Control in Southeast Texas.**  
M Matocha\*; Texas AgriLife Extension  
Service, College Station, TX (263)
- 04:30 PM    TENDOVO - Setting the Standard for Soybean Herbicides.** JC Holloway Jr\*;  
Syngenta Crop Protection, LLC, Jackson, TN  
(264)
- 04:45 PM    Dicamba Is Done - The Evolution of Synthetic-Auxin Resistant Pigweed in Tennessee: An Extension Perspective.** L  
Steckel\*, DC Foster; University of Tennessee,  
Jackson, TN (265)



# AUTHOR INDEX

Abbott, Chad	89, 159
Adams, Jason W.	244
Adams, Lou	68, 161
Ahmed, Khalied	40, 120
Akin, D. Scott	110, 118, 129
Alferez, Fernando	170
Allen, Tom	148
Andres, Ryan J.	65, 173
Argenta, Josiane C.	61, 137, 150
Armstrong, Joe	101
Arneson, Nicholas J.	1, 94
Arnold, Casey H.	45, 132, 235
Arsenijevic, Nikola	94
Aryal, Parmeshwor	231
Askew, Shawn	180, 182, 212, 218, 220, 221
Avent, Tristen H.	9, 50, 234, 235, 236, 238
Backscheider, Kelly A.	101
Bagavathiannan, Muthukumar V.	17, 21, 23, 26, 27, 31, 32, 35, 38, 42, 48, 73, 74, 87, 88, 102, 103, 122, 149, 154, 189, 191, 193, 211, 223, 229, 239, 248, 254, 259
Baker, Sydney C.	134
Bamber, Kevin W.	33, 75, 77, 183, 202, 249
Bararpour, Taghi	92, 96, 100, 105, 110, 115, 116, 117, 118, 119
Barber, Tom	82, 228, 11, 45, 47, 48, 60, 68, 78, 79, 93, 132, 145, 149, 151, 161, 165, 224, 237, 238, 240, 243, 253, 255
Barth, McKenzie J.	27
Basinger, Nicholas T.	104, 143, 155, 162
Batuman, Ozgur	170
Baucum, Carleton B.	136
Baughman, Todd A.	55, 56, 165, 185, 208
Bayabil, Haimanote	67, 230
Beckett, Tom H.	204
Begitschke, Erick	57, 107, 178
Bell, David A.	92, 96, 110, 116
Bell, Jourdan M.	83
Berry, Pete	244
Bessa de Lima, Gustavo Henrique	62
Bish, Mandy	94
Black, B. David	262
Blackburn, Benjamin	141, 147
Blankenship, Colton D.	25, 28

Blythe, Andrew Cole	4, 7
Boateng, Kwabena Ansong	39, 251
Bond, Jason A.	11, 138, 139, 140, 141, 148, 181, 237
Bowen, Samantha J.	125
Bowers, Dane L.	244
Bowling, Rebecca	31, 223
Boyd, John	69
Boyd, Nathan	70, 131, 192
Boyette, Michael D.	190
Bradley, Kevin W.	94, 139, 144, 260
Braley, Amy D.	109
Brewer, John	180, 218
Brosnan, James	158
Broster, Kayla L.	12, 71, 186
Brown, Ashli	147
Burgess, Patrick	216
Burrell II, Taylor D.	138
Butts, Thomas R.	9, 11, 13, 14, 41, 45, 48, 50, 78, 82, 132, 151, 161, 224, 228, 234, 235, 236, 237, 255
Byrd, Jr., John D.	12, 71, 186, 203
Cahoon, Charlie W.	3, 4, 7, 8, 65, 66, 80, 163, 165, 173, 175, 252
Calhoun, Justin S.	29, 63, 135, 257
Camargo Silva, Gustavo	26
Cangiano, Maria Laura	35
Caprio, Michael	147
Carpenter, Zachary A.	241
Carroll, Devon E.	114, 216
Carvalho-Moore, Pamela	41, 59, 78, 82, 132, 151, 168
Castner, Mason C.	13, 41, 45, 59, 121, 253
Ceperkovic, Isidor	17, 38, 239
Champagne, Rebecca	114
Chase, Carlene A.	231
Chaudhari, Sushila	28
Chitra, Fnu	24, 28
Chu, Sarah A.	30
Clabo, David C.	198, 200
Collie, Leah M.	93, 240, 243, 255
Collins, Guy D.	4, 7
Contreras, Diego J.	65, 66, 124, 173, 252
Cotter, Bodie	13, 14, 235
Craft, Jordan M.	180, 220
Culpepper, A Stanley	36, 37, 91, 123, 165, 175, 206
Cuvaca, Ivan B.	94

Darnell, Taylor L.	172
Daroub, Samira	70, 192
Davis, Brad M.	11, 237
De Castro, Edicarlos B.	43, 184, 210
De La Fuente, Gerald	241
de Oliveira, Joao Victor	34
de Sanctis, Jose H.	3, 8, 163
de Souza, Isadora G P	43
de Souza Rodrigues, Juliana	123, 156
Dean, Brock A.	8
Devkota, Pratap	67, 99, 164, 175, 230, 245
Dickens, E David	196, 198, 200
Dittmar, Peter J.	207
Dodds, Darrin M.	29, 34, 63, 134, 135, 142, 177, 247, 257
Doherty, Ryan C.	68, 93, 240, 243, 255
Dotray, Peter A.	15, 16, 55, 74, 83, 167, 179, 259
Drake, David R.	109
Dudak, Jenny L.	55, 56, 165, 185
Duncan, Thomas H.	12
Dunne, Jeffrey C.	65, 173, 252
Dyer, Logan M.	162
Eason, Kayla M.	123, 125, 156
Edwards, Henry M.	181
Enloe, Stephen F.	174, 176, 226
Ethridge, Sandra R.	58
Eubank, Thomas W.	140
Eure, Peter	204
Everman, Wesley	4, 7, 58, 65, 66, 80, 124, 163, 173, 252
Ezell, Andrew W.	195, 197, 199, 201
Ezell, John E.	195, 197, 199, 201
Ferguson, J Connor	241
Fleming, Jacob A.	48, 145, 149, 234
Flessner, Michael S.	2, 20, 33, 75, 77, 95, 104, 183, 202, 249
Forehand, Jacob C.	3, 163
Foster, Delaney C.	167, 259, 265
Franks, Dalton B.	90
Fuller, Gracen A.	39, 53, 137, 251
Gage, Karla L.	1, 94, 139, 260
Gannon, Travis	40, 120, 163
Gaudin, Anna B.	142
Gaur, Nandita	143
Gholson, Drew	148
Ghosh, Eeshita	23
Glenn, Nicole T.	141, 144, 147

Glueckert, Jonathan	226
Goatley, Mike	180
Godara, Navdeep	14, 149, 238
Gomiero Polli, Estefania	40, 120
Goncalves, Clebson G.	180, 212
Gonzalez Torralva, Fidel	78, 151, 250
Gordy, John W.	204
Gore, Adam	215
Granadino, Marco A.	124
Greene, Wykle C.	33, 75, 95, 104, 202, 249
Greer, Bradley	19, 64, 169
Grey, Timothy L.	123, 125, 156, 171
Grichar, William J.	55, 76, 81
Griffing, Lawrence R.	127
Grubbs, Rebecca	210
Gurjar, Bholumam	193, 38, 248
Hake, Kater	42, 254
Hammond, William	67, 230
Hampton, Brooklyn M.	2
Hand, Lavesta C.	37, 206
Hardin, Robert	248
Hardke, Jarrod	11, 237
Harris, James	44, 49, 222
Hathcoat, Daniel	21, 102, 210, 254, 259
Heflin, Kevin	83
Held, David W.	43
Hempfling, James W.	216
Henry, Gerald M.	43, 57, 106, 107, 124, 162, 178
Herman, Amber L.	6
Hiatt, Bryanna N.	146
Hill, JoVonn G.	43
Hill, Zachary T.	93, 240, 243, 255
Hixson, Adam	15, 165
Hodnett, George	154
Holloway Jr, James C.	264
Houston, Michael M.	9, 47, 59, 79, 145, 236, 259
Howard, Zachary S.	69, 94, 188
Hu, Chengsong	248
Hughes, John H.	177
Hughes, Robyn	115
Hurdle, Nicholas L.	123, 171
Hwang, Jeong-In	41, 82, 151, 228
Ianhez Pereira, Livia	175
Iboyi, Joseph	245

Ignes, Martin Jose	5, 184, 213
Ikley, Joseph T.	94
Inman, Matthew	97
Ippolito, Stephen	24, 28
Jablonski, Jackson	174
Jennings, Katherine M.	24, 25, 28, 65, 66, 173, 190, 252
Johnson, Bridgette C.	44, 222
Johnson, Dave	101
Johnson, Kevin	101
Johnson, William G.	94
Jones, Curtis A.	109
Jones, Eric A.	65, 66, 173, 252
Jordan, David L.	25, 28, 58, 80, 97, , 190
Joseph, Mikerly M.	49
Joyner, Joshua D.	4, 7
Kadyampakeni, Davie	170
Kanissery, Ramdas	70, 170, 192, 194, 205
Kankarla, Vanaja	87, 210
Karaikal, Srikanth Kumar	22, 51, 168, 233
Keeling, Wayne	83, 261
Kelly, Brendan R.	179
Kezar, Sarah E.	32, 122, 259
Kitt, Mark	130, 262
Klein, Patricia	154
Koo, Daewon	180
Kouame, Jeremie	168
Krishnan, Natraj	113
Kruger, Greg R.	34, 139, 247
Krutz, Jason	63, 29, 142, 257
Kumar, Krishna	127
Kumar, Vipin	1,18, 48, 242, 246
Kumari, Annu	10
Kutugata, Matthew	35, 38, 193
Kwetey, James	39, 251
LaBiche, Gabrielle	1, 30, 128
Lancaster, Sarah	94
Landry, Randall L.	157
Langemeier, Ryan D.	46, 52, 133, 175, 232, 256
Lazaro, Lauren M.	1, 2, 30, 94, 128, 136, 146, 260
LeCompte, Mathieu C.	40, 120
Legleiter, Travis	1, 6, 94
Leon, Ramon G.	58, 65, 66, 97, 104, 173, 190, 252, 259
Levi, Mathew	143
Li, Steve	10, 46, 52, 133, 175, 232, 256
Lins, Ryan D.	262

Locke, Anna M.	58
Louws, Frank	24
Loux, Mark	94, 139
Lovelace, Mike	258
MacDonald, Greg	174, 194
Machado Noguera, Matheus	22, 51, 168, 233, 62, 153
Maity, Aniruddha	122
Maltais-Landry, Gabriel	207
Mangialardi, Gregory A.	148
Manuchehri, Misha R.	48
Marshall, Michael W.	54, 111, 165
Martin, Daniel E.	38, 193
Matocha, Matthew	263
Matte, Willian	61
Mauromoustakos, Andy	60
McCaghren, Justin T.	46, 52, 133, 175, 232, 256
McCarty, Lambert B.	215, 217, 219
McCoy, Justin	148
McCullough, Patrick	98, 162, 214
McCurdy, James D.	43, 184, 210, 220
McElroy, Joseph S.	44, 49, 78, 151, 214, 222
McGinty, Joshua A.	76, 81, 189
McKeithen, Chase	223
McKnight, Benjamin M.	74
McLeod, Anna	227
McVane, Jodie M.	102, 229
Meeks, Frances	101
Meyer, Caleb K.	135
Meyers, Stephen L.	25, 72, 187
Michel, Jeff	216
Miller, Alyssa L.	53, 105, 126, 137, 150
Miller, Donnie	84, 85, 86, 146
Miller, Eric	1, 94
Mirsky, Steven Brian	35, 248
Mize, Marcie	84, 85, 86
Monks, David	24, 25, 28, 190
Moore, Levi D.	28, 190
Morgan, Gaylon	42, 74, 142, 254, 259
Mueller, Thomas C.	157
Mulvaney, Michael J.	67, 230, 245
Newton, Paul D.	90
Noe, Samuel C.	9, 236

Nolte, Scott A.	69, 74, 94, 165, 188, 189
Norsworthy, Jason K.	9, 11, 13, 14, 41, 45, 47, 48, 50, 59, 60, 68, 78, 79, 82, 121, 132, 139, 144, 145, 149, 151, 161, 224, 228, 234, 235, 236, 237, 238, 250, 253, 259, 260
Oakley, Graham	139, 141, 147
Oberweger, Conrad A.	176, 226
Odero, D Calvin	166, 194
Oliveira, Rone Batista	34
Oreja, Fernando H.	97, 104, 259
Orgeron, Albert J.	136
Osburn, Andrew W.	31, 223
Parker, Ethan T.	130
Patel, Jinesh	222
Patterson, Jake A.	63, 135, 177
Patterson, Katie M.	1
Patton, Blaine A.	16
Pedireddi, Usha R.	154
Peeples, Jimmy D.	116, 181
Peppers, John M.	180, 182, 221
Pereira, Livia	46, 52, 133, 232, 256
Perez, Loida M.	61
Peters, Sara	183
Pieralisi, Brian K.	142
Piveta, Leonard B.	13, 14, 59, 60, 78, 79, 132, 224, 228, 260
Poncet, Aurelie	11, 237
Price, Andrew J.	10
Price, Katilyn J.	175
Priess, Grant L.	41, 78, 151
Prince, Candice M.	172, 174
Pritchard, Benjamin D.	158
Prostko, Eric P.	8, 89, 159
Putri, Atikah D.	160
Quick, Hayden	71, 186, 203
R. Sales, Caetano A.	164
Rajan, Nithya	23
Ramos-Giraldo, Paula J.	35
Randell, Taylor M.	36, 37, 91, 206
Rangani, Gulab	112
Reasor, Eric	40
Reberg-Horton, Chris	35
Reed, Noah H.	11, 237
Reeves, Julie L.	108
Reeves, Samuel R.	141, 147
Reinhardt Piskackova, Theresa	104

Reister, Jaret W.	92, 96, 100, 116
Reynolds, Daniel B.	139, 141, 142, 144, 147, 260
Roberts, Trenton L.	50, 121, 253
Rodriguez, Alex G.	166
Rogers, Ronald R.	40, 120
Roma-Burgos, Nilda	22, 51, 62, 153, 168, 209, 233
Rooney, William	154
Rosenbaum, Kristin	101
Ross, Aaron	68, 93, 240, 243, 255
Rucker, Keith S.	125
Russell, David P.	71, 104, 175, 203
Russell, Eli C.	33, 75, 249
Russell, Kyle R.	179, 259
Rutland, Claudia Ann	49, 222
Saini, Monika	262
Samford, Jason	239
Samuelson, Spencer	258
Sanders, Tameka L.	181
Sandhu, Hardev S.	194
Sandhu, Ravneet K.	131
Sandoya, German V.	194
Sapkota, Bishwa B.	38, 73, 74, 191, 193
Schlegel Werle, Isabel	168
Schultheis, Jonathan	25
Schumann, Arnold	131
Segbefia, Worlanyo	39, 251
Self, Andrew B.	195, 197, 199, 201
Sellers, Brent A.	69, 164
Shankle, Mark W.	72, 126, 187
Sharma, Parth Sunil	39, 126, 251
Shome, Sambit	143
Sias, Cynthia	75, 183, 202, 249
Silcox, Charlie	120
Simpson, David M.	101, 147
Sims, Kira C.	28
Singh, Navjot	99, 230, 245
Singh, Shilpa	42, 254
Singh, Vijay	18, 20, 242, 246
Skovsen, Søren	35
Smith, Maxwell E.	15
Smith, Ty C.	9, 47, 79, 145, 149
Sparks, Darrell	147
Spencer, Dave	63, 142
Sperry, Benjamin P.	172, 174, 225
Spesard, Bruce	216, 222
Spothe, Matthew P.	2, 75, 202, 249



Spradley, Justin	261
Srivastava, Dhiraj	18, 20, 246
Steckel, Larry	4, 108, 157, 167, 260, 265
Stephens, Gresham A.	29, 135, 257
Stephenson, Daniel O.	90, 146
Stoudemayer, Timothy	215, 217, 219
Strom, Seth A.	130
Stutzman, Wyatt J.	188
Subramanian, Nithya K.	23, 103, 154
Suchoff, David	25
Sumner, Matthew	11, 237
Tavares, Antonio Augusto	34, 247
Taylor, Hayden R.	21
Taylor, Jacob W.	219
Taylor, Zachary R.	3, 4, 7, 8, 80, 163
Tillman, Barry L.	99
Timilsina, Nirmal	170, 192
Tiwari, Ruby	70, 170, 192
Torres, Ubaldo	38, 74, 193
Treadway, Zachary R.	55, 56, 165, 185
Treadwell, Danielle D.	207
Tseng, Te-Ming (Paul)	39, 51, 53, 61, 72, 105, 113, 115, 126, 137, 150, 187, 251
Tucker, Kevin A.	57, 106, 107, 178
Turnage, Gray	227
Ugljic, Zaim	135, 142, 177
Unruh, J. Bryan	223
Upadhyaya, Yogendra Raj	67, 230
Van Wychen, Lee	114
Vance, Jenna C.	36, 37, 91, 206
Vargas, Jose J.	158
Varner, Beau J.	141, 147
Varsha, Varsha	72, 187
Vemula, Shailaja	194
Votava, Eric	241
Vukoja, Barbara	247
Vulchi, Rohith	189
Waggoner, Brock	129
Walker, David C.	19, 64, 169
Wallau, Marcelo O.	164
Wang, Chih Julie	43, 57, 178
Webster, Connor	19, 64, 169
Webster, Eric	19, 64, 169
Weems, Jafe D.	130

Weisberger, David	155
Wells, Sheryl	216
Werle, Isabel S.	22, 51, 72, 153, 187, 233
Werle, Rodrigo	94
Westbury, David	98, 214
White, C.d. Ray	83, 261
Whitehead, James	129
Wilber, Amy L.	141, 184
Williams, John A.	19, 64, 169
Williams, Mitchell	54
Wright, Hannah E.	36, 37, 91, 206
Wuerffel, R Joseph	244
Xin-Gen, Zhou	17, 239
Yang, Jie	88
York, Alan C.	80
Young, Bryan G.	94, 139, 144, 260
Yu, Jialin	88, 211
Yue, Ziming	53, 105, 113, 126
Zaccaro-Gruener, Maria Leticia	224, 234, 59, 60, 121, 203
Zhen, Shuyang	32
Zhou, Xin-Gen	38
Zimmer, Marcelo	94

## **SWSS Sustaining Members – 2021-22**

---

**ADAMA**

**AMVAC Chemical Corp.**

**BASF Corporation**

**BASF Seed and Traits**

**Bayer CropScience**

**Belchim**

**Bellspray, Inc.**

**Corteva Agriscience**

**FMC**

**Greenleaf Technologies**

**K-I Chemical U.S.A. Inc.**

**Syngenta Crop Protection**

**TeeJet Technologies - Spraying Systems Co.**

**United Phosphorus, Inc.**

**Valent USA Corp**

**Winfield United**

## Notes

Personal Time Schedule				
Time	Monday	Tuesday	Wednesday	
8:00				
8:15				
8:30				
8:45				
9:00				
9:15				
9:30				
9:45				
10:00		Break	Break	
10:30				
11:00				
11:30				
12:00			SWSS Awards Luncheon	
12:15				
12:30		Grad Student Luncheon		
12:45				
1:00	General Session			
1:15				
1:30				
1:45				
2:00				
2:15				
2:30				
2:45				
3:00	Break			
3:30		Women’s Networking Event		
3:45			Break	
4:00				
4:30				
5:00			Graduate Student Awards Reception	
5:30				
6:00				
6:30				
7:00				
7:15				
7:30				
8:00				

