Program

73rd

Annual Meeting

**Southern Weed Science Society**



**SWSS**

**Theme:**

*“It’s Your Time”*

**January 26-30, 2020**

**Beau Rivage Resort and Casino**

**Biloxi, MS**

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

**PLEASE SUBMIT POWERPOINT FILES TO WEBSITE**

**Local Arrangements Committee**

|  |  |
| --- | --- |
| Darrin Dodds | Chair |
| Kelley Mazur | Registration |
| Jake McNeal  | Audio Visual |
| William Rutland | Equipment Storage & Security |
| Darrin Dodds | Graduate Students & Room Reservations |
| Kelley Mazur | Information Booth & Message Coordinator |
| Kelley Mazur | Meal Functions |
| Bradley Norris | Room Setup |
| John Williams | Signs and Exhibits |
| Bradley Norris | Poster Setup  |

**Special Events**

**Endowment Function**

Sunday, January 26, 2020

7:00 a.m. – 3:00 p.m.

**Graduate Student Mixer/Speaker**

Sunday, January 26, 2020

5:00 p.m. – 7:00 p.m.

**SWSS General Session**

Monday, January 27, 2020

1:00 p.m. – 3:00 pm

**Graduate Student Luncheon**

Tuesday, January 28, 2020

12:00 p.m. – 2:00 p.m.

**Graduate Student Quiz Bowl**

Tuesday, January 28, 2020

5:00 p.m. – 6:00 p.m.

**Christian Fellowship Breakfast**

Wednesday, January 29, 2020

6:30 a.m. – 7:45 a.m.

**SWSS Awards Luncheon**

Wednesday, January 29, 2020

12:00 p.m. – 2:00 p.m.

**Women’s Networking Event**

Wednesday, January 29, 2020

5:00 p.m. – 6:15 p.m.

**SWSS Graduate Awards Mixer**

Wednesday, January 29, 2020

5:30 p.m. – 8:30 p.m.

**Future Meetings**

Hilton Knoxville/Knoxville Convention Center

Knoxville, TN – January 24-28, 2021

AT&T Executive Education and Conference Center

Austin, TX – January 23-27, 2022

**Southern Weed Science Society Officers**

**PRESIDENT**

James C. Holloway, Jr.

Syngenta Crop Protection

james.holloway@syngenta.com

(731) 423-0804

**PRESIDENT ELECT**

Eric P Webster

LSU AgCenter

ewebster@agcenter.lsu.edu

(225) 281-9449

**VICE PRESIDENT**

Clete Youmans

BASF Corporation

cletus.youmans@basf.com

(731) 445-8880

**PAST PRESIDENT**

Bob Scott

University of Arkansas Rice Research Station

bscott@uaex.edu

(501) 676-3124

**SECRETARY-TREASURER**

Jim Brosnan

University of Tennessee

jbrosnan@utk.edu

(865) 474-0744

**EDITOR**

Muthu Bagavathiannan

Texas A&M University

muthu@tamu.edu

(479) 387-1674

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

Jason Bond Todd Baughman

Mississippi State University Oklahoma State University

jbond@drec.msstate.edu todd.baughman@okstate.edu

(662) 686-3282 (580) 224-0623

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

Greg Stapleton Eric Castner

BASF Corporation FMC

gregory.stapleton@basf.com eric.p.castner@cdupont.com

(731) 589-2629 (817) 597-1852

**WSSA REPRESENTATIVE**

John Byrd

Mississippi State University

jbyrd@pss.msstate.edu

(662) 325-4537

**BUSINESS MANAGER (EX-OFFICIO)**

Kelley Mazur

IMI Group

kelley@imigroup.org

(303) 327-8016

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

Carroll Johnson

Whitetail Institute

carroll@whitetailinstitute.com

(229) 402-1503

**STUDENT REPRESENTATIVE (EX-OFFICIO)**

Jordan Craft, Virginia Tech.

jcraft1@vt.edu

**Southern Weed Science Society**

**Committees and Chairpersons**

|  |  |
| --- | --- |
| 2020 Program | Eric Webster |
| 2021 Program | Clete Youmans |
| Awards | Bob Scott |
| Business Manager/Sales Coordination | Kelley Mazur |
| Computer Application | Dan Reynolds Shawn Askew |
| Constitution & Operating Procedures | Carroll Johnson |
| Education Units | Alan Estes |
| Endowment Foundation | Donnie Miller |
| Finance | Clete Youmans |
| Graduate Student Organization | Jordan Craft |
| Historical | John Byrd |
| Legislative and Regulatory | Angela Post |
| Local Arrangements | Darrin Dodds |
| Long Range Planning | Gary Schwarzlose |
| Newsletter Editor | Susan Scott |
| Nominating | Bob Scott |
| Research Committee | Clete Youmans |
| Resolutions and Necrology | David Black |
| Site Selection | James Holloway |
| Southern Weed Contest | Drew Ellis |
| Student Program | Kelly Backscheider |
| Sustaining Membership | Kelly Backscheider |
| Weed Resistance and Technology Stewardship | Hunter Perry |

**Program Section Chairs**

|  |  |
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| Agronomic Crops | Ben McKnight |
| Symposium – Collision Between Wildlife Management and Weed Science | Eric Webster |
| Graduate Student Contest | Kelly Backscheider |
| Horticultural Crops | Ramdas Kanissery |
| Physiological / Biological Aspects | Samer Rustom |
| Posters | Kelly Backscheider |
| New Technologies | Shane Carver |
| Weed Management in Turf | John Brewer |
| Educational Aspects of Weed Control | Connor Webster |
| Regulatory Aspect of Weed Control | Cherilyn Moore |
| Soil and Environmental Aspects | David Russell |
| Weed Biology and Ecology | Ethan Parker |
| Weed Management in Pastures, Rangeland,  | David Russell |
| Weed Management in Organic Production  | Connor Webster |
| Weed/Vegetation Management in Forestry | Clyde Smith |

**Registration**

**MONDAY, January 27, 2020**

8:00 a.m. – 5:00 p.m.

**TUESDAY, January 28, 2020**

8:00 a.m. – 5:00 p.m.

**WEDNESDAY, January 29, 2020**

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 27, 2020 in the Camellia Ballroom. 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 29, 2020.**

**Silent Auction**

Silent Auction will take place in Pre-Function Area and

will close on **Wednesday, January 29, 2020 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 | Azalea D |
| Graduate Student Mixer | Magnolia ABC |
| Local Arrangements | Gardenia |
| Graduate Contest Judge’s Breakfast  | Azalea ABC |
| Graduate Contest Judge’s Work Room | Oaks Boardroom |
| General Session | Magnolia Ballroom |
| SWSS Business Meeting | Magnolia Ballroom |
| SWSS Quiz Bowl | Magnolia Ballroom  |
| GSO Luncheon | Azalea ABC |
| Christian Fellowship Breakfast | Azalea ABC |
| SWSS Awards Luncheon | Magnolia Ballroom |
| Women’s Networking Mixer | Azalea ABC |
| SWSS Mixer | Promenade |
| SWSS Graduate Awards Reception | Magnolia Ballroom |

**PROGRAM OVERVIEW**

***Schedule of Events and Meetings***

**SUNDAY, January 26, 2020**

7:00 am – 3:00 pm Endowment Function

 The Preserve Golf Club

8:00 am – 5:00 pm Local Arrangements

 Gardenia

5:00 pm – 6:00 pm SWSS Executive Board Meeting

 Azalea D

5:00 pm – 7:00 pm Graduate Student Professional

 Development

 Magnolia Ballroom B and C

 *Sponsored: Syngenta Crop Protection*

**MONDAY, January 27, 2020**

7:00 am – 8:00 am Local Arrangements/Session Chairs

 Azalea D

7:00 am – 5:00 pm Local Arrangements

 Gardenia

8:00 am – 5:00 pm Registration/Presentation Loading

 Registration Desk

8:00 am – 9:00 am Endowment Foundation Committee

 Azalea A

8:00 am – 9:00 am Sustaining Membership Committee

 Azalea B

9:00 am – 10:00 am Site Selection Committee

 Azalea A

9:00 am – 10:00 am Weed Resistance and

 Technology Stewardship Committee

 Azalea B

9:00 am – 10:00 am Student Contest Committee

 Azalea C

10:00 am – 11:00 am Finance Committee

 Azalea B

10:00 am – Noon Legislative & Regulatory Committee

 Azalea A

11:00 am – Noon SWSS Executive Board Meeting

 Azalea D

1:00 pm – 2:50 pm **Opening – General Session**

 Magnolia Ballroom

5:00 pm – 6:00 pm SWSS Business Meeting

 Magnolia Ballroom

Immediately after Weed Contest Committee

Business Meeting Magnolia Ballroom

**TUESDAY, January 28, 2020**

6:00 am – 8:00 am Graduate Student Contest Judges

 Breakfast

 Azalea ABC

7:00 am – 7:00 pm Local Arrangements

 Gardenia

 8:00 pm – 5:00 pm Graduate Student Contest Judges Work Room

 Oaks Boardroom

8:00 am – 5:00 pm Registration/Presentation Loading
 Registration Desk

Noon – 2:00 pm Graduate Student Luncheon

 Azalea ABC

5:00 pm – 6:00 pm Graduate Student Quiz Bowl

 Magnolia Ballroom

 *Sponsored by Bayer CropScience*

**WEDNESDAY, January 29, 2020**

6:30 am – 7:45 am SWSS Christian Fellowship Breakfast Azalea ABC

8:00 am – 5:00 pm Registration/Presentation Loading
 Registration Desk

7:00 am – 5:00 pm Local Arrangements

 Gardenia

Noon – 2:00 pm SWSS Awards Luncheon

 Magnolia Ballroom

5:00 pm – 6:00 pm Women’s Networking Event

 Azalea ABC

 *Sponsored by Corteva Agriscience*

5:30 pm – 6:30 pm SWSS Mixer

 Promenade

6:30 pm – 8:00 pm SWSS Graduate Awards Reception

 Magnolia Ballroom

**THURSDAY, January 30, 2020**

7:00 am – 10:00 am SWSS Executive Board Breakfast

 & Board Meeting

 Azalea D

8:00 am – 9:00 am Local Arrangements Committee

 Gardenia

**TECHNICAL PROGRAM OVERVIEW**

**January 27, 2020 - Monday**

10:00 am – Noon Poster Setup

 Camellia Ballroom

1:00 pm – 2:50 pm General Session

 Magnolia Ballroom

3:00 pm – 5:00 pm The Collison Between Wildlife

 Management and Weed Science

 Symposium

 Magnolia Ballroom

3:00 pm – 5:00 pm Posters - Available for Viewing

 Camellia Ballroom

**January 28, 2020 - Tuesday**

7:00 am – 5:00 pm Posters Session

 Camellia Ballroom

 *Even # Authors (7:00 am – 8:00 am)*

8:00 am – Noon Student Paper Contest - MS

 Magnolia E

8:00 am – Noon Student Paper Contest - MS

 Magnolia F

8:00 am – 11:45 pm Student Paper Contest – PhD

 Magnolia G

8:00 am – Noon Student Paper Contest – PhD

 Magnolia H

**\*All paper and poster judges please have completed score sheets to Kelly Backschieder and Peter Eure by 5:00 pm on Tuesday**

2:00 pm – 3:30 pm New Technologies

 Magnolia EF

 2:00 pm – 3:00 pm Weed Management in Pasture and

 Rangeland

 Magnolia GH

3:00 pm – 3:15 pm Soil and Environmental Aspects of

 Weed Science

 Magnolia GH

3:15 pm – 4:30 pm Weed Biology and Ecology

 Magnolia GH

3:30 pm – 4:45 pm Physiological and Biological Aspects

 of Weed Control

 Magnolia EF

**January 29, 2019 - Wednesday**

7:00 am – 3:00 pm Posters Session

 Camellia Ballroom

 *Odd # Authors (7:00 am – 8:00 am)*

**Posters removed before 3:00 p.m.**

8:00 am – Noon Weed Management in Agronomic

 Crops

 Magnolia GH

8:00 am – 9:00 am Weed/Vegetation Management in

 Forestry

 Magnolia EF

9:00 am – 10:15 pm Weed Management in Horticulture

 Magnolia EF

10:45 am – Noon Regulatory Aspects of Weed Control

 Magnolia EF

2:00 pm. – 5:00 pm Weed Management in Agronomic

 Crops

 Magnolia GH

2:00 pm – 3:45 pm Weed Management in Turf

 Magnolia EF

3:45 pm – 4:00 pm Weed Management in Organic

 Production Systems

 Magnolia EF

4:00 pm – 4:15 pm Educational Aspects of Weed Control

 Magnolia EF

**January 30, 2019 - Thursday**

7:00 am – 10:00 am SWSS Executive Board Breakfast

 & Meeting

 Azalea D

8:00 am – 10:00 am Local Arrangements

 Gardenia

***SUNDAY EVENING, JANUARY 26***

**Graduate Student Professional Development**

|  |  |  |
| --- | --- | --- |
| LOCATION: |   | Magnolia Ballroom BC |
| TIME: |   | 05:00 PM - 07:00 PM |
| CHAIR:  |  | J. Craft, Virginia Tech |

**Speakers**

L Lauren, LSU AgCenter

S Rana, Bayer CropScience

N Bassinger, University of Georgia

K Backscheider, Corteva

**PROGRAM**

***MONDAY AFTERNOON, JANUARY 27***

**General Session**

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| LOCATION: |   | Magnolia Ballroom |
| TIME: |   | 01:00 PM - 02:50 PM |
| CHAIR: |   | EP Webster, LSU AgCenter  |

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| **1:00 PM** |  | **Announcements and Welcome.** EP Webster\*; LSU AgCenter, Baton Rouge, LA (1) |

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| **1:05 PM** |   | **Welcome to Mississippi.** S Martin\*; Mississippi State Univ, Miss State, MS (2) |
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| **1:30 PM** |   | **Presidential Address.** JC Holloway Jr\*; Syngenta Crop Protection, Jackson, TN (3) |

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| **1:45 PM** |   | **SWSS Endowment Enrichment Scholarship: A Week with Diligence Technologies.** KM Eason\*; University of Georgia, Tifton (4) |

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| **2:00 PM** |   | **SWSS Endowment Enrichment Scholarship: Mississippi Experience with Bayer CropScience.** TM Randell\*; University of Georgia, Tifton(5) |

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| **2:15 PM** |   | **SWSS Endowment Enrichment Scholarship: Texas Tour with Bayer CropScience.** G Sharma\*; Virginia Tech, Blacksburg (6) |

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| **2:30 PM** |   | **Washington Update.** L Van Wychen\*; WSSA, Alexandria, VA (7) |

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| **2:50 PM** |   | **BREAK** |

***MONDAY AFTERNOON, JANUARY 27***

**SYMPOSIUM - The Collision Between Wildlife Management and Weed Sciences: Challenges and Opportunities Abound.**

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| LOCATION: |   | Magnolia Ballroom |
| TIME: |   | 03:00 PM - 05:00 PM |
| CHAIR: |   | EP Webster, LSU AgCenter |

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| **3:00 PM** | **Impact of U.S. Farm Bill on Wildlife Management.** JL Cummins\*; Wildlife Mississippi, Stoneville, MS (8) |

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| **3:30 PM** |   | **The Whitetail Institute of North America: Our Customers Come First.** J Cooner\*; Whitetail Institute of North America, Hope Hull, AL (9) |

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| **4:00 PM** |   | **Functioning as Technical Specialist in a Peripheral Area of Weed Science.** WC Johnson\*; Whitetail Institute of North America, Tifton, GA (10) |

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| **4:30 PM** |   | **Management and Control of Feral Hogs.** GT Gentry\*; LSU AgCenter, Clinton, LA (11) |

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| **5:00 PM** |   | **Discussion** |

***MONDAY AFTERNOON, JANUARY 27***

**SWSS Business Meeting**

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| LOCATION: |   | Magnolia Ballroom |
| TIME: |   | 05:00 PM - 06:00 PM |
| CHAIR:  |  | JC Holloway Jr, Syngenta Crop Protection |

**SWSS Weed Contest Committee – All are invited, immediately following Business Meeting**

***TUESDAY MORNING, JANUARY 28***

**Graduate Student Contest Judges Breakfast**

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| LOCATION: |   | Azalea A, B, C |
| TIME: |   | 06:00 AM - 08:00 AM |
| CHAIR: |   | KA Backscheider, Corteva |

**Judges Workroom**

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| LOCATION: |   | Oaks Boardroom |
| TIME: |   | 08:00 AM - 05:00 PM |
| CHAIR: |   | KA Backscheider, Corteva |

***TUESDAY MORNING, JANUARY 28***

**POSTER - Poster Section**

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| LOCATION: |   | Oaks Boardroom |
| TIME: |   | 08:00 AM - 05:00 PM |
| CHAIR: |   | KA Backscheider, Corteva |

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| **Controlling Weedy Rice Using Reduced Rates of Quizalofop.** DC Walker\*, EP Webster, BM McKnight, SY Rustom, LC Webster, WB Greer; LSU AgCenter, Baton Rouge (12) |

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| **Effect Florpyrauxifen-benzyl on Different Rice Culitvars.** HM Edwards\*1, JD Peeples1, TL Sanders1, B Lawrence1, H Bowman2, JA Bond1; 1Delta Research and Extension Center, Stoneville, MS, 2University of Arkansas, Fayetteville (13) |

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| **Aquatic Weed Response to Herbicide Application in Louisiana Rice Production.** BM McKnight\*, EP Webster, SY Rustom, LC Webster, WB Greer, DC Walker; LSU AgCenter, Baton Rouge, (14) |

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| **A Comparison of Foreign Material in Soybean Grain Samples Along the Mississippi River Valley.** RM Porter\*1, LM Lazaro1, JT Copes2, K LaGraize3, G LaBiche1; 1LSU AgCenter, Baton Rouge, 2LSU AgCenter, St. Joseph, 3RMG, New Orleans, LA (15) |

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| **Bermudagrass (*Cynodon dactylon*) Response to Fall Applied Postemergence Triclopyr Tank-mixtures Following Seed Cane Harvest.** DJ Spaunhorst\*; USDA-ARS, Houma, LA (16) |

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| **A Multifaceted Approach to the Reclamation of Bermudagrass Pastures.** GM Henry\*, NT Basinger, DW Hancock; University of Georgia, Athens (17) |

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| **Evaluation of Residual Herbicides in Watermelon Production on Bareground or a Cereal Rye Cover.** MB Bertucci\*1, A McWhirt2, A Hotz3, LM Smith3; 1University of Arkansas, Fayetteville, 2University of Arkansas, Little Rock, 3University of Arkansas, Alma (18) |

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| **Getting Rid of Weeds Through Integrated Weed Management: an Areawide Approach.** LM Lazaro\*1, CG Rubione2, SB Mirsky3, ML Flessner4, MV Bagavathiannan5, M VanGessel2; 1LSU AgCenter, Baton Rouge, 2University of Delaware, Georgetown, 3USDA ARS, Beltsville, MD, 4Virginia Tech, Blacksburg, 5Texas A&M University, College Station (19) |

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| **Impact of Four Summer Cover Crop Species and Planting Timing on Weed Suppression, Soil Moisture, and Yield in Corn.** SL Samuelson\*, MV Bagavathiannan; Texas A&M University, College Station (20) |

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| **Methods for Overcoming Seed Dormancy in American Black Nightshade (*Solanum americanum*).** IS Werle\*1, T Tseng1, AR Ulguim2, AP Tucker1, NR Burgos3; 1Mississippi State University, Mississippi State, 2Federal University of Santa Maria, Santa Maria, 3University of Arkansas, Fayetteville (21) |
| **Interaction of a *Myrothecium verrucaria* Mycelial Formulation and a Glyphosate Product for Control of Redvine (*Brunnichia ovata*) and Trumpet Creeper (*Campsis radicans*).** CD Boyette\*, CT Bryson, RE Hoagland, MA Weaver, KC Stetina; USDA-ARS, Stoneville, MS (22) |

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| **Palmer Amaranth Sphere of Influence Effects on Cotton Growth and Productivity.** N Basinger\*1, D Weisberger1, RG Leon2; 1University of Georgia, Athens, 2NC State University, Raleigh (23) |

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| **Control of Palmer Amaranth (*Amaranthus palmeri*) with Glufosinate and S-metolachlor in Cotton Production Systems.** WJ Rutland\*, DM Dodds, JP McNeal, LX Franca, JJ Williams, BJ Norris, SD Hall; Mississippi State University, Mississippi State (24) |

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| **The Future of the Herbicide Stewardship Program at the University of Tennessee.** N Rhodes\*1, TC Mueller1, LE Steckel2, D McIntosh1; 1University of Tennessee, Knoxville, 2University of Tennessee, Jackson (25) |

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| **Evaluation of Timing and Application Methods for Weed Control and Crop Response in Cotton with Anthem Flex.** SA Nolte\*1, J McGinty2, M Matocha3; 1Texas A&M AgriLife Extension, College Station, 2Texas A&M AgriLife Extension Service, Corpus Christi, 3Texas AgriLife Extension Service, College Station (26) |

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| **A Multi-State Survey to Determine the Prevalence of Herbicide Resistance in Annual Bluegrass (*Poa annua* L.) in Managed Turfgrass Systems.** B Grubbs1, D Hathcoat\*2, S Askew3, LB McCarty4, MT Elmore5, J Brosnan6, JD McCurdy7, P McCullough8, B Unruh9, T Gannon10, A Patton11, J Kaminski12, A Kowalewski13, JS McElroy14, MV Bagavathiannan2; 1Texas A&M AgriLife Ext, College Station, 2Texas A&M Univ, College Station, 3Virginia Tech, Blacksburg, 4Clemson Univ, Clemson, SC, 5Rutgers Univ, New Brunswick, NJ, 6Univ of Tennessee, Knoxville, 7Mississippi State Univ, Mississippi State, 8Univ of Georgia, Griffin, 9Univ of Florida, 10NC State Univ, Raleigh, 11Purdue Uniy, West Lafayette, IN, 12Penn State, Univ Park, 13Oregon State Univ, Corvalis, 14Auburn Univ, Auburn, AL (27) |

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| **A Novel Fluorescent Compound to Measure Herbicide Physical Drift.** V Nandula\*; USDA, Stoneville, MS (28) |

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| **A Survey on Weeds Problem and Management Practices in Row Crop Production at Florida Panhandle.** P Devkota\*1, ET Carter2, RT Broughton3, MJ Mulvaney1; 1University of Florida, Jay, 2University of Florida, Marianna 3University of Florida, Live Oak (29) |

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| **Altered Target Site-Based Resistance to Mesosulfuron, an ALS Inhibitor, in Italian Ryegrass from Mississippi.** V Nandula\*1, D Giacomini2, JA Bond3; 1USDA-ARS, Stoneville, MS, 2University of Illinois, Urbana, 3Delta Research and Extension Center, Stoneville (30) |

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| **Application Timing for Dallisgrass Control in Bermudagrass Forage.** H Quick\*, JD Byrd, Jr.; Mississippi State University, Mississippi State (31) |

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| **Can Recovery from Auxin Injury be Expedited?** J Griffin\*1, G Morgan2; 1Texas A&M University, College Station, 2Cotton Incorporated, Cary, NC (32) |

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| **Cross-tolerance of Fluazifop-resistant Grain Sorghum to ACCase Herbicides.** LB Piveta\*1, JK Norsworthy1, MV Bagavathiannan2, MM Houston1; 1University of Arkansas, Fayetteville, 2Texas A&M University, College Station (33) |

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| **Deciphering Herbicide Resistance Through Epigenetics Lens.** G Sharma\*, S Askew, J Barney, J Westwood; Virginia Tech, Blacksburg (34) |

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| **Determining Duration of Residual Control of Soil-applied Herbicide to Form Total Preemergence Herbicide Programs in Cotton.** JS Calhoun\*, JC Ferguson; Mississippi State University, Mississippi State (35) |

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| **Do Herbicides Applied Before Shoot Emergence Control False Green Kyllinga?** JM Craft\*, S Askew; Virginia Tech, Blacksburg (36) |

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| **Does Weed Seed Shattering Date Influence Germinability?** SC Beam1, ML Flessner\*1, SB Mirsky2; 1Virginia Tech, Blacksburg, 2USDA ARS, Beltsville, MD (37) |

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| **Early Season Soybean Response to Drift Rates of Imazapyr, Metsulfuron, and Sulfometuron.** MW Marshall\*; Clemson University Edisto Research & Education Center, Blackville, SC (38) |
| **Effect of Glyphosate Formulation on pH of Dicamba Spray Mixtures.** LW Shoffner\*, TC Mueller; University of Tennessee, Knoxville (39) |

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| **Effect of Growth Regulators on Sex Ratio in Palmer Amaranth.** N Subramanian\*; Texas A&M University, College Station (40) |

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| **Effect of Herbicide Additions on pH for Approved Dicamba Tank-Mixtures in Cotton.** JC Ferguson\*, JS Calhoun, KL Broster, LH Merritt, MT Wesley Jr., ZR Treadway; Mississippi State Univ, Mississippi State, (41) |

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| **Effect of Herbicide Program, Spray Droplet Size, and Drift Reduction Agent on Glufosinate Efficacy.** BJ Norris\*, DM Dodds, WJ Rutland, JJ Williams, JP McNeal, LX Franca, SD Hall; Mississippi State University, Mississippi State (42) |

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| **Effect of Mowing Timing on Johnsongrass Herbicide Efficacy: Three Years of Trials.** J Omielan\*, M Barrett; University of Kentucky, Lexington (43) |

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| **Effective Dicamba Exposure on Enlist Soybean.** JL Reeves\*, S Steckel, CM Perkins, LE Steckel; University of Tennessee, Jackson (44) |
| **Effects of 2,4-D on Interspecific Chromosome Substitution Lines of Upland Cotton.** LM Perez\*, T Tseng; Mississippi State University, Mississippi State (45) |

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| **Effects of Multiple Dicamba Exposures to Non-Xtend Soybean.** R Peterson\*, TA Baughman; Oklahoma State University, Ardmore (46) |

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| **Effects of *Myrothecium verrucaria* on Two Glyphosate-Resistant *Amaranthus palmeri* Biotypes Differing in Betacyanin Content.** RE Hoagland\*, CD Boyette, KC Stetina, RH Jordan; USDA-ARS, Stoneville, MS (47) |
| **Effects of Nozzle Type and Application Pressure on Weed Management in Mississippi Peanut (*Arachis hypogea*).** KL Broster\*1, JC Ferguson1, TA Baughman2, BJ Zurweller1, B Rushing1; 1Mississippi State Univ, Mississippi State, 2Oklahoma State Univ, Ardmore (48) |
| **Effects of Temperature and Gibberellic Acid on the Germination of *Poa annua* Seeds in Maintained Turfgrass of Mississippi.** EB De Castro\*1, JD McCurdy1, TM Caputo1, J Brosnan2, PE McCullough3, AJ Patton4, DE Carroll2; 1Mississippi State Univ, Miss State, 2Univ of Tennessee, Knoxville, 3Univ of Georgia, Griffin, 4Purdue Univ, West Lafayette, IN (49) |
| **Efficacy of Fluridone (Brake) Herbicide in Mississippi Peanut.** RR Hale\*1, T Bararpour1, K Briscoe2, J Gore1, DR Cook1; 1Delta Research and Extension Center, Stoneville, MS, 2SePRO Corporation, Whitakers, NC (50) |
| **Evaluating the Effect of Rice Growth Stage at Application on Varietal Tolerance to Benzobicyclon.** JA Patterson\*, JK Norsworthy, ZD Lancaster, JW Beesinger, OW France; University of Arkansas, Fayetteville (51) |
| **Evaluation of ACCase-resistant Grain Sorghum to Fluazifop at Different Growth Stages.** LB Piveta\*1, JK Norsworthy1, MV Bagavathiannan2; 1Univ of Arkansas, Fayetteville, 2Texas A&M University, College Station (52) |
| **Evaluation of ALS Resistant Yellow Nutsedge (*Cyperus esculentus*) in GA Peanut.** FM Rigodanzo1, NT Basinger\*1, EP Prostko2; 1University of Georgia, Athens, 2University of Georgia, Tifton (53) |
| **Evaluation of Herbicide Programs for Blackberry Production.** P Carvalho de Lima\*1, M Machado Noguera1, L Benedetti2, NR Burgos1; 1University of Arkansas, Fayetteville, 2Federal University of Pelotas, Pelotas, Brazil (54) |
| **Evaluation of ImpactZ for Weed Control in Corn.** RR Hale\*1, T Bararpour1, S Ludwig2, MW Ebelhar1; 1Delta Res and Ext Center, Stoneville, MS, 2Nichino, Arp, TX (55) |

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| **Evaluation of Peanut Tolerance to Flumioxazin with Various Planting Depths and Seeding Rates Under Excessive Simulated Rainfall.** KJ Price\*, S Li, FB Browne, RD Langemeier; Auburn Univ, Auburn, AL (56) |

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| **Evaluation of Residual Herbicides for Broad Spectrum Weed Control in Mississippi Peanut.** T Bararpour\*, J Gore, RR Hale, DR Cook; Delta Research and Extension Center, Stoneville, MS (57) |
| **Evaluation of Soybean Grain and Seed Quality Following Harvest Aid Application and Delayed Harvest Conditions.** AB Scholtes\*1, RL Adams1, TW Allen2, JT Irby1, JA Bond2; 1Mississippi State University, Miss State, 2Delta Research and Extension Center, Stoneville, MS (58) |

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| **Evaluation of Weed Control with Multiple Cover Crop Termination Timings.** A Ross\*1, T Barber2, TR Butts1, RC Doherty3, ZT Hill3, LM Collie4; 1University of Arkansas System Division of Agriculture, Lonoke, 2University of Arkansas System Division of Agriculture, Monticello, 3University of Arkansas, Beebe, (59) |
| **Fall Versus Spring Applications for Broadleaf Weed Control in Winter Wheat.** KW Bamber\*1, ML Flessner1, M VanGessel2; 1Virginia Tech, Blacksburg, 2University of Delaware, Georgetown (60) |

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| **Fiber Quality and Value as Impacted by Sub-lethal Rates of 2,4-D.** SA Byrd\*1, M Manuchehri1, PA Dotray2, W Keeling3, G Morgan4; 1Oklahoma State University, Stillwater, 2Texas Tech Univ and Texas A&M AgriLife Research and Ext Service, Lubbock, 3Texas A&M AgriLife Research, Lubbock 4Cotton Incorporated, Cary, NC (61) |

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| **Genotyping Arkansas Weedy Rice Accessions for the HIS1 (HPPD Inhibitor Sensitive 1) Gene.** FG Torralva\*, C Brabham, JK Norsworthy; University of Arkansas, Fayetteville (62) |

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| **Glyphosate Preplant Damages Cucurbits and Fruiting Vegetables.** AS Culpepper\*, J Vance; University of Georgia, Tifton (63) |

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| **Horsenettle (*Solanum carolinense*) and Canada Thistle (*Cirsium arvense*) Control with a Novel Herbicide in Pastures and Hayfields.** WC Greene\*; Virginia Tech, Blacksburg (64) |

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| **Impact of Dicamba+Various Postemergence Herbicide Tank-Mixes on Palmer Amaranth (*Amaranthus palmeri*) Control and Cotton Injury.** BJ Norris\*, DM Dodds, JP McNeal, LX Franca, JJ Williams, SD Hall, WJ Rutland; Mississippi State University, Mississippi State (65) |

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| **Impact of Reduced Rates of Mesotrione on Soybean Growth and Yield.** D Miller\*1, DO Stephenson2; 1LSU AgCenter, St Joseph, 2LSU Ag Center, Alexandria (66) |
| **Impact of Reduced Rats of Isoxaflutole on Soybean Growth and Yield.** DO Stephenson1, D Miller\*2; 1LSU Ag Center, Alexandria, 2LSU AgCenter, St Joseph (67) |
| **Inadequate Control of Italian Ryegrass [*Lolium perenne* L. Ssp. *multiflorum* (Lam.) Husnot] with Paraquat in LA Sugarcane.** AJ Orgeron\*; LSU AgCtr, Baton Rouge (68) |

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| **Long-Chain Fatty Acid Inhibiting Herbicides in Louisiana Rice Production.** LC Webster\*, EP Webster, BM McKnight, SY Rustom, DC Walker, WB Greer; LSU AgCenter, Baton Rouge (69) |

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| **Management of Ryegrass in Wheat in NE Texas.** CA Jones\*; Texas A&M University, Commerce (70) |

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| **Managing Palmer Amaranth with Sequential Applications of Glufosinate with 2,4-D or Dicamba.** PA Dotray1, U Torres\*2, J Everitt3; 1Texas Tech University and Texas A&M AgriLife Research and Extension Service, Lubbock, 2Texas Tech University, Lubbock, 3Bayer CropScience, Shallowater, TX (71) |

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| **Mixtures of Elevore and Quelex Plus 2,4-D or Dicamba for Burndown Weed Control.** SA Hoffman\*1, CW Cahoon1, J Hurry1, S Li2, GD Collins1, R Vann1, AC York3, ZR Taylor4, FB Browne2; 1NC State University, Raleigh, 2Auburn University, Auburn, AL, 3NC State University, Liberty, 4NC State University, Sanford (72) |

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| **New Uses for Bicyclopyrone in Southern Crops.** GD Vail\*1, E Rawls2, H McLean3, V Mascarenhas4; 1Syngenta Crop Protection, Greensboro, NC, 2Syngenta Crop Protection, Vero Beach, FL, 3Syngenta Crop Protection, Perry, GA, 4Syngenta Crop Protection, Nashville, NC (73) |

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| **Nozzle Type and Arrangement Effect on Spray Coverage.** LG Smith\*; Univ of Arkansas, Newport (74) |

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| **Nozzle Type Effect on Coverage, Canopy Penetration, and Weed Control Using Enlist One and Liberty in Enlist E3 Soybean.** AN McCormick\*1, TW Dillon2, BM Davis2, TR Butts2, LM Collie3; 1Univ of Arkansas System Div of Agriculture, Newport, 2Univ of Arkansas System Div of Agriculture, Lonoke, 3Univ of Arkansas, Beebe (75) |

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| **Evaluation of Weed Control Programs in Furrow Irrigated Rice.** LM Collie\*1, T Barber2, TR Butts2, A Ross2, RC Doherty3, ZT Hill3, 1University of Arkansas, Beebe 2University of Arkansas System Division of Agriculture, Lonoke, 3University of Arkansas System Division of Agriculture, Monticello (76) |

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| **Peanut Variety Response to Brake® (Fluridone).** EP Prostko\*; University of Georgia, Tifton (77) |

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| **Practical Aspects of Dicamba Extraction from PUF Sampling Media.** J Williams\*, T Mueller; University of Tennessee, Knoxville (78) |

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| **Preplant Control of Kochia in Enlist™ Cotton in the Texas High Plains.** U Torres\*1, PA Dotray2, KR Russell1, M Lovelace3; 1Texas Tech University, Lubbock, 2Texas Tech University and Texas A&M AgriLife Research and Extension Service, Lubbock, 3Corteva Agriscience, Lubbock, TX (79) |

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| **Prickly Sida and Grass Species Control in Xtend and Enlist Soybean Systems.** ZT Hill\*1, T Barber2, RC Doherty1, LM Collie3, A Ross2; 1University of Arkansas System Division of Agriculture, Monticello, 2University of Arkansas System Division of Agriculture, Lonoke, 3University of Arkansas, Beebe, AR (80) |

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| **Resistance to Acetolactate Synthase Inhibitors is Due to a TRP 574 to LEU Amino Acid Substitution in the ALS Gene of Redroot Pigweed and Tall Waterhemp from Mississippi.** V Nandula\*1, D Giacomini2, J Ray1; 1USDA-ARS, Stoneville, MS, 2University of Illinois, Urbana (81) |

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| **Screening of Selected Soybean Germplasm for Tolerance to Dicamba.** V Nandula\*, R Smith, J Ray; USDA-ARS, Stoneville, MS (82) |

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| **Sesame Response to Ethalfluralin Applied Preplant.** WJ Grichar\*1, PA Dotray2; 1Texas A&M AgriLife Research, Yoakum, 2Texas Tech Univ and Texas A&M AgriLife Research and Extension Service, Lubbock, (83) |

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| **Sicklepod Extract Preparation, Analysis, and its Anti-herbivore Applications.** Z Yue\*, T Tseng, D Lang; Mississippi State University, Mississippi State (84) |

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| **Tank Mix Partners with Isoxaflutole Increase Soil Residual Activity Across the Cotton Belt.** DC Foster\*1, PA Dotray2, SA Byrd3, AS Culpepper4, DM Dodds5, SD Hall5, BJ Norris5, RL Noland6, SA Nolte7, M House8, JK Norsworthy9, RB Farr9, LE Steckel10, C Thompson11; 1Texas Tech Univ, Lubbock, 2Texas Tech Univ and Texas A&M AgriLife Res and Ext, Lubbock, 3Texas A&M University AgriLife Ext, Lubbock, 4Univ of Georgia, Tifton, 5Mississippi State Univ, Mississippi State, 6Texas A&M Agrilife Ext, San Angelo, 7Texas A&M AgriLife Ext, College Station, 8Texas A&M Univ, College Station, 9Univ of Arkansas, Fayetteville, 10Univ of Tennessee, Jackson, 11BASF, Abernathy, TX (85) |

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| **The Effect of Environmental Factors on Dicamba Volatility.** CL Wilhite\*, JM Taylor, G Oakley, BJ Varner, SR Reeves, DB Reynolds; Mississippi State University, Mississippi State (86) |

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| **The Effect of Multiple Exposures of Auxin Herbicide on Soybeans.** BJ Varner\*1, KW Bradley2, A Hager3, KL Gage4, DB Reynolds1, JK Norsworthy5, LE Steckel6, BG Young7; 1Mississippi State Univ, Mississippi State, 2Univ of Missouri, Columbia, 3Univ of Illinois, Urbana, 4Southern Illinois Univ Carbondale, Carbondale, 5Univ of Arkansas, Fayetteville, 6Univ of Tennessee, Jackson, 7Purdue Univ, Brookston, IN (87) |

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| **Useful Wild Plants of Texas....A Valuable Weed Science Reference.** JD Byrd\*; Mississippi State University, Mississippi State (88) |

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| **Vaseygrass (*Paspalum urvillei*) Control in Hybrid Bermudagrass with Derigo.** R Strahan\*, D Sexton, EK Twidwell; LSU AgCenter, Baton Rouge (89) |

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| **Weed Control and Crop Tolerance of Postemergence Herbicides in Sunn Hemp.** PJ Dittmar\*, D Davis; University of Florida, Gainesville (90) |

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| **Weed Management Programs in Mississippi Corn.** T Bararpour\*, RR Hale, JA Bond, MW Ebelhar; Delta Research and Extension Center, Stoneville, MS (91) |

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| **Winter Annual Broadleaf Control in Mississippi and Oklahoma Wheat (*Triticum aestivum*).** JC Ferguson1, M Manuchehri2, ZR Treadway\*1, KL Broster1, LH Merritt1, MT Wesley Jr.1, JS Calhoun1, JT Childers3; 1Mississippi State Univ, Mississippi State, 2Oklahoma State University, Stillwater 3Oklahoma State University, Marlow (92) |

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| **Microsatellite Markers Associated with Allelopathy in Weedy Rice (*Oryza sativa*).** BC Schumaker\*, SD Stallworth, T Tseng, S Shrestha; Mississippi State University, Mississippi State, MS (93) |

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| **Effects of Pinoxaden Application Timing on Crabgrass (*Digitaria* Spp.) in Bermudagrass (*Cynodon dactylon*) Turf.** JM Peppers\*1, JS McElroy2; 1Virginia Tech, Blacksburg, VA, 2Auburn University, Auburn, AL (94) |

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| **Evaluation of Chemical Control Options for Smutgrass (*Sporobolus indicus*) in Texas.** ZS Howard\*1, M Matocha2, SA Nolte3; 1Texas A&M University, College Station, 2Texas AgriLife Extension Service, College Station, 3Texas A&M AgriLife Extension, College Station (95) |

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| **Evaluation of *Echinochloa crus-galli* Sensitivity to Florpyrauxifen-benzyl.** GL Priess\*, JK Norsworthy, C Brabham; University of Arkansas, Fayetteville, AR (96) |

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| **From Pest to Pal: Screening Weedy Rice (*Oryza sativa*) for Abiotic Stress Tolerance.** SD Stallworth\*1, T Tseng1, BC Schumaker1, S Shrestha2, AP Tucker1; 1Mississippi State University, Mississippi State, 2Texas A&M University, College Station (97) |

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| **Integration of Isoxaflutole into Cotton Herbicide Programs.** RB Farr\*, JK Norsworthy, MC Castner, GL Priess, MM Houston; University of Arkansas, Fayetteville, AR (98) |

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| **Low Tunnel Evaluation of Dicamba Premixes.** G Oakley\*1, AS Culpepper2, DB Reynolds1, R Smeda3, C Sprague4, R Werle5; 1Mississippi State Univ, Mississippi State, 2University of Georgia, Tifton, 3Univ of Missouri, Columbia, 4Michigan State Univ, East Lansing, 5Univ of Wisconsin-Madison (99) |

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| **Molecular Markers Associated with Weed-Suppressing Abilities in Chromosome Substitution (CS) Cotton Lines.** SD Stallworth\*, BC Schumaker; Mississippi State University, Mississippi State, MS (100) |

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| **Multiple Dicamba Drift Events at Various Time Intervals on Louisiana Soybeans.** G LaBiche\*1, LM Lazaro1, DO Stephenson2, JT Copes3; 1LSU AgCenter, Baton Rouge, 2LSU AgCenter, Alexandria, 3LSU AgCenter, St. Joseph (101) |

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| **Palmer Amaranth Control and Associated Physiological Response to Synthetic Auxins and Glufosinate Applied Sequentially.** FB Browne\*, S Li, KJ Price, RD Langemeier, A Sanz-Saez; Auburn Uni, Auburn, AL (102) |

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| **The Dilemma of Palmer Amaranth Control with PPO Herbicides While Mitigating PPO-resistance.** EB Scruggs\*, ML Flessner; Virginia Tech, Blacksburg (103) |

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| **Does Planting Date Affect Sensitivity of Rice Loyant?** TH Avent\*, JK Norsworthy, JW Beesinger, LB Piveta, ZD Lancaster; University of Arkansas, Fayetteville, AR (104) |
| **The Importance of Timely Applications and Zero-tolerance When Considering Palmer Amaranth.** DJ Mahoney\*; NC State University, Clayton, NC (105) |

**Does Nitrogen Fertilizer Aid Rice Recovery Following Exposure to a Sub-lethal Concentration of Paraquat.** JD Peeples\*, B Lawrence, TL Sanders, HM Edwards, BR Golden, JA Bond; Delta Research and Extension Center, Stoneville, MS (106)

**Dissipation Rate of S-metholachlor in Soil Sprayed with the Same Herbicide PRE to Soybean.** J Kouame\*, R Grewe, E Grantz, C Willett, MC Savin, N Burgos; University of Arkansas, Fayetteville (107)

**Understanding the Mechanism of Resistance to S-metolachlor in Palmer Amaranth.** G Rangani\*1, L Benedetti2, M Machado Noguera1, N Roma-Burgos1; 1University of Arkansas, Fayatteville, 2Federal University of Pelotas, Pelotas, Rio Grande Do Sol, Brazil (108)

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| ***TUESDAY MORNING, JANUARY 28*****POSTER - Graduate Student Posters (MS)**

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| LOCATION: |   | Camellia Ballroom |
| TIME: |   | 07:00 AM - 12:00 PM |
| CHAIR: |   | KA Backscheider, Corteva  |

**\*Presenter/Speaker/†Contestant**

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| **†Can Florpyrauxifen-Benzyl Followed by Benzobicyclon Safely be Used on Hybrid and Medium-Grain Rice?** JW Beesinger\*1, JK Norsworthy1, C Sandoski2, JA Patterson1, OW France1; 1University of Arkansas, Fayetteville, 2Gowan USA, Collierville, TN (109) |

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| **†Impact of Weedy Rice Growth Stage on the Efficacy of Benzobicyclon.** MC Castner\*1, JK Norsworthy1, C Brabham1, C Sandoski2; 1University of Arkansas, Fayetteville, 2Gowen USA, Collierville, TN (110) |

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| **†Evaluation of Saflufenacil Plantback Intervals in Cotton.** RD Langemeier\*, S Li, KJ Price, FB Browne; Auburn University, Auburn, AL (111) |

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| **†Impact of Preemergence Herbicides on Palmer Amaranth (*Amaranthus palmeri*) Emergence and Cotton Injury.** SD Hall\*, DM Dodds, JP McNeal, LX Franca, JJ Williams, BJ Norris, WJ Rutland; Miss State University, Miss State (112) |

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| **†Influence of Cultivar on Injury to Soybean by a Low-dose of Dicamba.** OW France\*, JK Norsworthy, MC Castner, MM Zaccaro; Univ of Arkansas, Fayetteville (113) |

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| **†Effect of Sub-lethal Dicamba Rates on Soybean as Affected by Variety and Maturity Group.** MA Fajardo Menjivar\*; NC State University, Raleigh (114) |

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| **†Evaluating Peanut Planting Date and Twin-Row Spacing for Sicklepod Growth Suppression.** P Kharel\*1, P Devkota1, B Tillman2, G MacDonald3, MJ Mulvaney1, R Tiwari1; 1University of Florida, Jay, FL, 2University of Florida, Marianna, 3University of Florida, Gainesville (115) |

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| **†Critical Period of Italian Ryegrass *(Lolium multiflorum)* Control in No-Till Winter Wheat in North Carolina.** DJ Contreras\*, W Everman; NC State University, Raleigh (116) |

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| **†Forage Radish (*Raphanus sativus) C*Ontrol with Herbicides in Winter Wheat.** SJ Michael\*, ML Flessner, KB Pittman, KW Bamber, MS Reiter; Virginia Tech, Blacksburg (117) |

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| **†Exploring Putative Herbicide Resistance in a Goosegrass Biotype from Hawaii.** BD Pritchard\*1, JJ Vargas1, J Brosnan2, J DeFrank3; 1University of Tennessee, Knoxville, 2Univeristy of Tennessee, Knoxville, 3University of Hawaii, Honolulu (118) |

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| **†Biology and Phenology Comparisons of Four *Setaria* Species.** LM Dyer\*1, NT Basinger1, GM Henry1, P McCullough2, D Hancock1; 1University of Georgia, Athens, 2University of Georgia, Griffin (119) |

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| **†Movement of Trifloxysulfuron Within the Soil Profile in Response to Changes in Carrier Volume.** AJ Brown\*1, GM Henry1, NT Basinger1, J Brosnan2; 1University of Georgia, Athens, 2Univeristy of Tennessee, Knoxville (120) |

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| **†Comparison of Ground and Unmanned Aerial Sprayer Individual Plant Treatment Methods for Control of Smutgrass (*Sporobolus indicus)*.** MT House\*1, DE Martin2, SA Nolte3; 1Texas A&M University, College Station, 2USDA-ARS, College Station, TX, 3Texas A&M AgriLife Extension, College Station (121) |

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| **†Direct Determination of Glyphosate and AMPA in Soil by Liquid Chromatography/Tandem Mass Spectrometry.** B Gairhe\*, R Kanissery; University of Florida, Immokalee (122) |

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| **†Growth Responses of *Amaranthus palmeri* to Crop Planting Arrangements.** SA Ramsey\*1, AM Locke2, W Everman1, DL Jordan1, RG Leon1; 1NC State University, Raleigh, 2USDA ARS, Raleigh, NC (123) |

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| **†Influence of Winter Brassica Carinata Production on Summer Annual Weeds Emergence.** R Tiwari\*1, P Devkota1, RG Leon2, MJ Mulvaney1, T Reinhardt2, P Kharel1; 1University of Florida, Jay, 2NC State University, Raleigh (124) |
| **†Interspecific Hybridization Between *Sorghum bicolor* and *S. halepense* with and without Self-pollen Competition.** D Hathcoat\*1, G Hodnett1, W Rooney1, C Sias1, BL Young2, MV Bagavathiannan1; 1Texas A&M University, College Station, 2Texas A&M University, La Vernia (125) |

***TUESDAY MORNING, JANUARY 28*****POSTER - Graduate Student Posters (PhD)**

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| LOCATION: |   | Camellia Ballroom |
| TIME: |   | 07:00 AM - 12:55 PM |
| CHAIR: |   | KA Backscheider, Corteva  |

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| **†New Technologies for Weedy Rice Control in Louisiana.** WB Greer\*, EP Webster, BM McKnight, SY Rustom, LC Webster, DC Walker; LSU AgCenter, Baton Rouge (126) |

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| **†Cotton (*Gossypium hirsutum*) Defoliation as Affected by Droplet Size and Carrier Volume.** JP McNeal\*1, DM Dodds1, G Kruger2, LX Franca1, JJ Williams1, BJ Norris1, SD Hall1, WJ Rutland1; 1Mississippi State University, Miss State, 2University of Nebraska - Lincoln, North Platte (127) |

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| **†Unnamed Aerial Vehicle-Based Characterization of Herbicide Drift Injury in Cotton.** BB Sapkota\*, MV Bagavathiannan; Texas A&M Univ, College Station (128) |

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| **†Postemergence Applications of Liberty and Engenia in Bollgard II XtendFlex Cotton.** CR White\*, J Spradley, BM DeLong, W Keeling; Texas A&M AgriLife Research, Lubbock (129) |

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| **†Quantification of Dicamba Translocation and Accumulation in Soybean Seed.** MM Zaccaro\*1, JK Norsworthy1, C Brabham1, T Barber2; 1University of Arkansas, Fayetteville, 2University of Arkansas System Division of Agriculture, Lonoke (130) |

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| **†Evaluating Efficacy of Dicamba and Glufosinate Applied Alone or in Combination.** EA Jones\*, W Everman, RG Leon, JT Sanders, DJ Contreras, MA Granadino, MA Fajardo; NC State Univ, Raleigh (131) |

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| **†Formulation, Dose, and Adjuvant Effect on Glufosinate Efficacy.** M Machado Noguera\*1, P Carvalho de Lima1, L Earnest2, N Roma-Burgos1; 1University of Arkansas, Fayetteville, 2University of Arkansas, Rohwer (132) |

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| **†Integrated Management with Mechanical Tuber Removal, Cover Crop and Glyphosate During the Summer Fallow for Nutsedge Control.** RS Randhawa\*, PJ Dittmar; University of Florida, Gainesville (133) |

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| **†Effects of Micronutrients on the Reduction of Bermudagrass Bleaching Injury Associated with Topramezone Application.** AP Boyd\*, D Han, E Guertal; Auburn University, Auburn, AL (134) |

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| **†Fecundity Estimation of Late-season Common Waterhemp (*Amaranthus rudis*) Escapes in Soybean Using Drone Imagery.** C Hu\*, BB Sapkota, MV Bagavathiannan; Texas A&M University, College Station (135) |

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| **†Effects of Sugarcane Straw on Soil Temperature and Weed Emergence.** D Belapart\*1, II Brito2, EB Castro3, GD Macedo4, CA Carbonari2, ED Velini2, NR Burgos1; 1Univ of Arkansas, Fayetteville, 2Universidade Estadual Julio de Mesquita Silva, Botucatu, 3Mississippi State University, Miss State, 4Univ of Nebraska, Lincoln (136) |

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| **†Quantifying the Dissipation of Contact Herbicides from Plastic Mulches Using a Novel Anionic Polar Pesticide Column.** KM Eason\*, TL Grey, AS Culpepper; University of Georgia, Tifton (137) |

***TUESDAY MORNING, JANUARY 28*****MS Graduate Student Oral Papers – Section 1**

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| LOCATION: |   | Magnolia E |
| TIME: |   | 08:00 AM - 12:00 PM |
| CHAIR: |   | TR Butts, Univ of Arkansas System Division of Ag |

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| **8:00 AM** |   | **†Blueberry Response to Spring and Autumn Indaziflam Applications Over Time.** NL Hurdle\*1, TL Grey2, KS Rucker3; 1University of Georgia, Collierville, TN, 2University of Georgia, Tifton, 3Bayer CropScience, Tifton (138) |

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| **8:15 AM** |   | **†Evaluating the Utility of Benzobicyclon for Weedy Rice Control in Provisia Rice.** JA Patterson\*, JK Norsworthy, JW Beesinger, OW France, LB Piveta; University of Arkansas, Fayetteville, AR (139) |

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| **8:30 AM** |   | **†Melatonin Safens Bentazon to Sweetpotato in vitro.** GA Caputo\*1, MA Cutulle2, PA Wadl3; 1Clemson Univ, Clemson, 2Clemson University, Charleston, SC, 3USDA ARS, Charleston, SC (140) |
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| **8:45 AM** |   | **†Accessing Root System Architectural Traits Associated with Allelopathy in Weedy Rice (*Oryza sativa*).** BC Schumaker\*, SD Stallworth, T Tseng, AP Tucker; Mississippi State University, Mississippi State, MS (141) |

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| **9:00 AM** |   | **†A Comparison of Season Long Weed Control Programs in Peanut (*Arachis hypogea*).** KL Broster\*1, JC Ferguson1, BJ Zurweller1, TA Baughman2, B Rushing1, P Devkota3, S Li4; 1Mississippi State University, Mississippi State, 2Oklahoma State University, Ardmore, OK, 3University of Florida, Jay, FL, 4Auburn University, Auburn, AL (142) |

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| **9:15 AM** |   | **†Seasonal Herbicide Efficacy on Smutgrass (*Sporobolus indicus*) in Perennial Grass Pasture in Texas.** Z Howard\*1, M Matocha2, SA Nolte2; 1Texas A&M Univ, College Station, 2Texas AgriLife Ext, College Station (143) |

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| **9:30 AM** |  | **†Effect of Integrating Soil Solarization and Plastic Mulching on Weed Management in Tomato (*Solanum lyconpersicon* L.).** IS Werle\*1, CP De Moraes1, X Ye1, B Breland1, SR Broderick1, T Tseng1, NR Burgos3; 1Mississippi State Univ, Mississippi State, 3University of Arkansas, Fayetteville (144) |

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| **9:45 AM** |   | **†Cloning and Characterization of PPO*2* (?G210) Mutation in Rice.** P Carvalho de Lima\*1, G Rangani1, S Zhao1, AC Langaro3, V Srivastava1, NR Burgos1; 1University of Arkansas, Fayetteville, AR, 2Federal Rural Univ of Rio de Janeiro, Seropedica, Brazil (145) |

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| **10:00 AM** |   | **BREAK** |

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| **10:15 AM** |   | **†Evaluating St. Augustinegrass (*Stenotaphrum secundatum*) Sod Grow-In Following Preemergence Herbicide Application Using Multispectral Imaging.** AL Wilber\*1, JD McCurdy1, M Richard1, JM Czarnecki1, DG Sullivan2; 1Mississippi State University, Mississippi State, 2TurfScout, LLC, Greensboro, NC (146) |

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| **10:30 AM** |   | **†Best Management Practice for Cleaning Dicamba from Contaminated Sprayers.** SR Reeves\*, ZA Carpenter, BJ Varner, G Oakley, DB Reynolds; Mississippi State Univ, Miss State, MS (147) |

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| **10:45 AM** |   | **†Modeling Emergence of Annual Bluegrass (*Poa annua*) in Hybrid Bermudagrass (*C. dactylon* x *C. transvaalensis)*.** DR Taylor\*1, J Brosnan1, M Prorock1, TC Mueller1, LE Steckel2, B Horvath1; 1University of Tennessee, Knoxville, 2University of Tennessee, Jackson (148) |

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| **11:00 AM** |   | **†Italian Ryegrass (*Lolium perenne ssp. multiflorum*) Timing of Removal Effects on Corn in Mississippi.** MT Wesley Jr.1, ZR Treadway\*1, JC Ferguson1, DB Reynolds1, JA Bond2, EJ Larson1; 1Mississippi State University, Miss State, 2Delta Research and Ext Center, Stoneville, MS (149) |

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| **11:15 AM** |   | **†Growth Response of Southern Landscape Ornamentals to Low Rates of 2,4-D, Dicamba, and Glyphosate Particle Drift.** RD Langemeier\*, S Li, KJ Price, FB Browne; Auburn University, Auburn, AL (150) |

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| **11:30 AM** |   | **†Row Spacing and Planting Date Effect on the Critical Period of Grass Weed Control in Grain Sorghum (Sorghum Bicolor) in North Carolina.** DJ Contreras\*, W Everman; NC State University, Raleigh (151) |

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| **11:45 AM** |   | **Does a Rice Seed Treatment Safen Against Differing Rates and Formulations of Acetochlor?** TH Avent\*, JK Norsworthy, C Brabham, LB Piveta, MC Castner; Univ of Arkansas, Fayetteville (152) |

**Noon** ***TUESDAY MORNING, JANUARY 28*****MS Graduate Student Oral Papers – Section 2**

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| LOCATION: |   | Magnolia F |
| TIME: |   | 08:00 AM - 12:00 PM |
| CHAIR: |   | TR Butts, Univ of Arkansas System, Division of Ag |

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| **8:00 AM** |   | **†Effect of Herbicides at Various Growth Stages and First Female Inflorescence on Palmer Amaranth Fecundity and Seed Viability.** EB Scruggs\*, ML Flessner; VA Tech, Blacksburg (153) |

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| **8:15 AM** |   | **†Efficacy and Economics of Palmer Amaranth Management in Cotton.** BM DeLong\*1, JD Everitt2, W Keeling1, PA Dotray3; 1Texas A&M AgriLife Research, Lubbock, 2Bayer CropScience, Shallowater, TX, 3Texas Tech University and Texas A&M AgriLife Research and Ext, Lubbock (154) |

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| **8:30 AM** |   | **†Evidence of Antagonism: Cutleaf Groundcherry (*Physalis angulata* L.) Control by Glyphosate + 2,4-D.** SA Hoffman\*1, GD Collins1, JD Joyner2, CW Cahoon1, ZR Taylor3, AC Blythe1, W Everman1; 1NC State Univ, Raleigh, 2NC State Univ, Mount Olive, 3NC State Univ, Sanford (155) |

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| **8:45 AM** |   | **†Cotton Fiber Quality Response Following Exposure to Low Rates of Dicamba.** KR Russell\*1, PA Dotray2, IL Pabuayon1, GL Ritchie1; 1Texas Tech Univ, Lubbock, 2Texas Tech Univ and Texas A&M AgriLife Research and Extension Service, Lubbock (156) |

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| **9:00 AM** |   | **†Optimization of Carbon Sources for Weed Control in an ASD (Anaerobic Soil Disinfestation) Environment.** WP Wechter1, M Katawczi1, G Singh\*2, MA Cutulle2; 1USDA ARS, Charleston, SC, 2Clemson University, Charleston, SC (157) |

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| **9:15 AM** | **†Cotton Tolerance to Multiple Exposures of 2,4-D.** AC Blythe\*1, CW Cahoon1, LE Steckel2, W Everman1, GD Collins1, ZR Taylor3, JD Joyner4; 1NC State University, Raleigh, 2University of Tennessee, Jackson, 3NC State University, Sanford, 4NC State University, Mount Olive (158) |

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| **9:30 AM** |   | **†Palmer Amaranth Chlorophyll Fluorescence Response to Diurnal Auxinic Herbicide Applications.** JR Kalina\*1, CB Corkern2, TL Grey1, DG Shilling3, NT Basinger3; 1University of Georgia, Tifton, 2Bayer CropSciences, Tifton, 3University of Georgia, Athens (159) |

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| **9:45 AM** |   | **†Crop Tolerance and Weed Management in Herbicide Systems Utilizing Isoxaflutole in HPPD Tolerant Cotton.** DC Foster\*1, PA Dotray2, C Thompson3, G Baldwin4, F Moore5; 1Texas Tech University, Lubbock, 2Texas Tech University and Texas A&M AgriLife Research and Extension Serv, Lubbock, 3BASF, Abernathy, TX, 4BASF, Research Triangle Park, NC, 5BASF, Lubbock, TX (160) |

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| **10:00 AM** |  | **BREAK** |

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| **10:15 AM** |  | **†Efficacy and Crop Response of Herbicide Programs in Isoxaflutole Tolerant Soybeans (*Glycine max*).** DJ Black\*; NC State University, Franklinville (161) |

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| **10:30 AM** |   | **†Determining Best Management Practices for Weed Seed Reduction in Cotton.** RB Farr\*, JK Norsworthy, GL Priess, MC Castner, JA Patterson; University of Arkansas, Fayetteville (162) |

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| **10:45 AM** |   | **†Relative Soybean Response to Aminocyclopyrachlor, 2,4-D, Dicamba, and Aminopyralid.** TC Mueller, TI Clark\*; University of Tennessee, Knoxville (163) |

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| **11:00 AM** |   | **†Palmer Amaranth Hosts Tarnished Plant Bugs Which Impact Cotton Growth and Yield.** TM Randell\*, LC Hand, AS Culpepper, PM Roberts; Univ of Georgia, Tifton (164) |

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| **11:15 AM** |   | **†Soybean Response to Sub-lethal Dicamba Rates at Various Planting Dates.** MA Fajardo Menjivar\*; NC State University, Raleigh (165) |

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| **11:30 AM** |   | **†Screening of Chromosome Substitution (CS) Cotton Lines for Weed-Suppressing Potential.** GA Fuller\*, T Tseng, BC Schumaker; Mississippi State University, Mississippi State (166) |

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| **11:45 AM** |  | **†Preliminary Effect of Chloroacetamide Herbicides and Glyphosate on Dicamba Volatility.** JM Taylor\*, G Oakley, BJ Varner, SM Reeves, DB Reynolds; Mississippi State University, Mississippi State (167) |

***TUESDAY MORNING, JANUARY 28*****PhD Graduate Student Oral Papers – Section 1**

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| LOCATION: |   | Magnolia G |
| TIME: |   | 08:00 AM - 12:00 PM |
| CHAIR: |   | P Eure, Syngenta Crop Protection |

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| **8:00 AM** |   | **†2,4-D And Dicamba Applied Preplant in Plasticulture: Herbicide Dissipation and Cucurbit Crop Response.** LC Hand\*, KM Eason, TM Randell, TL Grey, AS Culpepper; University of Georgia, Tifton (168) |

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| **8:15 AM** |   | **†Evaluation of Herbicide Programs for Barnyardgrass and Palmer Amaranth Control in Furrow-Irrigated Rice.** JW Seale\*, JA Bond, BR Golden; Delta Research and Extension Center, Stoneville, MS (169) |

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| **8:30 AM** |   | **†Tolerance of Blueberry, Strawberry and Muscadine Grape to 2,4-D Choline.** KC Sims\*1, K Jennings2, D Monks2; 1NC State University, Goldsboro, 2NC State University, Raleigh (170) |

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| **8:45 AM** |   | **†Genome-wide Association Study of Abiotic Traits in Weedy Rice (*Oryza sativa*).** SD Stallworth\*1, BC Schumaker1, S Shrestha2, AP Tucker1, T Tseng1; 1Mississippi State University, Mississippi State, 2Texas A&M University, College Station (171) |

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| **9:00 AM** |   | **†Patterns of PPO Resistance Evolution in Palmer Amaranth from Mid-southern US.** M Machado Noguera\*1, G Rangani1, T Bararpour2, LE Steckel3, JW Heiser4, RL Nichols5, N Roma-Burgos1; 1Univ of Arkansas, Fayetteville, 2Delta Research and Ext Center, Stoneville, MS, 3Univ of Tennessee, Jackson, 4Univ of Missouri, Portageville, 5Cotton Inc, Cary, NC (172) |

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| **9:15 AM** |   | **†Early Season Residual Herbicide Strategies in Upland Rice Production.** LC Webster\*, EP Webster, BM McKnight, WB Greer, DC Walker, SY Rustom; LSU AgCenter, Baton Rouge (173) |

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| **9:30 AM** |   | **†Role of DNA Methylation in the Development of Herbicide Resistance.** G Sharma\*, S Askew, J Barney, D Haak, J Westwood, S Laliberte, L Zhang; Virginia Tech, Blacksburg (174) |

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| **9:45 AM** |   | **†Effects of Postemergence Herbicides on Rice Growth Following Paraquat Exposure.** TL Sanders\*, B Lawrence, HM Edwards, JA Bond; Delta Research and Ext Center, Stoneville, MS (175) |

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| **10:00 AM** |   | **BREAK** |

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| **10:15 AM** |   | **†Use of Gibberellin Inhibitors to Reduce Weed Germination.** FG Machado\*1, RF Santos1, WD Matte11, J Constantin1, RS Oliveira Jr.1, NR Burgos2; 1Universidade Estadual de Maringa, Maringa, 2University of Arkansas, Fayetteville (176) |

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| **10:30 AM** |   | **†Evaluation of Thiobencarb and Clomazone in Mississippi Rice Herbicide Programs.** HD Bowman\*1, JA Bond2, JW Seale2, JD Peeples2; 1Mississippi State University, Mississippi State, 2Delta Research and Extension Center, Stoneville, MS (177) |

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| **10:45 AM** |   | **†Commercial Sprayer Retention of Dicamba Residue Following Triple Rinse with Water: Alabama Statewide Survey.** FB Browne\*, S Li, KJ Price; Auburn University, Auburn, AL (178) |

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| **11:00 AM** |   | **†Evaluation of Florpyrauxifen-benzyl Activity on Aquatic Weeds in Louisiana Rice and Crawfish Production.** SY Rustom\*, EP Webster, BM McKnight, LC Webster, WB Greer, DC Walker; LSU AgCenter, Baton Rouge (179) |

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| **11:15 AM** |   | **†Dicamba Antagonism Effect on Control of Echinochloa.** CM Perkins\*1, LE Steckel1, TC Mueller2, M Hay3, ET Parker4; 1University of Tennessee, Jackson, 2University of Tennessee, Knoxville, 3Kansas State University, Manhattan, 4Syngenta Crop Protection, Vero Beach, FL (180) |

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| **11:30 AM** |   | **†Weed Control with Halosulfuron Plus Prosulfuron Applied PRE.** FR Kelly\*, JA Bond, B Lawrence, HM Edwards, JD Peeples; Delta Research and Extension Center, Stoneville, MS (181) |

***TUESDAY MORNING, JANUARY 28*****PhD Graduate Student Oral Papers – Section 2**

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| LOCATION: |   | Magnolia H |
| TIME: |   | 08:00 AM - 12:00 PM |
| CHAIR: |   | P Eure, Syngenta Crop Protection |

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| **8:00 AM** | **†Effect of Nozzle Selection on Weed Control and Yield in Mississippi Cotton.** JS Calhoun\*, JC Ferguson, KL Broster, LH Merritt, MT Wesley Jr.; Mississippi State Univ, Mississippi State (182) |

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| **8:15 AM** |   | **†Comparison of Fall vs Spring Herbicide Applications for Winter Weed Control in Pastures.** WC Greene\*; Virginia Tech, Blacksburg (183) |

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| **8:30 AM** |   | **†Stewardship Practices in XtendFlex Cotton and Economic Analysis.** R Vulchi\*1, J McGinty2, SA Nolte3; 1Texas A&M University, College Station, 2Texas A&M AgriLife Ext Service, Corpus Christi, 3Texas A&M AgriLife Ext, College Station (184) |

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| **8:45 AM** |   | **†Managing Bermudagrass Sensitivity to Herbicides While Controlling Goosegrass in the Transition Zone.** J Brewer\*, JM Craft, S Askew; Virginia Tech, Blacksburg (185) |

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| **9:00 AM** |   | **†Palmer Amaranth (*Amaranthus palmeri*) and Thrips (*Thrips sp*.) Control with Various Dicamba + Insecticide Tank-Mixes in Cotton.** JP McNeal\*1, DM Dodds1, AL Catchot1, J Gore2, G Kruger3, LX Franca1, JJ Williams1, BJ Norris1, SD Hall1, WJ Rutland1; 1Mississippi State Univ, Miss State, 2Delta Research and Ext Center, Stoneville, 3Univ of Nebraska - Lincoln, North Platte (186) |

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| **9:15 AM** |   | **†Tolerance of Hybrid Bermudagrasses to Applications of Topramezone and SpeedZone® for Postemergence Goosegrass (*Eleusine indica*) Control.** DE Carroll\*, J Brosnan, G Breeden, E Reasor; University of Tennessee, Knoxville (187) |

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| **9:30 AM** |   | **†Unravelling 2,4-D Resistance in Interspecific Chromosome Substitution Lines of Cotton (*Gossypium hirsutum* L.).** LM Perez\*, T Tseng; Mississippi State University, Mississippi State (188) |

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| **9:45 AM** |   | **†Current Leachate Competition Study in *Poa annua* at Clemson University.** JW Taylor\*; Clemson Univ, Clemson, SC (189) |

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| **10:00 AM** |   | **BREAK** |

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| **10:15 AM** |   | **†Does High Use of S-metolachlor Accelerate Degradation of S-metolachlor Applied Thereafter?** J Kouame\*, R Grewe, E Grantz, MC Savin, C Willett, N Burgos; University of Arkansas, Fayetteville, (190) |

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| **10:30 AM** |   | **†Early Prediction of Competitive Interactions Between Italian Ryegrass and Wheat Using Unmanned Aerial Systems.** BB Sapkota\*, V Singh, MV Bagavathiannan; Texas A&M University, College Station (191) |

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| **10:45 AM** |   | **†How Do Reduced Rates of Florpyrauxifen Applied to Soybean Affect Soybean Yield Components?** DC Walker\*, EP Webster, DO Stephenson, BM McKnight, SY Rustom, LC Webster, WB Greer; LSU AgCenter, Baton Rouge (192) |

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| **11:00 AM** |   | **†Effect of Four Winter Cover Crop Species and Termination Timing on Weed Suppression, Soil Moisture, and Yield in Cotton.** SL Samuelson\*, MV Bagavathiannan; Texas A&M University, College Station (193) |

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| **11:15 AM** |   | **†Making a Better Glufosinate: Improving Efficacy and Alleviating Environmental Variability.** JK Norsworthy, GL Priess\*; University of Arkansas, Fayetteville (194) |

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| **11:30 AM** |   | **†Crop Injury Evaluation of Mid-Season Applications of PPO Inhibitor Herbicides with Different Surfactants on Peanut.** KJ Price\*, S Li, FB Browne, RD Langemeier; Auburn Univ, Auburn, AL (195) |

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| **11:45 AM** |   | **Surveying the Use and Efficacy of Glufosinate in North Carolina Row Crops.** EA Jones\*1, W Everman1, RG Leon1, CW Cahoon2; 1NC State University, Raleigh, 2Virginia Tech, Painter (196) |

***TUESDAY FTERNOON, JANUARY 28*****Graduate Student Luncheon**

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| LOCATION: |   | Azalea A, B, C |
| TIME: |   | 12:00 PM - 02:00 AM |
| CHAIR: |   | JM Craft, Virginia Tech |

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| **12:00 PM** |   | **Leadership Styles and Being an Authentic Leader.** D Ashford\*; USDA, Wash DC (197) |

**Oral Presentations****\*Speaker** ***TUESDAY AFTERNOON, JANUARY 28*****New Technologies**

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| LOCATION: |   | Magnolia E, F |
| TIME: |   | 02:00 PM - 03:30 PM |
| CHAIR: |   | SM Carver, Agricenter International |

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| **2:00 PM** |   | **Assessment of Commercial Scale Dicamba and 2,4-D Drift Using Drift Reducing Adjuvants.** RJ Edwards\*1, SA Fredericks1, LC Magidow1, JV Gednalske1, GK Dahl2; 1WinField United, River Falls, WV, 2Winfield United, Eagan, MN (198) |

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| **2:15 PM** |   | **Importance of Nozzle Selection for Ground and Aerial Herbicide Applications.** TR Butts\*; University of Arkansas System Division of Agriculture, Lonoke (199) |

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| **2:30 PM** |   | **Quantification of Soybean Response to Dicamba Particle Drift and Vapor.** FB Browne\*, S Li, KJ Price, RD Langemeier; Auburn University, Auburn, AL (200) |

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| **2:45 PM** |   | **Two Year Assessment of the Integrated Harrington Seed Destructor in Arkansas.** T Barber\*1, JK Norsworthy2, TR Butts1, N Pearrow3; 1Univ of Arkansas System Division of Agriculture, Lonoke, 2Univ of Arkansas, Fayetteville, 3Univ of Arkansas System Division of Agriculture, Newport (201) |

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| **3:00 PM** |   | **New CnF(R) Activator Adjuvant.** NA Forbes\*; Flotek, Houston, TX (202) |

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| **3:15 PM** |   | **What's New from Syngenta.** BD Black\*1, D Bowers2; 1Syngenta Crop Protect, Searcy, AR, 2Syngenta Crop Protect, Greensboro, NC (203) |

***TUESDAY AFTERNOON, JANUARY 28*****Physiological and Biological Aspects of Weed Control**

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| LOCATION: |   | Magnolia E, F |
| TIME: |   | 03:30 PM - 04:45 PM |
| CHAIR: |   | SY Rustom, LSU AgCenter |

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| **3:30 PM** |   | **Evaluation of Rate and Timing of Herbicide Application During the Establishment of a Living White Clover (*Trifolium repens*) Mulch for Field Corn Production.** NT Basinger\*, NS Hill; University of Georgia, Athens (204) |

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| **3:45 PM** |   | **Glyphosate-Resistant Junglerice (*Echinochloa colona*) from Mississippi and Tennessee: Magnitude and Resistance Mechanisms.** V Nandula\*1, GB Montgomery2, A Vennapusa3, M Jugulam3, D Giacomini4, J Ray1, JA Bond5, LE Steckel6, P Tranel4; 1USDA-ARS, Stoneville, MS, 2Bayer CropScience, Rives, TN, 3Kansas State Univ, Manhattan, 4Univ of Illinois, Urbana, 5Delta Research and Ext Center, Stoneville, MS, 6Univ of Tennessee, Jackson (205) |

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| **4:00 PM** |   | **Resistance to Clethodim in Italian Ryegrass (*Lolium perenne* Ssp. *multiflorum*) from Mississippi and North Carolina.** V Nandula\*1, D Giacomini2, B Lawrence3, W Molin1, JA Bond3; 1USDA-ARS, Stoneville, MS, 2Univ of Illinois, Urbana, 3Delta Research and Extension Center, Stoneville, MS (206) |

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| **4:15 PM** |   | **Target Site-Based Resistance to ALS Inhibitors, Glyphosate, and PPO Inhibitors in a Palmer Amaranth Accession from Mississippi.** V Nandula\*1, D Giacomini2, W Molin1; 1USDA-ARS, Stoneville, MS, 2University of Illinois, Urbana (207) |

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| **4:30 PM** |   | **No Seed Means No Weeds or No Herbicide-Resistant Weeds.** T Bararpour\*, RR Hale, JA Bond, HM Edwards, JD Peeples; Delta Research and Extension Center, Stoneville, MS (208) |

***TUESDAY AFTERNOON, JANUARY 28*****Weed Management in Pastures and Rangeland**

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| LOCATION: |   | Magnolia G, H |
| TIME: |   | 02:00 PM - 03:00 PM |
| CHAIR: |   | D Russell, Auburn University |

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| **2:00 PM** |   | **Control of Trashy Grass Species in Bermudagrass (*Cynodon dactylon*) Pastures.** H Quick\*1, JD Byrd, Jr.1, DP Russell1, J Belcher2; 1Mississippi State University, Mississippi State, 2Bayer CropScience, Auburn, AL (209) |

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| **2:15 PM** |   | **Evaluation of ALS-inhibiting Herbicides for Control of Johnsongrass in Pastures.** MB Bertucci\*; Uni of Arkansas, Fayetteville (210) |

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| **2:30 PM** |   | **Evaluating the Effect of Hexazinone on Brunswickgrass in Bahiagrass Pastures.** C Cooper\*; University of Florida, Lecanto (211) |

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| **2:45 PM** |   | **Use of Nitrogen Fertilizer as a Carrier for Smutgrass Control with Hexazinone.** BA Sellers\*, J Noel; Univ of Florida, Ona (212) |

***TUESDAY AFTERNOON, JANUARY 28*****Soil & Environmental Aspects of Weed Science**

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| LOCATION: |   | Magnolia G, H |
| TIME: |   | 03:00 PM - 03:30 PM |
| CHAIR: |   | D Russell, Auburn University |

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| **03:00 PM** |   | **Evaluating Herbicide Soil Dissipation in Georgia Pecan.** SJ Bowen\*, KM Eason, TL Grey, L Wells; Univ of Georgia, Tifton (213) |

***TUESDAY AFTERNOON, JANUARY 28*****Weed Biology and Ecology**

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| LOCATION: |   | Magnolia G, H |
| TIME: |   | 03:15 PM - 04:45 PM |
| CHAIR: |   | ET Parker, Syngenta |

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| **3:15 PM** |   | **Antifeedant Effect of Sicklepod (*Senna obtusifolia*) Extract on Soybean Looper *Chrysodeixis includens* (Lepidoptera: Noctuidae).** Z Yue\*, T Tseng, N Krishnan; Mississippi State Univ, Mississippi State (214) |

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| **3:30 PM** |   | **Effect of Increasing Severity of Alternate Wetting and Drying (AWD) Irrigation Stress on Yield and Outcrossing Potential of Rice and Weedy Red Rice.** DR Gealy\*; USDA ARS DBNRRC, Stuggart (215) |

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| **3:45 PM** |   | **Interspecific Hybridization Between Male Sterile *Sorghum bicolor* and *S. halepense*.** D Hathcoat\*1, G Hodnett1, W Rooney1, C Sias1, BL Young2; 1Texas A&M University, College Station, 2Texas A&M Univ, La Vernia (216) |

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| **4:00 PM** |   | **Summer Annual Weed Seed Bank as Influenced by Winter *Brassica carinata* Production.** R Tiwari\*1, P Devkota1, RG Leon2, MJ Mulvaney1, T Reinhardt2, P Kharel1; 1University of Florida, Jay, 2NC State University, Raleigh (217) |

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| **4:15 PM** |   | **Phenotype and Phenology of Palmer Amaranth (*Amaranthus palmeri*) Populations from the Eastern United States.** SC Beam1, ML Flessner\*1, D Haak1, SB Mirsky2; 1Virginia Tech, Blacksburg, 2USDA ARS, Beltsville, MD (218) |

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| **4:30 PM** |   | **Characterization of Multiple-herbicide Tolerance in *Echinochloa Colona*.** G Rangani\*1, L Benedetti2, P Carvalho de Lima1, V Srivastava1, N Roma-Burgos1; 1University of Arkansas, Fayetteville, 2Federal University of Pelotas, Pelotas, Rio Grande Do Sol, Brazil (219) |

***TUESDAY AFTERNOON, JANUARY 28*****Quiz Bowl**

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| LOCATION: |   | Magnolia Ballroom |
| TIME: |   | 05:00 PM - 06:00 PM |
| CHAIR: |   | TC Mueller, Univ of Tenn |

***WEDNESDAY MORNING, JANUARY 29*****SWSS Christian Fellowship Breakfast**

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| LOCATION: |   | Azalea A, B, C |
| TIME: |   | 06:30 AM - 07:45 AM |
| CHAIR: |   | TC Mueller, Univ of Tennessee |

***WEDNESDAY MORNING, JANUARY 29*****Weed Management in Agronomic Crops**

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| LOCATION: |   | Magnolia G, H |
| TIME: |   | 08:00 AM - 05:00 PM |
| CHAIR: |   | B McKnight, LSU AgCenter, |

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| **8:00 AM** |   | **Does Spray Tank Contamination with AMS and the Addition of the Potassium Salt of Glyphosate Increase Dicamba Volatility?** MM Zaccaro\*, JK Norsworthy, C Brabham, LB Piveta; University of Arkansas, Fayetteville (243) |

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| **8:15 AM** |   | **2019 Xtend Weed Management in Tennessee: We Have a Problem.** LE Steckel\*1, CM Perkins1, TC Mueller2; 1University of Tennessee, Jackson, 2University of Tennessee, Knoxville (244) |

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| **8:30 AM** |   | **Dimetric Charged: A New Option for Burndown and Residual Weed Control.** RJ Edwards\*1, GK Dahl1, EP Spandl1, MA Risley1, AD Makepeace2; 1WinField United, River Falls, WV, 2WinField United, Arden Hills, MN (245) |

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| **8:45 AM** |   | **Italian Ryegrass Burndown with Herbicide Combinations Including BAS 850 H and BAS 851 H.** TL Grey\*1, LJ Newsome2, D Findley3; 1Univ of Georgia, Tifton, 2BASF, Tifton, GA, 3BASF, Durham, NC (246) |

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| **9:00 AM** |   | **Tirexor (Trifludimoxazin): Next Generation Burndown Update.** D Findley\*; BASF, Rolesville, NC (247) |

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| **9:15 AM** |   | **Introduction and Overview of MON 301107: A New Glyphosate Formulation.** A Mills\*1, N Rana2, RA Recker3, DJ Mayonado4, CM Mayo5; 1Bayer CropScience, Collierville, TN, 2Bayer CropScience, St Louis, MO, 3Bayer CropScience, Smithton, IL, 4Bayer CropScience, Hebron, MD, 5Bayer CropScience, Gardner, KS (248) |

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| **9:30 AM** |   | **Weed Control and Crop Tolerance with Glu-LTMa Resolved Isomer of Glufosinate, in Glufosinate Resistant Cotton and Soybean.** B Green1, TA Hayden\*2; 1AgriMetis, LLC, Lutherville, MD, 2Agrimetis, Owensboro, KY (249) |

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| **9:45 AM** |   | **Reduced Herbicide Antagonism for Grass Weed Control Through Novel Spray Application Techniques.** LH Merritt, JC Ferguson\*, DB Reynolds, A Brown, T Tseng; Mississippi State University, Miss State, (250) |

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| **10:00 AM** |   | **Evaluating Cover Crops and Herbicide Programs for Weed Management in Cotton.** P Devkota\*, R Tiwari, P Kharel, MJ Mulvaney; University of Florida, Jay (251) |

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| **10:15 AM** |   | **BREAK** |

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| **10:45 AM** |   | **Evaluation of Loyant Post-Directed in Arkansas Cotton.** RC Doherty\*1, T Barber2, ZT Hill1, LM Collie2, A Ross2; 1University of Arkansas System Division of Agriculture, Monticello, 2Univ of Arkansas System Division of Agriculture, Lonoke (252) |

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| **11:00 AM** |   | **Influence of Irrigation and Delayed Activation on Cotton Residual Herbicide Efficacy.** FB Browne\*, S Li, KJ Price, RD Langemeier; Auburn Univ, Auburn, AL (253) |

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| **11:15 AM** |   | **Evaluation of Florpyrauxifen-benzyl Control of Palmer Amaranth in Furrow-irrigated Rice.** JW Beesinger\*1, JK Norsworthy1, T Barber2, MC Castner1, GL Priess1, RB Farr1; 1University of Arkansas, Fayetteville, 2University of Arkansas System Division of Agriculture, Lonoke (254) |

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| **11:30 AM** |   | **Implications of Dicamba Exposure During Rice Reproductive Development.** MC Castner\*, JK Norsworthy, L Priess, RB Farr; University of Arkansas, Fayetteville (255) |

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| **11:45 AM** |   | **Rice (*Oryza sativa*) Response to Sub-lethal Concentrations of Crop Desiccants.** JM McCoy\*1, JA Bond1, BR Golden1, T Bararpour1, DM Dodds2, J Gore1, B Lawrence1; 1Delta Research and Extension Center, Stoneville, 2Mississippi State University, Mississippi State (256) |

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| **Noon** |   | **Lunch** |

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| **2:00 PM** |   | **Evaluation of PRE and POST Herbicide Programs for Weed Control in Peanut (*Arachis hypogeae* L.).** P Kharel\*1, P Devkota1, B Tillman2, G MacDonald3, R Tiwari1; 1University of Florida, Jay, 2University of Florida, Marianna, 3University of Florida, Gainesville (257) |

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| **2:15 PM** |   | **Rice Performance Following Exposure to Sub-lethal Concentrations of Commonly Applied PRE Herbicides.** B Lawrence\*, JA Bond, BR Golden, TW Allen, HM Edwards, J McCoy; Delta Research and Extension Center, Stoneville, MS (258) |

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| **2:30 PM** |   | **Weed Management in Oklahoma Soybean.** TA Baughman\*, R Peterson; Oklahoma State University, Ardmore (259) |

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| **2:45 PM** |   | **Influence Nitrogen and Potassium Fertilization on Soybean Exposed to a Low-dose of Dicamba at Multiple Growth Stages.** OW France\*, JK Norsworthy, MM Zaccaro, MC Castner; University of Arkansas, Fayetteville (260) |
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| **3:00 PM** |   | **Herbicide Program and Row Spacing Effect on PPO-resistant Palmer Amaranth and Waterhemp.** MS Wiggins\*1, D Copeland2, N Hustedde3; 1FMC, Friendship, TN, 2FMC, Dayton, OH, 3FMC, Celestine, IN (261) |

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| **03:15 PM** |   | **Differential Susceptibility of Palmer Amaranth Accessions to Group 3 and 15 Herbicides.** FG Torralva\*, LB Piveta, JK Norsworthy; University of Arkansas, Fayetteville (262) |

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| **03:30 PM** |   | **Impact of Droplet Size and Carrier Volume on Soybean (*Glycine max*) Harvest Aid Efficacy.** SD Hall\*1, DM Dodds1, G Kruger2, JT Irby1, JP McNeal1, LX Franca1, JJ Williams1, BJ Norris1, WJ Rutland1; 1Mississippi State Univ, Miss State, 2Univ of Nebraska - Lincoln, North Platte (263) |

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| **3:45 PM** |   | **Synergized Ametryn - A New Use for an Old Triazine for Resistant Weed and Grass Control in Corn.** LL Walker\*; Walker Cotton Technical Services, Flintville, TN (264) |

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| **4:00 PM** |   | **The Bicyclopyrone Weed Control Advantage in a New Premix Product Concept for Corn.** S Cully1, H McLean\*2, GD Vail3, RD Lins4, TH Beckett3; 1Syngenta Crop Protection, Marion, IL, 2Syngenta Crop Protection, Perry, GA, 3Syngenta Crop Protection, Greensboro, NC, 4Syngenta Crop Protection, Rochester, MN (265) |
| **4:15 PM** |   | **Management of Volunteer Corn with Fusilade DX Plus Dicamba Tank Mixes.** M Hay\*1, ET Parker2, P Eure3; 1Syngenta, Vero Beach, FL, 2Syngenta Crop Protection, Vero Beach, FL, 3Syngenta Crop Protection, Greensboro, NC (266) |

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| **4:30 PM** |   | **Pre- and Post-emergence Herbicide Tolerance of Industrial Hemp Grown for Grain.** SJ Michael\*, ML Flessner, KW Bamber, JH Fike; Virginia Tech, Blacksburg (267) |

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| **4:45 PM** |   | **Dicamba Research Update.** LE Steckel1, TC Mueller\*2; 1University of Tennessee, Jackson, 2University of Tennessee, Knoxville (268) |

***WEDNESDAY MORNING, JANUARY 29*****Weed / Vegetation Management in Forestry**

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| LOCATION: |   | Magnolia E, F |
| TIME: |   | 08:00 AM - 09:00 AM |
| CHAIR: |   | C Smith, UPL |

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| **8:00 AM** |   | **Control of Natural Pine Following July Treatments of Imazapyr and Glufosinate.** JE Ezell\*1, AW Ezell2, AB Self3; 1Private Consultant, Starkville, MS, 2Mississippi State University, Mississippi State, 3Mississippi State University, Grenada (220) |

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| **8:15 AM** |   | **Control of Natural Pines Using Site Preparation Mixes with Imazapyr, Glyphosate, Saflufenacil, BAS #1, and BAS #2.** AB Self\*1, AW Ezell2; 1Mississippi State Univ, Grenada, 2Mississippi State Univ, Mississippi State (221) |

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| **8:30 AM** |   | **Two-year Loblolly Seedling Growth Following Herbaceous Weed Control Applications of Varying Amounts of Sulfometuron, Imazapyr, Hexazinone. or Indaziflam.** AW Ezell\*1, AB Self2, J Belcher3; 1Mississippi State University, Mississippi State, 2Mississippi State University, Grenada, 3Bayer CropScience, Auburn, AL (222) |

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| **8:45 AM** |   | **Methods Utilizing UAVs to Assess Volunteer Pine and Hardwood Response to Preplant Herbicides.** S Askew\*; Virginia Tech, Blacksburg (223) |

***WEDNESDAY MORNING, JANUARY 29*****Weed Management in Horticultural Crops**

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| LOCATION: |   | Magnolia E, F |
| TIME: |   | 09:00 AM - 10:15 PM |
| CHAIR: |   | R Kanissery, Univ of Florida  |

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| **9:00 AM** |   | **Alternative Weed Control Techniques in Horticulture Production.** R Kanissery\*; University of Florida, Immokalee (224) |

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| **9:15 AM** |   | **Evaluating Weed Suppressive Sweet Potato Cultivars and Cover Crops for Weed Management in Sweet Potato.** IS Werle1, A Nuss\*1, SL Meyers2, T Tseng1; 1Mississippi State University, Mississippi State, 2Purdue University, West Lafayette, IN (225) |

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| **9:30 AM** |   | **Exploration of Chelated Fe as a Safener in Broccoli.** MW Farnham1, D Couillard1, S Robinson1, ML Washington\*2, MA Cutulle2, T Campbell2; 1USDA ARS, Charleston, SC, 2Clemson University, Charleston, SC (226) |

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| **9:45 AM** |   | **Weed Management with Ethanedinitrile in Plasticulture Vegetable Production.** N Boyd\*; University of Florida, Balm (227) |

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| **10:00 AM** |   | **Lima Bean, Snap Bean, and Southern Cowpea Injury and Residue Levels from Low-dose Applications of Dicamba.** HE Wright\*1, T Gray2, J Shugart3, AS Culpepper1; 1University of Georgia, Tifton, 2Georgia Department of Agriculture, Athens, 3Georgia Department of Agriculture, Tifton (228) |

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| **10:15 AM** |   | **BREAK** |

***WEDNESDAY MORNING, JANUARY 29*****Regulatory Aspects of Weed Control**

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| LOCATION: |   | Magnolia E, F |
| TIME: |   | 10:45 AM - 12:00 PM |
| CHAIR: |   | C Moore, Syngenta  |

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| **10:45 AM** |   | **The Importance of Pesticides and an Overview of the Development and Registration in the United States.** MU Dixon\*; Syngenta Crop Protection, Greensboro, NC (229) |

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| **11:00 AM** |   | **Is the 'No Effect Level' from Dicamba Exposure Through Physical Drift and Volatility Similar?** JK Norsworthy\*1, GL Priess1, MC Castner1, MM Zaccaro1, T Barber2, TC Mueller3; 1Univ of Arkansas, Fayetteville, 2Univ of Arkansas System Division of Agriculture, Lonoke, 3Univ of Tennessee, Knoxville (230) |

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| **11:15 AM** |   | **Risk-Mitigation Measures for Safe Use of Paraquat.** PD Laird\*; Syngenta Crop Protection, Greensboro, NC (231) |

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| **11:30 AM** |   | **The Current State of Atrazine Use in Corn.** C Moore\*; Syngenta Crop Protection, LLC, Greensboro, NC (232) |

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| **11:45 AM** |   | **The Status of Hemp Herbicide Registrations in the US and Abroad.** AR Post\*; NC State University, Raleigh (233) |

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| **Noon** |   | **Lunch** |

***WEDNESDAY AFTERNOON, JANUARY 29*****SWSS Awards Luncheon**

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| LOCATION: |   | Magnolia Ballroom |
| TIME: |   | Noon - 02:00 PM |
| CHAIR: |   | RC Scott, Univ of Arkansas Rice Res Station, Stuttgart |

***WEDNESDAY AFTERNOON, JANUARY 29*****Weed Management in Turf**

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| LOCATION: |   | Magnolia E, F |
| TIME: |   | 02:00 PM - 03:45 PM |
| CHAIR: |   | J Brewer, Virginia Tech |

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| **2:00 PM** |   | **Alternatives to Glyphosate for Turf Renovation.** CG Goncalves\*1, JM Craft1, J Brewer1, K Miller2, J Corbett3, S Askew1; 1Virginia Tech, Blacksburg, 2BASF Corporation, Chesterfield, VA, 3Albaugh, Selma, NC (234) |

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| **02:15 PM** |   | **Further Evaluation of Temperature Effects on Zoysiagrass Response to Glyphosate and Glufosinate.** JM Craft\*, S Askew; Virginia Tech, Blacksburg (235) |

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| **2:30 PM** |   | **Tropical Signalgrass Control Options with Roundup Combinations.** NJ Gambrell\*, LB McCarty, RB Cross; Clemson University, Clemson, SC (236) |

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| **2:45 PM** |   | **Tropical Signalgrass Control in Seashore Paspalum.** T Stoudemayer\*; Clemson University, Clemson, SC (237) |

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| **3:00 PM** |   | **Comparison of a New Aminopyralid-based Herbicide for Native or Reduced-management Areas.** CG Goncalves\*1, J Brewer1, JM Craft1, DE Hillger2, S Askew1; 1Virginia Tech, Blacksburg, 2Corteva Agriscience, Thorntown, IN (238) |

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| **3:15 PM** |   | **Methods to Increase Safety of Pinoxaden on St. Augustinegrass (*Stenotaphrum secundatum*).** JM Peppers\*1, JS McElroy2; 1Virginia Tech, Blacksburg, 2Auburn University, Auburn, AL (239) |

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| **3:30 PM** |   | **Potential Antagonists of Pinoxaden for Smooth Crabgrass Control.** J Brewer\*1, JM Craft1, JM Peppers2, JS McElroy3, S Askew1; 1Virginia Tech, Blacksburg, 2Auburn University, Horton, 3Auburn University, Auburn, AL (240) |

***WEDNESDAY AFTERNOON, JANUARY 29*****Weed Management in Organic Production Systems**

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| LOCATION: |   | Magnolia E, F |
| TIME: |   | 3:45 PM - 4:00 PM |
| CHAIR: |   | C Webster, LSU AgCenter |

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| **3:45 PM** |   | **Better Together? Evaluating Cover Crop Mulches, Organic Herbicides, and Weed Seed Biological Control in Reduced-tillage Crop Systems.** MA Cutulle\*1, C Blubaugh2, DG Lewis1, RA Schmidt-Jeffris4; 1Clemson University, Charleston, SC, 2Clemson University, Clemson, SC, 3USDA-ARS, Wapato, WA (241) |

***WEDNESDAY AFTERNOON, ANUARY 29*****Educational Aspects of Weed Control**

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| LOCATION: |   | Magnolia E, F |
| TIME: |   | 4:00 PM - 4:15 PM |
| CHAIR: |   | C Webster, LSU AgCenter |

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| **4:00 PM** |   | **Pesticide Education in an Era of Glyphosate Litigation. Lessons Learned from the Front Lines in Florida.** SF Enloe\*, J Ferrell; University of Florida, Gainesville (242) |

***WEDNESDAY AFTERNOON, JANUARY 29*****SWSS Women's Networking Event**

|  |  |  |
| --- | --- | --- |
| LOCATION: |   | Azalea A, B, C |
| TIME: |   | 05:00 PM - 06:00 PM |
| CHAIR: |   | KA Backscheider, Corteva  |

**SWSS Mixer**

|  |  |  |
| --- | --- | --- |
| LOCATION: |   | Promenade |
| TIME: |   | 5:30 PM - 6:30 PM |

**SWSS Graduate Awards Reception**

|  |  |  |
| --- | --- | --- |
| LOCATION: |   | Magnolia Ballroom |
| TIME: |   | 6:30 PM - 8:00 PM |
| CHAIR: |   | KA Backscheider, Corteva |

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**SWSS Sustaining Members – 2019-20**

**ADAMA**

**Agricenter International**

**AMVAC Chemical Corp.**

**BASF Corporation**

**Bayer CropScience**

**Belchim Crop Protection**

**Bellspray, Inc.**

**Corteva Agriscience**

**Diligence Technologies**

**Farm Press Publications**

**FMC**

**Greenleaf Technologies**

**Gylling Data Management, Inc.**

**Gowan**

**Helena Agri-Enterprises, LLC.**

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

**Monsanto Company**

**Nichino America**

**Syngenta Crop Protection**

**TeeJet Technologies - Spraying Systems Co.**

**The Scotts Company**

**United Phosphorus, Inc.**

**Valent USA Corp**

**Winfield United**

|  |
| --- |
| **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 |  |
| **10:15** |  |  | Break |
| **10:30** |  |  |  |
| **10:45** |  |  |  |
| **11:00** |  |  |  |
| **11:15** |  |  |  |
| **11:30** |  |  |  |
| **11:45** |  |  |  |
| **12:00** |  |  |  |
| **12:15** |  |  |  |
| **12:30** |  |  |  |
| **12:45** |  | **Grad Student** | **SWSS Awards** |
| **1:00** |  | **Luncheon** | **Luncheon** |
| **1:15** |  |  |  |
| **1:30** |  |  |  |
| **1:45** | **General** |  |  |
| **2:00** | **Session** |  |  |
| **2:15** |  |  |  |
| **2:30** |  |  |  |
| **2:45** |  |  | Break |
| **3:00** |  |  |  |
| **3:15** |  |  |  |
| **3:30** |  |  |  |
| **3:45** |  |  |  |
| **4:00** |  |  |  |
| **4:15** |  |  |  |
| **4:30** |  |  |  |
| **4:45** |  |  |  |
| **5:00** | **SWSS****Business****Meeting** | **SWSS Quiz Bowl** | **Women’s Networking Event** |
| **5:15** |
| **5:30** |
| **5:45** |
| **6:00** | **SWSS Graduate Awards Mixer** |
| **7:00** |  |  |
| **7:15** |  |  |
| **7:30** |  |  |