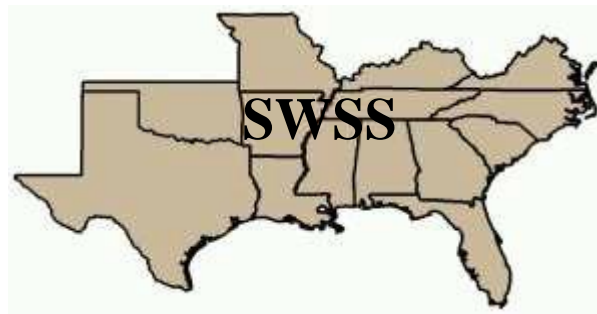


Program

72nd
Annual Meeting

**Southern
Weed Science
Society**



Theme:

“United for a Productive Future”

**February 03-06, 2019
Renaissance Convention Center Hotel and Spa
Oklahoma City, OK**

PLEASE SUBMIT ABSTRACTS TO WEBSITE PRIOR TO MEETING

PLEASE SUBMIT POWERPOINT FILES TO WEBSITE

Local Arrangements Committee

| | |
|------------------|---|
| Todd Baughman | Chair |
| Kelley Mazur | Registration |
| Russ Perkins | Audio Visual |
| Bruce Steward | Equipment Storage & Security |
| Luke Etheredge | Graduate Students & Room Reservations |
| Adam Hixon | Information Booth & Message Coordinator |
| Gary Schwarzlose | Meal Functions |
| Eric Castner | Room Setup |
| Misha Manuchehri | Signs and Exhibits |
| Seth Byrd | Poster Setup |

Special Events

Endowment Function

Sunday, February 3, 2019
7:00 a.m. – 3:00 p.m.

Graduate Student Mixer/Speaker

Sunday, February 3, 2019
5:00 p.m. – 7:00 p.m.

SWSS General Session

Monday, February 4, 2019
1:00 p.m. – 3:00 pm

Graduate Student Quiz Bowl

Tuesday, February 5, 2019
5:00 p.m. – 6:00 p.m.

Christian Fellowship Breakfast

Wednesday, February 6, 2019
6:30 a.m. – 7:45 a.m.

Graduate Student Luncheon

Wednesday, February 6, 2019
12:00 p.m. – 2:00 p.m.

Women's Networking Event

Wednesday, February 6, 2019
4:00 p.m. – 5:00 p.m.

SWSS Mixer/Awards Banquet

Wednesday, February 6, 2019
5:00 p.m. – 8:00 p.m.

Future Meetings

Beau Rivage Resort and Casino
Biloxi, MS
January 26-30, 2020

Knoxville, TN - 2021

Southern Weed Science Society Officers

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STUDENT REPRESENTATIVE (EX-OFFICIO)

Zachary Lancaster
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zdlancas@email.uark.edu

Committees and Chairpersons

| | |
|--|--------------------------|
| Endowment Foundation | Darrin Dodds |
| Awards | Gary Schwarzlose |
| Computer Application | Dan Reynolds/Shawn Askew |
| Constitution & Operating Procedures | Carroll Johnson |
| Finance | Eric Webster |
| Graduate Student Organization | Zachary Lancaster |
| Weed Resistance and Technology Stewardship | Hunter Perry |
| Historical | John Byrd |
| Legislative and Regulatory | Angela Post |
| Local Arrangements | Todd Baughman |
| Long Range Planning | Peter Dotray |
| Site Selection | Eric Webster |
| Nominating | Gary Schwarzlose |
| 2019 Program | James Holloway |
| 2020 Program | Eric Webster |
| Research Committee | Eric Webster |
| Resolutions and Necrology | David Black |
| Southern Weed Contest | Darrin Dodds |
| Student Program | Charlie Cahoon |
| Sustaining Membership | Jacob Reed |
| Education Units | Alan Estes |
| Newsletter Editor | Susan Scott |
| Business Manager/Sales Coordination | Kelley Mazur |

Program Section Chairs

| | |
|---|-------------------|
| Agronomic Crops | Vijay Singh |
| Uses of New Technologies in Weed Science - Symposia | James Holloway |
| Graduate Student Contest | Charlie Cahoon |
| Horticultural Crops | Nickolas Basinger |
| Physiological / Biological Aspects | Clyde Smith |
| Posters | Charlie Cahoon |
| New Technologies | Ryan Edwards |
| Weed Management in Turf | Shawn Askew |
| Educational Aspects of Weed Control | Clyde Smith |
| Soil and Environmental Aspects | Clyde Smith |
| Weed Biology and Ecology | Matthew Cutulle |
| Weed Management in Pastures, Rangeland, | John Byrd |
| Weed/Vegetation Management in Forestry | Clyde Smith |

Registration

MONDAY, February 4, 2019

8:00 a.m. – 5:00 p.m.

TUESDAY, February 5, 2019

8:00 a.m. – 5:00 p.m.

WEDNESDAY, February 6, 2019

8:00 a.m. – 3:00 p.m.

Displays and Posters

Set-up time for displays and the Poster Session is 10:00 a.m. to noon on Monday, February 4, 2019, 2019 in the Ballroom D. The poster area will be open from 3:00 p.m. to 5:00 p.m. on Monday, 7:30 a.m. to 5:00 p.m. on Tuesday, and 7:30 to Noon on Wednesday. All posters are to be removed no later than 2 p.m. on Wednesday, February 6, 2019.

Authors in the Student Contest will be present to discuss their posters from 7:00 a.m. to 8:00 a.m. on Tuesday. Authors of all other posters will be present from 7:30 to 8:00 a.m. on Wednesday.

Displays and Posters must be removed before 2:00 p.m. On Wednesday, February 6, 2019.

Silent Auction

Silent Auction will take place in Pre-Function Area and will close on **Wednesday, February 6, 2019 at 1:00 p.m.** Auction item pick up will be announced.

Location of Events

| | |
|------------------------------------|-------------------|
| SWSS Executive Board Meetings | Meeting Room 16 |
| Graduate Student Mixer | Ballroom A |
| Local Arrangements | Meeting Room 21 |
| Graduate Contest Judge's Breakfast | Meeting Room 18 |
| Graduate Contest Judge's Work Room | Meeting Room 18 |
| SWSS Business Meeting | Ballroom AB |
| General Session | Ballroom AB |
| SWSS Quiz Bowl | Ballroom AB |
| GSO Luncheon | Meeting Room 18 |
| Women's networking event | Meeting Room 18 |
| SWSS Mixer | Pre Function Area |
| SWSS Awards Banquet | Ballroom AB |

PROGRAM OVERVIEW

Schedule of Events and Meetings

Sunday, February 3, 2019

| | |
|-----------------------|---|
| 7:00 a.m. – 3:00 p.m. | Endowment Function Lincoln Park Golf Course |
| 8:00 a.m. – 5:00 p.m. | Local Arrangements Meeting Room 21 |
| 5:00 p.m. – 6:00 p.m. | SWSS Executive Board Meeting Meeting Room 16 |
| 5:00 p.m. – 6:00 p.m. | Graduate Student Event/Mixer |
| 6:00 p.m. – 7:00 p.m. | Graduate Student Event Speaker |

MONDAY, February 4, 2019

| | |
|-------------------------|--|
| 7:00 a.m. – 8:00 a.m. | Local Arrangements/Section Chairs Ball Room D |
| 7:00 a.m. – 5:00 p.m. | Local Arrangements Meeting Room 21 |
| 8:00 a.m. – 12:00 p.m. | Presentation Loading Area Pre Function Area |
| 10:00 a.m. – 12:00 p.m. | Poster Setup Ball Room D |
| 8:00 a.m. – 9:00 a.m. | Endowment Foundation Committee Meeting Room 17 |
| 8:00 a.m. – 9:00 a.m. | Sustaining Membership Committee Meeting Room 16 |
| 9:00 a.m. – 10:00 a.m. | Site Selection Committee Meeting Room 16 |

| | |
|---------------------------------------|---|
| 9:00 a.m. – 10:00 a.m. | Herbicide Resistant Weeds Meeting Room 20 |
| 9:00 a.m. – 10:00 a.m. | Student Contest Committee Meeting Room 17 |
| 10:00 a.m. – 11:00 a.m. | Finance Committee Meeting Room 20 |
| 10:00 a.m. – 12:00 a.m. | Legislative & Regulatory Committee Meeting Room 19 |
| 11:00 a.m. – 12:00 a.m. | SWSS Executive Board Meeting Meeting Room 16 |
| 1:00 p.m. – 2:50 p.m. | Opening – General Session Ballroom AB |
| 1:00 p.m. – 5:00 p.m. | Presentation Loading Area Pre Function Area |
| 5:00 p.m. – 6:00 p.m. | SWSS Business Meeting Ballroom AB |
| Immediately after Business meeting | Weed Contest Committee Ballroom AB |

TUESDAY, February 5, 2019

| | |
|------------------------|--|
| 6:15 a.m. – 7:00 a.m. | Graduate Student Contest Meeting Room 18 |
| 7:00 a.m. – 7:00 p.m. | Local Arrangements Meeting Room 21 |
| 8:00 p.m. – 5:00 p.m. | Graduate Student Contest Judges Work Room - Meeting Room 18 |
| 8:00 a.m. – 12:00 p.m. | Presentation Loading Pre Function Area |
| 5:00 p.m. – 6:00 p.m. | Graduate Student Quiz Bowl Ballroom AB |

WEDNESDAY, February 6, 2019

| | |
|-----------------------|--|
| 6:30 a.m. – 7:45 a.m. | SWSS Christian Fellowship Breakfast - Meeting Room 18 |
| 7:00 a.m. – 5:00 p.m. | Local Arrangements Meeting Room 21 |
| Noon – 2:00 p.m. | Graduate Student Lunch / Symposium Meeting Room 18 |
| 4:00 p.m. – 5:00 p.m. | Women's Networking Event Meeting Room 18 |
| 5:00 – 6:00 p.m. | SWSS Mixer Pre Function Area |

6:00 p.m. – 8:00 p.m. SWSS Awards Banquet
Ballroom AB

THURSDAY, February 7, 2019

7:00 a.m. – 10:00 a.m. SWSS Executive Board Breakfast
& Board Meeting
Meeting Room 16

8:00 a.m. – 9:00 a.m. Local Arrangements Committee
Meeting Room 21

TECHNICAL PROGRAM OVERVIEW

February 4, 2019 - Monday

1:00 p.m. – 2:45 p.m. General Session
Ballroom AB

3:00 p.m. – 5:00 p.m. Poster - Available for Viewing
Ballroom D

3:00 p.m. – 5:00 p.m. Uses of New Technologies in Weed Science
Symposium
Ballroom AB

5:00 p.m. – 6:00 p.m. SWSS Business Meeting
Ballroom AB

6:00 p.m. – 7:00 p.m. SWSS Weed Contest Meeting
Ballroom AB
(Immediately following the business meeting)

February 5, 2019 - Tuesday

7:30 a.m. – 12:00 p.m. Posters Session
Ballroom D
*Authors in the Student Contest
Present (7:00 a.m. – 8:00 a.m.)*

8:00 a.m. – 5:00 p.m. Student Paper Contest - Masters
Section – Meeting Room 19 20

7:00 a.m. – 3:30 p.m. Student Paper Contest - PhD
Section – Meeting Room 16 17

***All paper and poster judges please have completed score
sheets to Charlie Cahoon by 5:30 pm on Tuesday**

8:15 a.m. – 9:15 a.m. Weed Biology and Ecology
Meeting Room 14 15

10:00 a.m. – 12:00 p.m. Weed Management in Pasture
and Rangeland
Meeting Room 14 15

1:00 p.m. – 5:00 p.m. Posters – Available for Viewing
International South

1:00 p.m. – 1:15 p.m. Educational Aspects of Weed Control
Meeting Room 14 15

- 1:15 p.m. – 2:00 p.m. Physiological and Biological Aspects of Weed Control
Meeting Room 14 15
- 2:00 p.m. – 2:45 p.m. Weed/Vegetation Management in Forestry
Meeting Room 14 15
- 3:00 p.m. – 3:45 p.m. Soil and Environmental Aspects of Weed Science
Meeting Room 14 15
- 5:00 p.m. – 6:00 p.m. Student Quiz Bowl
Ballroom AB

February 6, 2019 - Wednesday

- 7:30 a.m. – 12:00 p.m. Posters - Available for Viewing
International South
*Authors of all non-student posters
present (7:30 a.m. – 8:00 a.m.)*
Posters removed before 2:00 p.m.
- 8:15 a.m. – 4:00 p.m. Weed Management in
Agronomic Crops
Meeting Room 16 17
- 8:15 a.m. – 9:45 a.m. New Technologies in Weed Science
Meeting Room 19 20
- 10:00 a.m. – 12:00 p.m. Weed Control in Horticulture
Meeting Room 19 20
- 8:00 a.m. – 10:45 a.m. Weed Control in Turf
Meeting Room 14 15
- Noon – 2:00 p.m. Student Luncheon &
Symposium (*registered
students/speakers only*)
Embassy CD
- 4:00 p.m. – 5:00 p.m. Women's networking event
Meeting Room 18

February 6, 2019 - Wednesday Evening

- 4:00 p.m. – 5:00 p.m. SWSS Women's
Networking
Event
- 5:00 p.m. – 6:00 p.m. SWSS MIXER
Pre Function
Area
- 6:00 p.m. – 8:00 p.m. SWSS AWARDS BANQUET
Ballroom AB

February 7, 2019 - Thursday

- 7:00 a.m. – 10:00 a.m. SWSS Executive Board Breakfast
& Meeting
Meeting Room 16
- 8:00 a.m. – 9:00 a.m. Local Arrangements
Meeting Room 2

PROGRAM

Poster Section

Location: Ballroom D

Chair and Moderator: Charles Cahoon

***PRESENTER**

"GROW: A Science Based Resource Tool for Integrated Weed Management." C.G. Rubione*¹, M.J. Vangessel¹, L.M. Lazaro², S. Mirsky³, K. Pittman⁴, M.L. Flessner⁵, M.V. Bagavathiannan⁶; ¹University of Delaware, Georgetown, DE, ²Louisiana State University, Baton Rouge, LA, ³USDA, Beltsville, MD, ⁴Virginia Tech, Blacksburg, VA, ⁵Virginia Tech PPWS Dept., Blacksburg, VA, ⁶Texas A&M University, College Station, TX (1)

Residual Overlay of Clomazone plus Pendimethalin with Other Residual Herbicides Labeled in Rice. M.J. Osterholt*¹, E. Webster¹, B. McKnight², S. Rustom², C. Webster³, D.C. Walker²; ¹Louisiana State University, Baton Rouge, LA, ²LSU AgCenter, Baton Rouge, LA, ³LSU, Baton Rouge, LA (2)

Evaluation of Herbicide Overlap in Provisia Rice. B. McKnight*¹, E. Webster², R. Levy³, S. Rustom¹, C. Webster⁴, M.J. Osterholt², D.C. Walker¹; ¹LSU AgCenter, Baton Rouge, LA, ²Louisiana State University, Baton Rouge, LA, ³LSU AgCenter, Alexandria, LA, ⁴LSU, Baton Rouge, LA (3)

Herbicide Resistant Palmer Amaranth (*Amaranthus palmeri*) in Row Crop Production Systems in Texas. V. Singh*¹, R. Garetson¹, S. Singh¹, P.A. Dotray², M. Bagavathiannan¹; ¹Texas A&M University, College Station, TX, ²Texas Tech University, Lubbock, TX (4)

Evaluation of Adjuvants on Quizalofop Activity in Provisia Rice when Mixed with ALS Herbicides. C. Webster*¹, E. Webster², B. McKnight³, S. Rustom³, D.C. Walker³, M.J. Osterholt²; ¹LSU, Baton Rouge, LA, ²Louisiana State University, Baton Rouge, LA, ³LSU AgCenter, Baton Rouge, LA (5)

Comparison of Various Water and Tank Cleaner Rinse Sequences for Effective Removal of Dicamba from Contaminated Sprayer Systems. Z.A. Carpenter*, D.B. Reynolds, A.B. Johnson; Mississippi State University, Mississippi State, MS (6)

Glyphosate-resistant ragweed parthenium (*Parthenium hysterophorus* L.) confirmed in Texas, USA. S. Singh*, V. Singh, N. Subramanian, M. Bagavathiannan; Texas A&M University, College Station, TX (7)

Rice Tolerance to Sequential Applications of Florpyrauxifen-benzyl. H.E. Wright*¹, J.K. Norsworthy¹, G.L. Priess¹, R.C. Scott², T. Barber³, J. Ellis⁴; ¹University of Arkansas, Fayetteville, AR, ²Univ of Arkansas Coop Extn, Lonoke, AR, ³University of Arkansas, Lonoke, AR, ⁴Dow AgroSciences, Sterlington, LA (8)

Utilizing Herbicide Resistant Cotton to Control PPO-resistant Palmer amaranth Postemergence. W. Coffman*¹, T. Barber², J.K. Norsworthy¹, M.C. Castner¹; ¹University of Arkansas, Fayetteville, AR, ²University of Arkansas, Lonoke, AR (9)

Soybean Varietal Tolerance to Thiencarbazone-methyl. Z.D. Lancaster*, J.K. Norsworthy, G.L. Priess, J.T. Richburg; University of Arkansas, Fayetteville, AR (10)

Evaluation of Weed Control Programs in Grain Sorghum with Minimal or No Atrazine . J.T. Richburg*¹, J.K. Norsworthy¹, Z.D. Lancaster¹, J. Patterson²; ¹University of Arkansas, Fayetteville, AR, ²Auburn University, Auburn, AL (11)

Grower Perspectives and Practices on Pasture and Hayfield Weed Management in Virginia. W.C. Greene*¹, M.L. Flessner², K. Pittman³; ¹Virginia Tech, Virginia Tech, VA, ²Virginia Tech PPWS Dept., Blacksburg, VA, ³Virginia Tech, Blacksburg, VA (12)

Herbicide Carryover to Various Fall Planted Cover Crop Species. L.S. Rector*¹, M.L. Flessner², K. Pittman¹, K.W. Bamber¹, S.C. Beam¹; ¹Virginia Tech, Blacksburg, VA, ²Virginia Tech PPWS Dept., Blacksburg, VA (13)

Plant Community Shifts Associated with Intensive Cogongrass Management. S.F. Enloe*¹, J.S. Aulakh², N.J. Loewenstein³, J.H. Miller⁴; ¹University of Florida, Gainesville, FL, ²The Connecticut Agricultural Experiment Station, Windsor, CT, ³Auburn University, Auburn, AL, ⁴USDA Forest Service Southern Research Station (emeritus), Auburn, AL (14)

Critical Period for Weed Control in Flue-Cured Tobacco. M. Inman*, M. Vann, D. Jordan; North Carolina State University, Raleigh, NC (15)

Soft Rush (*Juncus effusus*) Management in Carpetgrass Pastures. R. Strahan*¹, E.K. Twidwell¹, A.L. Granger², M. Voitier¹; ¹LSU AgCenter, Baton Rouge, LA, ²LSU AgCenter, Abbeville, LA (16)

The Influence of Sequential Order of Enlist Duo, Enlist One, and Liberty on Palmer amaranth Control. D.C. Foster*¹, P.A. Dotray¹, K.R. Russell¹, M.L. Lovelace²; ¹Texas Tech University, Lubbock, TX, ²Corteva agriscience, Lubbock, TX (17)

A Weed Science Short Course for Modes of Action and Herbicide Resistance. T. Mueller*; University of Tennessee, Knoxville, TN (18)

Dicamba Behavior Under Controlled Conditions. T.I. Clark*, T. Mueller; University of Tennessee, Knoxville, TN (19)

Areawide Multitactic Weed Management Research and Outreach: Ongoing Activities in the Southern Region. M. Bagavathiannan*¹, L.M. Lazaro², J.K. Norsworthy³, L.E. Steckel⁴, J.A. Bond⁵, S. Mirsky⁶; ¹Texas A&M University, College Station, TX, ²Louisiana State University, Baton Rouge, LA, ³University of Arkansas, Fayetteville, AR, ⁴University of Tennessee, Jackson, TN, ⁵Delta Research and Extension Center, Stoneville, MS, ⁶USDA, Beltsville, MD (20)

Allelopathic Rice Varieties for Weed suppression: Field Observations. S.E. Abugho*¹, J. Samford², A.M. McClung³, X. Zhou⁴, M. Bagavathiannan¹; ¹Texas A&M University, College Station, TX, ²Texas A&M AgriLife Research, Sealy, TX, ³USDA-ARS, Stuttgart, AR, ⁴Texas A&M AgriLife Research, Beaumont, TX (21)

Elevated CO₂ Effect on Controlling Velvetleaf and Johnsongrass with Tembotrione. J.C. Argenta*, S. Finlayson, T.C. Gentry, M. Bagavathiannan, K. Carson; Texas A&M University, College Station, TX (22)

Hybridization Between Grain Sorghum and Johnsongrass: Preliminary Findings. M. Bagavathiannan¹, S. Shrestha*², C. Sias¹, S. Ohadi¹, W. Rooney¹, G. Hodnett¹; ¹Texas A&M University, College Station, TX, ²Texas A&M, College Station, TX (23)

Sweet potato Response to Selected Herbicides. S. Chaudhari*¹, K.M. Jennings², M. Shankle³, S.C. Smith², M.D. Waldschmidt², L. Moore², K.C. Sims²; ¹NCSU, Raleigh, NC, ²North Carolina State University, Raleigh, NC, ³Mississippi State University, Pontotoc, MS (24)

Effect of Soil-Applied Herbicide Timing on Cover Crop Establishment . J. Calhoun*¹, D.B. Reynolds²; ¹Mississippi State University, Starkville, MS, ²Mississippi State University, Mississippi State, MS (25)

Evaluation of Brake Herbicide in the Enlist Cotton System. S.A. Nolte*¹, M. Matocha²; ¹Texas A&M AgriLife Extension, College Station, TX, ²Texas AgriLife Extension Service, College Station, TX (26)

Spray Volume and Application Rate of

Trifloxysulfuron Affects Long-term Dallisgrass

Control. G.M. Henry*¹, K.A. Tucker¹, J.T. Brosnan², G. Breeden³; ¹University of Georgia, Athens, GA, ²Univ. of Tennessee, Knoxville, TN, ³University of Tennessee, Knoxville, TN (27)

Herbicide Desiccation Strategies for Reduced

Skinning Injury on Spring Fresh Market Potato. F.

Souza Krupek, P.J. Dittmar*, L. Zotarelli, S. Sargent, D. Rowland; University of Florida, Gainesville, FL (28)

Evaluation of Soybean for Hormetic Response to

Extreme Low-Doses of Dicamba. M.C. Castner*¹, J.K.

Norsworthy¹, J.T. Richburg¹, M.M. Houston²; ¹University of Arkansas, Fayetteville, AR, ²University of Arkansas, Fayetteville, AR (29)

Impact of Nitrogen Rate and Timing on Weed and

Muskmelon Emergence and Growth. A. Buzanini, P.J.

Dittmar*; University of Florida, Gainesville, FL (30)

Preplant Kochia Control in Enlist Cotton. U. Torres*¹,

P.A. Dotray¹, K.R. Russell¹, G.K. Flusche Ogden¹, M.L. Lovelace²; ¹Texas Tech University, Lubbock, TX, ²Corteva Agriscience, Lubbock, TX (31)

On a Knife Edge: Conservation Agriculture and

Troublesome Weed Control. A.J. Price*; USDA-ARS,

Auburn, AL (32)

Evaluation of Fluridone in Peanut. K.J. Price*, S. Li;

Auburn University, Auburn, AL (33)

Broadleaf Weed Control in Rice with Saflufenacil-

based Herbicide Mixtures. H. Edwards*¹, B. Lawrence¹,

T.L. Sanders², J.D. Peeples Jr.³, N.G. Corban¹, J.A. Bond⁴; ¹Mississippi State University, Stoneville, MS, ²Mississippi State University: Delta Research & Extension Center, Stoneville, MS, ³Delta Research and Extension Center, Stoneville, MS, ⁴Delta Research and Extension Center, Stoneville, MS (34)

Rainfall Timing Effects on Pre-emergence Herbicide

Efficacy in Soybean. P.H. Urach Ferreira¹, L.H.

Merritt*¹, D.B. Reynolds¹, T. Irby¹, W.L. Ralston², G. Kruger³, J. Ferguson¹; ¹Mississippi State University, Mississippi State, MS, ²Bear's Best Atlanta, Suwanee, GA, ³University of Nebraska-Lincoln, North Platte, NE (35)

Peanut Response to Multiple Simulated Off-Target

Events of Dicamba + Glyphosate. E.P. Prostko*;

University of Georgia, Tifton, GA (36)

Efficacy of Enlist Duo, Enlist One, and FeXapan for Control of Glyphosate-Resistant Palmer amaranth. T.

Bararpour*¹, R.R. Hale², L. Walton³, J.A. Bond²; ¹Mississippi State University, Stoneville, MS, ²Delta Research and Extension Center, Stoneville, MS, ³Corteva Agriscience™, Agriculture Division of DowDuPont™, Indianapolis, IN (37)

Efficacy of Enlist Duo, Enlist One, and FeXapan for Control of Glyphosate-Resistant Horseweed. T.

Bararpour*¹, R.R. Hale², L. Walton³, J.W. Seale¹, H. Edwards¹, J.D. Peeples Jr.⁴, T. Sanders⁵; ¹Mississippi State University, Stoneville, MS, ²Delta Research and Extension Center, Stoneville, MS, ³Corteva Agriscience™, Agriculture Division of DowDuPont™, Indianapolis, IN, ⁴Delta Research and Extension Center, Stoneville, MS, ⁵Mississippi State University, Stoneville, MS (38)

Evaluation of Residual Herbicides for Broad Spectrum Weed Control in Mississippi Peanut. T.

Bararpour*¹, J. Gore¹, R.R. Hale², D. Cook³; ¹Mississippi State University, Stoneville, MS, ²Delta Research and Extension Center, Stoneville, MS, ³Mississippi State University, Stoneville, MS (39)

Using Pesticides Wisely. A.S. Culpepper*¹, J.C. Vance², T. Gray³, R. Keigwin⁴; ¹University of Georgia, Tifton, GA, ²University of Georgia, Tifton, GA, ³Georgia Department of Agriculture, Atlanta, GA, ⁴U.S. EPA, Washington, DC (40)

Efficacy of Weed Management Programs Containing Resicore in Mid-South Corn. R.R. Hale*¹, T.

Bararpour², L. Walton³, J.A. Bond¹, H. Edwards², J. Mccoy¹, B.K. Pieralisi¹, J.D. Peeples Jr.⁴, T.L. Sanders⁵; ¹Delta Research and Extension Center, Stoneville, MS, ²Mississippi State University, Stoneville, MS, ³Corteva Agriscience™, Agriculture Division of DowDuPont™, Indianapolis, IN, ⁴Delta Research and Extension Center, Stoneville, MS, ⁵Mississippi State University: Delta Research & Extension Center, Stoneville, MS (41)

Evaluation of PRE and POST Applications of

Metribuzin in Corn. R.R. Hale*¹, T. Bararpour², B.R. Golden¹, J.W. Seale², B. Lawrence², B.K. Pieralisi¹, J. Mccoy¹, N.G. Corban²; ¹Delta Research and Extension Center, Stoneville, MS, ²Mississippi State University, Stoneville, MS (42)

Italian ryegrass (*Lolium multiflorum*) Timing of Removal Effects on Corn (*Zea mays* L.) in

Mississippi. M.T. Wesley Jr.*¹, J.A. Bond², E.J. Larson³, D.B. Reynolds⁴, J. Ferguson⁴; ¹Mississippi State University, Mississippi State, MS, ²Delta Research and Extension Center, Stoneville, MS, ³Mississippi State University, Starkville, MS, ⁴Mississippi State University, Mississippi State, MS (43)

Preparation of Sicklepod Extract with Potential Use as an Effective Deer Repellent. Z. Yue*¹, T. Tseng²; ¹Mississippi State University, Starkville, MS, ²Mississippi State University, Mississippi State, MS (44)

Screening Weedy Rice Germplasm for Tolerance to Various Abiotic Stresses. S.D. Stallworth*¹, T. Tseng¹, B.C. Schumaker²; ¹Mississippi State University, Mississippi State, MS, ²Mississippi State University, Starkville, MS (45)

Genomics Regions Associated with Allelopathy in Weedy Rice. B.C. Schumaker*¹, S. Shrestha¹, T. Tseng², N.R. Burgos³, S.D. Stallworth²; ¹Mississippi State University, Starkville, MS, ²Mississippi State University, Mississippi State, MS, ³University of Arkansas, Fayetteville, AR (46)

Weed Control Programs in Centipedegrass and Zoysiagrass Lawns Utilizing Pyrimisulfan and Penoxsulam. P. McCullough*; University of Georgia, Griffin, GA (47)

Herbicide/Insecticide Co-Application Impacts in Xtend and Enlist Cotton. D. Miller*¹, D.O. Stephenson²; ¹LSU AgCenter, St Joseph, LA, ²LSU Ag Center, Alexandria, LA (48)

Impact of Reduced Rates of Isoxaflutole on Soybean Growth and Yield. D. Miller*¹, D.O. Stephenson²; ¹LSU AgCenter, St Joseph, LA, ²LSU Ag Center, Alexandria, LA (49)

Cutleaf evening primrose (*Oenothera laciniata*) and winter annual broadleaf control in wheat in Mississippi and Oklahoma. J. Ferguson*¹, M.R. Manuchehri², L.H. Merritt¹, Z.R. Treadway¹, K.L. Broster³, M.T. Wesley Jr.⁴, J. Childers²; ¹Mississippi State University, Mississippi State, MS, ²Oklahoma State University, Stillwater, OK, ³Mississippi State University, Starkville, MS, ⁴Mississippi State University, Mississippi State, MS (50)

WSSA Advocates for Weed Controls that Protect Soybean Export Value. C. Moseley¹, L. Van Wychen*², H. Curlett³, J. Schroeder⁴, P. Laird¹, S.P. Conley⁵; ¹Syngenta, Greensboro, NC, ²WSSA, Alexandria, VA, ³USDA-APHIS, Washington, DC, ⁴USDA Office of Pest Management Policy, Arlington, VA, ⁵University of Wisconsin-Madison, Madison, WI (51)

Response of Grain Sorghum to Low Rate of Roundup, Liberty, and Gramoxone at Different Growth Stages. J.W. Seale*¹, T. Bararpour¹, R.R. Hale², B. Lawrence¹, N.G. Corban¹; ¹Mississippi State University, Stoneville, MS, ²Delta Research and Extension Center, Stoneville, MS (52)

Weed Control Programs in Mississippi Peanut. J.W. Seale*¹, T. Bararpour¹, J.A. Bond², J. Gore¹, B.R. Golden², R.R. Hale²; ¹Mississippi State University, Stoneville, MS, ²Delta Research and Extension Center, Stoneville, MS (53)

Field Scale Harvest Weed Seed Control in Virginia Wheat and Soybean. S.C. Beam*¹, M.L. Flessner², K.W. Bamber¹, L.S. Rector¹; ¹Virginia Tech, Blacksburg, VA, ²Virginia Tech PPWS Dept., Blacksburg, VA (54)

Dose response study to evaluate dicamba tolerance of wild tomato germplasm. R. Zangouejinejad¹, M. Alebrahim², S. Shrestha³, T. Tseng*⁴; ¹Mississippi State University, Mississippi State, MS, ²University of Mohaghegh Ardabili, Ardabili, Iran, ³Mississippi State University, Starkville, MS, ⁴Mississippi State University, Mississippi State, MS (55)

Screening and development of markers for weed suppressive trait in sweet potato. B.C. Schumaker*¹, M. Ferreira², G.A. Caputo¹, S. Shrestha¹, S.L. Meyers³, N.R. Burgos⁴, T. Tseng²; ¹Mississippi State University, Starkville, MS, ²Mississippi State University, Mississippi State, MS, ³Mississippi State University, Mississippi State, MS, ⁴University of Arkansas, Fayetteville, AR (56)

Benoxacor and Fenclorim Safeners for Protecting Tomato from Herbicide Injury: Screening and Mechanisms of Action. S. Duarte¹, E. Castro¹, B.M. Silva¹, C.P. Moraes*¹, B.C. Schumaker¹, T. Tseng²; ¹Mississippi State University, Starkville, MS, ²Mississippi State University, Mississippi State, MS (57)

Allelopathic Tomato: From Compounds to Molecular Markers. B.M. Silva¹, E. Castro¹, S. Duarte¹, C.P. Moraes*¹, B.C. Schumaker¹, T. Tseng²; ¹Mississippi State University, Starkville, MS, ²Mississippi State University, Mississippi State, MS (58)

Our Comprehensive Herbicide Stewardship Program at the University of Tennessee. N. Rhodes*¹, L.E. Steckel², T. Mueller³, D. McIntosh³; ¹U of TN 252 Ellington Bldg, Knoxville, TN, ²University of Tennessee, Jackson, TN, ³University of Tennessee, Knoxville, TN (59)

Allelopathic Potential and Allelochemicals in Tomato: An Alternative for Sustainable Weed Management. C.P. Moraes*¹, E. Castro¹, S. Duarte¹, B.M. Silva¹, B.C. Schumaker¹, R. Snyder², T. Tseng³; ¹Mississippi State University, Starkville, MS, ²Mississippi State University, Crystal Springs, MS, ³Mississippi State University, Mississippi State, MS (60)

Droplet Size Effects on Italian Ryegrass (*Lolium multiflorum*) control in Mississippi Corn (*Zea mays*). M.T. Wesley Jr.¹, Z.R. Treadway*², J.A. Bond³, E.J. Larson⁴, D.B. Reynolds², J. Ferguson²; ¹Mississippi State University, Mississippi State, MS, ²Mississippi State University, Mississippi State, MS, ³Delta Research and Extension Center, Stoneville, MS, ⁴Mississippi State University, Starkville, MS (61)

Glyphosate-resistant Italian Ryegrass Control with Residual Herbicides and Cover Crops. Peeples, Lawrence, Edwards, Sanders, Corbon, Bond. J.D. Peeples Jr.*; Delta Research and Extension Center, Stoneville, MS (62)

Impact of Reduced Rates of Isoxaflutole on Growth and Yield of Cotton. D. Miller*¹, D.O. Stephenson²; ¹LSU AgCenter, St Joseph, LA, ²LSU Ag Center, Alexandria, LA (63)

Sesame Tolerance to Bicyclopyrone. J. Rose*¹, P.A. Dotray², W. Grichar³; ¹Sesaco Corp, Austin, TX, ²Texas Tech University, Lubbock, TX, ³Texas A&M AgriLife Research, Yoakum, TX (64)

Graduate Student Posters (MS only)

***PRESENTER † STUDENT POSTER CONTEST**

†Critical Period of Weed Control for Italian Ryegrass in Wheat. D.J. Contreras*, W. Everman; North Carolina State University, Raleigh, NC (65)

Control of Lanceleaf Ragweed (*Ambrosia bidentata*) in Summer Pastures. J.D. Byrd¹, D.P. Russell², N.H. Thorne³, H.B. Quick*²; ¹Mississippi State University, Miss State, MS, ²Mississippi State University, Mississippi State, MS, ³Mississippi State University, Mississippi State University, MS (66)

†Differences in seed set among diverse cytoplasmic male sterile *Sorghum bicolor* genotypes, following pollination with *Sorghum halepense*. C. Sias*, B.L. Young, D. Hathcoat, T. Mundt, G. Hodnett, W. Rooney, M. Bagavathiannan; Texas A&M University, College Station, TX (67)

Feasibility of Harvest Weed Seed Control for Johnsongrass in Grain Sorghum. B.L. Young*¹, D. Sarangi¹, N. Korres², L.M. Lazaro³, M.J. Walsh⁴, J.K. Norsworthy², M. Bagavathiannan¹; ¹Texas A&M University, College Station, TX, ²University of Arkansas, Fayetteville, AR, ³Louisiana State University, Baton Rouge, LA, ⁴University of Sydney, Sydney, Australia (68)

†Does Sensitivity among Soybean Cultivars Vary to a Low Dose of Dicamba? O.W. France*¹, J.K. Norsworthy¹, J. Ross², M.C. Castner¹, T. Barber²; ¹University of Arkansas, Fayetteville, AR, ²University of Arkansas, Lonoke, AR (69)

Longevity of Control Achieved by Preplant and Preemergence Soil Residual Herbicides in Soybean. G.L. Priess*¹, J.K. Norsworthy¹, Z.D. Lancaster¹, M.C. Castner¹, T. Barber²; ¹University of Arkansas, Fayetteville, AR, ²University of Arkansas, Lonoke, AR (70)

†Effect of Carrier Volume and Nozzle Selection on Glufosinate and 2,4-D Efficacy. S. Davis*¹, D. Dodds¹, L.X. Franca¹, J. McNeal²; ¹Mississippi State University, Mississippi State, MS, ²Mississippi State University, Mississippi State, Mississippi, MS (71)

Spray Efficacy and Drift Potential of an Unmanned Aerial Sprayer Influenced by Cross-wind, Flight Speed, and Nozzle Selection. J.E. Hunter*, R.E. Austin, R.J. Richardson, T. Gannon, J.C. Neal, R.G. Leon; North Carolina State University, Raleigh, NC (72)

†Effect of Soybean Variety and Maturity Group on Dicamba Injury. M.A. Granadino*, W. Everman, J. Sanders, D.J. Contreras, E.A. Jones; North Carolina State University, Raleigh, NC (73)

Weed Efficacy and Economics of Bollgard II XtendFlex Cotton Systems. B.M. DeLong*¹, W. Keeling², P.A. Dotray³, J. Everitt⁴; ¹Texas A&M AgriLife, Lubbock, TX, ²Texas A&M AgriLife Research, Lubbock, TX, ³Texas Tech University, Lubbock, TX, ⁴Monsanto Company, Shallowater, TX (74)

†Effect of Spray Volume on the Efficacy of Asulam on Fall Panicum Control. R. Mereb Negrisoni*, D. Otero; University of Florida, Belle Glade, FL (75)

Weed Management Systems in Auxin Tolerant Cotton. K.R. Russell*¹, P.A. Dotray¹, W. Keeling²; ¹Texas Tech University, Lubbock, TX, ²Texas A&M AgriLife Research, Lubbock, TX (76)

†Efficacy of Enlist, Xtend and Liberty Based Weed Control Systems in Cotton. R. Vulchi*¹, S.A. Nolte¹, M. Matocha², G. Morgan¹, J. McGinty¹; ¹Texas A&M AgriLife Extension, College Station, TX, ²Texas AgriLife Extension Service, College Station, TX (77)

†Evaluation of Current Chemical Control Options for Smutgrass (*Sporobolus indicus* var. *indicus*) in Texas. Z. Howard*¹, S.A. Nolte¹, M. Matocha²; ¹Texas A&M AgriLife Extension, College Station, TX, ²Texas AgriLife Extension Service, College Station, TX (78)

†**Evaluation of Rice Varietal Tolerances to Benzobicyclon Applied at Different Growth Stages.** J.A. Patterson*, J.K. Norsworthy, C.B. Brabham, Z.D. Lancaster, G.L. Priess; University of Arkansas, Fayetteville, AR (79)

†**Operating Pressure and Nozzle Type Effects on Season Long Weed Control in Peanut (*Arachis hypogaea* L.).** K.L. Broster*¹, T.A. Baughman², B. Zurweller³, J. Ferguson³; ¹Mississippi State University, Starkville, MS, ²OSU- Institute for Agricultural BioScience, Ardmore, OK, ³Mississippi State University, Mississippi State, MS (80)

†**Over-expression of *PPO2* (Δ G210) Gene Mutation in Rice.** P.C. Lima*, G. Rangani, S. Zhao, A.C. Langaro, V. Srivastava, N.R. Burgos; University of Arkansas, Fayetteville, AR (81)

†**Palmer Amaranth Control Following Sequential Applications of XtendiMax and Liberty with and without Warrant.** G.K. Flusche Ogden*¹, P.A. Dotray¹, J. Everitt²; ¹Texas Tech University, Lubbock, TX, ²Monsanto Company, Shallowater, TX (82)

†**Sensitivity of Non-tolerant Wheat to Quizalofop-P-ethyl in Central Oklahoma.** J.T. Childers*¹, M.R. Manuchehri¹, V. Kumar², J. Crose¹, R. Liu³; ¹Oklahoma State University, Stillwater, OK, ²Kansas State University, Hays, KS, ³Texas A&M, College Station, TX (83)

†**Weed Management Effects on Peanut Yield and Weed Populations the Following Year.** A.T. Hare*, D. Jordan, R.G. Leon, M. Inman; North Carolina State University, Raleigh, NC (84)

Graduate Student Posters (PhD only)

*PRESENTER † STUDENT POSTER CONTEST

†***Setaria parviflora* Management in Tall Fescue and Bermudagrass Pastures.** B. Greer*; Auburn University, Auburn University, AL (85)

†**Effect of Flooding Period and Seed Burial Depth on Palmer amaranth (*Amaranthus palmeri*) Seed Germination.** L.X. Franca*, D. Dodds, M. Plumblee, S. Davis; Mississippi State University, Mississippi State, MS (86)

Flooding Depth and Burial Effect on Emergence of Five California Weedy Rice Biotypes. L.B. Galvin*¹, M.B. Mesgaran¹, k. al-khatib²; ¹University of California, Davis, Davis, CA, ²UC Davis, Davis, CA (87)

†**Optimizing Selective Goosegrass Control in Bermudagrass Turf.** J. Brewer*, S. Askew; Virginia Tech, Blacksburg, VA (88)

†**Palmer Amaranth Residual Control as Effected by Cover Crop and Herbicide.** C.M. Perkins*¹, K.W. Bradley², J.K. Norsworthy³, D.B. Reynolds⁴, K.L. Gage⁵, S. Steckel⁶, B.G. Young⁷, L.E. Steckel⁶; ¹The University of Tennessee, Jackson, TN, ²University of Missouri, Columbia, MO, ³University of Arkansas, Fayetteville, AR, ⁴Mississippi State University, Mississippi State, MS, ⁵Southern Illinois Univeristy, Carbondale, IL, ⁶University of Tennessee, Jackson, TN, ⁷Purdue University, West Lafayette, IN (89)

†**Distinguishing Weed Species in a Field Environment with the Utilization of UAVs and Spectral Imaging.** E.A. Jones*, J. Sanders, W. Everman, D.J. Contreras, M.A. Granadino; North Carolina State University, Raleigh, NC (90)

Optimizing chloroacetamide placement in dicamba-resistant cotton and soybean production systems. J.T. Buol*¹, L.X. Franca¹, D.B. Reynolds¹, D. Dodds¹, A. Mills²; ¹Mississippi State University, Mississippi State, MS, ²Monsanto Company, Collierville, TN (91)

†**Palmer amaranth (*Amaranthus palmeri*) and Thrips (*Thrips sp.*) Control with Various Dicamba + Insecticide Tank-mixes in Cotton (*Gossypium hirsutum*).** J. McNeal*¹, D. Dodds², A. Catchot³, L.X. Franca², S. Davis²; ¹Mississippi State University, Mississippi State, Mississippi, MS, ²Mississippi State University, Mississippi State, MS, ³Mississippi State University, Starkville, MS (92)

Fallow Period Nutsedge Management System Using Mechanical Tuber Removal and Glyphosate Followed by Cover Crop in Vegetable Production. R.S. Randhawa*, P.J. Dittmar; University of Florida, Gainesville, FL (93)

†**Evaluation of Cover Crops for Weed Suppression in Watermelon Grown with Plasticulture.** F.B. Browne*, S. Li, K.J. Price; Auburn University, Auburn, AL (94)

†**Impact of Nozzle Type and Carrier Volume on Cotton Harvest Aid Efficacy.** S.A. Byrd¹, B.R. Wilson*²; ¹Texas A&M University AgriLife Extension, Lubbock, TX, ²Oklahoma State University, Stillwater, NC (95)

†**Herbicide Efficacy as Influenced by Density and Duration of Shade.** D.J. Mahoney*¹, D. Jordan², A.T. Hare², R.G. Leon²; ¹North Carolina State Univ., Raleigh, NC, ²North Carolina State University, Raleigh, NC (96)

†**Management of Perennial Grass ssp. in Louisiana Rice Production.** D.C. Walker*¹, E. Webster², B. McKnight¹, S. Rustom¹, M.J. Osterholt², C. Webster³; ¹LSU AgCenter, Baton Rouge, LA, ²Louisiana State University, Baton Rouge, LA, ³LSU, Baton Rouge, LA (97)

†**Influence of adjuvants and glyphosate formulations on droplet spreading on contrasting leaf surfaces.** M. Machado Noguera*¹, F.C. Caratti², N.R. Burgos¹; ¹University of Arkansas, Fayetteville, AR, ²University of Arkansas, Fayetteville, AR (98)

†**Peanut Injury Evaluation of PPO Inhibitor Herbicides as Affected by Application Timings and Surfactants.** K.J. Price*, S. Li; Auburn University, Auburn, AL (99)

†**ALS Cross-Resistance and Multiple-Resistance in California Accessions of *Cyperus difformis*.** A. Ceseski*, A. Godar, k. al-khatib; UC Davis, Davis, CA (100)

Species Identification of Ryegrass Accessions from Texas Blacklands Based on GRIN Reference Samples. A. Maity*¹, S.E. Abugho², V. Singh², N. Subramanian², G.R. Smith², M. Bagavathiannan²; ¹Texas A&M university, College Station Texas, College Station, TX, ²Texas A&M University, College Station, TX (101)

†**The Effect of Non-chemical Management Practices on Weed Population Dynamics in Organic Grain Production.** S.L. Samuelson*, N. Rajan, R.W. Schnell, M. Bagavathiannan; Texas A&M University, College Station, TX (102)

†**Use of Low Tunnel Field Trials to Understand Dicamba Volatility.** M.M. Zaccaro*¹, J.K. Norsworthy¹, M.M. Houston², C.B. Brabham¹; ¹University of Arkansas, Fayetteville, AR, ²University of Arkansas, Fayetteville, AR (103)

Preplant and Preemergence Palmer amaranth Control in Grain Sorghum for the Texas High Plains. C.D. White*¹, J.L. Spradley², W. Keeling³, B. Bean⁴; ¹Texas A&M AgriLife, Lubbock, TX, ²Texas A&M Agrilife, LUBBOCK, TX, ³Texas A&M AgriLife Research, Lubbock, TX, ⁴United Sorghum Checkoff Program, Lubbock, TX (104)

Relative Duration of Residual Control Among Preemergent Herbicides. B. Sperry*¹, D.B. Reynolds¹, J. Ferguson¹, J.A. Bond², G. Kruger³, A. Brown⁴; ¹Mississippi State University, Mississippi State, MS, ²Delta Research and Extension Center, Stoneville, MS, ³University of Nebraska-Lincoln, North Platte, NE, ⁴Mississippi State Chemical Laboratory, Mississippi State, MS (105)

MONDAY AFTERNOON FEBRUARY 4

General Session

LOCATION: Ballroom A, B
TIME: 1:00 PM - 2:45 PM
CHAIR/
MODERATOR: James Holloway
Syngenta Crop Protection
Jackson, TN
CO-CHAIR: Robert Scott
Univ of Arkansas Coop
Extn
Lonoke, AR

***SPEAKER**

- 1:00 Announcements and Welcome.** J. Holloway*; Syngenta Crop Protection, Jackson, TN (106)
- 1:05 Welcome to Oklahoma.** J. Smith*; Oklahoma State University, Stillwater, OK (107)
- 1:30 Presidential Address.** R.C. Scott*; Univ of Arkansas Coop Extn, Lonoke, AR (108)
- 1:40 SWSS Endowment Enrichment Scholarship - Zachary Lancaster - Bayer.** Z.D. Lancaster*; University of Arkansas, Fayetteville, AR (109)
- 1:55 SWSS Endowment Enrichment Scholarship - Wykle Greene - Syngenta.** W.C. Greene*; Virginia Tech, Virginia Tech, VA (110)
- 2:10 SWSS Endowment Enrichment Scholarship - Cole Smith - Valent.** S.C. Smith*; North Carolina State University, Raleigh, NC (111)
- 2:25 Washington Policy Update.** L. Van Wychen*; WSSA, Alexandria, VA (112)
- 2:45 Break**

MONDAY AFTERNOON FEBRUARY 4

Use of New Technologies in Weed Science

LOCATION: Ballroom A, B
TIME: 3:00 PM - 5:00 PM
CHAIR/
MODERATOR: James Holloway
Syngenta Crop Protection
Jackson, TN
CO-CHAIR: Robert Scott
Univ of Arkansas Coop
Extn
Lonoke, AR

***SPEAKER**

- 3:00 Use of Social Media in Agriculture Extension.** M. Hightower*; University of Arkansas, Little Rock, AR (113)
- 3:20 Weeding Out Poor Video Practices.** K. Rodtnick*; University of Arkansas, Little Rock, AR (114)
- 3:40 Taking Effective Scientific Photographs and Analyzing Digital Images and Videos in Weed Science Research.** S. Askew*; Virginia Tech, Blacksburg, VA (115)
- 4:00 Broadcast TV & Beyond: 10 Years of Delivering Engaging Content at SUNUP.** L. Stout*¹, D. Deken¹, T.A. Baughman²; ¹SUNUP-TV, Stillwater, OK, ²OSU- Institute for Agricultural BioScience, Ardmore, OK (116)
- 4:20 An Eye in the Sky - Moving Beyond Visual Ratings in Crop Science.** L.C. Purcell*, G.L. Priess, J.K. Norsworthy, H.E. Wright; University of Arkansas, Fayetteville, AR (117)
- 4:40 New and Emerging Technologies for Rights-of-Way.** J.D. Byrd*; Mississippi State University, Miss State, MS (118)

MONDAY AFTERNOON FEBRUARY 4

SWSS Business Meeting

LOCATION: Ballroom A, B
TIME: 5:00 PM - 6:00 PM
CHAIR: Robert Scott
Univ of Arkansas Coop
Extn
Lonoke, AR
CO-CHAIR/ James Holloway
MODERATOR: Syngenta Crop Protection
Jackson, TN

TUESDAY MORNING FEBRUARY 5

Graduate Student Contest Judges Breakfast

LOCATION: Meeting Room 18
TIME: 6:00 AM - 8:00 AM

TUESDAY MORNING FEBRUARY 5

Graduate Student Contest Workroom

LOCATION: Meeting Room 18
TIME: 8:00 AM - 5:00 PM

TUESDAY MORNING FEBRUARY 5

Graduate Student Oral Papers (MS Only)

LOCATION: Meeting Room 19, 20
TIME: 8:00 AM - 5:00 PM
CHAIR/ Charlie Cahoon
MODERATOR: North Carolina State
University
Raleigh, NC
CO-CHAIR: Pete Eure
Syngenta Crop Protection
Richmond, TX

***SPEAKER † STUDENT CONTEST**

- 8:00 †Active Ingredient Effects on Italian Ryegrass (*Lolium multiflorum*) Control in Mississippi Corn (*Zea mays* L.).** M.T. Wesley Jr.*¹, J.A. Bond², E.J. Larson³, D.B. Reynolds⁴, J. Ferguson⁴; ¹Mississippi State University, Mississippi State, MS, ²Delta Research and Extension Center, Stoneville, MS, ³Mississippi State University, Starkville, MS, ⁴Mississippi State University, Mississippi State, MS (119)
- 8:15 †Assessing the Potential for Enlist One to Volatilize and Injure Non-Enlist Cotton.** G.L. Priess*¹, J.K. Norsworthy¹, Z.D. Lancaster¹, T. Barber²; ¹University of Arkansas, Fayetteville, AR, ²University of Arkansas, Lonoke, AR (120)
- 8:30 †Evaluation of Corn Tolerance to Postemergence-applied PSII Herbicides .** J.T. Richburg*¹, J.K. Norsworthy¹, T. Barber², M.C. Castner¹, M.M. Zaccaro¹; ¹University of Arkansas, Fayetteville, AR, ²University of Arkansas, Lonoke, AR (121)
- 8:45 †Deactivation of 2,4-D and Dicamba using the Fenton Reaction using Cotton (*Gossypium hirsutum*) and Soybean (*Glycine max*) as Bio-Indicators.** G. Oakley*, D.B. Reynolds, Z.A. Carpenter; Mississippi State University, Mississippi State, MS (122)
- 9:00 †Browntop millet (*Urochloa ramosa*) and Broadleaf Signalgrass (*Urochloa platyphylla*) Competition Effects on Growth and Yield of Peanut (*Arachis hypogaea*) Managed with Prohexadione Calcium.** Z.R. Treadway*, B. Zurweller, J. Ferguson; Mississippi State University, Mississippi State, MS (123)

- 9:15 †Changes to Cotton Boll Distribution Following Low Rates of Dicamba at Different Growth Stages.** K.R. Russell*, P.A. Dotray, G.L. Ritchie; Texas Tech University, Lubbock, TX (124)
- 9:30 †Interaction of Seedling Vigor, Planting date, and Flumioxazin on Peanut Growth.** N.L. Hurdle*¹, T.L. Grey², C. Pilon¹, E.P. Prostko¹, W.S. Monfort¹; ¹University of Georgia, Tifton, GA, ²University of Georgia, Tifton, GA (125)
- 9:45 Break**
- 10:00 †Do Contact Herbicides Exacerbate Injury Caused by Dicamba on Non-Dicamba-Resistant Soybean?** M.C. Castner*, J.K. Norsworthy, G.L. Priess, M.M. Zaccaro; University of Arkansas, Fayetteville, AR (126)
- 10:15 †Assessment of Preemergence Herbicides for Control of PPO-resistant Palmer amaranth in Cotton.** W. Coffman*¹, T. Barber², J.K. Norsworthy¹, G.L. Priess¹; ¹University of Arkansas, Fayetteville, AR, ²University of Arkansas, Lonoke, AR (127)
- 10:30 †Allelopathy in Weedy Rice: A Resource for Breeding Allelopathic Rice Cultivars.** T. Tseng¹, B.C. Schumaker*², N.R. Burgos³, E. Castro², S. Shrestha², S.D. Stallworth¹; ¹Mississippi State University, Mississippi State, MS, ²Mississippi State University, Starkville, MS, ³University of Arkansas, Fayetteville, AR (128)
- 10:45 †Comparison of Burndown Weed Control by Halauxifen-methyl, 2,4-D, and Dicamba.** M.C. Askew*¹, C.W. Cahoon², A. York³, M.L. Flessner⁴; ¹Virginia Tech, Eure, NC, ²North Carolina State University, Raleigh, NC, ³North Carolina State University, Cary, NC, ⁴Virginia Tech PPWS Dept., Blacksburg, VA (129)
- 11:00 †Cucumber Tolerance to Glufosinate Applied Preplant or Preemergence.** T.M. Randell*¹, J.C. Vance¹, A.S. Culpepper²; ¹University of Georgia, Tifton, GA, ²University of Georgia, Tifton, GA (130)
- 11:15 †Evaluation of Florpyrauxifen-benzyl-containing Weed Control Programs for Furrow-irrigated Rice.** H.E. Wright*¹, J.K. Norsworthy¹, Z.D. Lancaster¹, R.C. Scott², J. Ellis³; ¹University of Arkansas, Fayetteville, AR, ²Univ of Arkansas Coop Extn, Lonoke, AR, ³Dow AgroSciences, Sterlington, LA (131)

- 11:30 †Efficacy of Tank Mixes Containing Linuron for Palmer Amaranth Control in Sweet Potato**. L. Moore*, K.M. Jennings, D. Monks, S.C. Smith, M.D. Waldschmidt, K.C. Sims; North Carolina State University, Raleigh, NC (132)
- 11:45 †Quizalofop Activity when Mixed with Reduced Rates of Halosulfuron in Provisia Rice**. C. Webster*¹, E. Webster², B. McKnight³, M.J. Osterholt², S. Rustom³, D.C. Walker³; ¹LSU, Baton Rouge, LA, ²Louisiana State University, Baton Rouge, LA, ³LSU AgCenter, Baton Rouge, LA (133)
- 12:00 Lunch**
- 1:00 †Response of Hybrid Bermudagrass (*Cynodon dactylon*) to Glyphosate Application Timing and Rate**. C.L. Darling*¹, B. Sellers¹, J. Ferrell², D. Odero³, J.C. Dubeux⁴; ¹University of Florida, Ona, FL, ²University of Florida, Gainesville, FL, ³University of Florida, Belle Glade, FL, ⁴Committee, Marianna, FL (134)
- 1:15 Integrated Management of Johnsongrass in Inzen sorghum**. B.L. Young*¹, N. Korres², L.M. Lazaro³, M.J. Walsh⁴, J.K. Norsworthy², M. Bagavathiannan¹; ¹Texas A&M University, College Station, TX, ²University of Arkansas, Fayetteville, AR, ³Louisiana State University, Baton Rouge, LA, ⁴University of Sydney, Sydney, Australia (135)
- 1:30 †Flue-Cured Tobacco Tolerance to S-metolachlor**. A. Clapp*, M. Vann, C.W. Cahoon, M. Inman; North Carolina State University, Raleigh, NC (136)
- 1:45 Critical Period of Weed Control for grass species in Grain Sorghum**. D.J. Contreras*, W. Everman; North Carolina State University, Raleigh, NC (137)
- 2:00 †Droplet Size and Drift Potential of Roadside Spray Nozzles**. H.B. Quick*¹, D.P. Russell¹, J.D. Byrd², N.H. Thorne³; ¹Mississippi State University, Mississippi State, MS, ²Mississippi State University, Miss State, MS, ³Mississippi State University, Mississippi State University, MS (138)
- 2:15 †Evaluating Time of Day Effects on Broadleaf Weed Control in XtendFlex® Cotton**. J.R. Kalina*¹, C.B. Corkern², T.L. Grey³, N.T. Basinger⁴, D.G. Shilling⁵; ¹University of Georgia, williamson, GA, ²Bayer Crop Science, Alapha, GA, ³University of Georgia, Titon, GA, ⁴The University of Georgia, Athens, GA, ⁵University of Georgia, Athens, GA (139)

- 2:30 †Influence of Cover Crop Mixture, Cover Crop Placement, and Herbicides on Weed Control in Cotton.** A.M. Johnson*¹, A.J. Price²; ¹Auburn University, Auburn, AL, ²USDA-ARS, Auburn, AL (140)
- 2:45 Break**
- 3:00 †Droplet Size Effects on Pre-Emergence Herbicide Efficacy in Soybeans.** P.H. Urach Ferreira¹, L.H. Merritt*¹, D.B. Reynolds¹, T. Irby¹, G. Kruger², J. Ferguson¹; ¹Mississippi State University, Mississippi State, MS, ²University of Nebraska-Lincoln, North Platte, NE (141)
- 3:15 †Winter Annual Weed Control with Early Planted Cover Crops and Residual Herbicides.** L.S. Rector*¹, M.L. Flessner², K.W. Bamber¹, K. Pittman¹; ¹Virginia Tech, Blacksburg, VA, ²Virginia Tech PPWS Dept., Blacksburg, VA (142)
- 3:30 †Soybean Performance Following Exposure to Dicamba at Multiple Growth Stages.** N.G. Corban*¹, B. Lawrence¹, H. Edwards¹, J.D. Peoples Jr.², T. Sanders³, D.B. Reynolds⁴, J.A. Bond⁵; ¹Mississippi State University, Stoneville, MS, ²Delta Research and Extension Center, Stoneville, MS, ³Mississippi State University, Stoneville, MS, ⁴Mississippi State University, Mississippi State, MS, ⁵Delta Research and Extension Center, Stoneville, MS (143)
- 3:45 †Integration of UAV-based Weed Mapping with a UAV-sprayer for Increasing Weed Control Efficiency.** J.E. Hunter*, R.E. Austin, R.J. Richardson, T. Gannon, J.C. Neal, R.G. Leon; North Carolina State University, Raleigh, NC (144)
- 4:00 †Response of Peanut to Low Rates of Dicamba at Different Growth Stages.** J.W. Seale*¹, T. Bararpour¹, J. Gore¹, J.A. Bond², B.R. Golden², R.R. Hale²; ¹Mississippi State University, Stoneville, MS, ²Delta Research and Extension Center, Stoneville, MS (145)
- 4:15 Differential Response of Cowpea Varieties to Preplant and Preemergence Herbicides.** P.C. Lima*, N.R. Burgos, A. Shi, L. Benedetti; University of Arkansas, Fayetteville, AR (146)
- 4:30 Planting Date Effect on Soybean Response to Dicamba.** M.A. Granadino*, W. Everman, J. Sanders, D.J. Contreras, E.A. Jones; North Carolina State University, Raleigh, NC (147)

4:45 Influence of Carrier Volume, Nozzle Type, and Weed Size on Glufosinate Efficacy. J. Calhoun*¹, D.B. Reynolds²; ¹Mississippi State University, Starkville, MS, ²Mississippi State University, Mississippi State, MS (148)

TUESDAY MORNING FEBRUARY 5

Graduate Student Oral Papers (PhD only)

LOCATION: Meeting Room 16, 17
TIME: 8:00 AM - 3:15 PM
CHAIR/ Charlie Cahoon
MODERATOR: North Carolina State University
Raleigh, NC
CO-CHAIR: Kelly Backscheider
DuPont
Franklin, IN

***SPEAKER † STUDENT CONTEST**

8:00 †Cereal Rye Cover Crop Termination Timing Affect on Common Ragweed in Virginia Soybean. S.C. Beam*¹, M.L. Flessner², S. Mirsky³; ¹Virginia Tech, Blacksburg, VA, ²Virginia Tech PPWS Dept., Blacksburg, VA, ³USDA, Beltsville, MD (149)

8:15 †Evaluation of an Integrated Weed Management (IWM) program for control of Giant Smutgrass in ‘Pensacola’ Bahiagrass Pastures. J.C. Dias*¹, B. Sellers², J. Ferrell³, S.F. Enloe³, J.M. Vendramini⁴, P. Moriel⁴; ¹University of Florida, ONA, FL, ²University of Florida, Ona, FL, ³University of Florida, Gainesville, FL, ⁴University of Florida, Ona, FL (150)

8:30 †Determining Dicamba Retention in Spray Tanks and its Impact on Flue-Cured Tobacco. M. Inman*, M. Vann, T. Gannon, D. Jordan, K.M. Jennings; North Carolina State University, Raleigh, NC (151)

8:45 †Genetic Diversity of Phenotypically Distinct Goosegrass (*Eleusine indica*) Ecotypes. B. Kerr*, B. McCarty, C. Saski; Clemson University, Clemson, SC (152)

9:00 †Effect of Carrier Volume and Spray Quality on Soybean Response to Dicamba. B. Sperry*¹, J. Calhoun², D.B. Reynolds¹, J. Ferguson¹, G. Kruger³; ¹Mississippi State University, Mississippi State, MS, ²Mississippi State University, Starkville, MS, ³University of Nebraska-Lincoln, North Platte, NE (153)

- 9:15 †Characterization of Functional Trait Diversity Among Ryegrass (*Lolium* spp.) Accessions from Texas Blacklands.** A. Maity*¹, S.E. Abugho², V. Singh², N. Subramanian², G.R. Smith², M. Bagavathiannan²; ¹Texas A&M university, College Station Texas, College Station, TX, ²Texas A&M University, College Station, TX (154)
- 9:30 †Evaluating Effectiveness of Dicamba Removal from Contaminated Sprayers Following Various Incubation Periods from Contamination to Clean Out.** Z.A. Carpenter*, D.B. Reynolds, A.B. Johnson; Mississippi State University, Mississippi State, MS (155)
- 9:45 Break**
- 10:00 †Genetic Diversity, Molecular Markers, and Genes for Abiotic Stress Tolerance in Weedy Rice.** S.D. Stallworth*¹, T. Tseng¹, S. Shrestha²; ¹Mississippi State University, Mississippi State, MS, ²Mississippi State University, Starkville, MS (156)
- 10:15 †Detecting and Classifying Weeds in Row Crops Using Spectral and Contextual Information.** B.B. Sapkota*¹, V. Singh², D. Cope¹, M. Bagavathiannan²; ¹Texas A&M University, College station, TX, ²Texas A&M University, College Station, TX (157)
- 10:30 †Aquatic Weed Response to Titrated Application Rates of Florpyrauxifen-Benzyl in Louisiana Rice.** S. Rustom*¹, E. Webster², B. McKnight¹, C. Webster³, D.C. Walker¹; ¹LSU AgCenter, Baton Rouge, LA, ²Louisiana State University, Baton Rouge, LA, ³LSU, Baton Rouge, LA (158)
- 10:45 †Non-synthetic Herbicides to Control Rice Weeds: Do They Work?** S.E. Abugho*¹, A.V. Pagenotto², X. Zhou³, M. Bagavathiannan¹; ¹Texas A&M University, College Station, TX, ²University of Sao Paulo, Sao Paulo, Brazil, ³Texas A&M AgriLife Research, Beaumont, TX (159)
- 11:00 †Improved Herbicide Selectivity in Tomato by Safening Action of Benoxacor and Fenclorin.** C.P. Moraes*¹, E. Castro¹, S. Duarte¹, B.M. Silva¹, B.C. Schumaker¹, N.R. Burgos², T. Tseng³; ¹Mississippi State University, Starkville, MS, ²University of Arkansas, Fayetteville, AR, ³Mississippi State University, Mississippi State, MS (160)

- 11:15 †Hayfield Sward Response to Herbicide Impregnated Dry Fertilizer.** W.C. Greene*¹, M.L. Flessner², K.W. Bamber³, P.L. Burch⁴, S. Flynn⁵; ¹Virginia Tech, Virginia Tech, VA, ²Virginia Tech PPWS Dept., Blacksburg, VA, ³Virginia Tech, Blacksburg, VA, ⁴Corteva Agriscience, Christiansburg, VA, ⁵Corteva Agriscience, Lees Summit, MO (161)
- 11:30 †Fomesafen Degradation from the Surface of Low-Density Polyethylene Mulch.** K.M. Eason*¹, T.L. Grey², A.S. Culpepper³; ¹The University of Georgia, Tifton, GA, ²University of Georgia, Tifton, GA, ³University of Georgia, Tifton, GA (162)
- 11:45 †Weed Management in Conventional and Conservation Tillage Systems with Bollgard II XtendFlex Cotton.** C.D. White*¹, W. Keeling², P.A. Dotray³; ¹Texas A&M AgriLife, Lubbock, TX, ²Texas A&M AgriLife Research, Lubbock, TX, ³Texas Tech University, Lubbock, TX (163)
- 12:00 Lunch**
- 1:00 †Regional Zoysiagrass Response to Glyphosate and Glufosinate Applied at Variable Timings in Spring.** J.M. Craft*, S. Askew; Virginia Tech, Blacksburg, VA (164)
- 1:15 Evaluation of the Suitability of 13 Winter Cover Crop Species for Southeast Texas.** S.L. Samuelson*, J. Hernandez, M. Bagavathiannan; Texas A&M University, College Station, TX (165)
- 1:30 Prevalence and distribution of PPO mutations on Palmer amaranth populations from the US mid-south.** M. Machado Noguera*¹, J.W. Heiser², T. Bararpour³, L.E. Steckel⁴, R.L. Nichols⁵, S.C. Beam⁶, L. Benedetti¹; ¹University of Arkansas, Fayetteville, AR, ²University of Missouri, Portageville, MO, ³Mississippi State University, Stoneville, MS, ⁴University of Tennessee, Jackson, TN, ⁵Cotton Incorporated, Cary, NC, ⁶Virginia Tech, Blacksburg, VA (166)
- 1:45 Drilling Depth Effects on Crop Stand and Weed Control in California Rice.** A. Ceseski*, A. Godar, k. al-khatib; UC Davis, davis, CA (167)
- 2:00 Sweetpotato Tolerance to Indaziflam.** S.C. Smith*¹, K.M. Jennings¹, D. Monks¹, M. Schwarz², L. Moore¹, M.D. Waldschmidt¹; ¹North Carolina State University, Raleigh, NC, ²Bayer U.S. LLC, Research Triangle Park, NC (168)

- 2:15 Reducing the Off-target Movement of Dicamba with See and Spray Technology.** Z.D. Lancaster*¹, J.K. Norsworthy¹, J.T. Richburg¹, M.M. Houston², T. Barber³; ¹University of Arkansas, Fayetteville, AR, ²University of Arkansas, Fayetteville, AR, ³University of Arkansas, Lonoke, AR (169)
- 2:30 Sorgoleone has Varying Efficacy on Select Wheat (*Triticum aestivum* ssp.) Cultivars and Weed Species.** E.A. Jones*, M. Bansal, W. Everman, J. Sanders, D.J. Contreras, M.A. Granadino; North Carolina State University, Raleigh, NC (170)
- 2:45 Palmer amaranth (*Amaranthus palmeri*) and Tarnished Plant Bug (*Lygus Lineolaris*) Control with Various Dicamba + Insecticide Tank-Mixes in Cotton (*Gossypium hirsutum*).** J. McNeal*¹, D. Dodds², A. Catchot³, L.X. Franca², S. Davis²; ¹Mississippi State University, Mississippi State, Mississippi, MS, ²Mississippi State University, Mississippi State, MS, ³Mississippi State University, Starkville, MS (171)

TUESDAY MORNING FEBRUARY 5

Weed Biology and Ecology

LOCATION: Meeting Room 14,15
 TIME: 8:15 AM - 9:45 AM
 CHAIR/ MATTHEW CUTULLE
 MODERATOR: CLEMSON UNIVERSITY
 CHARLESTON, SC
 CO-CHAIR: ANGELA POST
 NORTH CAROLINA STATE
 UNIVERSITY
 RALEIGH, NC

***SPEAKER**

- 8:15 Root System Architecture and Genes Associated with Allelopathy in Weedy Rice.** A.P. Tucker*¹, B.C. Schumaker¹, S. Shrestha¹, S.D. Stallworth², N.R. Burgos³, T. Tseng²; ¹Mississippi State University, Starkville, MS, ²Mississippi State University, Mississippi State, MS, ³University of Arkansas, Fayetteville, AR (172)

- 8:30 Sicklepod Extract as an Effective Deer Repellent: From Captive Facility to Field Testing.** Z. Yue*¹, T. Tseng², M. Lashley¹; ¹Mississippi State University, Starkville, MS, ²Mississippi State University, Mississippi State, MS (173)
- 8:45 Response of diverse red rice Lines to Alternating Wetting and Drying (AWD) and Conventional Flood-Irrigation Practices.** D. Gealy*¹, J. Rohila²; ¹USDA ARS DBNRRRC, Stuttgart, AR, ²USDA ARS DBNRRRC, Stuttgart, AR (174)
- 9:00 Characterization of F₁ Hybrid Progenies of *Sorghum bicolor* and its Weedy Congener, *Sorghum halepense*.** C. Sias*, S. Ohadi, G. Hodnett, W. Rooney, M. Bagavathiannan; Texas A&M University, College Station, TX (175)
- 9:15 Seed Viability of Palmer Amaranth as Affected by Herbicide Applications.** D. Sarangi*¹, K.M. Werner¹, B. Pilipovic¹, P.A. Dotray², M.V. Bagavathiannan¹; ¹Texas A&M University, College Station, TX, ²Texas Tech University, Lubbock, TX (176)

TUESDAY MORNING FEBRUARY 5

Weed Management in Pastures and Rangeland

LOCATION: Meeting Room 14,15
 TIME: 10:00 AM - 12:00 PM
 CHAIR/ John Byrd
 MODERATOR: Mississippi State University
 Miss State, MS
 CO-CHAIR: Jason Belcher
 Bayer Crop Protection
 Auburn, AL

***SPEAKER**

- 10:00 Is Glyphosate an Option for Selective Control of Smutgrass in Bahiagrass Pastures in Florida?** B. Sellers*¹, J.C. Dias²; ¹University of Florida, Ona, FL, ²University of Florida, ONA, FL (177)
- 10:15 Grass Weed Management in Southern Pastures / Spray Fields Using Indaziflam.** L.S. Warren*¹, D. Spak²; ¹Warren QA and Weed Research, Surf City, NC, ²Bayer Crop Science, RTP, NC (178)

- 10:30 Managing Brunswickgrass in Bahiagrass Seed Production Fields in Florida.** C.T. Cooper*¹, B. Sellers²; ¹UF/IFAS Extension Citrus County, Lecanto, FL, ²University of Florida, Ona, FL (179)
- 10:45 Weed Control and Bermudagrass Tolerance to Indaziflam in Bermudagrass Hay Production.** J. Belcher*¹, D. Spak²; ¹Bayer Crop Protection, Auburn, AL, ²Bayer Crop Science, RTP, NC (180)
- 11:00 Common Cocklebur and Common Ragweed Control with Saflufenacil and Halosulfuron in Cool-Season Pastures.** J. Green*¹, K. Vanzant²; ¹Univ of Kentucky, Lexington, KY, ²Univ of Kentucky, Versailles, KY (181)
- 11:15 Weed Control and Crop Safety with Indaziflam in Pastures.** M. Matocha*¹, S.A. Nolte², J.R. Jackson³; ¹Texas AgriLife Extension Service, College Station, TX, ²Texas A&M AgriLife Extension, College Station, TX, ³Texas A&M AgriLife Extension, Stephenville, TX (182)
- 11:30 Tolerance of Tifton 9 Seedling Bahiagrass to Sedge-Inhibiting Herbicides.** D.P. Russell*¹, J.D. Byrd², N.H. Thorne³, H.B. Quick¹; ¹Mississippi State University, Mississippi State, MS, ²Mississippi State University, Miss State, MS, ³Mississippi State University, Mississippi State University, MS (183)
- 11:45 Discussion**

Notes:

TUESDAY AFTERNOON FEBRUARY 5

Educational Aspects of Weed Control

LOCATION: Meeting Room 14,15
TIME: 1:00 PM - 1:15 PM
CHAIR/
MODERATOR: Clyde Smith
UPI
Marianna, FL
CO-CHAIR: John Byrd
Mississippi State University
Miss State, MS

***SPEAKER**

1:00 Complementary Applications of Analytic Techniques in Field Research. J.T. Buol*¹, A. Brown², D.B. Reynolds¹; ¹Mississippi State University, Mississippi State, MS, ²Mississippi State Chemical Laboratory, Mississippi State, MS (184)

TUESDAY AFTERNOON FEBRUARY 5

Physiological and Biological Aspects of Weed Control

LOCATION: Meeting Room 14,15
TIME: 1:15 PM - 2:00 PM
CHAIR/
MODERATOR: Clyde Smith
UPI
Marianna, FL
CO-CHAIR: John Byrd
Mississippi State University
Miss State, MS

***SPEAKER**

1:15 Dicamba Accumulation in Soybean Following Low-Dose Exposure in Reproductive Development. M.M. Zaccaro*, J.K. Norsworthy, C.B. Brabham; University of Arkansas, Fayetteville, AR (185)

1:30 EPA's Registration Review Process & Its Potential Impact on Herbicide Use. C. Moore*; Syngenta Crop Protection, LLC, Greensboro, NC (186)

**1:45 Spatial-Temporal Analysis of the
Benzobicyclon Rice Tolerance Gene . C.**
Brabham*¹, J.K. Norsworthy¹, V.K. Varanasi¹,
C. Sandoski²; ¹University of Arkansas,
Fayetteville, AR, ²Gowan USA, Collierville, TN
(187)

TUESDAY AFTERNOON FEBRUARY 5

Weed / Vegetation Management in Forestry

LOCATION: Meeting Room 14,15
TIME: 2:00 PM - 3:00 PM
CHAIR/
MODERATOR: Clyde Smith
UPI
Marianna, FL
CO-CHAIR: John Byrd
Mississippi State University
Miss State, MS

***SPEAKER**

- 2:00 Early Response to Pine Control Treatments
in Forestry Site Preparation**
Applications. A.B. Self*¹, A.W.
Ezell²; ¹Mississippi State University, Grenada,
MS, ²Mississippi State University, Miss State,
MS (188)
- 2:15 Control of Natural Pines with a Mix of
Imazapyr, Glyphosate, and Saflufenacil.** A.W.
Ezell*¹, A.B. Self²; ¹Mississippi State
University, Miss State, MS, ²Mississippi State
University, Grenada, MS (189)
- 2:30 Two-Year Loblolly Pine Growth Following
Herbaceous Weed Control with Mixtures
Containing Indaziflam.** A.W. Ezell*¹, A.B.
Self², J. Belcher³; ¹Mississippi State University,
Miss State, MS, ²Mississippi State University,
Grenada, MS, ³Bayer Crop Protection, Auburn,
AL (190)
- 2:45 Break**

TUESDAY AFTERNOON FEBRUARY 5

**Soil and Environmental Aspects of Weed
Science**

LOCATION: Meeting Room 14,15
TIME: 3:00 PM - 4:15 PM
CHAIR/
MODERATOR: Clyde Smith
UPI
Marianna, FL
CO-CHAIR: Jason Belcher
Bayer Crop Protection
Auburn, AL

***SPEAKER**

- 3:00 Response of Cotton to Low Rates of Clarity, Engenia, and Enlist Duo at different Growth Stages.** R.R. Hale*¹, T. Bararpour², J.W. Seale²; ¹Delta Research and Extension Center, Stoneville, MS, ²Mississippi State University, Stoneville, MS (191)
- 3:15 Assessing Dicamba Drift: Large Scale Field Studies.** G. Kruger*¹, G. Sousa Alves¹, D.B. Reynolds², J.K. Norsworthy³, B.G. Young⁴, C. Sprague⁵, R. Werle⁶, C. Sias⁷, P.H. Sikkema⁸; ¹University of Nebraska-Lincoln, North Platte, NE, ²Mississippi State University, Mississippi State, MS, ³University of Arkansas, Fayetteville, AR, ⁴Purdue University, West Lafayette, IN, ⁵Michigan State University, East Lansing, MI, ⁶University of Wisconsin, Madison, WI, ⁷Texas A&M University, College Station, TX, ⁸University of Guelph, Ridgetown, ON (192)
- 3:30 An Attempt at Partitioning Dicamba Particles and Vapors.** G. Kruger*¹, G. Sousa Alves¹, D.B. Reynolds², D. Dodds², A. Brown³, A. Meredith³, L.X. Franca², B.K. Fritz⁴, C. Hoffmann⁵, J.A. Golus¹, K. Schroeder¹; ¹University of Nebraska-Lincoln, North Platte, NE, ²Mississippi State University, Mississippi State, MS, ³Mississippi State Chemical Laboratory, Mississippi State, MS, ⁴USDA:ARS Areawide Pest Management Research Unit, College Station, TX, ⁵Prology Consulting, Bryan, TX (193)
- 3:45 Discussion**

TUESDAY AFTERNOON FEBRUARY 5

Quiz Bowl

LOCATION: Ballroom A, B
TIME: 5:00 PM - 6:00 PM
CHAIR/ Tom Mueller
MODERATOR: University of Tennessee
Knoxville, TN

WEDNESDAY MORNING FEBRUARY 6

SWSS Christian Fellowship Breakfast

LOCATION: Meeting Room 18
TIME: 6:30 AM - 7:45 AM
CHAIR/ Tom Mueller
MODERATOR: University of Tennessee
Knoxville, TN

WEDNESDAY MORNING FEBRUARY 6

Weed Management in Agronomic Crops

LOCATION: Meeting Room 16, 17
TIME: 8:15 AM - 4:00 PM
CHAIR/ Vijay Singh
MODERATOR: Texas A&M University
College Station, TX
CO-CHAIR: Sandeep Rana
Bayer (Monsanto Legacy)
Galena, MD

***SPEAKER**

8:15 Predicting the Relative Long-Term Effectiveness of Herbicide Programs on *Amaranthus* Using Syngenta's Resistance Fighter Model. E.T. Parker*¹, R. Wuerffel², E. Palmer³, D.L. Bowers⁴, C.L. Dunne⁵, D. Kaundun⁶, C. Liu⁶; ¹Syngenta, Vero Beach, FL, ²Syngenta, Sebastian, FL, ³Syngenta Crop Protection, Greensboro, NC, ⁴Syngenta, Greensboro, NC, ⁵Syngenta Crop Protection, Vero Beach, FL, ⁶Syngenta, Bracknell, England (194)

- 8:30 Use of Unmanned Aerial Systems for Weed Detection and Management.** V. Singh^{*1}, D. Martin², B. Sapkota¹, M. Latheef², M. Bishop¹, M. Bagavathiannan¹; ¹Texas A&M University, College Station, TX, ²USDA, College Station, TX (195)
- 8:45 State of Resistance for Palmer Amaranth Populations from the North Carolina Coastal Plain.** D.J. Mahoney^{*1}, D. Jordan², A.T. Hare², N.R. Burgos³, M. Vann²; ¹North Carolina State Univ., Raleigh, NC, ²North Carolina State University, Raleigh, NC, ³University of Arkansas, Fayetteville, AR (196)
- 9:00 Engenia Herbicide Research Update.** C. ASMUS^{*1}, S.K. Bangarwa²; ¹BASF CORPORATION, Raleigh, NC, ²BASF Corporation, Durham, NC (197)
- 9:15 Pyraclonil Efficacy in California Water Seeded Rice.** K.E. Driver^{*1}, A. Godar², k. al-khatib², J. Gutierrez³; ¹UC Davis, Davis, CA, ²UC Davis, davis, CA, ³Nichino USA, Fresno, CA (198)
- 9:30 Post-Direct Options in Enlist Cotton.** R.C. Doherty^{*1}, T. Barber², Z.T. Hill³, A. Ross²; ¹University of Arkansas, Division of Agriculture, Cooperative Extension, Monticello, AR, ²University of Arkansas, Lonoke, AR, ³University of Arkansas Cooperative Extension Service, Monticello, AR (199)
- 9:45 Break**
- 10:00 Susceptibility of Arkansas Palmer Amaranth Accessions to Common Sites of Action.** C. Brabham^{*}, J.K. Norsworthy, V.K. Varanasi; University of Arkansas, Fayetteville, AR (200)
- 10:15 Evaluation of Engenia Herbicide Rope-wick Applications for Control of Palmer amaranth in Dicamba Tolerant Soybean.** G. Stapleton^{*1}, C. ASMUS², D.E. Westberg³; ¹BASF Corporation, Halls, TN, ²BASF CORPORATION, Raleigh, NC, ³BASF Corporation, Cary, NC (201)
- 10:30 Off-Target Movement of Auxin Herbicides in Arkansas: What have We Learned?** J.K. Norsworthy^{*1}, T. Barber², R.C. Scott³, C. Willett¹, J. Ross²; ¹University of Arkansas, Fayetteville, AR, ²University of Arkansas, Lonoke, AR, ³Univ of Arkansas Coop Extn, Lonoke, AR (202)

- 10:45 Tavium™ Plus VaporGrip® Technology – A Tool for Weed Management in Conventional and No-Till Dicamba Tolerant Soybeans and Cotton.** P.M. Eure*¹, J. Holloway², D. Porter³, T. Beckett³; ¹Syngenta Crop Protection, Richmond, TX, ²Syngenta Crop Protection, Jackson, TN, ³Syngenta Crop Protection, Greensboro, NC (203)
- 11:00 Effect of POST-applied PPO- and ALS-inhibiting Herbicides on Soybean Yield and Canopy Formation.** O.W. France*, J.K. Norsworthy, M.C. Castner, G.L. Priess; University of Arkansas, Fayetteville, AR (204)
- 11:15 Peanut Injury Evaluation of PPO Inhibitor Herbicides as Affected by Application Timings and Surfactants.** K.J. Price*, S. Li; Auburn University, Auburn, AL (205)
- 11:30 Cotton Tolerance to Halauxifen-methyl and Florasulam Applied Preplant Burndown.** C.W. Cahoon*¹, M.C. Askew², M.L. Flessner³, A. York⁴; ¹North Carolina State University, Raleigh, NC, ²Virginia Tech, Eure, NC, ³Virginia Tech PPWS Dept., Blacksburg, VA, ⁴North Carolina State University, Cary, NC (206)
- 11:45 Evaluation of Soybean Tolerance to Off-Target Loyant™ (florpyrauxifen-benzyl) Deposition.** D.C. Walker*¹, E. Webster², B. McKnight¹, S. Rustom¹, M.J. Osterholt², C. Webster³; ¹LSU AgCenter, Baton Rouge, LA, ²Louisiana State University, Baton Rouge, LA, ³LSU, Baton Rouge, LA (207)
- 12:00 Lunch**
- 1:00 A Comparison of Multiple Pre and Post-emergent Herbicide Programs in Peanut (*Arachis hypogaea* L.).** K.L. Broster*¹, T.A. Baughman², B. Zurweller³, J. Ferguson³; ¹Mississippi State University, Starkville, MS, ²OSU- Institute for Agricultural BioScience, Ardmore, OK, ³Mississippi State University, Mississippi State, MS (208)
- 1:15 Mechanical Options to Improve In-row Weed Control in Organic Peanut Production.** W.C. Johnson III*; USDA-ARS, Tifton, GA (209)
- 1:30 Managing PPO-resistant *Amaranthus* sp. in Roundup Ready 2 Xtend Soybeans.** G.B. Montgomery*¹, N. Rana², L.M. Etheredge³; ¹Bayer CropScience, Rives, TN, ²Bayer CropScience, St. Louis, MO, ³Monsanto Company, Llano, TX (210)

- 1:45 The FullPage Rice Cropping Solution and Preface and Postscript Herbicides- a new IMI-tolerant rice weed control system.** A. Kendig*¹, D. Feist², B. Ottis³; ¹ADAMA, Chesterfield, MO, ²ADAMA, Ft. Collins, CO, ³RiceTec, Alvin, TX (211)
- 2:00 Weed Management Programs in Mississippi Corn.** T. Bararpour*¹, R.R. Hale², J.A. Bond², J.W. Seale¹, B.R. Golden²; ¹Mississippi State University, Stoneville, MS, ²Delta Research and Extension Center, Stoneville, MS (212)
- 2:15 Efficacy of Quizalofop Mixtures with Auxinic Herbicides.** T.L. Sanders*¹, H. Edwards², B. Lawrence², J.D. Peeples Jr.³, N.G. Corban², B.R. Golden⁴, J.A. Bond⁴; ¹Mississippi State University: Delta Research & Extension Center, Stoneville, MS, ²Mississippi State University, Stoneville, MS, ³Delta Research and Extension Center, Stoneville, MS, ⁴Delta Research and Extension Center, Stoneville, MS (213)
- 2:30 Rice Response to Common Preplant Herbicides.** B. Lawrence*¹, J.A. Bond², H. Edwards¹, B.R. Golden², T.L. Sanders³, N.G. Corban¹, J.D. Peeples Jr.⁴; ¹Mississippi State University, Stoneville, MS, ²Delta Research and Extension Center, Stoneville, MS, ³Mississippi State University: Delta Research & Extension Center, Stoneville, MS, ⁴Delta Research and Extension Center, Stoneville, MS (214)
- 2:45 Break**
- 3:00 Gramoxone Magnum: A New Option for Burndown and Residual Weed Control.** B. Lindenmayer*¹, R. Lins², A. Moses³, M. Saini⁴, D.L. Bowers⁵; ¹Syngenta Crop Protection, Perkins, OK, ²Syngenta, Byron, MN, ³Syngenta, Gilbert, IA, ⁴Syngenta Crop Protection, Greensboro, NC, ⁵Syngenta, Greensboro, NC (215)
- 3:15 Permeate: A New NPE-Free Nonionic Surfactant.** J.A. Gillilan¹, R.J. Edwards*², T.A. Hayden³, L.C. Magidow⁴, A.D. Makepeace⁴, J.V. Gednalske⁴; ¹Winfield United, Springfield, TN, ²WinField Solutions, River Falls, WI, ³Winfield United, Owensboro, KY, ⁴Winfield United, River Falls, WI (216)

- 3:30 Nozzle Type and Time of Application Effects on Weed Control in Mississippi Cotton.** J. Ferguson*¹, P.H. Urach Ferreira¹, M.T. Wesley Jr.², L.H. Merritt¹, Z.R. Treadway¹, K.L. Broster³, N. Fleitz⁴; ¹Mississippi State University, Mississippi State, MS, ²Mississippi State University, Mississippi State, MS, ³Mississippi State University, Starkville, MS, ⁴Pentair-Hypro, New Brighton, MN (217)
- 3:45 Evaluation of Benzobicyclon-Containing Programs for Weedy Rice Control in Provisia Rice.** J.A. Patterson*, J.K. Norsworthy, Z.D. Lancaster, J.T. Richburg, M.C. Castner; University of Arkansas, Fayetteville, AR (218)
- 4:00 Discussion**

WEDNESDAY MORNING FEBRUARY 6

New Technologies

LOCATION: Meeting Room 19, 20
TIME: 8:15 AM - 9:45 AM
CHAIR/ Ryan Edwards
MODERATOR: WinField Solutions
River Falls, WI

***SPEAKER**

- 8:15 Taking Effective Scientific Photographs and Analyzing Digital Images and Videos in Weed Science Research.** S. Askew*; Virginia Tech, Blacksburg, VA (219)
- 8:30 Image-Based Detection of Plasticulture Row-Middle Vegetation using a Convolutional Neural Network.** S.M. Sharpe*¹, A.W. Schumann², J.J. Yu³, N. Boyd¹; ¹University of Florida, Wimauma, FL, ²University of Florida, Lake Alfred, FL, ³University of Florida, Riverview, FL (220)
- 8:45 What's New from Syngenta: New product introductions and current product updates.** D. Black*; Syngenta Crop Protection, Searcy, AR (221)
- 9:00 Introducing ProVista St. Augustine grass, the Next Generation of Sustainable Lawn Grasses.** S. Kelly*¹, C.A. Yurisc¹, L. Freshour², M. Koch², C. Baldwin², R.D. Baker²; ¹The Scotts Company, Apopka, FL, ²The Scotts Company, Marysville, OH (222)

9:15 Palmer amaranth (*Amaranthus palmeri*) Control Using Various Droplet Sizes of Acifluorfen and Lactofen. L.X. Franca*¹, D. Dodds¹, C. Samples¹, G. Kruger², T.R. Butts²; ¹Mississippi State University, Mississippi State, MS, ²University of Nebraska-Lincoln, North Platte, NE (223)

9:30 Discussion

WEDNESDAY MORNING FEBRUARY 6

Weed Management in Horticultural Crops

LOCATION: Meeting Room 19, 20
TIME: 10:00 AM - 11:45 AM
CHAIR/ Nicholas Basinger
MODERATOR: The University of Georgia
Athens, GA

***SPEAKER**

10:00 Interspecific and intraspecific interference of Palmer amaranth (*Amaranthus palmeri*) and large crabgrass (*Digitaria sanguinalis*) in sweetpotato. N.T. Basinger*¹, K.M. Jennings², D. Monks², D. Jordan², W. Everman², E.L. Hestir³, M.D. Waldschmidt², S.C. Smith², C. Brownie²; ¹The University of Georgia, Athens, GA, ²North Carolina State University, Raleigh, NC, ³University of California, Merced, Merced, CA (224)

10:15 Cucurbit Response to Residual Glyphosate Activity from a Preplant Application. K.J. Goodman*¹, T.M. Randell¹, L.C. Hand¹, J.C. Vance¹, A.S. Culpepper²; ¹University of Georgia, Tifton, GA, ²University of Georgia, Tifton, GA (225)

10:30 Evaluating Pumpkin Tolerance to Acetochlor. J.H. Ferebee*¹, C.W. Cahoon¹, T. Besancon², H.B. Blake¹, T.H. Hines¹; ¹Virginia Tech, Painter, VA, ²Rutgers University, Chatsworth, NJ (226)

10:45 Evaluation of Chelated Fe and Plant Hormones as Herbicide Safeners in Sweetpotato. M.A. Cutulle*¹, H.T. Campbell¹, P.A. Wadl², D. Jeffris¹; ¹Clemson University, Charleston, SC, ²USDA-ARS, Charleston, SC (227)

- 11:00 Effects of Low-Dose Applications of 2,4-D and Dicamba on Cucumber and Cantaloupe.** L.C. Hand*¹, A.S. Culpepper², T. Gray³, J. Shugart³; ¹University of Georgia, Tifton, GA, ²University of Georgia, Tifton, GA, ³Georgia Department of Agriculture, Atlanta, GA (228)
- 11:15 Crop tolerance and weed control of clomazone + ethalfluralin posttransplant in cucurbit crops.** P.J. Dittmar*¹, A.S. Culpepper², R.B. Batts³; ¹University of Florida, Gainesville, FL, ²University of Georgia, Tifton, GA, ³NCSU IR-4 Field Research Center, Raleigh, NC (229)
- 11:30 Pumpkin Variety Tolerance to Fomesafen.** N.R. Burgos*¹, M. Machado Noguera¹, L. Benedetti¹, P.C. Lima¹, F.C. Caratti², S. Eaton³; ¹University of Arkansas, Fayetteville, AR, ²University of Arkansas, Fayetteville, AR, ³University of Arkansas, Fayetteville, Fayetteville, AR (230)
- 11:45 Hydrogels as herbicide carriers in vegetable plasticulture.** R. Kanissery*¹, C. McAvoy²; ¹University of Florida - IFAS, Immokalee, FL, ²University of Florida - SWFREC, Immokalee, FL (231)
- 12:00 Discussion**

WEDNESDAY MORNING FEBRUARY 6

Weed Management in Turf

LOCATION: Meeting Room 14,15
 TIME: 8:00 AM - 11:00 AM
 CHAIR/ MODERATOR: Shawn Askew
 Virginia Tech
 Blacksburg, VA

***SPEAKER**

- 8:00 Enhancing the efficacy of preemergence herbicides for annual bluegrass control using degree-day models.** P. McCullough*; University of Georgia, Griffin, GA (232)
- 8:15 Zoysiagrass and broadleaf weed response to herbicides applied during spring green up.** J.M. Craft*, S. Askew; Virginia Tech, Blacksburg, VA (233)
- 8:30 Potential Turfgrass Herbicide Safeners.** S.A. Ledford*, B. McCarty, B. Kerr; Clemson University, Clemson, SC (234)

- 8:45 Post Emergence Control of Southern Watergrass and Torpedograss - final updates.** P.J. Brown*, B. McCarty, B. Cross, B. Kerr, N. Gambrell; Clemson University, Clemson, SC (235)
- 9:00 Evaluation of newly established buffalograss for tolerance to glyphosate.** M.B. Bertucci*, D. Karcher, D. OBrien, M. Richardson; University of Arkansas, Fayetteville, AR (236)
- 9:15 Postemergence Crabgrass (*Digitaria* spp.) Control in Bermudagrass with Pinoxaden.** D.R. Taylor*¹, J.T. Brosnan², G. Breeden³, G.M. Henry⁴; ¹University of Tennessee Knoxville, Knoxville, TN, ²Univ. of Tennessee, Knoxville, TN, ³University of Tennessee, Knoxville, TN, ⁴University of Georgia, Athens, GA (237)
- 9:30 Soil Moisture and Application Placement Affect Herbicide Efficacy for Postemergence Goosegrass (*Eleusine indica*) Control.** J. Vargas*¹, J.T. Brosnan², G. Breeden³, M.T. Elmore⁴, D.P. Tuck⁴; ¹U of TN 252 Ellington Bldg, Knoxville, TN, ²Univ. of Tennessee, Knoxville, TN, ³University of Tennessee, Knoxville, TN, ⁴Rutgers University, New Brunswick, NJ (238)
- 9:45 Break**
- 10:00 Post-emergent Control Options for Poa Annu.** B. McCarty¹, J.R. Weaver*², N. Gambrell¹, C. Patrick¹; ¹Clemson University, Clemson, SC, ²Clemson University, Pendleton, SC (239)
- 10:15 Evaluation of Piper and Clethodim for Annual Bluegrass Control in Dormant Bermudagrass .** P. McCullough*; University of Georgia, Griffin, GA (240)
- 10:30 New Products for Thin Paspalum Control.** J. Brewer*¹, S. Rana², S. Askew¹; ¹Virginia Tech, Blacksburg, VA, ²Virginia Polytechnic Institute and State University, Blacksburg, VT (241)
- 10:45 Discussion**

WEDNESDAY AFTERNOON FEBRUARY 6

Graduate Student Luncheon

LOCATION: Meeting Room 18
TIME: 12:00 PM - 2:00 PM

SWSS Women Networking Event

LOCATION: Meeting Room 18
TIME: 4:00 PM - 5:00 PM

SWSS Mixer

LOCATION: LV2 Pre-Function
TIME: 5:00 PM - 6:00 PM

Awards Banquet

LOCATION: Ballroom A, B
TIME: 6:00 PM - 8:00 PM

THURSDAY MORNING FEBRUARY 7

SWSS Executive Board Meeting

LOCATION: Meeting Room 16
TIME: 7:00 AM - 10:00 AM
CHAIR/ MODERATOR: James Holloway
Syngenta Crop Protection
Jackson, TN

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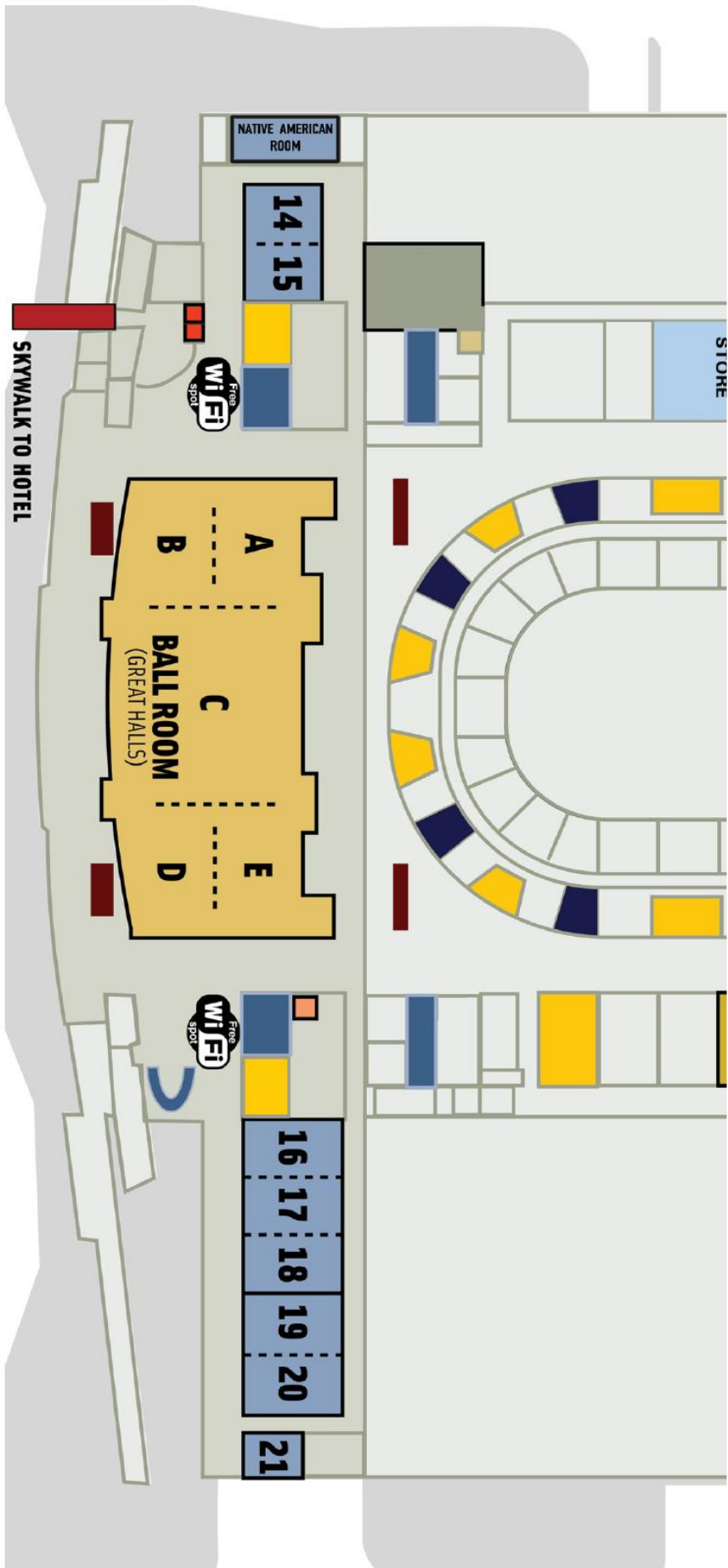
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SWSS Sustaining Members - 2019

ADAMA
Agricenter International
AMVAC Chemical Corp.
BASF Corporation
Bayer CropScience
Corteva
Diligence Technologies
Direct Contact, Inc.
DuPont Crop Protection
Farm Press Publications
FMC
Greenleaf Technologies
Helena Chemical Co
K-I Chemical U.S.A. Inc.
Nichino America
Syngenta Crop Protection
The Scotts Company
TeeJet Technologies - Spraying Systems Co.
United Phosphorus, Inc.
Valent USA Corp
Winfield United



Personal Time Schedule

| Time | Monday | Tuesday | Wednesday |
|-------------|-----------------------------|----------------|------------------------|
| 8:00 | | | |
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| 9:30 | | | |
| 9:45 | | Break | Break |
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| 5:00 | | | |
| 5:15 | | | |
| 5:30 | SWSS Business Meeting | SWSS Quiz Bowl | SWSS Mixer |
| 5:45 | | | |
| 6:00 | | | |
| 7:00 | | | SWSS Awards Banquet |
| 7:15 | | | |
| 7:30 | | | |