WSSA

2027 Annual Meeting
February 8-11, 2027
Denver, CO

2028 Annual Meeting
January 17-20, 2028
Savannah, GA

WEED SCIENCE SOCIETY OF AMERICA

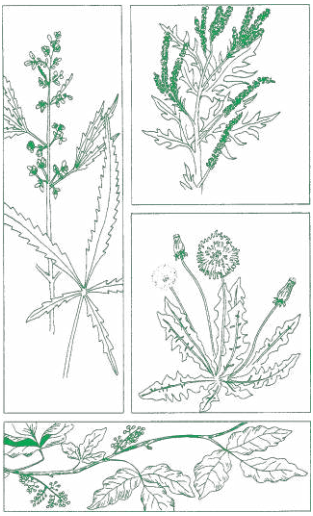
66th Meeting

2026 MEETING PROGRAM

Crabtree Valley Marriot

Raleigh, NC

February 8-12, 2026



WSSA Sustaining Members

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Syngenta Crop Protection

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66th Meeting
Weed Science Society of America

Local Arrangements Committee 2026 – Raleigh

Co-Chairs ..... Charles Cahoon, Ramon Leon

Andrew Blyth, Dallas Taylor, Gaylon Morgan, David Belles, Navdeep Godara

The WSSA 2026 Program

Welcome to the 2026 Weed Science Society of America (WSSA) Annual Meeting!

We are thrilled to gather at the Crabtree Valley Marriott in Raleigh, North Carolina. Nestled in Crabtree Valley, our venue offers the perfect balance of convenience and is situated adjacent to the Crabtree Valley Mall and just a short ride from the vibrant energy of downtown Raleigh.

Our program kicks off early with a **Pre-Conference Tour** of the Syngenta facilities in Greensboro on Monday morning (7:00 AM – 2:00 PM). For those looking to network early, the **Women in Weed Science Networking Event** will also be held Monday afternoon from 2:00 PM – 3:30 PM.

The **General Session** officially begins at 4:15 PM on Monday, February 24, 2026. We are honored to welcome our Keynote Speaker, **Dr. Garey Fox**, Dean of the College of Agriculture and Life Sciences at North Carolina State University. Following the keynote, President Hilary Sandler will deliver the Presidential Address, followed by our annual awards ceremony and a celebratory food-and-drink reception.

Student Engagement & Competition As always, the WSSA meeting is dedicated to the next generation of scientists. With 152 students competing in the Single Slide Talk (SST) and poster contests, the talent on display will be exceptional.

- **Tuesday:** Student Lunch and Business Meeting (12:00 PM) featuring a roundtable on "Careers in Emerging Ag-Tech and Startups."
- **Tuesday/Wednesday:** SST contests begin Tuesday afternoon, with the finals held Wednesday at 8:30 AM.
- **Wednesday:** A "Scientific Writing" workshop starts at 3:30 PM, followed by the Student Awards Ceremony at 5:30 PM.

Symposia and Science We are proud to offer three distinct symposia this year:

1. **Tuesday Morning:** "Bridging the Gap: Regulatory, Technical, and Industry Perspectives on Targeted and Autonomous Weed Control."
2. **Tuesday Afternoon:** "Re-framing the Discussion of Herbicide Resistance – Perspectives on Best Practices for Real-time Management in the Field."
3. **Wednesday Morning:** An interactive poster symposium hosted by the Herbicide Resistance Action Committee (HRAC).

Beyond the sessions, we invite you to join the **5K Puff Run/Walk** on the Raleigh Greenway Wednesday morning at 7:00 AM, or join the Tuesday night bus to the **Glenwood Avenue** restaurant district at 6:00 PM. We conclude on

Thursday with three exciting **Post-Conference Tours**: Cotton Incorporated, local BASF research facilities, and the North Carolina Museum of Natural History.

Special thanks to our local arrangements personnel Charles Cahoon, Ramon Leon, Dallas Taylor, Andrew Blythe, David Belles, Gaylon Morgan, and Navdeep Godara, and the WSSA Executive Secretary, Eric Gustafson, for keeping this program chair on course and organizing numerous events. We acknowledge guidance from WSSA Executive board members Dawn Refsell and Hilary Sandler; their input has been crucial in the development of the program. We thank our Contest Chair Darrin Dodds, along with all those who stepped up to be Section Chairs, Moderators, and Judges. We could not do it without you!!

Welcome to Raleigh and have a great meeting!

Ian Burke, WSSA Program Chair and President-Elect

2026 Program Committee

General Program Chair	Ian Burke
Vice Chair	Dawn Refsell
01. Agronomic Crops	Laura Smith
02. Horticultural Crops	Thierry Besancon
03. Turf and Ornamentals	Navdeep Godara
04. Pastures, Rangelands, Forests, and Rights of Way, and Wildlands	David Russell
05. Aquatic Invasives	Andrew Howell
06. Regulatory Aspects	Bianca Martins
07. Teaching and Extension	Sarah Lancaster
08. Formulation, Adjuvant, and Application Technology	Peter Berry
09. Weed Biology and Ecology	Aniruddha Maity
10. Biocontrol of Weeds	Cara McCauley
11. Physiology	David Belles
12. Soil and Environmental Aspects	Cameron Douglass
13. Integrated Weed Management	Nick Basinger
14. Sensing, Automation, and Precision Technologies	Michael Walsh
15. Genomics	Isabel Werle
16. Sustaining Member Exhibits	Kyle Kepner
17. Poster Sessions	Charles Cahoon
18. Student Contest	Darrin Dodds and Hannah Wright
Student Travel Enrichment Experience	Cara McCauley

Graduate Student Liaison	Navdeep Godara
Local Arrangements	Charles Cahoon, Ramon Leon Dallas Taylor Andrew Blythe David Belles Gaylon Morgan Navdeep Godara

Program Booklet and Abstracts

Please use the QR Code below to access a pdf copy of the program.

Commented [ICB1]: Insert QR Code

Posters and Sustaining Member Exhibits

All posters and Sustaining Member Exhibits will be on display in the Crabtree Ballroom from Tuesday at 7 am to Thursday at 8 am. Poster display times are not included in the program.

MEETING ROOM LOCATIONS

All meeting rooms are located on the first floor to the north and south of the hotel lobby.

CONDENSED PROGRAM

SUNDAY FEBRUARY 8

WSSA Board of Directors Meeting	7:30 AM-5:00 PM	City of Oaks (Dogwood, Magnolia)
GROW	2:00 PM-5:00 PM	City of Oaks (Sycamore, Willow)
Graduate Student Drive Shack Networking Event *Sponsored by Bayer Crop Science* *Graduate Students Only*	6:00 PM-10:00 PM	Off-Site, Pre-registration Required

MONDAY FEBRUARY 9

TOUR Syngenta Greensboro	7:00 AM-1:30 PM	Lobby
Herbicide Resistance Education Committee	8:00 AM-10:00 AM	Capital
Terminology Committee	8:00 AM-9:30 AM	Creedmore
Sensing, Automation, and Precision Technologies Committee	10:00 AM-11:30 AM	Capital

IWSS Board Meeting	10:00 AM-11:30 AM	Creedmore
Publications Committee	10:00 AM-11:00 AM	Boardroom
Endangered Species Committee	11:00 AM-12:00 PM	Creedmore
Science Policy Committee	12:00 PM-2:00 PM	Creedmore
Registration	1:00 PM-4:00 PM	Raleigh
Formulation, Adjuvant, and Application Technology Committee	12:30 PM-2:00 PM	Capital
Herbicide Resistance Action Committee	2:00-3:30 PM	Capital
Poster Set-up	12:00 PM-4:00 PM	Crabtree Ballroom
Women in Weed Science	2:00 PM-3:45 PM	City of Oaks Ballroom
Sponsored by Corteva		
General Session	4:15 PM-7:00 PM	Glenwood Ballroom Salons II, III, IV
Awards Reception	7:00 PM-9:30 PM	Glenwood Ballroom Salon I & Glenwood Terrace

TUESDAY FEBRUARY 10

Judges Breakfast	6:00 AM - 7:00 AM	Creedmore
Puff 5K Run/Walk	6:30 AM-7:30 AM	Lobby
Finance Committee	7:00-9:00 AM	Capital
Posters (Odd-number authors present)	7:00 AM - 8:30 AM	Crabtree Ballroom

POSTER 00. Committee Reports; *In Memoriam*

POSTER 01. Agronomic Crops

POSTER 02. Horticultural Crops

POSTER 03. Turf and Ornamentals

POSTER 04. Pasture, Rangelands, Forests, and Rights of Way

POSTER 05. Wildland and Aquatic Invasives

POSTER 07. Teaching and Extension

POSTER 08. Formulation, Adjuvants, and Application Technology

POSTER 09. Weed Biology and Ecology

POSTER 10. Biocontrol of Weeds

POSTER 11. Physiology

POSTER 12. Soil and Environmental Aspects

POSTER 13. Integrated Weed Management

POSTER 14. Sensing, Automation, and Precision Technologies

POSTER 15. Genomics

Registration	7:00 AM-4:45 PM	Raleigh

Oral 1. Agronomic Crops	9:00 AM-5:30 PM	Glenwood Ballroom Salon I
Oral 11. Physiology	9:00 AM-11:45 AM	Glenwood Ballroom Salon II
Symposium: Autonomous Weed Control	9:00 AM-12:00 PM	Glenwood Ballroom Salon III & IV
Judge's Workroom	9:00 AM-4:30 PM	Creedmore
Graduate Student Luncheon	12:00 PM-1:30 PM	City of Oaks Ballroom
Symposium: Reframing the Discussion of Herbicide Resistance	1:30 PM-5:30 PM	Glenwood Ballroom Salon III & IV
Oral 18. WSSA-SST Contest	1:45 PM-5:30 PM	Glenwood Ballroom Salon III & IV
Coffee Break	3:00 PM-3:15 PM	Glenwood Ballroom Hall
IWSS Meeting	5:30 PM-6:30 PM	Glenwood Ballroom Salon I
One-Way Shuttles to Downtown Raleigh	6:00 PM	Lobby

WEDNESDAY MORNING FEBRUARY 11

President's Breakfast	6:00 AM-7:30 AM	Creedmore
Posters (Even-number authors present)	7:00 AM-8:45 AM	Crabtree Ballroom
Registration	7:00 AM-4:00 PM	Raleigh
MRSPC-Herbicide Resistance Monitoring Network	7:00 AM-8:00 AM	Capital
SST Finals	8:30 AM-9:00 AM	Glenwood Ballroom Salon I
Judges Work Room	9:00 AM-3:00 PM	Creedmore
HRAC Poster Symposium	9:00-11:00 AM	City of Oaks Ballroom
Oral 09. Weed Biology and Ecology	9:00 AM-3:00 PM	Glenwood Ballroom Salon II
Oral 05. Aquatic Invasives	9:00 AM-3:00 PM	Glenwood Ballroom Salon III & IV
Oral 14. Sensing, Automation, and Precision Technologies	9:15 AM-12:00 PM	Glenwood Ballroom Salon I
International Weed Genomics	11:00 AM-12:00 PM	Capital

Consortium		
Oral 15. Genomics	1:30 PM-4:45 PM	Glenwood Ballroom Salon I
Agronomic Crops Business Meeting	2:00 PM-3:00 PM	Capital
Integrated Weed Management Business Meeting	2:00 PM-3:00 PM	Creedmore
Aquatic Invasives Discussion Section	3:15-4:15 PM	Capital
Weed Biology and Ecology Business Meeting	3:15-4:15 PM	Creedmore
Coffee Break	3:00 PM-3:15 PM	Glenwood Ballroom Hall
Oral 1. Agronomic Crops	3:15 PM-5:30 PM	Glenwood Ballroom Salon II
Oral 2. Horticultural Crops	3:15 PM-5:30 PM	Glenwood Ballroom Salon III & IV
Oral 10. Biocontrol of Weeds	4:45 PM-5:15 PM	Glenwood Ballroom Salon I
Graduate Student Workshop: Scientific Writing	3:30 PM-5:00 PM	City of Oaks Ballroom

International Weed Science Society General Session	5:30 PM-6:30 PM	Glenwood Ballroom Salon III & IV
WSSA Society Reception *Sponsored by BASF*	6:30 PM-8:30 PM	Glenwood Ballroom Salon I

THURSDAY FEBRUARY 12

WSSA Breakfast Business Meeting	6:00 AM-7:45 AM	City of Oaks Ballrooms
Poster Take-Down	8:00-11:00 AM	Crabtree Ballroom
Oral 18. Travel Enrichment Experience and Science Policy Fellows	8:00-9:45 AM	Glenwood Ballroom Salon I
Oral 07. Teaching and Extension	8:00-10:00 AM	Glenwood Ballroom Salon I
Oral 13. Integrated Weed Management	8:00 -11:45 AM	Glenwood Ballroom Salon III & IV
Coffee Break	10:00-10:15 AM	Glenwood Ballroom Hall
Oral 12. Regulatory Aspects	10:15-11:00 AM	Glenwood Ballroom Salon I

Oral 03. Turf and Ornamentals	10:15-11:00 AM	Glenwood Ballroom Salon II
Oral 04. Pasture, Rangelands, Forests, Rights of Way, and Wildlands	11:15 AM-11:45 AM	Glenwood Ballroom Salon II
TOUR Cotton Incorporated	1:00-4:00 PM	Lobby
TOUR BASF	1:00-4:00 PM	Lobby
TOUR Self-guided North Carolina Museum of Natural History	1:00-4:00 PM	Lobby

PROGRAM

SUNDAY FEBRUARY 8

WSSA Board of Directors Meeting

LOCATION:	City of Oaks (Dogwood, Magnolia)
TIME:	7:30 AM-5:00 PM Eastern
MODERATOR:	Hilary Sandler UMass Cranberry Station East Wareham, MA
CO-MODERATOR:	Ian Burke North Carolina State University, Raleigh, NC

GROW Meeting

LOCATION:	City of Oaks (Sycamore, Willow)
TIME:	2:00 PM-5:00 PM Eastern
MODERATOR:	Emily Ungelsbee GROW Rockville, MD

Graduate Student Drive Shack Networking Event

PRE-REGISTRATION REQUIRED

LOCATION:	Drive Shack 6901 Play Golf Wy, Raleigh, NC 27607 Transport departs 5:30 PM
TIME:	6:00-10:00 PM Eastern
MODERATORS:	Navdeep Godara North Carolina State University Raleigh, NC

MONDAY MORNING FEBRUARY 9

TOUR-Syngenta

LOCATION: Meet in Lobby
TIME: 7:00 AM-1:30 AM Eastern
MODERATOR: David Belles
Syngenta Crop Protection
Goldsboro, NC

Terminology Committee

LOCATION: Creedmore
TIME: 8:00-9:30 AM Eastern
MODERATOR: Dawn Refsell
Corteva AgriScience
Johnston, IA

Herbicide Resistance Education Committee

LOCATION: Capital Room
TIME: 8:00-10:00 AM Eastern
MODERATOR: Jill Schroeder
Albuquerque, NM

IWSS Board of Directors Meeting

LOCATION: Boardroom
TIME: 9:00 AM-10:30 AM Eastern
MODERATOR: Do-Soon Kim
President, IWSS
Soeul, Korea

WSSA Publications Committee Meeting

LOCATION: Creedmore
TIME: 9:00-10:00 AM Eastern
MODERATOR: Chris Willenborg
University of Saskatchewan
Saskatoon, SK, Canada

MONDAY MORNING FEBRUARY 9

Sensing, Automation, and Precision Technologies Committee

LOCATION: Capital
TIME: 10:00-11:30 AM Eastern
MODERATOR: Nathan Boyd
University of Florida
Wimauma, Florida

Endangered Species Act Committee

LOCATION: Creedmore
TIME: 11:00 AM-12:00 PM Eastern
MODERATOR: Bill Chism
Point of Rocks, MD

MONDAY AFTERNOON FEBRUARY 9

Science Policy Committee Meeting

LOCATION: Port McNeil
4th Floor, North Tower
TIME: 12:00-2:00 PM Eastern
MODERATOR: Lee Van Wychen
WSSA
Alexandria, VA

US-HRAC Committee Meeting

LOCATION: Pavillion Ballroom C
TIME: 2:00-3:30 PM Eastern
MODERATOR: David Belles
Syngenta
Greensboro, NC

MONDAY AFTERNOON FEBRUARY 9

Formulation, Adjuvant, and Application Technology Committee

LOCATION: Pavillion Ballroom C
TIME: 2:00-3:30 PM Eastern
MODERATOR: Matthew Faletti
Precision Laboratories
Kenosha, WI

Registration

LOCATION: Junior Ballroom Foyer
TIME: 1:00-4:00 PM Eastern
MODERATOR: Eric Gustafson
WSSA Executive Secretary

Women in Weed Science

LOCATION: City of Oaks Ballroom
TIME: 2:00-3:30 PM Eastern
MODERATOR: Cara McCauley
Corteva Agriscience
Indianapolis, IN

Sponsored by Corteva Agriscience

MONDAY AFTERNOON FEBRUARY 9

General Session

LOCATION: Glenwood Ballroom
Salon II, III & IV
TIME: 4:15-7:00 PM Eastern
CHAIR: Ian Burke
North Carolina State University
Raleigh, NC
MODERATORS: Hilary Sandler
University of Massachusetts
Cranberry Station,

E. Wareham, MA

*SPEAKER

4:15 PM **Welcome to the 2026 WSSA Annual Meeting**. Ian C. Burke*, North Carolina State University, Raleigh, NC

4:20 PM **Keynote.** Garey Fox*, Dean, College of Agriculture and Life Sciences, North Carolina State University, Raleigh, NC.

4:50 PM **Washington, DC Update**. Lee Van Wychen*, WSSA, Alexandria, VA

5:05 PM **IWSS Update**, Do-Soon Kim*, IWSS, Korea.

5:20 PM **WSSA Presidential Address**. Hilary A. Sandler*, University of Massachusetts Cranberry Station, E. Wareham, MA

5:35 PM **Awards Presentations**. Scott Senseman*, Oklahoma State University, Stillwater, OK.

6:30 PM **Presentation of Honorary Members and Fellows.** Scott Senseman*, Oklahoma State University, Stillwater, OK.

MONDAY EVENING FEBRUARY 9

Awards Reception

LOCATION: Glenwood Ballroom
Salon I and Glenwood Terrace
TIME: 7:00-9:00 PM Eastern

Sponsored by Syngenta Crop Protection

TUESDAY MORNING FEBRUARY 10

Judges Breakfast

LOCATION: Creedmore
TIME: 6:00-7:00 AM Eastern
MODERATORS: Darrin Dodds

Mississippi State University
Starkville, MS

Registration

LOCATION: Raleigh
TIME: 7:00 AM-4:00 PM Eastern
MODERATOR: Eric Gustafson
WSSA Executive Secretary

Puff 5K Walk/Run

LOCATION: Meet in Lobby
TIME: Assemble: 6:45 AM
Eastern
7:00-8:00 AM
Eastern
MODERATOR: Dallas Taylor
BASF
Raleigh, NC

WSSA Finance Committee Meeting

LOCATION: Capital
TIME: 7:00-9:00 AM Eastern
MODERATOR: Lauren Lazaro

TUESDAY MORNING FEBRUARY 10

Poster Session-Odd Numbers

LOCATION:	Crabtree Valley Ballroom
TIME:	7:00-9:00 AM Eastern
MODERATORS:	Charles Cahoon North Carolina State University Raleigh, NC

Authors with odd-numbered posters will be present on Tuesday. Authors with even-numbered posters will be present on Wednesday.

POSTER PRESENTATIONS

POSTER - 01. Agronomic Crops

***PRESENTING AUTHOR**
► WSSA STUDENT CONTEST

1. Clethodim Tank-Mixed with Auxinic Herbicides for Goosegrass and Sourgrass Control. Wallace Santini*[1], Roberto Saggin Visoto[1], Alice Lazzari[1], Alisson Hanh[1], Michelangelo Trezzi[2], Mauro Rizzardi[3], Otavio Schaeffer[3], Anderson Nunes Gabardo[1]. *[1]Agronomy, Federal Institute of Education Science and Technology of Rio Grande do Sul, Brazil, [2]Agronomy, Federal University of Technology - Paraná, Brazil, [3]Agronomy, Passo Fundo University, Brazil*

2. Challenges in Italian Ryegrass Management in Brazil. Anderson Gabardo*[1], Alisson Hahn[1], Michelangelo Trezzi[2], Roberto Saggin Visoto[1], Wallace Santini[1], Mauro Rizzardi[3]. *[1]Federal Institute of Education Science and Technology of Rio Grande do Sul, Brazil, [2]Federal University of Technology - Paraná, Brazil, [3]Passo Fundo University, Brazil*

► 3. Elucidating Rice-Weed Competition Dynamics in Direct Seeded Rice Using Multispectral Remote Sensing. Reuben Senyo Kudiabor*[1], Panneerselvam Peramaiyan[2], Virender Kumar[2], Muthukumar Bagavathiannan[1], Amit Srivastava[2]. *[1]Texas A&M University, College Station, TX, [2]International Rice Research Institute, Uttar Pradesh, India*

4. Hyperspectral Field Spectrometry Reveals Reflectance Differences Between Rice and Weed Species. Panneerselvam

Peramaiyan[1], Reuben Senyo Kudiabor*[2], Virender Kumar[1], Muthukumar Bagavathiannan[2], Amit Srivastava[1]. [1]*International Rice Research Institute, Uttar Pradesh, India,* [2]*Texas A&M University, College Station, TX*

5. Multiplatform Remote Sensing (Unmanned Aerial Vehicle, Aircraft, Satellite) for Detecting Herbicide Injury in Cotton Using Thermal and Multispectral Data. Bismark Anokye*[1], Chenghai Yang[2], Muthukumar Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX,* [2]*USDA-ARS Aerial Application Research Unit, College Station, TX*

► **6. Multi-State Survey Identifies Putative Herbicide-Resistant Kochia (*Bassia scoparia*) Populations Across the Great Plains.** Curtis Lefler*[1], Todd Gaines[1], Akamjot Brar[1], Daniel Guimaraes Abe[2], Caleb Dalley[2], Devanshi Desai[3], Patrick Geier[4], Brian Jenks[2], Jeremie Kouame[4], Jeanne Falk Jones[4], Timothy Seipel[3], Lovreet Shergill[1]. [1]*Colorado State University, Fort Collins, CO,* [2]*North Dakota State University, Fargo, ND,* [3]*Montana State University, Bozeman, MT,* [4]*Kansas State University, Manhattan, KS*

7. Herbicide Selection for Perennial Grain Crop-Kernza. Adebisi Adeleke*[1], Isidor Ceperkovic[1], Katherine Bohn[1], Jacob Jungers[1], Debalin Sarangi[1]. [1]*University of Minnesota, Saint Paul, MN*

8. Field Characterization of Root System Architecture in Diverse Cotton (*Gossypium* spp.) Lines. Varnika Kalaichelvan*[1], Grace Mclntyre[1], Pandian Rajendran[1], Alvaro Sanz-Saez[2], Muthukumar Bagavathiannan[1], Nithya Subramanian[1]. [1]*Texas A&M University, College Station, TX,* [2]*Auburn University, Auburn, AL*

9. Agronomic Performance and Regional Suitability of Diverse Cereal Rye Germplasm in Texas: Implications for Weed Suppression. Kapil Chobhe*[1], Muthukumar Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX*

10. Stakeholder Readiness for Site-Specific Weed Control Technologies in Turfgrass. Bholuram Gurjar*[1], Madan Sapkota[1], Maxwel Coura Oliveira[2], Chase Straw[3], Muthukumar Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX,* [2]*Western São Paulo University,* [3]*Pennsylvania State University, University Park, PA*

11. Agronomic Performance and Regional Suitability of Diverse Cereal Rye Germplasm in Texas: Implications for Weed Suppression. Kapil Chobhe*[1], Muthukumar Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX*

12. Decreased effectiveness of 2,4-D and Glufosinate Applied Alone or Mixed at Night. Eric Jones*[1], Sachin Dhanda[1], Jill

Alms[1], David Vos[1]. [1]*South Dakota State University, Brookings, SD*

► 13. Evaluation of PRE Applied Clomazone and S-Metolachlor on Crop Safety and Winter Annual Weed Control in a North Carolina *Brassica carinata* System. Avi Goldsmith*[1], Edmilson Almeida[2], Ramon Leon[1]. [1]*North Carolina State University, Raleigh, NC,* [2]*The Federal University of Maranhão, Maranhão, Brazil*

14. Chlorophyll Fluorescence as an Indicator of Phytotoxicity Induced by PSII Inhibitors in Micropropagated Sugarcane Plants. Rogelio Miranda-Marini*[1, 2], Valentín Alberto Esqueda-Esquivel[2], Nicacio Cruz-Huerta[1], Víctor Arturo González-Hernández[1], José Alfredo Carrillo-Salazar[1]. [1]*Colegio de Postgraduados-Campus Montecillo, Estado de México, México,* [2]*Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias - Campo Experimental Cotaxtla, Veracruz, México*

15. Managing Perennial Grass Species in Clearfield Rice. Maranda Hains[1], Connor Webster*[1], Gavin Sparks[1], Ben Stoker[1], Morgan Boone[1], Evelyn Williams[1], Ronnie Levy[1]. [1] *Louisiana State University Ag Center, Baton Rouge, LA*

► 16. Optimization of Rapidicil® Dose and Adjuvant Type for Control of Palmer amaranth (*Amaranthus palmeri*), cheatgrass (*Bromus tectorum*), common ragweed (*Ambrosia artemisiifolia*), and kochia (*Bassia scoparia*). Ankit Yadav*[1], Garrison Gundy[2], Pat Clay[2], Amit Jhala[1]. [1]*University of Nebraska-Lincoln, NE,* [2] *Valent U.S.A. LLC, San Ramon, CA*

17. Epyrifenacil (Rapidicil®) Tank-Mixtures for Cover Crop Termination (Cereal Rye and Wheat) in No-Till Soybean and Corn Production. Randall Landry*[1], Pat Clay[1], Garrison Gundy[1], Matt Griffin[1], Sam Noe[1], Gregory Clarke[1], Nathan Drewitz[1], Ronald Estes[1], Mallory Everett[1], Jonathon Kohrt[1], Meador Chris[1], Eric Ott[1], Andrew Rodstrom[1], Hunt Sanders[1], Chad Smith[1], Jhonatan Barro[1], Lipi Parikh[1]. [1]*Valent U.S.A. LLC, San Ramon, CA*

► 18. Yield and Developmental Impacts on Rice to Simulated Herbicide Carryover. Ben Stoker*[1], Connor Webster[1], Ronnie Levy[1], Gavin Sparks[1], Maranda Hains[1], Eve Williams[1], Morgan Boone[1]. [1] *Louisiana State University Ag Center, Baton Rouge, LA*

19. Cotton and Soybean Tolerance to Interline Mega Tank Mixtures with Group 15 Herbicides. Tristen Avent*[1], Ryan Bryant-Schlobohm[1], Jason Norsworthy[2], Peter Dotray[3], Larry Steckel[4], Prashant Jha[5]. [1]*UPL Corporation Ltd.,* [2]*University of Arkansas System Division of Agriculture, Fayetteville, AR,* [3]*Texas Tech and Texas A&M Agrilife Research & Extension Service, Lubbock, TX,* [4]*University of Tennessee,* [5]*Louisiana State University Ag Center, Baton Rouge, LA*

20. Weed Control and Response of Grain Sorghum to a Premix of Encapsulated Saflufenacil and Pyroxasulfone. Sai Suvidh Maddela*[1], Amit J. Jhala[1]. [1]*University of Nebraska-Lincoln, Lincoln, NE*

21. Designing Competitive Soybean [*Glycine max* (L.) Merr.] Through Cultural Practices and Plant Architecture for Improved Weed Management. Qasim Khan*[1], Michael Ostlie[1]. [1]*North Dakota State University Carrington REC, Carrington, ND*

► **22. Characterization of Glufosinate Resistance in Waterhemp (*Amaranthus tuberculatus*) Populations from Illinois.** Cristiana Bernardi Rankrape*[1], Isabel Werle Noe[2], Logan Miller[2], Eduardo Lago[1], Rishabh Singh[2], Alexander Lopez[2], Aaron Hager[2], Karla Gage[1], Patrick Tranel[2]. [1]*Southern Illinois University, Carbondale, IL,* [2]*University of Illinois Urbana-Champaign, Urbana-Champaign, IL*

► **23. Aerial Off-target Movement of Iptriazopyrid to Soybean.** Cory Ketchum*[1], Jason Norsworthy[1], Cade Halbrook[1], Lane Pierce[1]. [1]*University of Arkansas Systems Division of Agriculture, Fayetteville, AR*

► **24. Iptriazopyrid Mixed with Auxin Herbicides in Rice.** Gavin Sparks*[1], Connor Webster[1], Steven Stoker[1], Morgan Boone[1], Eve Williams[1], Maranda Hains[1], Ronnie Levy[1]. [1]*Louisiana State University, Baton Rouge, LA*

► **25. Evaluation of Wheat Growth, Biomass, and Competitiveness as Affected by Seed Treatment and Italian Ryegrass (*Lolium multiflorum*) Infestation.** Sushmita Dey*[1], Brad Lindenmayer[2], Liberty Galvin[1]. [1]*Oklahoma State University, Stillwater, OK,* [2]*Syngenta Crop Protection, Perkins, OK*

26. Statewide Herbicide Resistance Assessment and Dose Response Characterization of Italian Ryegrass (*Lolium perenne* ssp. *multiflorum*) in Oklahoma Winter Wheat. Amna Dar*[1], Liberty Galvin[1], Ty Shreve[1]. [1]*Oklahoma State University, Stillwater, OK*

► **27. Herbicide-Resistant Rhizome Johnsongrass (*Sorghum halepense*): An Emerging Challenge in Mid-South Cropping Systems.** Shahreen Mirza*[1], Prashant Jha[1], Bhupesh Dhaka[1], Daniel Stephenson[2], Stephen Ippolito[2]. [1]*Louisiana State University AgCenter, Baton Rouge, LA,* [2]*Louisiana State University AgCenter, Alexandria, LA*

28. Effective Herbicide Programs for Weed Control in Grain Sorghum in New York. Vipan Kumar*[1], Midhat Tugoo[1], Henrique Scatena[1], Preetaman Bajwa[1]. [1]*Cornell University, Ithaca, NY*

29. Recognition of Italian Ryegrass (*Lolium perenne* ssp. *multiflorum*) in Wheat (*Triticum aestivum*) using machine learning. Navjot Singh*[1], Bholuram Gurjar[1], Guy Coleman[2],

Kumari Sapna[1], Michael Walsh[3], Muthukumar Bagavathiannan[1]. *[1]Texas A&M University, College Station, TX, [2]University of Copenhagen, Copenhagen, Denmark, [3]Charles Stuart University, Wagga Wagga, Australia*

► 30. Comparing the Segment Anything Model (SAM) and U-Net for Weed Image Segmentation. Navjot Singh*[1], Matthew Kutugata[2], Chris Reberg-Horton[3], Steven Mirsky[2], Muthukumar Bagavathiannan[1]. *[1]Texas A&M University, College Station, TX, [2] USDA-ARS Sustainable Agricultural Systems Laboratory, Beltsville, MD, [3]North Carolina State University, Raleigh, NC*

► 31. Influence of Dicamba and 2,4-D on Glyphosate Control of Annual Grasses. Brock Dean*[1], Charlie Cahoon[1], David Jordan[1], Zachary Taylor[1], Colden Bradshaw[1], Jackson Alsdorf[1], Diego Contreras[1]. *[1]North Carolina State University, Raleigh, NC*

► 32. Response of Horseweed (*Erigeron canadensis*) Populations from Connecticut and New York to Glyphosate and Chlorimuron/Thifensulfuron. Yunqi Chen*[1], Midhat Tugoo[1], Jatinder Aulakh[2], Erik Smith[1], Vipan Kumar[1]. *[1]Cornell University, Ithaca, NY, [2]Connectcut Agricultural Experiment Station, New Haven, CT*

33. Multiple Herbicide Resistance in Kochia (*Bassia scoparia*) Populations from South Dakota. Sachin Dhanda*[1], Jill Alms[1], David Vos[1], Eric Jones[1]. *[1]South Dakota State University, Brookings, SD*

► 34. Status of Multiple Herbicide-Resistant Palmer amaranth (*Amaranthus palmeri*) and Waterhemp (*Amaranthus tuberculatus*) in New York. Midhat Tugoo*[1], Henrique dos Santos Scatena[1], Mike Stanyard[1], Lynn M Sosnoskie[1], Jatinder Aulakh[2], Vipan Kumar[1]. *[1]Cornell University, Ithaca, NY, [2]The Connecticut Agricultural Experiment Station, New Haven, CT*

► 35. Evaluating Late-Season Broadcasted Cereal Rye for Italian Ryegrass (*Lolium perenne* ssp. *multiflorum*) Suppression. Colden Bradshaw*[1], Charlie Cahoon[1], Wesley Everman[2], Diego Contreras[1], Brock Dean[1], Jackson Alsdorf[1], Luke Szoch[1], Ronel Argueta[1], Zachary Taylor[1]. *[1]North Carolina State University, Raleigh, NC, [2]Iowa State University, Ames, IA*

► 36. Impact of Fluxofenim Seed Safener on Sugar Beet Response to Group 15 Herbicides Applied Preemergence. Laura Rodriguez*[1], Joel Felix[2], Clarke Alder[3], Albert Adjesiwor[1]. *[1]University of Idaho, Kimberly, ID, [2]Oregon State University, Ontario, OR, [3]Betaseed, Middleton, ID*

► 37. Axant™ Flex Cotton Response to Tank-Mixtures Containing Topramezone, L-Glufosinate, and Group 15 Herbicides. Matthew Woolard*[1], Peter Dotray[1], Adam Hixson[2], Andrea Sagiorato[1], Brad Guice[3], Bobby Rodriguez[2]. *[3]Texas Tech*

and Texas A&M Agrilife Research & Extension Service, Lubbock, TX, [2]BASF, Lubbock, TX, [3]BASF, Winnsboro, LA

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► 39. Planting Density, Water Availability, and Maternal Effects Alter Common lambsquarters (*Chenopodium album*) Dynamics in Short-Stature Corn. Kyle Elizalde*[1], Erin Burns[1]. [1]*Michigan State University, East Lansing, MI*

40. Assessing Soil pH and Rainfall Timing as Determinants of Early Post-Emergent Herbicide Efficacy in Winter Wheat. Connor Cox*[1], Liberty Galvin[1]. [1]*Oklahoma State University, Stillwater, OK*

41. Exploring The Effects of Tillage Depth and Intensity on Weed Seeds at Various Depths. Connor Cox*[1], Liberty Galvin[1], Daniel Adamson[1]. [1]*Oklahoma State University, Stillwater, OK*

► 42. Weed Community Response to Competition from Short vs. Traditional Stature Corn. Nathan Welch*[1], Erin Burns[1]. [1]*Michigan State University, East Lansing, MI*

43. Cutleaf Evening Primrose Control with Postemergence Herbicides. Vijay Varanasi*[1], Taghi Bararpour[2], Partson Mubvumba[1], Krishna Reddy[1]. [1]*USDA-ARS-Crop Production Systems Research Unit, Stoneville, MS,* [2]*Mississippi State University, Stoneville, MS*

44. Crop Safety and Weed Control with PRE-applied Metribuzin at Varying Rates and Combinations in Plenish and Enlist Soybean. Preetaman Bajwa*[1], Vipan Kumar[1], Matthew Ryan[1], Wendong Zhang[1], Antonio DiTommaso[1]. [1]*Cornell University, Ithaca, NY*

► 45. Survey of Herbicide Resistance in Rye Brome (*Bromus secalinus*) Throughout Wheat-Growing Regions of Oklahoma. Ty Shreve*[1], Amna Dar[1], Connor Cox[1], Liberty Galvin[1]. [1]*Oklahoma State University, Stillwater, OK*

► 46. Managing Glyphosate-Resistant Waterhemp in Truvera Sugarbeet. Michael Dodde*[1], Brian Stiles II[1], Christy Sprague[1]. [1]*Michigan State University, East Lansing, MI*

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47. Evaluation of Non-Chemical Weed Control Methods in Washington State Grape Production. Rui Liu*[1], Michelle Moyer[1], Devin Rippner[2]. [1]*Washington State University, Prosser,*

WA, [2] USDA-ARS, Horticultural Crops Research Unit, Prosser, WA

► **48. Tomato (*Solanum lycopersicum*) Tolerance to Pyridate Applied POST Directed or Shielded.** Kai Goble*[1], Katherine Jennings[1], David Monks[1], David Jordan[1], Joe Reamsnyder[1]. *[1]North Carolina State University, Raleigh, NC*

► **49. Response of Field-grown Sweet Corn to Herbicides.** Joe Reamsnyder*[1], Katherine Jennings[1], David Monks[1], Kai Goble[1], Colton Blankenship[2], Stephen Ippolito[3], Hope Thome[1]. *[1]North Carolina State University, Raleigh, NC, [2]Louisiana State University AgCenter, Hammond, LA, [3]Louisiana State University AgCenter, Alexandria, LA*

50. Florpyrauxifen-benzyl Efficacy and Crop Safety in Almond Orchards. Mandeep Riar*[1], Jorge Angeles[1]. *[1]University of California Agriculture and Natural Resources, Oakland, CA*

51. Exploring Synergy Between Pre-Emergence Herbicides to Enhance Nutsedge Control in Tomato Production. Nithin Batthula *[1], D. Calvin Odero [2], Pavlos Tsouvaltzis [1], Ramdas Kanissery [1]. *[1]University of Florida/IFAS, Immokalee, FL, [2]University of Florida/IFAS, Belle Glade, FL*

52. Evaluating the Efficacy of Herbicide Programs for Weed Control in Sweet Corn. Sohaib Chattha*[1], Tim Waters[2], Rui Liu[1]. *[1]Washington State University, Prosser, WA, [2]Washington State University, Pasco, WA*

53. Advancing Sustainable Weed Control: Electrical Suppression of Perennial Weeds in New Jersey Highbush Blueberries. Thierry E. Besancon*[1], Lynn M. Sosnoskie[2], Wesley M. Bouchelle[1], Aleah L. Butler-Jones[2]. *[1]Rutgers University, New Brunswick, NJ, [2]Cornell University, Geneva, NY*

54. Optimizing Cover Crop Termination for Weed Control in Ohio Vegetable Production. Ramawatar Yadav*[1], Miriam Styer[1]. *[1]The Ohio State University, Columbus, OH*

► **55. Cotton Seed Meal and Chicken Manure + Molasses-induced Anaerobic Soil Disinfestation Improves Weed and Root-Knot Nematode Management in Sweetpotato.** Simardeep Singh*[1], Tyler Campbell[1], Churamani Khanal[1], Matthew Cutulle[1]. *[1]Clemson University, Clemson, SC*

56. How Do Seed Treatments and Soil Temperature Impact Green Onion Response to Pendimethalin? Matthew Cutulle*[1], Tyler Ca[1]. *[1]Clemson University, Clemson, SC*

57. Evaluation of Anaerobic Soil Disinfestation (ASD) in Fall Watermelon Produced in A Partial Saltwater Agroecosystem. Tyler Campbell*[1], Matthew Cutulle[1], Rebecca Starkey[1]. *[1]Clemson University, Clemson, SC*

58. Evaluation of Plant Hormone Seed Treatments to Safen Pre-Emergent Herbicides Applied to Green Onion. Rebecca Starkey*[1], Tyler Campbell[1], Matthew Cutulle[1]. *[1]Clemson University, Charleston, SC*

59. Bean There, Tested That: Early Insights on Metamitron Safety in Legumes. Lynn Sosnoskie*[1], Mark VanGessel[2], Thierry Besancon[3]. *[1]Cornell University, Geneva, NY, [2]University of Delaware, Newark, DE, [3]Rutgers University, New Brunswick, NJ*

60. Amped-Up Apples: Comparing Zasso™ Electrical Weeding and Cultivation in Organic Orchards. Aleah Butler-Jones*[1], Adam Thomas[1], John Owens[1], Gregory Peck[1], Kyle Wickings[1], Brad Hanson[2], Marcelo Moretti[3], Thierry Besançon[4], Lynn Sosnoskie[1]. *[1]Cornell University, Geneva, NY, [2]University of California, Davis, CA, [3]Oregon State University, Corvalis, OR, [4]Rutgers University, New Brunswick, NJ*

61. IR-4 Project: Success and Benefits to Specialty Crop Growers. Roger B. Batts*[1], Jaimin Patel[1], Philip Moore[1], Alice Axtell[1], Debbie Carpenter[1], Jerry Baron[1]. *[1]IR-4 Project, Raleigh, NC*

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► 62. Influence of Application Equipment on Topramezone Efficacy for Smooth Crabgrass Control. Suzannah Hale*[1], Juan Romero[2], Navdeep Godara[3], Shawn Askew[1]. *[1]Virginia Polytechnic Institute and State University, Blacksburg, VA, [2]Ecorobotix, Pasco, WA [3]North Carolina State University. Raleigh, NC*

► 63. Differential Sensitivity to Diquat within a Pseudo F2 Segregating Population of St. Augustinegrass (*Stenotaphrum secundatum*). Aliyah Jackson*[1], Susana Milla-Lewis[1], James Holland[1], [2], Acer VanWallendael[1], Ramon Leon[1]. *[1]North Carolina State University, Raleigh, NC, [2]USDA-ARS Plant Science Research Unit, Raleigh, NC*

► 64. Improved Goosegrass Management and Bermudagrass Safety Through Micro-Dose Topramezone and Metribuzin Programs. Katarzyna Gawron*[1], Mikerly Joseph[1], Lukasz Wnorowski[1], Patrick McLoughlin[2], Aaron Ackenine[2], Jayson Ging[3], Chase McKeithen[3], Brian Unruh[3], Gregory MacDonald[1], Eli Russell[1], Marco Schiavon[2], Pawel Petelewicz[1]. *[1]University of Florida, Gainesville, FL, [2]University of Florida, Davie, FL, [3]University of Florida, Jay, FL*

► 65. Infestation-Based Feasibility Thresholds and Herbicide Savings Potential of AI-Driven Targeted Application in Turfgrass. Mikerly Mistral Joseph*[1], Katarzyna A. Gawron[1],

Lukasz Wnorowski[1], J. Bryan Unruh[1], Pawel Petelewicz[1]. *[1]University of Florida, Gainesville, FL*

66. Evaluation of Preemergence Doveweed Control Strategies in Florida. Pawel Petelewicz*[1], Lukasz Wnorowski[1], Katarzyna Gawron[1], Mikerly Joseph[1], Jayson Ging[1], Chase McKeithen[1], J. Bryan Unruh[1]. *[1]University of Florida, Gainesville, FL*

► 67. Weed and Turfgrass Species Response to Cryogenic Liquid. Samuel Crawford*[1], Shawn Askew[1], Juan Romero[2], Suzannah Hale[1]. *[1]Virginia Polytechnic Institute and State University, Blacksburg, VA, [2]Ecorobotix, Pasco, WA*

► 68. Annual Bluegrass Suppression in Creeping Bentgrass Fairway: Plant Growth Regulators, Herbicides, and Nitrogen Regimens. Emmanuel U. Nwachukwu*[1], Daniel P. Tuck[1], Matthew T. Elmore[1]. *[1]Rutgers University, New Brunswick, NJ*

► 69. Evaluating Herbicide Tank Mixtures for False-Green Kyllinga (*Kyllinga gracillima*) Control in Bermudagrass using Machine-Vision-Guided Targeted Spraying. Brooke Heikkila*[1], Navdeep Godara[1], Venkateswar Reddy Yelkur[1], Juan Romero[2], Michael Carlson[2]. *[1]North Carolina State University, Raleigh, NC, [2]Ecorobotix, Pasco, WA*

► 70. Evaluating Postemergence Herbicides to Control Bosc's Mille Graines (*Oldenlandia boscii*) in Warm-Season Sod Production. Venkateswar Reddy Yelkur*[1], Raymond McCauley[1], Navdeep Godara[1]. *[1]North Carolina State University, Raleigh, NC*

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72. Chemical and Biological Control Options for Spotted Knapweed Control. Joe Omielan*[1]. *[1]University of Kentucky, Lexington, KY*

73. Watts for Weed Control in Railways: Exploring Pulsed Electric Field Technology. Marcelo Moretti*[1], Jason Crisp[2], Randall Prostak[3]. *[1]Oregon State University Corvallis, OR, [2]Lisi Global, Richland, WA, [3]University of Massachusetts Amherst, Amherst, MA*

74. Effects of Pre and Post Emergence Sandbur (*Cenchrus* spp.) Management in Hay and Pastures. Zachry Howard*[1], Scott Nolte[1], Justin Chase[2], Case Medlin[3]. *[1]Texas A&M AgriLife*

Extension, [2]Texas A&M University, College Station, TX, [3]Environmental Science U.S. LLC, Cary, NC

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► 76. A Review of Water Soldier (*Stratiotes aloides*): a High-Risk Invasive Aquatic Weed in the United States. Maria Grazia Corrales-Jimenez*[1], Kara Foley[1], Rob Richardson[1], Ramon Leon-Gonzalez[1]. *[1]North Carolina State University, Raleigh, NC*

► 77. Response of *Vallisneria* Taxa to Combination Herbicide Treatment. Delaney Davenport[1], Kara Foley*[1], Jens Beets[2], Rob Richardson[1]. *[1]North Carolina State University, Raleigh, NC, [2] USDA-ARS Invasive Species and Pollinator Health Research Unit, Albany, CA*

► 78. Evaluation of Herbicide Mixtures for Control of Giant Salvinia (*Salvinia molesta*). Brady Dillingham*[1], Rob Richardson[1]. *[1]North Carolina State University, Raleigh, NC*

79. Effect of Ambient Temperature after Herbicide Application on Jointed Spikerush (*Eleocharis interstincta*) Injury. Julie Stich*[1], Abigail Schulken[1], Eli Russell[1]. *[1]University of Florida, Gainesville, FL*

► 80. Evaluating Efficacy of Flumioxazin and Topramezone Combinations for Water Lettuce Control. Abigail Schulken*[1], Eli Russell[1]. *[1]University of Florida, Gainesville, FL*

81. Screening Non-Aquatic Labeled Herbicides for Efficacy on West Indian Marsh Grass. Eli Russell*[1], Abigail Schulken[1]. *[1]University of Florida, Gainesville, FL*

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83. TRACK - Best Management Practices for Navigating the ESA Process for Pesticides. Bart Clewis*[1], Tony Burd[1], Caydee Savinelli[1], Elijah Meck[1]. *[1]Syngenta Crop Protection, Greensboro, NC*

84. The FIFRA Endangered Species Task Force (FESTF): Open Access to 30+ Years of ESA Data Aggregation. Cameron Douglass*[1], Annie Krueger[1], Ashlea Rives Frank[1], Leah Duzy[1], Reuben Baris[2], Tilghman Hall[3]. [1]*Compliance Services International, Lakewood, WA,* [2]*Corteva AgriScience, Indianapolis, IN,* [3]*Bayer Crop Science, St. Louis, MO*

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86. Comparing Backpack Application Methods. Chris Gregory*[1], Dr. John Byrd[1]. [1]*Mississippi State University, Starkville, MS*

87. Effective Herbicide Options for Termination of Glyphosate-Resistant Italian Ryegrass. Vipan Kumar*[1], Midhat Tugoo[1], Preetaman Bajwa[1], Henrique Scatena[1], Mike Stanyard[1]. [1]*Cornell University, Ithaca, NY*

88. Fundamentals of Weed Science. Robert Zimdahl[1], Nicholas Basinger*[2]. [1]*Colorado State University, Ft. Collins, CO,* [2]*The University of Georgia, Athens, GA*

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► 91. Machine Learning Models for Predicting Spray Drift from Uncrewed Aerial Systems (UAS). Fatemeh Esmaeilbeiki*[1], Vijay Singh[1], Daniel E. Martin[2]. [1]*Virginia Polytechnic Institute and State University, Painter, VA,* [2] *USDA-ARS Aerial Application Research Unit, College Station, TX*

92. The Use of Adjuvants to Minimize Splashing and Micro-Drift Using Pinpoint Spray Technology. Clebson Gonçalves*[1]. [1]*University of California Cooperative Extension, Ukiah, CA*

93. Drift Reduction in Cotton and Soybean Using Drop Nozzles. Scott Nolte*[1], Christina Ward[1], Peter Dotray[2], Wesley Everman[3], Maxwell Smith[4], Thomas Butts[5], Justin Calhoun[6], Gaylon Morgan[7]. *[1]Texas A&M University AgriLife Extension Service, College Station, TX, [2]Texas Tech and Texas A&M Agrilife Research & Extension Service, Lubbock, TX, [3]Iowa State University, Ames, IA, [4]Oklahoma State University, Stillwater, OK, [5]Purdue University, West Lafayette, IN [6]Mississippi State University, Starkville, MS, [7]Cotton Incorporated, Cary, NC*

► 94. Pyroxysulfone-Coated Fertilizers for Residual Control of Palmer Amaranth in Cotton. John Kohler*[1], Peter Dotray[1,2], Charles Cahoon[3], Matthew Woolard[1], Megan Singletary[1], Andrea Sagiorato[1], Holly Davis[4], Bobby Rodriguez[2]. *[1] Texas Tech University, Lubbock, TX, [2]Texas A&M AgriLife, Lubbock, TX, [3]North Carolina State University, Raleigh, NC, [4]FMC Corporation, Lubbock, TX*

POSTER - 09. Weed Biology and Ecology

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95. Effects of Rye Cover Crop Termination Timing on Emergence of Major Agronomic Weeds. Eugene Law*[1], Lilly Sencenbaugh[2], Kevin Bradley[3], Adam Davis[4], Wesley Everman[5], Michael Flessner[6], Lauren Lazaro[7], John Lindquist[8], Jason Norsworthy[9], Mark VanGessel[10], John Wallace[2], Steven Mirsky[11]. *[1]The Ohio State University, Columbus, OH, [2]Pennsylvania State University, University Park, PA, [3]University of Missouri, Columbia, MO, [4]University of Illinois Urbana-Champaign, Urbana-Champaign, IL, [5]Iowa State University, Ames, IA [6]Virginia Polytechnic Institute and State University, Blacksburg, VA, [7]Blue River Technology, Sunnyvale, CA, [8]University of Nebraska - Lincoln, Lincoln, NE, [9]University of Arkansas, Fayetteville, AR, [10]University of Delaware, Newark, DE, [11]USDA-ARS Sustainable Agricultural Systems Laboratory, Beltsville, MD*

96. Soil-Applied PPOs: Still Reliable for Palmer Amaranth? Prakriti Dhaka*[1], Gulab Rangani[1], Aimone Porri[2], Ingo Meiners[2], Nilda Roma-Burgos[1]. *[1]University of Arkansas, Fayetteville, AR, [2]BASF SE, Ludwigshafen, Germany*

97. Deep Learning-Based Detection of Weed Seed Contamination in Crop Seedlots. Bismark Anokye*[1], Muthukumar Bagavathiannan[1]. *[1]Texas A&M University, College Station, TX*

► 98. Comparative Growth and Emergence Pattern of some Waterhemp and Palmer Amaranth Biotypes in Iowa. Tunde Akanbi*[1], Alex Macvilay[1], Wesley Everman[1]. *[1]Iowa State University, Ames, IA*

99. Fifty Years Underground: Long-Term Viability of Weed Seeds in a Burial Study. Grant Egley[1, 2], James Chandler[1, 2], Debbie Boykins[2], Sapna Kumari[1], Maxwel Oliveira[3], Nithya Subramanian*[4], Krishna Reddy[2], Muthukumar Bagavathiannan[1]. *[1]Texas A&M University, College Station, TX, [2]USDA-ARS, Stoneville, MS, [3]Texas A&M University, College Station, TX, [4]Texas A&M AgriLife Research, College Station, TX*

► **100. Molecular Identification of Grass Endophyte *Epichloe* Spp. Using Translation Elongation Factor 1-alpha and Beta-Tubulin Gene in Herbicide Resistant Italian Ryegrass (*Lolium multiflorum*) Populations from Alabama.** Somak Hazra*[1], Rakesh Ghosh[1], Nisith Nishank Purohit[1], Precious Chukwubem[1], Anthony O Adesemoye[1], Aniruddha Maity[1]. *[1]Auburn University, Auburn, AL*

► **101. Influence of Simulated Lunar Soil on Seed Germination and Seedling Growth of Palmer Amaranth (*Amaranthus palmeri*) and Italian Ryegrass (*Lolium perenne* ssp. *multiflorum*).** Gurwinder Singh*[1], Muthukumar Bagavathiannan[2], Aniruddha Maity[1]. *[1]Auburn University, Auburn, AL, [2]Texas A&M University, College Station, TX*

102. Spatial Variability of Weed Populations in Plasticulture Systems. Alex Rodriguez*[1], Renato Furlanetto[1], Arnold Schumann[1], Amr Abd-Elrahman[1], Ramdas Kanissery[1], Nathan Boyd[1]. *[1]University of Florida, Gainesville, FL*

► **103. Carolina Geranium (*Geranium carolinianum* L.) Emergence Modelling in Florida Strawberry Fields.** Sudip Regmi*[1], Nathan S Boyd[1]. *[1]University of Florida, Gainesville, FL*

104. Initial Screening of Soil-Mediated Allelopathic Effects of *Plantago lanceolata* on Crops and Weeds. Sirwan Babaei*[1], Amir Sadeghpour[1], Eric C. Brevik[1] Karla Gage[1]. *[1]Southern Illinois University, Carbondale, IL*

105. Weed as Pathogen Reservoir: Evidence of Infection of *Curvularia lunata* (Wakker) Boedijn in *Rottboellia cochinchinensis* (Lour.) Clayton from Philippine Corn Areas. Clare Hazel Tabernilla*[1], Analiza Henedina Ramirez[1], Romnick Latina[1]. *[1]University of the Philippines, Los Baños, Philippines*

► **106. Root Architecture and Morphology of Palmer Amaranth, Waterhemp and Common Lambsquarters.** Sai Suvidh Maddela*[1], Amit J. Jhala[1]. *[1]University of Nebraska Lincoln, Lincoln, NE*

► **107. Natural Host Range of Cotton Leafroll Dwarf Virus Across Seasons in Alabama, USA.** Carter Bonnell*[1, 2], Andrew Price[2], Kathleen Martin[1], Steve Brown[1], Gourav Chahal[1], Karishma Khanal[1]. *[1]Auburn University, Auburn, AL, [2] USDA-ARS National Soil Dynamics Laboratory, Auburn, AL*

108. Rice Response to Varying Competition Intervals of Barnyardgrass (*Echinochloa crus-galli*). Evelyn Williams*[1], Connor Webster[1], Ronnie Levy[1], Maranda Hains[1], Gavin Sparks[1], Ben Stoker[1], Morgan Boone[1]. [1]*Louisiana State University, Baton Rouge, LA*

109. Conducting A Streamside Sonata: The Impacts of Restoration and Invasion on Urban Stream Soundscapes. Gabrielle Ripa[1], Jacob Barney*[1], Leighton Reid[1], Stacy Endriss[1]. [1]*Virginia Polytechnic Institute and State University, Blacksburg, VA*

110. A High-Fidelity 3D Plant Phenotyping Approach to Elucidate Weed-Crop Competition Dynamics. Joe Johnson[1], Purushottam Gyawali*[1], Muthukumar V. Bagavathiannan[1]. [1]*Department of Soil and Crop Sciences, Texas A&M University, College Station, TX*

► **111. Evaluating the Evolutionary Stability of Dioecy in the Genus *Amaranthus*.** Alexander Lopez*[1], Lucas Kopecky Bobadilla[1], Damilola Raiyemo[1], Isabel Werle Noe[1], Patrick Tranel[1]. [1]*University of Illinois Urbana-Champaign, Urbana Champaign, IL*

► **112. Assessment of Preemergence Herbicide Resistance in North Carolina Italian Ryegrass.** Diego Contreras*[1], Jackson Alsdorf[1], Colden Bradshaw[1], Brock Dean[1], Luke Szoch[1], Zack Taylor[1], Charlie Cahoon[1], Wesley Everman[2]. [1]*North Carolina State University, Raleigh, NC,* [2]*Iowa State University, Ames, IA*

113. Distribution of Prominent Weed Escapes at Harvest in Texas Row Crops. Luke Schmitz*[1], Ryan Hamberg[1], Scott Nolte[1], Peter Dotray[2], Muthukumar Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX,* [2]*Texas Tech and Texas A&M Agrilife Research & Extension Service, Lubbock, TX*

► **114. Elucidating the Complexities of Multispecies Weed Competition in Wheat: Above- and Below-ground Interactions.** Purushottam Gyawali*[1], Christoph von Redwitz[2], Muthukumar V. Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX,* [2]*Institute for Plant Protection in Field Crops and Grassland, Julius Kühn Institute (JKI), Federal Research Centre for Cultivated Plants, Braunschweig, Germany*

115. Collecting Weed Seedling Images to Generate A.I. Models. Marie-Josée Simard*[1], Etienne Lord[1], Benoit Lacasse[1], Robert Nurse[2], Martin Laforest[1], Shaun Sharpe[3]. [1]*Agriculture and Agri-Food Canada, Saint-Jean-sur-Richelieu, QC, Canada,* [2]*Agriculture and Agri-Food Canada, Harrow, ON, Canada,* [3]*Agriculture and Agri-Food Canada, Saskatoon, SK, Canada*

► **116. Weed Community Shifts in Organic Kernza® Production.** Natasha Djuric*[1], Antonio DiTommaso[1], Jacob Jungers[2], Prabin Bajgain[3], Laura van der Pol[4], Leonardo Deiss[5],

Manbir Rakkar[6], Jose Franco[7], Matthew Ryan[1]. [1]*Cornell University, Ithaca, NY,* [2]*University of Minnesota, St. Paul, MN,* [3]*USDA-ARS, Prairie-du-Sac, WI,* [4]*The Land Institute, Salina, KS,* [5]*Colorado State University, Fort Collins, CO,* [6]*The Ohio State University, Wooster, OH,* [7]*Savanna Institute, Madison, WI*

► 117. Bristly Hawksbeard Seed Germination Under Alternating Temperatures. Renan Favera*[1], Carol Mallory-Smith[1], Victor Ribeiro[1]. [1]*Oregon State University, Corvalis, OR*

► 118. Germination Rate of Nine Herbicide-Resistant South Carolina Palmer Amaranth Populations at Different Temperatures. Gabriel Gava*[1], Michael W. Marshall[1], Fernando H. Oreja[1]. [1]*Clemson University, Clemson, SC*

119. Advancing Foliar Repellent Delivery in Soybean Using Nanoparticle-Encapsulated Sicklepod Extract. Fernanda Reolon de Souza[1], Alyssa Miller[1], Subharanjan Gahan[1], Nicholas Fitzkee[1], Te Ming Tseng[1]. [1]*Mississippi State University, Starkville, MS*

120. Effects of Grazing Exclusion on Forages and Weeds in the Kansas Flint Hills? Mellany Roenne*[1], Grant Snider[1], Lawrence Kerr[1], Sophie Westbrook[1]. [1]*Kansas State University, Manhattan, KS*

121. Characterizing the Seed and Soil Microbiome of Weed Species Extracted from a Long-term Irrigation Experiment. Franco Sanchez-Izurieta[1], Cody Willmore[2], Raissa Na-ah[1], David Weller[2], Timothy Paulitz[2], Daniel Schlatter[3], Olivia Landau*[2]. [1]*Washington State University, Pullman, WA,* [2]*USDA-ARS, Pullman, WA,* [3]*USDA-ARS, St. Paul, MN*

122. Allelopathic Effects of Japanese Brome (*Bromus japonicus*) and Field Bindweed (*Convolvulus arvensis*) on Germination of Tallgrass Prairie Forbs. Lawrence Kerr*[1], Sophie Westbrook[1]. [1]*Kansas State University, Manhattan, KS*

123. Determining Efficacies of Five Newer Herbicides for Field Horsetail (*Equisetum arvense*) Control in Christmas Tree Production. Supti Saha Mou*[1], Debalina Saha[1]. [1]*Michigan State University, East Lansing, MI*

124. Invasive Plants Alter the Soundscape of Urban Streams. Jacob Barney*[1], Gabrielle Ripa[1], Leighton Reid[1]. [1]*Virginia Polytechnic Institute and State University, Blacksburg, VA*

POSTER - 10. Biocontrol of Weeds

***PRESENTING AUTHOR**
► WSSA STUDENT CONTEST

125. Weed Suppression by *Sorghum bicolor* Lines Differing in Sorgoleone Production: Insights from a Multi-Environment Study. Megan Schill*[1], Nithya Rajan[1], William Rooney[1],

Muthukumar Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX*

► 126. Examining Various Formulations of Dogfennel (*Eupatorium capillifolium*) Extract on its Soil Activity for Pigweed (*Amaranthus* spp.) Suppression. Ravneet Kaur*[1], Rakesh Kumar Ghosh[1], Aniruddha Maity[1]. [1]*Auburn University, Auburn, AL*

127. Spatio-Temporal Dispersal of Mycoherbicide *Sclerotium rolfsii* in Controlling Herbicide Resistant *Monochoria vaginalis*. So-Won Koo[1], Do-Soon Kim*[1]. [1]*Seoul National University, Seoul, South Korea*

► 128. Elucidating the Microbial Suppression of Weed Seedbanks: Decay Dynamics of Palmer Amaranth and Johnsongrass Seeds. Ncomiwe Maphalala*[1], Sanjay Antony-Babu[1], Muthukumar Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX*

129. Discovery and Development of Microbial Natural Products for Weed Control. Kara Talbott*[1], Brady Hirshfeld[1], Namrata Baruah[1], Pam Marrone[1], Jim Boyd[1], Amit Vasavada[1]. [1]*Invasive Species Corporation, Davis, CA*

130. Tadpole Shrimp (*Triops longicaudatus*) Biocontrol of Rice (*Oryza sativa*) Weeds. Taiyu Guan*[1], Luis Espino[1], Ian Grettenberger[2], Troy Clark[1], Whitney Brim-DeForest[1]. [1]*University of California Cooperative Extension Sutter-Yuba, Yuba City, CA,* [2]*University of California, Davis, CA*

POSTER – 11 Physiology

***PRESENTING AUTHOR**
► WSSA STUDENT CONTEST

► 131. Antioxidant and Detoxification Enzyme Responses to Glufosinate Treatment in *Eleusine indica*. Gabriel Felipe Stulp*[1], Stéphani Patel Pasqualotto[2], João Henrique Rocha Barion[2], João Vitor Dalbianco Paniça[2], Rodrigo Orsini Pola[2], Emy Luiza Ishii Iwamoto[2], Franck Dayan[1], Rubem Silvério de Oliveira Jr[2]. [1]*Colorado State University, Ft. Collins, CO,* [2]*State University of Maringá, Maringá, Brazil*

► 132. Investigating Dicamba Resistance in a Palmer Amaranth (*Amaranthus palmeri*) Population from Kansas. Andre Lucas Simoes Araujo*[1], Sofia Marques Hill[1], Chandrashekar Aradhya[2], Aruna Varanasi[2], Franck Dayan[1], Todd Gaines[1]. [1]*Colorado State University, Ft. Collins, CO,* [2]*Bayer Crop Science, St. Louis, MO*

► 133. Evaluation of Multiple Herbicide Resistance in Barnyardgrass [*Echinochloa crus-galli* (L.) P. Beauv.] Populations from Texas. Ravindra Babu Tanikonda*[1], Fidel González-Torralva[2], Neha Boora[1], Nithya Subramanian[1], Samer

Rustom[1], Muthukumar Bagavathiannan[1], Mithila Jugulam[2]. *[1]Texas A&M University, College Station, TX, [2]Texas A&M AgriLife Research and Extension Center, Beaumont, TX*

POSTER - 12. Soil and Environmental Aspects

***PRESENTING AUTHOR**
► WSSA STUDENT CONTEST

► 134. Influence of Biochar-Herbicide Interactions on Weed Control Efficacy in Alabama. Nisith Nishank Purohit*[1], Rakesh Kumar Ghosh[1], Yucheng Feng[1], Andrew Price[2], Aniruddha Maity[1]. *[1]Department of Crop, Soil and Environmental Sciences, Auburn University, AL, [2]USDA-National Soil Dynamics Laboratory, Auburn, AL*

► 135. Cover Crop Biomass and Rainfall Regime Interaction Effects on PRE Herbicide Efficacy. Gourav Chahal*[1], Carter Bonnell[1], Simer Virk[1], David Russell[1], Andrew Price[2]. *[1]Auburn University, Auburn, AL, [2] USDA-National Soil Dynamics Laboratory, Auburn, AL*

POSTER - 13. Integrated Weed Management

***PRESENTING AUTHOR**
► WSSA STUDENT CONTEST

136. Glufosinate Tank-Mixed with Carfentrazone Improves Control of Wild Poinsettia and Common Ragweed. Roberto Saggin Visoto*[1], Alice Lazzari[1], Michelangelo Trezzi[2], Wallace Santini[1], Mauro Rizzardi[3], Anderson Nunes Gabardo[1]. *[1]Agronomy, Federal Institute of Education Science and Technology of Rio Grande do Sul, Sertão, Brazil, [2]Agronomy, Federal University of Technology - Paraná, Pato Branco, Brazil, [3]Agronomy, Passo Fundo University, Passo Fundo, Brazil*

137. Integrating Multispectral and Hyperspectral Imagery with Machine Learning Models for Large-scale Weed Mapping and Classification. Bismark Anokye*[1], Chenghai Yang[2]. *[1]Texas A&M University, College Station, TX, [2]USDA-ARS Aerial Application Research Unit, College Station, TX*

138. Automated Sex Classification in Palmer Amaranth Using RGB Imaging and Machine Learning Techniques. Bismark Anokye*[1], Ubaldo Torres[1], Bholuram Gurjar[1], Navjot Singh[1], Muthukumar Bagavathiannan[1]. *[1]Texas A&M University, College Station, TX*

► 139. WeedGeoLocator: A Geospatial AI Tool for Weed Detection at Field-Scale. Rutvij Wamanse*[1], Vijay Singh[1]. *[1]Virginia Polytechnic Institute and State University, Painter, VA*

140. Glyphosate Resistance Testing in Weedy Varieties of *Panicum miliaceum*. Emily Hochschild*[1]. [1]*North Carolina State University, Raleigh, NC*

► 141. Uncovering the Multiple Weed Suppression Mechanisms of a Cereal Rye Cover Crop. Gustavo Camargo Silva*[1], Muthukumar Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX*

142. Design and Evaluation of the Open-Weed Locator (OWL) Camera Guided Sprayer for Precision Weed Management. Bholuram Gurjar*[1], Vijai Krishna[1], Guy Coleman[2], Muthukumar Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX,* [2]*University of Copenhagen, Copenhagen, Denmark*

143. Integrating Airborne Sensing and Deep Learning for Mapping *Sphenoclea zeylanica* Infestations in Philippine Rice Systems. Bholuram Gurjar*[1], Jerico Bigornia[2], Steve Klassen[2], Virender Kumar[2], Muthukumar Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX,* [2]*International Rice Research Institute, Uttar Pradesh, India*

144. Optimizing Flame Weed Control in Organic Cotton Production. Faeqa Mohsin*[1], Gabriela Elizarraras[1], Deepak Loura[1], Muthukumar Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX*

► 145. Evaluation of Reduced Tillage in Combination with Alternative Weed Control Methods in Organic Cotton. Faeqa Mohsin*[1], Nithya Rajan[1], Jake Mowrer[1], Katie Lewis[1], Joseph Burke[1], Peter Dotray[2], Megan Mills[2], Muthukumar Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX,* [2]*Texas Tech and Texas A&M Agrilife Research & Extension Service, Lubbock, TX*

► 146. Integrated Weed Management Using Cover Crops and Herbicides in Alabama Peanut Production Systems. Wilfried Ouedraogo*[1], Aniruddha Maity[1], Andrew Ahlersmeyer[1]. [1]*Auburn University, Auburn, AL*

147. Insights from On-Farm Evaluation of Weed Seed Impact Mills in Major US Cropping Regions. Sarah Chu*[1], Eli Russell[2], Eugene Law[3], Mark VanGessel[4], Wesley Everman[5], Aaron Hager[6], Prashant Jha[7], Luis Avila[8], Lauren Lazaro[9], Debalin Sarangi[10], Nicholas Basinger[11], Michael Walsh[12], Steven Mirsky[13], Michael Flessner[14], Muthukumar Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX,* [2]*University of Florida, Gainesville, FL,* [3]*Ohio State University, Columbus, OH,* [4]*University of Delaware, Newark, DE,* [5]*Iowa State University, Ames, IA,* [6]*University of Illinois Urbana-Champagne, Urbana-Champagne, IL,* [7]*Louisana State University, Baton, Rouge, LA,* [8]*Mississippi State University, Starkville, MS,* [9]*Former: Blue River Technology, Sunnyvale, CA,* [10]*University of Minnesota, Minneapolis, MN,* [11]*University of Georgia, Athens, GA,* [12]*Charles*

Sturt University, Wagga Wagga, Australia, [13] USDA-ARS Sustainable Agricultural Systems Laboratory, Beltsville, MD, [14]Virginia Polytechnic Institute and State University, Blacksburg, VA

► **148. Improving Pre-Harvest Weed Control in Alabama Corn Through UAV-Delivered Herbicide Treatments.** Walter Martins*[1], Wilfried Ouedraogo[1], Aniruddha Maity[1]. *[1]Auburn University, Auburn, AL*

149. Can We Reduce Herbicide Passes in Corn with Cover Crops? Jenna Beville*[1], Michael Flessner[1]. *[1]Virginia Polytechnic Institute and State University, Blacksburg, VA*

150. Surtain™ Herbicide: Label Expansion for Weed Management in Popcorn and Processing Sweet Corn. Dallas Taylor*[1], Sandy Ethridge[1], Sam Willingham[1], Sanjeev Bangarwa[1], Josh Putman[1]. *[1] BASF SE, Ludwigshafen, Germany,*

► **151. Managing Palmer Amaranth (*Amaranthus palmeri*) Escapes with Sequential Applications of Glufosinate and 2,4-D Choline.** Lalit Mohan*[1], Sarah Lancaster[1], Victoria Johnson[1], Mithila Jugulum[2]. *[1]Kansas State University, Manhattan, KS, [2]Texas A&M AgriLife Research and Extension Center, Beaumont, TX*

► **152. Contrasting Cereal Rye Growth Windows Drive Biomass Differences and Residue-mediated Impacts on Weed Suppression and Soybean Yield.** Aleksandar Grujic*[1], Erin Haramoto[1], Matthew Allen[1], John M. Wallace[2]. *[1]University of Kentucky, Lexington, KY, [2]Pennsylvania State University, University Park, PA*

► **153. A Multi-Regional View of Planting Green and Early Season Weed Recruitment.** Grant Hoffer*[1], John Wallace[1], Mark VanGessel[2], Nicholas Basinger[3], Aaron Hager[4], Erin Haramoto[5], Aleksandar Grujic[5], Wesley Everman[6], John Lindquist[7], Eugene Law[8], Mercy Odemba[8], Karla Gage[9], Eric Miller[9]. *[1]Pennsylvania State University, University Park, PA, [2]University of Delaware, Newark, DE, [3]University of Georgia, Athens, GA, [4]University of Illinois Urbana-Champaign, Urbana-Champaign, IL, [5]University of Kentucky, Lexington, KY, [6]Iowa State University, Ames, IA, [7]University of Nebraska - Lincoln, Lincoln, NE, [8]Ohio State University, Columbus, OH, [9]Southern Illinois University, Carbondale, IL*

► **154. Establishing Energy Thresholds for Laser Weed Control Across Weed Species and Growth Stages.** Thomas Rushing*[1], Bholuram Gurjar[1], Vijai Krishna[1], Muthu Bagavathiannan[1]. *[1]Texas A&M University, College Station, TX*

155. Evaluating Palmer Amaranth Control in IWM Programs Using UAV-Based Multispectral Imaging. Usman Mohammed[1],

Prashant Jha*[1], Ivan Grijalva[1], Bhupesh Dhaka[1], Shahreen Mirza[1]. *[1]Louisiana State University AgCenter, Baton Rouge, LA*

► 156. Allelopathic Potential of Grazing-type Winter Covers on Crop and Weed Emergence and Growth. Yunzhu Chen*[1], Kapil Chobhe[1], Katie Lewis[1], Muthukumar Bagavathiannan[1]. *[1]Texas A&M University, College Station, TX*

► 157. Targeting Perennial Grasses Using ACCase & ALS Inhibiting Herbicides. Morgan Boone*[1], Gavin Sparks[1], Connor Webster[1], Evelyn Williams[1], Ben Stoker[1], Ronnie Levy[1], Maranda Hains[1]. *[1]Louisiana State University Ag Center, Baton Rouge, LA*

158. Relay Intercropping of Wheat and Soybean in the Central U.S.: Opportunities and Challenges. Amar Godar*[1], Jason Norsworthy[1], Karla Gage[2], Rachel Cott[3], Sarah Lancaster[3], Thomas Butts[4], Bryan Young[4]. *[1]University of Arkansas - Fayetteville, AR, [2]University of Southern Illinois, Carbondale, IL, [3]Kansas State University, Manhattan, KS, [4]Purdue University, West Lafayette, IN*

159. Effect of Water Stress During Growth Stages on Growth and Fecundity of Palmer Amaranth. Gaganjot Singh Sodhi*[1], Dr. Sukhbir Singh[1], Dr. Rupinder Saini[1], Dr. Krishna Jagadish[1], Dr. Donna McCallister[1]. *[1]Texas Tech University, Lubbock, TX*

► 160. Analyzing the Effect of Varying Intensities of Weed Control on Winter Wheat. Claire Roche*[1], Desiree McGriff[1], Liberty Galvin[1], Connor Cox[1], Amanda De Oliveira Silva[1]. *[1]Oklahoma State University, Stillwater, OK*

► 161. Effects of Rye Cover Crop, MSO Use, and Residual Herbicide on *Amaranthus palmeri* Control in Soybean. Joaquin L Enrria*[1], J. Anita Dille[1]. *[1]Kansas State University, Manhattan, KS*

► 162. Integrated Management of Volunteer Corn in Corn. Alex Chmielewski*[1], Amit Jhala[1], Mandeep Singh[2]. *[1]University of Nebraska Lincoln, Lincoln, NE, [2] University of California Division of Agriculture and Natural Resources, Woodland, CA*

► 163. Cereal Rye Cover Crop and Fall Residual Herbicides: Dual Strategy against Glyphosate- and ACCase-Resistant Italian ryegrass (*Lolium perenne* L ssp. *multiflorum*). Bhupesh Dhaka*[1], Prashant Jha[1], Donnie Miller[2], Connor McKoin[1], Shahreen Mirza[1]. *[1]Louisiana State University AgCenter, Baton Rouge, LA, [2]Louisiana State University AgCenter, St. Joseph, LA*

164. Optimizing Mid-Infrared Thermal Weed Control: Species- and Growth-Stage Responses in a Controlled Environment. Ryan Hamberg*[1], Patrick Jackson[2], Jon Jackson[2], Muthukumar Bagavathiannan[1]. *[1]Texas A&M University, College Station, TX, [2]Global Neighbor Inc., Xenia, OH*

► **165. Time as a Tool: Does Planting Date Impact Weed Management in Dry Beans?** Jacob H. Felsman*[1], Brian J. Stiles II[1], Christy L. Sprague[1]. [1]*Michigan State University, East Lansing, MI*

166. Impacts of Integrated Weed Management on Weed Density and Seedbank Reduction in Cotton-Corn Rotations. Sarah Chu*[1], Aradhya Chandrashekar[2], Gaylon Morgan[3], Muthukumar Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX,* [2]*Bayer Crop Science, St. Louis, MO,* [3]*Cotton Incorporated, Cary, NC*

► **167. Investigating Italian Ryegrass (*Lolium perenne* ssp. *multiflorum*) Suppression with Summer Cover Crops.** Jackson Alsdorf*[1], Diego Contreras[1], Brock Dean[1], Colden Bradshaw[1], Zachary Taylor[1], Wesley Everman[2], Charles Cahoon[1]. [1]*North Carolina State University, Raleigh, NC,* [2]*Iowa State University, Ames, IA*

► **168. Evaluating Chaff Lining for Post-Harvest Weed Seed Control in Ohio Row Crops.** Amber Emmons*[1], Daniel Doretto[1], Mercy Odemba[1], Ram Yadav[1], Alyssa Essman[1], Eugene Law[1]. [1]*The Ohio State University, Columbus, OH*

169. Minimum Tillage in California Rice: Weed Population Dynamics Under Variable Winter Management Strategies. Whitney Brim-DeForest*[1], Bruce Linquist[2], Luis Espino[3], Taiyu Guan[1]. [1]*University of California Division of Agriculture and Natural Resources, Yuba City, CA,* [2]*University of California-Davis, Davis, CA,* [3]*University of California Division of Agriculture and Natural Resources, Oroville, CA*

170. Seedbank Response to Tillage and Cover Crops in Organic Vegetables. Dwayne Joseph*[1], Alan Leslie[1], Cerruti Hooks[1]. [1]*University of Maryland, College Park, MD*

► **171. Reduced-Input Herbicide Programs for Cotton in the Texas Southern High Plains.** Andrea Sagiorato*[1], Peter Dotray[1], [2], Matthew Woolard[1], Megan Singletary[1], John Kohler[1], Bobby Rodriguez[2], Gaylon Morgan[3]. [1]*Texas Tech University, Lubbock, TX,* [2]*Texas A&M Agrilife Research and Extension Service, Lubbock, TX,* [3]*Cotton Incorporated, Cary, NC*

172. How Much Energy is Enough? Defining Thresholds for Electrical Weed Control Across Species and Growth Stages. Ryan Hamberg*[1], Muthukumar Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX*

173. Postemergence Suppression of Kura Clover (*Trifolium ambiguum*) Varies with Herbicidal Mode of Action. Vijay Varanasi*[1], Tulsi Kharel[1], Saseendran Anapalli[1]. [1]*USDA-ARS-Crop Production Systems Research Unit, Stoneville, MS*

► **174. Winter Cover Crop Mixtures Reduce Early-Season Weed Pressure and Affect Morning Glory Performance in**

Soybean No-Till Systems. Hailey Haddock*[1], Fernando Oreja[1], Juan Brocca[1], Coleman Scroggs[1]. *[1]Clemson University, Clemson, SC*

175. Efficacy and Crop Safety of Pre-Plant Herbicides for Guayule (*Parthenium argentatum*) Establishment in the Low Desert of California. Oli Bachie*[1]. *[1]University of California Agriculture and Natural Resources, Holtville, CA*

POSTER - 14. Sensing, Automation, and Precision Technologies

***PRESENTING AUTHOR**
► WSSA STUDENT CONTEST

► 176. Use Case of ARA Ultra Precision Targeted Application Technology in Wisconsin Non-GMO Corn and Soybean Systems. Daniel Zhu*[1], Guilherme Alves[1], Sabeel Abuhakmeh Abuhakmeh[1], Ryan DeWerff[1], Zaim Ugljic[1], Rodrigo Werle[1]. *[1]University of Wisconsin Madison, Madison, WI*

► 177. Early-Stage Weed Detection Using Hyperspectral Imaging and Deep Learning. Mahmoud Rady*[1, 2], Matthew Cutulle[1], Brian Ward[1]. *[1]Clemson University, Charleston, SC, [2]Alexandria University, Alexandria, Egypt*

► 178. Evaluating Precision Herbicide Application Strategies During Summer Fallow in the Northern Great Plains. Devanshi Het Desai*[1], Het Samir Desai[1], Paul Nugent[1], Lovreet Shergill[2], Tim Seipel[1]. *[1]Montana State University, Bozeman, MT, [2]Colorado State University, Ft. Collins, CO*

179. Comprehensive Benchmarking of YOLO Models for Multi-Class Weed Detection in Soybean Fields Using UAV Imagery. Linyuan Wang*[1], Dong Chen[1], Haibo Yao[2], Te Ming Tseng[1], Xin Sun[3], Yanbo Huang[2]. *[1]Mississippi State University, Starkville, MS, [2]USDA-ARS Genetics and Sustainable Agricultural Research Unit, Starkville, MS, [3]North Dakota State University, Fargo, ND*

► 180. From Pixels to Predictions: Machine Learning for Herbicide Resistance Detection. Akhilesh Sharma*[1], Alejandro Perez-Jones[2], Chandrima Shyam[2], Lucia Acosta-Gamboa[2]. *[1]Cornell University, Ithaca, NY, [2]Bayer Crop Science, St. Louis, MO*

POSTER - 15. Genomics

***PRESENTING AUTHOR**
► WSSA STUDENT CONTEST

181. Improving Gene Annotations for Weed Genomes in IWGC Phase 2. Maria Antonia Rossatto Novelli*[1], Todd Gaines[1], Eric Patterson[2], Caio Brunharo[3]. [1]*Colorado State University, Fort Collins, CO,* [2]*Michigan State University, East Lansing, MI,* [3]*Pennsilvania State University, University Park, PA*

► 182. Characterization of the Genetic Diversity of Curlyleaf Pondweed (*Potamogeton crispus*). Mallory Kaiser*[1], Gregory Chorak[2], Ryan Thum[2], Ryan Wersal[1]. [1]*Minnesota State University, Mankato, MN,* [2]*Montana State University, Bozeman, MT*

► 183. Transgenerational Stress Plasticity Modulates Epigenetic and Transcriptional Herbicide Responses in *Arabidopsis thaliana*. Anais Mejia*[1], Caio Brunharo[2]. [1]*Colorado State University, Ft. Collins, CO,* [2]*Pennsylvania State University, University Park, PA*

► 184. Unraveling Resistance Mechanisms in a Field-Evolved Population of *Amaranthus palmeri*. Franck Dayan[1], Anais Mejia*[1], Todd Gaines[1], Dustin Moreno[2]. [1]*Colorado State University, Ft. Collins, CO,* [2]*Universidad de Panama, Panama City, Panama*

► 185. Tracing the Roots of Auxin Herbicide Selectivity Through AUX/IAA Evolution. Eric Moog*[1], Todd Gaines[1], Franck Dayan[1]. [1]*Colorado State University, Fort Collins, CO*

186. Exploring the Next-Gen Weed Control: Gene Silencing Initiated by Topically Applied dsRNA. Hong Ma*[1], Ramon Leon[1]. [1]*North Carolina State University, Raleigh, NC*

► 187. Revisiting RNAseq and QTL Mapping Analysis in an HPPD-Resistant Palmer Amaranth and Screening for Herbicide Multiple-Resistance. Eduardo Rudell*[1], Andre Simoes Araujo[1], Bianca Assis Barbosa Martins[2], Nawaporn Onkokesung[2], Frank Dayan[1], Todd Gaines[1]. [1]*Colorado State University, Ft. Collins, CO,* [2]*Bayer Crop Science, St. Louis, MO*

188. Genome-wide Identification and Comparative Analysis of Cytochrome P450 Genes in Asteraceae. Fatemeh Abdollahi*[1], Sofia Marques Hill[1], David R Nelson[2], Todd Gaines[1]. [1]*Colorado State University, Fort Collins, CO,* [2]*University of Tennessee, Memphis, TN*

► 189. Development of the First Agrobacterium-mediated Transformation Protocol for Proso Millet (*Panicum miliaceum*): Applications for Crop and Weed Research. Leigh Schwinden*[1], Acer VanWallendael[1], Kedong Da[1]. [1]*North Carolina State University, Raleigh, NC*

190. Genetic Comparisons of Italian Ryegrass (*Lolium multiflorum*) Populations Across North Carolina. Audrey Fahey*[1], Nik Hay[1], Leigh Schwinden[1], Emily Hochschild[1], Acer VanWallendael[1]. [1]*North Carolina State University, Raleigh, NC*

191. Unveiling the Mechanisms of Increased EPSPS Copy Number in Glyphosate-Resistant Italian Ryegrass (*Lolium multiflorum*). Adrian Veron*[1], Caio Brunharo[1]. [1]*Pennsylvania State University, University Park, PA*

► **192. Genetic variation in Flowering Time Genes across North Carolina *Amaranthus palmeri* Populations.** Morgan Alexander*[1], Acer VanWallendael[1], Nikoli Hay[1]. [1]*North Carolina State University, Raleigh, NC*

193. The Telomere-to-Telomere Genome of *Erigeron sumatrensis* and Reveal Insights into Herbicidal Target HPPD and Herbicide Activity. Zuren Li*[1], Yutong Liu[1], Meiliang Zhou[2], Lianyang Bai[1]. [1]*Hunan Academy of Agricultural Sciences, Changsha, China,* [2]*Chinese Academy of Agricultural Sciences, Beijing, China*

TUESDAY MORNING FEBRUARY 10

Judges Work Room

LOCATION: Creedmore
TIME: 9:00 AM-4:00 PM Eastern

ORAL - 01. Agronomic Crops

LOCATION: Glenwood Ballroom
Salon I
TIME: 9:00 AM-5:00 PM Eastern
MODERATORS: Craig Alford
Corteva AgriScience
Johnston, IA

***SPEAKER**

09:00 AM **200. Evaluating Metribuzin for Waterhemp (*Amaranthus tuberculatus*) Management in Corn across the North Central United States.** Eric Jones*[1], Jill Alms[1], David Vos[1], Tommy Butts[2], Leonard Piveta[2], Alyssa Essman[3], Alyson Godwin[3], Anthony Dobbels[3], Wesley Everman[4], Damian Franzenburg[4], Alex Macvilay[4], Aaron Hager[5], Joseph Ikley[6], Rodrigo Werle[7], Ryan DeWerff[7], Nikola Arsenijevic[7]. *[1]South Dakota State University, Brookings, SD, [2]Purdue University, West Lafayette, IN, [3]The Ohio State University, Columbus, OH, [4]Iowa State University, Ames, IA, [5]University of Illinois Urbana-Champaign, Urbana-Champaign, IL, [6]North Dakota State University, Fargo, ND, [7]University of Wisconsin, Madison, WI*

09:15 AM **201. BASF's Next Generation PPO Herbicide: Fendioxypyracil.** Liliana Parra Rapado*[1], Tobias Seisser[1]. *[1]BASF SE, Limburgerhof, Germany*

09:30 AM **202. Preplant Burndown Weed Control with Epyrifenacil (Rapidicil®), a Novel Broad Spectrum PPO Herbicide.** Pat Clay*[1], Garison Gundy[1], Randall Landry[1], Griffin Matt[1], Noe Sam[1], Clarke Gregory[1], Nathan Drewitz[1], Estes Ronald[1], Mallory Everett[1], Jonathon Kohrt[1], Chris Meador[1], Eric Ott[1], Andrew Rodstrom[1], Hunt Sanders[1], Chad Smith[1], Jhonatan Barro[1], Lipi Parikh[1]. *[1]Valent U.S.A. LLC, San Ramon, CA*

09:45 AM **203. Programs for Burndown Weed Control in No-Till Corn, Soybeans, and Wheat with Epyrifenacil (Rapidicil®).** Garrison Gundy*[1], Pat

Clay[1], Randall Landry[1], Matt Griffin[1], Sam Noe[1], Gregory Clarke[1], Nathan Drewitz[1], Ronald Estes[1], Mallory Everett[1], Jonathon Kohrt[1], Chris Meador[1], Eric Ott[1], Andrew Rodstrom[1], Hunt Sanders[1], Chad Smith[1], Jhonatan Barro[1], Lipi Parikh[1]. [1]*Valent U.S.A. LLC, San Ramon, CA*

10:00 AM **204. Vyconic Soybeans: A Flexible Approach to Preemergent Weed Management with Acetochlor-Mesotrione Premix.** Carl Coburn*[1], Katilyn Price[1], Zewei Miao[1], Emily Scholting[1]. [1]*Bayer Crop Science, St. Louis, MO*

10:15 AM **205. Response of Popcorn and Processing Sweet Corn Hybrids to a Premix of Saflufenacil and Pyroxasulfone (Surtain® herbicide) Applied Pre- and Early Post-Emergence.** Ankit Yadav*[1], John Frihauf[2], Amit Jhala[1]. [1]*University of Nebraska-Lincoln, Lincoln, NE,* [2]*BASF Corporation, Raleigh, NC*

10:30 AM **206. Impact of Application Timing and Residual Tank Mixtures on Postemergence Weed Control in Enlist Soybean.** Kurt Vollmer*[1], Jadon Cook[1]. [1]*University of Maryland, College Park, MD*

10:45 AM **207. Postemergence Herbicides for the Control of Multiple-Herbicide-Resistant Canada Fleabane (*Conyza canadensis*) in Corn.** Nader Soltani[1], Isabelle Aicklen*[1], Christian Willemse[1], Peter Sikkema[1]. [1]*University of Guelph, Guelph, ON*

11:00 AM **208. Suspected Resistance of Common Cocklebur (*Xanthium strumarium*) from Illinois and Indiana to Glyphosate and Atrazine.** Alexander R. Mueth*[1], Julie M. Young[1], Bryan G. Young[1]. [1]*Purdue University, West Lafayette, IN*

11:15 AM **209. Glyphosate Resistance in Goosegrass (*Eleusine indica*): Evidence from New Jersey Populations.** Carrie Mansue*[1], Thierry Besancon[1], Lynn Sosnoskie[2], Caio Brunharo[3], Adrian Veron[3]. [1]*Rutgers University, New Brunswick, NJ,* [2]*Cornell University, Ithaca, NY,* [3]*The Pennsylvania State University, College Park, PA*

11:30 AM **210. Counties and Acreage Affected by Herbicide Resistant Weeds in Soybean, Corn, and Cotton in 2017.** Michael Flessner*[1], Nicholas Basinger[2], Zahoor Ganie[3], Ian Burke[4], Kara Pittman[5]. [1] *Virginia Polytechnic Institute and State University, Blacksburg, VA,* [2]*University of Georgia, Athens, GA,* [3]*FMC,* [4]*Washington State University,*

Pullman, WA, [5]Pennsylvania State University, College Park, PA

12:00 PM **LUNCH BREAK**

01:15 PM **212. Evaluating Herbicide Resistance in Giant Ragweed (*Ambrosia trifida*).** Cristiana Bernardi Rankrape*[1], Isabel Werle Noe[2], Eduardo Lago[1], Patrick Tranel[2], Karla Gage[1]. *[1]Southern Illinois University, Carbondale, IL, [2]University of Illinois Urbana-Champaign, Urbana-Champaign, IL*

01:30 PM **213. Bayer's Weed Survey Project: A Comprehensive Update on Herbicide Sensitivity Trends in Waterhemp and Palmer Amaranth in the US.** Chandrima Shyam*[1], Drew Tyre[1], Alejandro Perez-jones[1], Jeffrey Herrmann[1], Chandrashekar Aradhya[1]. *[1]Bayer Crop Science, St. Louis, MO*

01:45 PM **214. Characterization of Dicamba Efficacy in Selected Palmer amaranth and Waterhemp Populations.** Aruna Varanasi*[1], Chandra Aradhya[1]. *[1]Bayer Crop Science, St. Louis, MO*

02:00 PM **215. Distribution of PPO inhibitor (Group 14)-resistant kochia (*Bassia scoparia*) in North Dakota and the Canadian Prairies.** Joseph Ikley*[1], Charles Geddes[2], Gaganpreet Dhariwal[2], Laura Kennedy[2], Lindsey Fransen[3], Zack Bateson[3]. *[1]North Dakota State University, Fargo, ND [2]Agriculture and Agri-Food Canada, Lethbridge AB, [3]National Agricultural Genotyping Center, Fargo, ND*

02:15 PM **216. Resistance Breaking Capability of New-Generation PPO-Inhibiting Herbicides.** Sarah Stilgenbauer*[1], Aimone Porri[1]. *[1]BASF SE, Limburgerhof, Germany*

02:30 PM **217. Increased Occurrence of Herbicide-Resistant Grasses in Louisiana Cropping Systems.** Shahreen Mirza*[1], Prashant Jha[1], Bhupesh Dhaka[1], Connor Webster[1], Daniel Stephenson[2], Donnie Miller[3], Matt Foster[4]. *[1]Louisiana State University AgCenter, Baton Rouge, LA, [2]Louisiana State University AgCenter, Alexandria, LA, [3]Louisiana State University AgCenter, St Joseph, LA, [4]Louisiana State University AgCenter, St. Gabriel, LA*

02:45 PM **218. Herbicide Use Pattern and Perceptions of Herbicide Resistance Among Rice Farmers in Quezon, Philippines.** Analiza Henedina Ramirez*[1],

Mary Joy Abit[1]. [1]*University of the Philippines Los Banos, Los Banos, Philippines*

3:00 PM BREAK

03:15 PM **219. Resistance to ACCase- and ALS-inhibiting Herbicides in *Echinochloa glabrescens* Populations from Quezon, Philippines.** Mary Joy Abit*[1], Samantha Ann Bernice Manlutac[1], Vico Aaron Enriquez[1], Analiza Henedina Ramirez[1]. [1]*University of the Philippines Los Banos, Los Banos, Philippines*

03:30 PM **220. Issues and Scope of Direct Seeded Rice as an Alternative to Puddled Transplanted Rice in North-Western India: Insights from Haryana.** Dharam Bir Yadav*[1], Ashok Yadav[1], Ankur Chaudhary[1], Virender Kumar[2], R. K. Malik[3], Gurjeet Gill[4]. [1]*CCS Haryana Agricultural University, Hisar, India,* [2]*IRRI, Manila, Philippines,* [3]*IRRI, India,* [4]*University of Adelaide, Adelaide, Australia*

03:45 PM **221. Viludo Seed Safener: A Novel Fenclorim Seed Treatment for Enhanced Rice Safety to Clomazone Applications.** Ryan Bryant-Schlobohm*[1], Jason Norsworthy[2], Tristen Avent[1], Ryan Henry[1], Cody Gray[1], Paul Johnson[1]. [1]*United Phosphorus, Inc., King of Prussia, PA,* [2]*University of Arkansas, Fayetteville, AR*

04:00 PM **222. Iptriazopyrid, a Novel Herbicide for US Rice Production.** Craig Sandoski*[1]. [1]*Gowan USA, Collierville, TN*

04:15 PM **223. Iptriazopyrid: A Novel HPPD Herbicide for Rice.** Jason Norsworthy*[1], Cory Ketchum[1]. [1]*University of Arkansas, Fayetteville, AR*

04:30 PM **224. Iptriazopyrid Use in Louisiana Rice.** Connor Webster*[1], Craig Sandoski[2], Maranda Hains[1], Ben Stoker[1], Gavin Sparks[1], Evelyn Williams[1], Morgan Boone[1], Ronnie Levy[1]. [1] *Louisiana State University, Baton Rouge, LA,* [2]*Gowan USA, Collierville, TN*

04:45 PM **225. Iptriazopyrid Mixed with Contact Herbicides in Rice.** Gavin Sparks*[1], Connor Webster[1], Morgan Boone[1], Eve Williams[1], Steven Stoker[1], Maranda Hains[1], Ronnie Levy[1]. [1]*Louisiana State University, Baton Rouge, LA*

05:00 PM **226. Evaluation of Iptriazopyrid: A New HPPD-inhibiting Herbicide.** Ben Stoker*[1], Connor Webster[1], Ronnie Levy[1], Gavin Sparks[1], Maranda

Hains[1], Eve Williams[1], Morgan Boone[1]. *[1] Louisiana State University, Baton Rouge, LA*

05:15 PM **227. Effectiveness of Iptriazopyrid in Combination with Commonly Utilized Synthetic Auxins in Rice.** Cory Ketchum*[1], Jason Norsworthy[1], Noah Chandler[1], Rhet Baxley[1]. *[1]University of Arkansas, Fayetteville, AR*

TUESDAY MORNING FEBRUARY 10

ORAL - 11. Physiology

LOCATION: Glenwood Ballroom Salon II
TIME: 9:00 AM-2:45 PM Eastern
MODERATORS: David Belles, Syngenta Crop Protection, Greensboro, NC

***SPEAKER**

09:00 AM **228. Plant Transcription Factor Responses to Herbicides.** Franck Dayan*[1], Srishti Gupta[2], Caleb Knepper[3], Catarine Markus[4], Aldo Merotto[4], Luan Cutti[5], Crystal Sparks[1], Martin Laforest[6], Carlos Rigon[7], Jim Brosnan[8]. *[1]Colorado State University, Ft. Collins, CO, [2]Duke University, Durham, NC, [3]RiceTec Inc, [4]Federal University of Rio Grande do Sul, Porto Alegre, Brazil, [5]Michigan State University, East Lansing, MI, [6]Agriculture and Agri-Food Canada, Saint-Jean-sur-Richelieu, QC, [7]Corteva Agriscience, Indianapolis, IN, [8]University of Tennessee, Knoxville, TN*

09:15 AM **229. Rimisoxafen: The First Dual-Mode Herbicide Combining Two Distinct Mechanisms to Combat Global Weed Resistance.** Atul Puri*[1], Ryan Emptage[1], Il-Ho Kang[1], Chad Brabham[1], Ravishekhara Reddy[1], Marco Montagna[1]. *[1]FMC Corporation, Philadelphia, PA*

09:30 AM **230. Phenotypic, Biochemical and Transcriptomic Analyses Uncover the Modes of Action of Cinnamaldehyde, a Potential New Botanical Herbicide.** Sofiene Ben Kaab*[1], Zoe Schroeder[2], Victoria Shema[2], Samuel Revolinski[2],

Tomo Kawashima[2], Pan Zhiqiang[3], Charles Cantrell[3], Ikhlas Khan[4], Steve Duke[4], Joanna Bajsa-Hirschel[3], Haissam Jijakli[1]. *[1]Gembloux Agro-Bio Tech, University of Liege, Belgium, [2]University of Kentucky, Lexington, KY, [3]USDA-ARS Natural Products Utilization Research Unit, Oxford, MS, [4]The University of Mississippi, Oxford, MS*

09:45 AM **231. The New HRAC Mode of Action Classification 2026 - Major Revision of Actives.** Jens Lerchl*[1], Matthias Witschel[1], Jens Frackenpohl[2], Bianca Martins[2], Hudson Takano[3], Jeffrey Epp[3], James Morris[4], Gael Le Goupil[4], Roland Beffa[5]. *[1] BASF SE, Ludwigshafen, Germany, [2]Bayer AG, Leverkusen, Germany, [3]Corteva AgriScience, Indianapolis, IN, [4]Syngenta AG, Basil, Switzerland, [5]HRAC Global*

10:00 AM **232. The New HRAC Mode of Action Classification 2026 - Shaping the Future.** Jens Lerchl*[1], Matthias Witschel[1], Bianca Martins[2], Jens Frackenpohl[2], Hudson Takano[3], Jeffrey Epp[3], James Morris[4], Gael Le Goupil[4], Roland Beffa[5]. *[1]BASF SE, Ludwigshafen, Germany, [2]Bayer AG, Leverkusen, Germany, [3]Corteva AgriScience, Indianapolis, IN, [4]Syngenta AG, Basil, Switzerland, [5]HRAC Global, Location?*

10:15 AM **233. How Mevalocidin Inhibits the Mevalonate Pathway to Kill Weeds.** Stephen Duke*[1], Amar Chittiboyina[1], Hemant Lata[1], Pankaj Pandey[1], Joanna Bajsa-Hirschel[2]. *[1]University of Mississippi, Oxford, MS, [2]USDA-ARS Natural Products Utilization Unit, Oxford, MS*

10:30 AM **234. Histone DeAcetylase (HDAC) Mediation as a New Herbicide Mode-of-Action.** Paul Zorner*[1], Anand Ray[1]. *[1]Remote Epigenetics, Encinitas, CA*

10:45 AM **235. 2,4-D Metabolism in Palmer Amaranth (*Amaranthus palmeri*) and Waterhemp (*Amaranthus tuberculatus*): Comparative Profiling of Detoxification Pathways and Metabolite Identification.** Michael Ozolins*[1], Emma Kuhl[1], Jason Norsworthy[2], Erin Hill[1], Eric Patterson[1]. *[1]Michigan State University, East Lansing, MI, [2]University of Arkansas, Fayetteville, AR*

11:00 AM **236. Evaluating Multiple Herbicide Resistance in Kochia Against Synthetic Auxins and PPO-Inhibitors.** Chandrima Shyam*[1], Lucia Acosta-Gamboa[1], Jiani Yang[1], Kathryn Haydon[1], Ericka Havecker[1], Alejandro Perez-Jones[1]. [1]*Bayer Crop Science, St. Louis, MO*

11:15 AM **237. Environmental Factors Influencing the Differential Response of Resistant and Susceptible Waterhemp (*Amaranthus tuberculatus*) Populations to Glufosinate-ammonium.** Isabel Werle Noe*[1], Logan Miller[1], Damilola A. Raiyemo[1], Alexander J. Lopez[1], Estéfani Sulzbach[1], Aaron G. Hager[1], Patrick J. Tranel[1]. [1]*University of Illinois Urbana-Champaign, Urbana-Champaign, IL*

11:30 PM **Business Meeting**

TUESDAY MORNING FEBRUARY 10

SYMPOSIUM - 01. Bridging the Gap: Regulatory, Technical, and Industry Perspectives on Targeted and Autonomous Weed Control

LOCATION: Glenwood Ballroom Salon 3 and 4
TIME: 9 AM-12:30 PM Eastern
MODERATORS: Lauren Lazaro

***SPEAKER**

09:00 AM **Introduction to Symposium.** Lauren Lazaro

09:05 AM **238. Novel Weed Control Technologies: Significant Opportunities but Considerable Challenges.** Michael Walsh*[1]. [1]*Charles Stuart University, Wagga Wagga, NSW, Australia*

09:25 AM **239. Transforming Agriculture with Robotics and Deep Learning.** Chris Padwick*[1]. [1]*John Deere, Menlo Park, CA*

09:45 AM **240. The Current State of HWSC and Where Autonomous Control Is Taking Us.** Dean Mayerle*[1]. [1]*Redekop Manufacturing, Saskatoon, SK*

10:05 AM **241. Rewriting the Rules with Aim & Apply™.** Chad Yagow*[1]. [1]*Veradnt Robotics, Hayward, CA*

10:25 AM **242. Targeted Application, Standardizing Performance: ASABE X665.** Adam Barlow*[1]. [1]*John Deere, Des Moines, IA*

10:45 AM **243. Targeted Applications and Crop Protection Manufacturers: Implications, Challenges, and Opportunities.** R. Joseph Wuerffel*[1]. [1]*Syngenta Crop Protection, Greensboro, NC*

11:05 AM **244. From Challenges to Opportunities: Collaborative Approaches from Agriculture Retailers to Enhance Sustainable Weed Control with Changing Agrotechnology's.** Jeff Bunting*[1], Terry Kipley[2]. [1]*GROWMARK Inc, Mahomet, IL,* [2] *Council of Producers and Distributors of Agrotechnology, Northport, NY*

11:25 AM **245. The Role of the EPA and the Impacts of Technology.** Kelly Tindall*[1], Melanie Biscoe[1], Julie Breeden-Alemi[1], Khue Nguyen[1], Andrew Shelby[1], Laura Bacon[1]. [1]*U.S. Environmental Protection Agency, Washington, DC*

11:45 AM **Panel Discussion.** The symposium will culminate in a plenary panel discussion featuring all of the day's presenters.

TUESDAY AFTERNOON FEBRUARY 10

SYMPOSIUM - 02. Re-framing the Discussion of Herbicide Resistance – Perspectives on Best Practices for Real-time Management in the Field

LOCATION: Glenwood Ballroom
Salon II

TIME: 1:00-5:00 PM Eastern

MODERATORS: Charles Cahoon
North Carolina State University
Raleigh, NC

Cameron Douglas
Compliance Services International
Lakewood, WA

Sarah Lancaster
Kansas State University
Manhattan, KS

***SPEAKER**

01:00 PM **Introduction.** Charlie Cahoon*[1]. [1]*North Carolina State University, Raleigh, NC*

1:10 PM **Local Perspectives.** Charlie Cahoon*[1]. [1]*North Carolina State University, Raleigh, NC*

1:40 PM **Moderated Panel Discussion on Local Perspectives.** Charlie Cahoon*[1]. [1]*North Carolina State University, Raleigh, NC*

02:15 PM **246. Factors That Affect Resistance Management Decisions at the Farm Level.** Steve Hoffman*[1], [1]*InDepth Agronomy, Manitowoc, WI*

02:30 PM **247. Re-framing the Discussion of Herbicide Resistance - Perspectives on Best Practices for Real-time Management in the Field: Commodity Group Perspective (Soybeans).** Blake Barlowe[1], Katherine Stowe[1]. [1]*United Soybean Board, Apex, NC*

02:45 PM **248. Addressing Herbicide Resistance: An Industry Perspective.** David Belles*[1]. *[1]Syngenta Crop Protection, Greensboro, NC*

03:00 PM BREAK (15 MINUTES)

03:15 PM **249. The Herbicide Resistance Monitoring Network (HeRMoN).** Eric Patterson[1], Sara Lancaster[2], Caio Brunharo[3], Christy Sprague[1], Bryan Young[4], Thomas Butts[4], Patrick Tranel[5], Rodrigo Werle[6], Mithila Jugulam[7], Luis Avila[8], Jason Norsworthy[9], Kevin Bradley[10]. *[1]Michigan State University, East Lansing, MI, [2]Kansas State University, Manhattan, KS, [3]The Pennsylvania State University, College Park, PA, [4]Purdue University, West Lafayette, IN, [5]University of Illinois Urbana-Champaign, Urbana-Champaign, IL, [6]University of Wisconsin-Madison, Madison, WI, [7]Texas A&M University, College Station, TX, [8]Mississippi State University, Starkville, MS, [9]University of Arkansas, Fayetteville, AR, [10]University of Missouri, Columbia, MO*

03:30 PM **250. EDDMapS: Managing, visualizing, and sharing data on weed presence and herbicide resistance.** Joseph LaForest*[1]. *[1]University of Georgia, Athens, GA*

03:45 PM **251. GROW Resources Empower Farmers to Combat Herbicide Resistance.** Michael Flessner*[1], Emily Unglesbee[2], Amy Sullivan[2], Mark VanGessel[3], Muthukumar Bagavathiannan[4], John Wallace[5], Steven Mirsky[6]. *[1] Virginia Polytechnic Institute and State University, Blacksburg, VA, [2]GROW, [3]University of Delaware, Newark, DE, [4]Texas A&M University, College Station, TX, [5]The Pennsylvania State University, College Park, PA, [6]USDA-ARS Sustainable Agricultural Systems Laboratory, Beltsville, MD*

4:00 PM **252. A Social Science Perspective on Best Management Practices for Herbicide Resistance.** Nick Bergmann*[1]. *[1]Washington State University, Pullman, WA*

04:15 PM **253. Trust, Social Capital, and Community Adoption of Herbicide Resistance Best Management Practices.** Katherine Dentzman*[1]. *[1]Iowa State University, Ames, IA*

04:15 PM **Moderated Discussion with Audience Members.** Sarah Lancaster*[1], Cameron Douglas. *[1]Kansas State University, Manhattan, KS, [2]Compliance Services International, Lakewood, WA*

TUESDAY AFTERNOON FEBRUARY 10

ORAL - WSSA - SST

M.S. Student Contest

LOCATION: Glenwood Ballroom
Salon III
TIME: 1:45-5:15 PM Eastern
MODERATOR: Darrin Dodds
Mississippi State University
Starkville, MS

***SPEAKER**

01:45 PM **254. Field Evaluation of Weed-Suppression Traits in Diverse Cotton (*Gossypium* spp.) Lines.** Varnika Kalaichelvan*[1], Pandian Rajendran[1], Fernando Aguiar Neves[1], Aniruddha Maity[2], Alvaro Sanz-Saez[2], Muthukumar Bagavathiannan[1], Nithya Subramanian[1]. *[1]Texas A&M University, College Station, TX, [2]Auburn University, Auburn, AL*

01:49 PM **255. Influence of Poultry Litter and Nutrient Inputs on Effectiveness of Pre-Emergence Herbicides in Southeastern Cotton Production.** Gurwinder Singh*[1], Nisith Nishank Purohit[1], Rakesh Kumar Ghosh[1], Rishi Prasad[1], Aniruddha Maity[1]. *[1]Auburn University, Auburn, AL*

01:53 PM **256. Natural Host Range of Cotton Leafroll Dwarf Virus Across Seasons in Alabama, USA.** Kathleen Martin[1], Carter Bonnell*[1,2], Andrew Price[2], Steve Brown[1], Gourav Chahal[1], Karishma Khanal[1]. *[1]Auburn University, Auburn, AL, [2]USDA-*

ARS National Soil Dynamics Laboratory, Auburn, AL

01:57 PM **257. Survey of Herbicide Resistance in Texas Palmer amaranth (*Amaranthus palmeri*).** Luke Schmitz*[1], Ryan Hamberg[1], Scott Nolte[1], Peter Dotray[2], Muthukumar Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX,* [2]*Texas Tech and Texas A&M Agrilife Research & Extension Service, Lubbock, TX*

02:01 PM **258. From 2,4-D to Dicamba: Is Waterhemp One Step Ahead?** Adebisi Adeleke*[1], Jerry Cohen[1], Eric Patterson[2], Navjot Singh[1], Debalin Sarangi[1]. [1]*University of Minnesota, Saint Paul, MN,* [2]*Michigan State University, East Lansing, MI*

02:05 PM **259. Delta T and Glufosinate Performance: Validation of Thresholds for Palmer Amaranth (*Amaranthus palmeri*) Control.** Lalit Mohan*[1], Sarah Lancaster[1], Jeremie Kouame[2], Igor Lima[1]. [1]*Kansas State University, Manhattan, KS,* [2]*Agricultural Research Center, Hays, KS*

02:09 PM **260. Sensitivity of Ohio Waterhemp Populations to Postemergence Herbicides.** Betsy Cunningham*[1], Alyssa Essman[1], Alexander Lindsey[1], Jim Ippolito[1], Anthony Dobbels[1], Colin Barclay[1]. [1]*Ohio State University, Columbus, OH*

02:13 PM **261. Balancing Cost and Control: Overlapping Residual Strategies for Waterhemp (*Amaranthus tuberculatus*) Management in Ohio.** Ella Poling*[1], Anthony Dobbels[1], Colin Barclay[1], Laura Lindsey[1], Stephanie Karhoff[1], Guilherme Signorini[1], Alyssa Essman[1]. [1]*The Ohio State University, Columbus, OH*

02:17 PM **262. Palmer amaranth (*Amaranthus palmeri*) Control: The Role of Glufosinate Formulation, AMS rates, and Weather Conditions.** Caroline Wayhs Backes*[1], Zachary Howard[1], Scott Nolte[1]. [1]*Texas A&M University, College Station, TX*

02:21 PM **263. The Space Between: Can Inter-planted Soybeans Improve Weed Management?** Zachary Ury*[1], Kevin Bradley[1]. [1]*University of Missouri, Columbia, MO*

02:25 PM **264. Assessing Weed Pressure and Management Efficacy in an Agrivoltaic Soybean Cropping System.** Dana Russell*[1], Caroline Marschner[1], Jinwook Kim[1], Matthew Sturchio[1], Antonio DiTommaso[1]. *[1]Cornell University, Ithaca, NY*

02:29 PM **265. Evaluation of Vegetation Index Performance Among Corn, Cotton, Peanut, and Weed Species.** Walter Martins*[1], Wilfried Ouedraogo[1], Aniruddha Maity[1]. *[1]Auburn University, Auburn, AL*

02:33 PM **266. How Much Is Enough? Dose Response of *Hydrilla verticillata* to Endothall.** Samantha Bowen*[1], Kayla Eason[2], Benjamin Sperry[3], Timothy Grey[1]. *[1]University of Georgia, Tifton, GA, [2]USDA-ARS Southeastern Watershed Research Unit, Tifton, GA, [3]US Army Corps of Engineers, Gainesville, FL*

02:37 PM **267. Perennial Grass Control in Louisiana Rice using ALS and ACCase Herbicides.** Morgan Boone*[1], Evelyn Williams[1], Ben Stoker[1], Maranda Hains[1], Ronnie Levy[1], Gavin Sparks[1]. *[1]LSU Ag Center, Baton Rouge, LA*

02:41 PM **268. Response of Rice Variety and Seeding Rate to Barnyardgrass (*Echinochloa crus-galli*) Competition.** Evelyn Williams*[1], Connor Webster[1], Ronnie Levy[1], Ben Stoker[1], Maranda Hains[1], Gavin Sparks[1], Morgan Boone[1]. *[1]Louisiana State University, Baton Rouge, LA*

02:45 PM **269. Is Maleic Hydrazide a Viable Tool in Managing Volunteer Potatoes?** Nathan Welch*[1], Erin Burns[1]. *[1]Michigan State University, East Lansing, MI*

02:49 PM **270. Optimizing Field Margin Management to Minimize Agricultural Weed Problems and Enhance Ecosystem Services.** Rebecca Stup*[1], Sophie Westbrook[2], Antonio DiTommaso[1]. *[1]Cornell University, Ithaca, NY, [2]Kansas State University, Manhattan, KS*

02:53 PM **271. Determine Crop-Weed Dynamics in a Sorghum-Cotton Rotation and Assess The Impact on System-Level Water Use.** Gaganjot

Singh Sodhi*[1], Sukhbir Singh[1], Rupinder Saini[1], Dr. Krishna Jagadish[1], Donna McCallister[1]. [1]*Texas Tech University, Lubbock, TX*

02:57 PM **272. Comparing Weed Control Efficacy following a Pre-emergent Herbicide Application from UAV and Ground Sprayer in Soybean.** Jesse Yount*[1], Kevin Bradley[1]. [1]*University of Missouri, Columbia, MO*

03:00 PM BREAK (15 MINUTES)

03:15 PM **273. Comparison of Aerial Application Technologies: Spray Drone vs. Airplane for Fungicide Spray Deposition and Uptake in Corn (Zea mays L.).** Daniel Castaneda*[1], Steve Li[1], Juliana de Souza Rodrigues[1], Grayson Chew[1], Alejandra Bolanos[1]. [1]*Auburn University, Auburn, AL*

03:19 PM **274. Drone Seeding: Farmers Tool for Cover Crop Success.** Kamana Pilania*[1], Sydney Buffington[1], Ana Campos[1], Himani Ahlawat[1], Wesley Porter[1], Jodi Maynard[1], Nicholas Basinger[1]. [1]*University of Georgia, Athens, GA*

03:23 PM **275. Assessing Targeted Sprayer Performance for Managing Tropical Signalgrass in Bermudagrass Under Varying Herbicide Approaches.** Katarzyna Gawron*[1], Lukasz Wnorowski[1], Mikerly Joseph[1], Sergio Gallo[2], Maria Cecilia Sanchez Quintanilla[2], Marco Schiavon[2], Pawel Petelewicz[1]. [1]*University of Florida, Gainesville, FL,* [2]*University of Florida, Davie, FL*

03:27 PM **276. Palmer Amaranth (*Amaranthus palmeri*) Control Utilizing Split-boom and Tank-mix Application Methods.** Colton Fuller*[1], Larry Steckel[1]. [1]*The University of Tennessee, Knoxville, TN*

03:31 PM **277. Influence of Cover Crop Types and Termination Methods on Weed Suppression in Tomato Fields.** Ravneet Kaur*[1], Akashdeep Singh Brar[1], Aniruddha Maity[1]. [1]*Auburn University, Auburn, AL*

03:35 PM **278. Impact of Cover Crop Residues on The Germination and Biomass of Troublesome Weed Species.** Karishma Khanal*[1], Gourav Chahal[1], Carter Bonnell[1], Andrew Price[2]. [1]*Auburn University,* [2]*USDA-ARS National Soil Dynamics Laboratory, Auburn, AL*

03:39 PM **279. The Grass is Not Always Greener on the Other Side: Comparing the Performance of Hairy Vetch (*Vicia villosa*) After Selective Cereal Rye (*Secale cereale*) Termination.** Jenna Beville*[1], Michael Flessner[1]. [1] *Virginia Polytechnic Institute and State University, Blacksburg, VA*

03:43 PM **280. Evaluating Cover Crop Mediated Palmer amaranth Suppression in Cotton-Corn Rotation System.** Himani Ahlawat*[1], Hannah Carol Lindell[1], Priscila Campos[1], Kamana Pilania[1], Peyton Worsham[1], Sydney Buffington[1], Matthew Levi[1], Nicholas Basinger[1]. [1]*University of Georgia, Athens, GA*

03:47 PM **281. Constitutive Hyperspectral Reflectance to Discriminate PPO-Resistant and -Susceptible Palmer amaranth (*Amaranthus palmeri*) Populations.** Diego A. Rodriguez*[1], Mario Soto[1], Juan C. Velasquez[1], Nilda Roma Burgos[1]. [1]*University of Arkansas, Fayetteville, AR*

03:51 PM **282. Selecting for Success: How Varietal Growth Habit Shapes Soybean Canopy Formation.** Sithin Mathew*[1], Henry J Nelson[1], Aaron Lorenz[1], Seth Naeve[1], Vasudha Sharma[1], Debalin Sarangi[1]. [1]*University of Minnesota, St. Paul, MN*

03:55 PM **283. Drop It Like It's H.O.T.: Herbicide Organic Treatments for Cotton Defoliation.** Megan Singletary*[1], Peter Dotray[1,2], Muthukumar Bagavathiannan[3]. [1]*Texas Tech University, Lubbock, TX,* [2]*Texas A&M AgriLife Research and Extension, Lubbock, TX,* [3]*Texas A&M University College Station, TX*

03:59 PM **284. Improving Cotton Tolerance to Pre-emergence Herbicides using Biochar.** Nisith Nishank Purohit*[1], Rakesh Kumar Ghosh[1], Yucheng Feng[1], Andrew Price[2], Aniruddha Maity[1].

[1]*Auburn University, AL,* [2]*USDA-National Soil Dynamics Laboratory, Auburn, AL*

04:03 PM **285. Augmented Design Based Screening of a Large MG-III Soybean Panel, to Decipher Genetic Variants Underlying Metribuzin Tolerance.** Abdaal Ali*[1], Lichun Zhoui[1], Zoe Schroeder[1], Victoria Shema[1], Samuel Revolinski[1]. [1]*University of Kentucky, Lexington, KY*

04:07 PM **286. Satellite-Based Identification and Quantification of Off-Target Dicamba Using Soybean (*Glycine Max* L.) Canopies in Central Illinois.** Dylan R Kerr*[1], Nicholas F Martin[1], Juan D Arbelaez[1], Aaron G Hager[1], Martin M Williams II[1]. [1]*University of Illinois at Urbana-Champaign, Urbana-Champaign, IL*

04:11 PM **287. Determination of the Critical Period for Weed Control in Peanut Following Winter Cover Crops.** Gourav Chahal*[1], Carter Bonnell[1], Simer Virk[1], David Russell[1], Andrew Price[2]. [1]*Auburn University, Auburn, AL* [2]*USDA-ARS National Soil Dynamics Laboratory, Auburn, AL*

04:15 PM **288. Under the Influence: Cover Crop Influence on Herbicide Fate in Georgia Peanuts.** Hannah Lindell*[1], Samantha Bowen[1], Kayla Eason[2], Timothy Grey[1], Nicholas Basinger[1]. [1]*University of Georgia, Athens, GA,* [2] *USDA-ARS Southeastern Watershed Research Unit, Tifton, GA*

04:19 PM **289. Modeling Weed Induced Maize (*Zea mays* L.) Yield Losses with UAS Derived Aerial Imagery.** Avi Goldsmith*[1], Robert Austin[1], Charles Cahoon[1], Ramon Leon[1]. [1]*North Carolina State University, Raleigh, NC*

04:23 PM **290. Comparing Drill and Drone Planting of Cereal Rye for Fall-Emerging Weed Control in Cotton.** Wilfried Ouedraogo*[1], Maity Aniruddha[1], Walter Jordao[1]. [1]*Auburn University, Auburn, AL*

04:27 PM **291. Turning Drone Imagery into Spray Maps: Evaluating Pix4Dfields for Turfgrass Weed Management.** Amy Wilber*[1], James McCurdy[1]. [1]*Mississippi State University, Starkville, MS*

04:31 PM **292. Enhancing Weed Identification Accuracy Using Diffusion-Based Super-Resolution of UAV Imagery.** Linyuan Wang*[1], Dong Chen[1], Haibo Yao[2], Te Ming Tseng[1], Xin Sun[3], Yanbo Huang[2]. *[1]Mississippi State University, Starkville, MS, [2]USDA-ARS, Environmental Microbial and Food Safety Laboratory, Beltsville, MD, [3]North Dakota State University, Fargo, ND*

04:35 PM **293. Shocking the System: Weed and Soil Biological Responses to Zasso™ Electrical Weeding.** Aleah Butler-Jones*[1], Adam Thomas[1], Gregory Peck[1], Kyle Wickings[1], Brad Hanson[2], Marcelo Moretti[3], Thierry Besançon[4], Lynn Sosnoskie[1]. *[1]Cornell University, Ithaca, NY, [2]University of California-Davis, Davis, CA, [3]Oregon State University, Corvalis, OR, [4]Rutgers University, New Brunswick, NJ*

TUESDAY AFTERNOON FEBRUARY 10

ORAL - WSSA - SST

Ph.D. Student Contest

LOCATION: Glenwood Ballroom Salon 3
TIME: 1:45-5:15 PM Eastern
MODERATOR: Darrin Dodds, Mississippi State University, Starkville, MS

01:45 PM **294. When Stress Becomes Strength: Palmer Amaranth's PPO Comeback.** Prakriti Dhaka*[1], Gulab Rangani[1], Aimone Porri[2], Ingo Meiners[2], Nilda Roma-Burgos[1]. *[1]University of Arkansas, Fayetteville, AR, [2] BASF SE, Ludwigshafen, Germany*

01:49 PM **295. Mechanisms Underlying Glufosinate Resistance in Waterhemp from Minnesota.** Navjot Singh*[1], André Lucas Simões Araujo[2], Franck E. Dayan[2], Todd A. Gaines[2], Roger L. Becker[1], Gregg A. Johnson[1], Debalin Sarangi[1].

[1]*University of Minnesota, Minneapolis, MN,* [2]*Colorado State University, Ft. Collins, CO*

01:53 PM **296. The Evolving Herbicide Resistance Trajectory of *Amaranthus palmeri* (Palmer Amaranth) in Tennessee.** Sally Reed*[1], Colton Fuller[1], Larry Steckel[1]. [1]*University of Tennessee, Knoxville, TN*

01:57 PM **297. Growth and Reproductive Biology of Glyphosate-Resistant Palmer amaranth in New York.** Midhat Tugoo*[1], Vipan Kumar[1], Antonio DiTommaso[1]. [1]*Cornell University, Ithaca, NY*

02:01 PM **298. Development And Evaluation of Directed Energy System for Precision Weed Control.** Muhammad Usama Yaseen[1], John M. Long[1], Liberty Galvin[1]. [1]*Oklahoma State University, Stillwater, OK*

02:05 PM **299. Genome-wide Signatures of Herbicide Resistance Positive Selection in Italian Ryegrass (*Lolium multiflorum*) across the United States.** Adrian Veron*[1], Caio Brunharo[1]. [1]*Pennsylvania State University, University Park, PA*

02:09 PM **300. Multi-County Screen of Italian Ryegrass (*Lolium perenne* ssp. *multiflorum*) to Glyphosate and Clethodim in Tennessee.** Hayden Love*[1], Larry Steckel[1]. [1]*The University of Tennessee, Knoxville, TN*

02:13 PM **301. Weed Emergence Dynamics Under Inter-row Mowing, Electrocution, Seed Impact Mill, and Herbicide Programs.** Preetaman Bajwa*[1], Vipan Kumar[1], Christopher Pelzer[1], Matthew Ryan[1], Wendong Zhang[1], Antonio DiTommaso[1]. [1]*Cornell University, Ithaca, NY*

02:17 PM **302. Herbicide Resistance Management via Fraise Mowing.** Logan Smith*[1], Greg Breeden[1], Jim Brosnan[1]. [1]*University of Tennessee, Knoxville, TN*

02:21 PM **303. Dose-Response Metabolomics as a Complementary Tool to Disentangle Primary and Off-Target Effects of Toxins in Plants.** Gagandeep Kaur*[1], Elizabeth Leonard[1], Pawanjit

Sandhu[2], Nishanth Tharayil[1]. *[1]Clemson University, Clemson, SC, [2]University of British Columbia-Okanagen, Okanagen, BC*

02:25 PM **304. Glyphosate And Aminomethylphosphonic Acid Contents in Soybean Field Soils Across the Americas: Contrast Between Brazil and Canada.** Celso Franca*[1], Laurianne Ladouceur[2], William Overbeek[2], Marc Lucotte[2], Matthieu Moingt[2], Rubem Oliveira Jr.[3], Ednaldo Borgato[1]. *[1]University of Florida, Gainesville, FL, [2]Université du Québec à Montréal, Montréal, QC, [3]Universidade Estadual de Maringa, Maringa, Brazil*

02:29 PM **305. Evaluating Cover Crops for Weed Management in Edamame [*Glycine max* (L.) Merr.].** Akashdeep Singh Brar*[1], Michael Flessner[2], Bo Zhang[2], Mark Reiter[1], Vijay Singh[1]. *[1]Virginia Polytechnic Institute and State University, Blacksburg, VA Painter, VA, [2] Virginia Polytechnic Institute and State University, Blacksburg, VA*

02:33 PM 306. **Impacts of Sorghum-Barley Crop Rotation on the Chile Pepper Growing Season.** Ram Singh Insa*[1], Brian Schutte[1]. *[1]New Mexico State University, Las Cruces, NM*

02:37 PM **307. Evaluation of Herbicide Programs and Crop Response for Effective Weed Control in Mung Bean (*Vigna radiata*).** Tunde Akanbi*[1], Elizabeth Tranel[1], Arti Singh[1], Wesley Everman[1]. *[1]Iowa State University, Ames, IA*

02:41 PM **308. Sediment Composition Around Bear Lake and its Relationship to Milfoil Establishment.** Francielli Santos de Oliveira*[1], Corey Ransom[1], Eric Westra[1], Mirella Ortiz[1]. *[1]Utah State University, Logan, UT*

02:45 PM **309. Salinity Stress Effects on Rice and Weeds in South Carolina Coastal Agroecosystems.** Gursewak Singh*[1], Brian Ward[1], Mahmoud Rady[1], Matthew Cutulle[1]. *[1]Clemson University, Clemson, SC*

02:49 PM **310. Where Weeds Fall, Food Rises: Protecting Sweetpotato (*Ipomoea batatas*) for a Hungry World.** Alyssa Miller*[1], Te- Ming Tseng[1], Lorin

Harvey[1], Maxwell Bloodworth[1]. [1]*Mississippi State University, Starkville, MS*

02:53 PM **311. Yellow Nutsedge (*Cyperus esculentus*) Management Using Concentrated Organic Byproducts in Anaerobic Soil Disinfestation.** Priyanka Gupta*[1], Matthew Cutulle[1], Bhupinder Jatana[2], Chandrasekar Kousik[3]. [1]*Clemson University, Coastal Research and Education Center, Charleston, SC,* [2]*Clemson University, Edisto Research and Education Center, Blackville, SC,* [3]*USDA-ARS U.S. Vegetable Laboratory, Charleston, SC*

02:57 PM **312. Investigating the Effects of Preemergence Herbicides on the Growth of Two Native Flowering Forb Species in Flowering Turfgrass Lawns.** Nikolay Minaev*[1], James D McCurdy[1], Edicarlos B. de Castro[1]. [1]*Mississippi State University, Starkville, MS*

03:00 PM **BREAK**

03:15 PM **313. How Cool Are Living Mulches? Cool-Season Perennial Grasses for Weed Management in Cotton.** Priscila Campos*[1], Himani Ahlawat[1], Kamana Pilania[1], Sydney Buffington[1], Muthu Bagavathiannan[2], Gaylon Morgan[3], Nicholas Basinger[1]. [1]*University of Georgia, Athens, GA,* [2]*Texas A&M University, College Station, TX,* [3]*Cotton Inc., Cary, NC*

03:19 PM **314. Roots, Rhizosphere, and Resistance: Understanding Soil Communities in *Sorghum halepense* for Future Weed Suppression.** Connor Purvis*[1], Erin E. Burns[1]. [1]*Michigan State University, East Lansing, MI*

03:23 PM **315. Wild Oat Hide-and-Seek: The Soil Depths Where Herbicides Win or Fail.** Sushmita Sharma Koirala*[1], Albert Adjesiwor[1]. [1]*University of Idaho, Twin Falls, ID*

03:27 PM **316. Weed Suppression and Biological Nitrification Inhibition in Diverse Cereal Rye Germplasms.** Kapil Chobhe*[1], Nithya Rajan[1], Megan Leigh Schill[1], Nithya Subramanian[1], Sanjay Antony-Babu[1], Sakiko Okumoto[1], Muthukumar

Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX*

TUESDAY AFTERNOON FEBRUARY 10

IWSS Meeting

LOCATION: Glenwood Ballroom
Salon I
TIME: 5:30-6:30 PM Eastern
MODERATOR: Do-Soon Kim

Raleigh Downtown One Way Shuttle

LOCATION: Lobby
TIME: 5:30-6:30 PM Eastern

WEDNESDAY MORNING FEBRUARY 11

Presidents' Breakfast

LOCATION: Creedmore
TIME: 6:30-8:00 AM Eastern
MODERATOR: Hilary Sandler
University of Massachusetts
Cranberry Station
E. Wareham, MA

MRSPC- Herbicide Resistance Monitoring Network

LOCATION: Capital
TIME: 8:00–9:00 AM Eastern
MODERATOR: Eric Patterson
Michigan State University
East Lansing, MI

WEDNESDAY MORNING FEBRUARY 11

Poster Session - Even Numbers

LOCATION: Crabtree Ballroom
TIME: 7:00-9:00 AM Eastern
MODERATORS: Charles Cahoon
North Carolina State University
Raleigh, NC

Authors with odd-numbered posters will be present on Tuesday. Authors with even-numbered posters will be present on Wednesday.

WEDNESDAY MORNING FEBRUARY 11

SYMPOSIUM-03.
The Herbicide Resistance Action Committee

LOCATION: City of Oaks Ballroom
TIME: 9:00-11:00 AM Eastern
MODERATORS: Ian Burke
North Carolina State University
Raleigh, NC
Dawn Refsell
Corteva AgriScience
Johnston, IA

Join members of the Herbicide Resistance Action Committee (HRAC) for a dynamic symposium focused on bridging the gap between technical resistance research and field-level implementation. This session moves beyond the traditional poster gallery, utilizing each presentation as a focal point for expert-led table discussions.

Participants will explore the essential pillars of modern resistance management: the standardization of global terminology, the development of robust genetic repositories, and the refinement of validation criteria. The session also tackles the "human element" of weed science, discussing proven strategies for improving grower adoption of Integrated Weed Management (IWM). Engage directly with the HRAC Committee to discuss the tools, data, and collaborative frameworks necessary to stay ahead of evolving resistance challenges.

194. Speaking the Same Language: Standardizing Herbicide Resistance Terminology. Dawn Refsell[1], Greg Elmore[2]. *[1]Corteva AgriScience, Indianapolis, IN, [2]Bayer Crop Science, St. Louis, MO*

195. From Mode of Action Classification to Streamlined Access to HRAC Resources: Advancing Herbicide Resistance Strategies through Integrated Weed Management. Bianca Martins*[1], Jens Lerchl[2], Hudson Takano[3], Gael Le Goupil[4], Roland Beffa[5], Laurent Cornette[6]. *[1]Bayer AG, Leverkusen, Germany, [2]BASF SE, Ludwigshafen, Germany, [3]Corteva AgriScience, Indianapolis, IN, [4]Syngenta AG, Basil, Switzerland, [5]Senior Scientist Consultant, [6]Gowan Company, Yuma, AZ*

196. Engagement Forum with HRAC on Managing Herbicide Resistance. Craig Alford[1], Chandra Aradhya[2], Roland Beffa[3], David Belles[4], Ryan Bryant-Schlobohm[5], Laurent Cornette[6], Greg Elmore[2], Gael Le Goupil[8], Jens Lerchl[7], Ryan Lins[4], Bianca Martins[2], Dawn Refsell[1], David Simpson[1], Hudson Takano*[1]. *[1]Corteva AgriScience, Indianapolis, IN, [2]Bayer Crop Science, St. Louis, MO, [3]Independent Researcher, [4] Syngenta Crop Protection, Greensboro, NC, [5]United Phosphorus Limited, Amarillo, TX, [6]Gowan Company, Yuma, AZ, [7] BASF SE, Ludwigshafen, Germany, [8] Syngenta AG, Basil, Switzerland*

197. Weed Resistance Database and Genetic Repository. Roland Beffa*[1]. *[1]European Weed Research Society*

198. Resistance Testing and Validation Criteria. Craig Alford*[1], David Simpson[1]. *[1]Corteva Agriscience, Indianapolis, IN*

199. Best Practices for Improving Grower Adoption of Integrated Weed Management. David Belles[1], Chandrashekar Aradhya[2], Ryan Bryant-Schlobohm[3]. *[1]Syngenta Crop Protection, Greensboro, NC, [2]Bayer Crop Science, St. Louis, MO, [3] United Phosphorus Limited, Amarillo, TX*

WEDNESDAY MORNING FEBRUARY 11

SST - SST PhD - Finals

LOCATION:	Glenwood Ballroom Salon I
TIME:	8:30-9:00 AM Eastern
MODERATOR:	Darrin Dodds Mississippi State University Starkville, MS

Judges Work Room

LOCATION: Creedmore
TIME: 9:00 AM-5:00 PM Eastern

WEDNESDAY MORNING FEBRUARY 11

Oral 13. Weed Biology and Ecology

LOCATION: Glenwood Ballroom
Salon II
TIME: 9:00 AM-3:00 PM Eastern
MODERATORS: Aniruddha Maity
Auburn University
Auburn, AL

***SPEAKER**

09:00 AM **317. Weed Biology and Management in Changing Times: A Stakeholder Perspective from the Australian Grain Production Systems.** Ali Bajwa*[1], Bill Grant[2], Aakansha Chadha[2]. [1]*La Trobe Institute for Sustainable Agriculture and Food, La Trobe University, Melbourne, Australia,* [2]*Federation University, Victoria, Australia.*

09:15 AM **318. Michigan Common Ragweed Exhibits Multiple Mechanisms of Resistance to PPO Herbicides.** Sara Alvarez Rodriguez*[1], Michael Ozolins[1], Aimone Porri[2], Eric Patterson[1]. [1]*Michigan State University, East Lansing, MI,* [2]*BASF SE, Limburgerhof, Germany*

09:30 AM **319. Multiple Herbicide Resistance in Italian Ryegrass (*Lolium multiflorum*) Populations from Alabama.** Somak Hazra*[1], Nisith Nishank Purohit[1], Aniruddha Maity[1]. [1]*Auburn University, Auburn, AL*

09:45 AM **320. Synthetic And Organic Herbicide Efficacies for Liverwort Control in Containerized Ornamental Production And Assay for Absorption and Translocation Of 14C Herbicides in Liverwort Thallus.** Manjot Sidhu*[1], Debalina Saha[2], Eric Patterson[2].

[1]University of Maine, Orono, ME, [2]Michigan State University, East Lansing, MI

10:00 AM **321. Understanding Weed Demographic Responses to Management Practices in the Midwest Through Density-Dependent Matrix Modeling.** Mercy Odemba*[1], John Wallace[2], [3], Grant Hoffer[2], Mark VanGessel[3], Nicholas Basinger[4], Karla Gage[5], Erin Haramoto[6], John Lindquist[7], Steven Mirsky[8], Wesley Everman[9], Aaron Hager[10], Eugene Law[1]. *[1]The Ohio State University, Columbus, OH, [2]The Pennsylvania State University, College Park, PA, [3]University of Delaware, Newark, DE, [4]University of Georgia, Athens, GA, [5]Southern Illinois University, Carbondale, IL, [6]University of Kentucky, Lexington, KY, [7]University of Nebraska-Lincoln, Lincoln, NE, [8]USDA-ARS Sustainable Agricultural Systems Laboratory, Beltsville, MD, [9]Iowa State University, Ames, IA, [10]University of Illinois Urbana-Champaign, Urbana-Champaign, IL*

10:15 AM **322. Allelopathic Responses of Corn and Weeds to Cover Crop Extracts.** Karishma Khanal*[1], Gourav Chahal[1], Carter Bonnell[1], David Russell[1], Steven Hague[1], Andrew Price[2]. *[1]Auburn University, Auburn, AL [2]USDA-ARS National Soil Dynamics Laboratory, Auburn, AL*

10:30 AM **323. Impact of Spring Burndown Herbicides Applied at Different Reproductive Stages on Control and Progeny Fitness of Glyphosate-Resistant Italian Ryegrass.** Bhupesh Dhaka*[1], Prashant Jha[1], Donnie Miller[2], Connor McKoin[1], Shahreen Mirza[1]. *[1]Louisiana State University AgCenter, Baton Rouge, LA, [2]Louisiana State University AgCenter, St. Joseph, LA*

10:45 AM 324. **Understanding Weed Suppression and Weed Communities in Cereal-Legume Intercropping.** Natasha Djuric*[1], David Kottelenberg[2], Niels Anten[2], Jochem Evers[2], Lammert Bastiaans[2], Antonio DiTommaso[1], Matthew Ryan[1]. *[1]Cornell University, Ithaca, NY, USA, [2]Wageningen University, Wageningen, The Netherlands*

11:00 AM **325. An Invasive Species or A Weed? Managing Gazanias in Southern Australia.** Ali Bajwa*[1]. [1]*La Trobe Institute for Sustainable Agriculture and Food, La Trobe University, Melbourne, Australia*

11:15 AM **326. Assessing Postemergence Herbicide Efficacy on Horseweed (*Conyza canadensis*) under Elevated Carbon Dioxide Condition.** Supti Saha Mou*[1], Debalina Saha[1]. [1]*Michigan State University, East Lansing, MI*

11:30 AM **327. Environmental by Genotypic Drivers of *Parthenium hysterophorus* Photosynthesis and Phenotypic Plasticity.** Sarah Kezar*[1,2], Akhilesh Sharma[2], Magdalena Julkowska[2], Tim Setter[2], Antonio DiTommaso[2]. [1]*University of Wisconsin-Madison, Madison, WI,* [2]*Cornell University, Ithaca, NY*

11:45 AM **328. Sorgoleone: A Potential Chemical Ecology Driver of Invasiveness in *Sorghum halepense*.** Megan Schill*[1], Nithya Rajan[1], William Rooney[1], Sakiko Okumoto[1], Nithya Subramanian[1], Muthukumar Bagavathiannan[1]. [1]*Texas A&M University, College Station, TX*

12:00 PM **LUNCH BREAK**

01:15 PM **329. Germination Ecology of Italian Ryegrass (*Lolium multiflorum*) and Cheatgrass (*Bromus tectorum*) from the Pacific Northwest.** Chandra Montgomery[1], Albert Adjesiwor*[1], Joan Campbell[1], Traci Rauch[1], Victor Ribeiro[2]. [1]*University of Idaho, Moscow, ID,* [2]*Oregon State University, Corvalis, OR*

01:30 PM **330. Morphological, Reproductive and Stress Response Dynamics of Large Crabgrass (*Digitaria sanguinalis*) under Increasing Drought Intensity.** Supti Saha Mou*[1], Debalina Saha[1]. [1]*Michigan State University, East Lansing, MI*

01:45 PM **331. Rapid Markers for Detecting Herbicide Resistance in Kentucky Weeds.** Zoe Schroeder*[1], Samuel Revolinski[1], Shahbaz Ahmed[2], Marija Savic[2]. [1]*University of Kentucky,*

Lexington, KY, [2]Washington State University, Pullman, WA

02:00 PM **332. A GWAS to Reveal the Underpinnings of Metribuzin Tolerance in Oats.** Victoria Shema*[1], Samuel Revolinski[2], Zoe Schroeder[2]. *[1]University of Kentucky, Lexington, KY*

02:15 PM **333. Weed Competition Drives Multigenerational Stress Memory in Wheat: Hormonal and Transcriptomic Insights.** Albert Kwarteng*[1], Albert Adjesiwor[2], Ian Burke[3], Joseph Kuhl[2], Brenda Murdoch[2], Fangming Xiao[2]. *[1]Lincoln University of Missouri, [2]University of Idaho, Moscow, ID, [3]North Carolina State University, Raleigh, NC*

02:30 PM **334. Potential Shift in Global Habitat Distribution of Italian ryegrass (*Lolium perenne* ssp. *multiflorum*) Under Changing Long-term Weather Irregularities.** Aniruddha Maity*[1], Pradeep Adhikari[2]. *[1]Auburn University, Auburn, AL, [2]Hankyong National University, Anseong, Republic of Korea*

02:45 PM **335. Climate-Driven Weed Shifts and Herbicide Resistance in Rainfed Agriculture in Northern Ghana.** Emmanuel Yennumi Wandaat*[1]. *[1]Environmental Protection Authority, Accra, Ghana*

WEDNESDAY MORNING FEBRUARY 11

Oral 05. Aquatic Invasives

LOCATION:	Glenwood Ballroom Salon III & IV
TIME:	9:00 AM-3:00 PM Eastern
MODERATORS:	Andrew Howell North Carolina State University Raleigh, NC

***SPEAKER**

09:00 AM **336. Update from the Aquatic Plant Management Society.** Lyn Gettys*[1]. *[1]Aquatic*

Plant Management Society President, Gainesville, FL

09:15 AM **337. Comparing Traditional and Technology-Based Methods to Enhance Submersed Weed Management.** Andrew Howell*[1], Kara Foley[1], Rob Richardson[1]. *[1]North Carolina State University, Raleigh, NC*

09:30 AM 338. **Taking Aquatic Weed Control to New Heights with Drones.** Rob Richardson*[1], Andrew Howell[1]. *[1]North Carolina State University, Raleigh, NC*

09:45 AM **339. MilfoilMapper: A Web-Based Tool to Inform Eurasian Watermilfoil Management.** Ryan Thum*[1], Ashley Wolfe[1]. *[1]Montana State University, Bozeman, MT*

10:00 AM **340. Methods and Aquatic Formulation Designs to Enhance Aquatic Herbicides in High Exchange Systems.** Ben Willis*[1]. *[1]SePRO Corporation, Carmel, IN*

10:15 AM **341. Assessment of Aquatic Herbicide Degradation and *Hydrilla verticillata* Response.** Timothy Grey[1], Kayla Eason*[2], Samantha Bowen[1], Benjamin Sperry[3]. *[1]University of Georgia, Tifton, GA, [2] USDA-ARS Southeastern Watershed Research Unit, Tifton, GA, [3] US Army Corps of Engineers, Gainesville, FL*

10:30 AM **342. Assessing Growth Patterns and Management Efficacy of Hydrilla verticillata in Flowing Systems.** Brady Dillingham*[1], Kara Foley[1], Rob Richardson[1]. *[1]North Carolina State University, Raleigh, NC*

10:45 AM **343. Hydrilla Management in Flowing Systems Utilizing Novel Injection System.** Rory Roten*[1]. *[1]SePRO Corporation, Carmel, IN*

11:00 AM **344. Influence of Sediment and Water Nutrient Concentrations of the Growth of Three *Hydrilla verticillata* Biotypes.** Ramon Leon[1], Maria Grazia Corrales-Jimenez*[1], Kara

Foley[1], Rob Richardson[1]. [1]*North Carolina State University, Raleigh, NC*

11:15 AM **345. Comparative Herbicide Response of Three *Hydrilla verticillata* Biotypes.** Kara Foley*[1], Andrew Howell[1], Jens Beets[2], Rob Richardson[1]. [1]*North Carolina State University, Raleigh, NC,* [2]*USDA-ARS Invasive Species and Pollinator Health Research Unit, Albany, CA*

11:30 AM **346. Evaluating Concentration Exposure Times of Different Herbicide Combinations for Hydrilla Control.** Eli Russell*[1], Jonathan Glueckert[1], Corrina Vuillequez[1], Amber Riner[1], Benjamin Sperry[2]. [1]*University of Florida, Gainesville, FL,* [2]*US Army Corps of Engineers, Gainesville, FL*

11:45 AM **347. Management of Northern Hydrilla (*Hydrilla verticillata* ssp. *lithuanica*) at East Twin Lake, CT using Fluridone.** Dominic Meringolo*[1]. [1]*SOLitude Lake Management, Raleigh, NC*

12:00 PM LUNCH BREAK

1:15 AM **348. The Potential for Classical Biological Control of Connecticut River Hydrilla.** Jeremiah Foley*[1], Nate Harms[2]. [1]*Connecticut Agricultural Experiment Station,* [2]*United States Army Corp of Engineers, Vicksburg, MS*

01:30 PM **349. Field Testing the Performance and Selectivity of Discrete In-water Applications of Imazamox to control invasive Water Hyacinth (*Eichhornia (Pontederia) crassipes*).** Kelli Gladding*[1], James Leary[2]. [1] *University of Florida IFAS FLREC, Davie, FL,* [2]*South Florida Water Management District, West Palm Beach, FL*

01:45 PM **350. Three Years of Research Investigating the Effects of "Natural" Herbicides on Aquatic Plants.** Lyn Gettys*[1]. [1]*University of Florida IFAS FLREC, Davie, FL*

02:00 PM **351. Screening Aquatic and Non-Aquatic Labeled Herbicides for Efficacy on Torpedograss.** Abigail Schulken*[1], Julie Stich[1],

Eli Russell[1]. [1]*University of Florida, Gainesville, FL*

02:15 PM **352. Biology and Management of Invasive *Scleria lacustris* and *Scleria macrocarpa* in Florida.** Greg MacDonald*[1]. [1]*University of Florida, Gainesville, FL*

02:30 PM **353. Plant Community Response to Aerial Herbicide Treatment of West Indian Marsh Grass.** Stephen Enloe*[1], James Leary[2], Alex Onisko[2], Rich Botta[2]. [1]*University of Florida, Gainesville, FL,* [2] *South Florida Water Management District, West Palm Beach, FL*

WEDNESDAY MORNING FEBRUARY 11

IWGC Meeting

LOCATION: Capital
TIME: 11:00 AM-12:00 PM Eastern
MODERATOR: Todd Gaines
Colorado State University
Fort Collins, CO

WEDNESDAY MORNING FEBRUARY 11

Oral 14. Sensing, Automation, and Precision Technologies

LOCATION: Glenwood Ballroom
Salon I
TIME: 9:30 AM-12:00 PM Eastern
MODERATORS: Michael Walsh
Charles Stuart University
Wagga Wagga, NSW
Australia

***SPEAKER**

09:30 AM **355. Bullseye on Weeds: How Verdant's Aim and Apply Targeted Spray Technology Affects Weed Control, Yield, and Quality of**

Fall Spinach. Thierry E. Besancon*[1], Lynn M. Sosnoskie[2], Chad Yagow[3], John Purcell[3]. *[1]Rutgers University, New Brunswick, NJ, [2]Cornell University, Ithaca, NY, [3]Verdant Robotics \, Hayward, CA*

09:45 AM **356. Building A Targeted Spray Research Program: Lessons learned at the University of Florida.** Nathan Boyd*[1]. *[1]University of Florida, Gainesville, FL*

10:00 AM **357. Design and Development of an Autonomous Weed Monitoring System for Florida Production Fields.** Renato Herrig Furlanetto*[1], Arnold Schumann[2], Nathan Boyd[1]. *[1]University of Florida - Gulf Coast Research and Education Center, Wimauma, FL, [2]University of Florida - Citrus Research and Education Center, Lake Alfred, FL*

10:15 AM **358. Innovative MOA for Controlling *A. Palmeri* Resistant using a drone application.** Ido Shwartz*[1], Tal Kerem[1], Amit Koch[1], Tarin Harpaz[1], Efrat Lidor Nili[1], Orly Noivrit Brick[1]. *[1]WeedOUT, Ness Ziona, Israel*

10:30 AM **359. Performance of Organic Herbicides Using Broadcast and Pinpoint Spray Technology.** Clebson Gonçalves*[1]. *[1]University of California UC Cooperative Extension, Lakeport, CA*

10:45 AM **360. Impact of Smart Spray Technology on Goosegrass (*Eleusine indica* L.) Control in Plasticulture Tomatoes.** Ana Claudia Buzanini[1], Renato Herrig Furlanetto[1], Arnold Walter Schumann[1], Nathan Boyd[1]. *[1]University of Florida, Gainesville, FL*

11:00 AM **361. Advances in Precision Weed Management, 2026.** Vijay Singh*[1], Akash Brar[1], Fatemeh Esmaeilbeiki[1], Rutvij Wamanse[1], Robert Cooley[1], Daniel Martin[2]. *[1] Virginia Polytechnic Institute and State University, Blacksburg, VA, [2]Pluvium, LLC, College Station, TX*

11:15 AM **362. Predicting Spray Drift from Uncrewed Aerial Systems Using Machine Learning Models.** Vijay Singh[1], Fatemeh Esmaeilbeiki[1], Daniel Martin[2]. *[1] Virginia Polytechnic Institute and State University, Blacksburg, VA, [2]Pluvium, LLC, College Station, TX*

11:30 AM **363. Cover Crop Planting Using Uncrewed Aerial System.** Vijay Singh*[1], Rutvij Wamanse[1], Milos Viric[1], Akashdeep Singh Brar[1]. [1] *Virginia Polytechnic Institute and State University, Blacksburg, VA*

WEDNESDAY AFTERNOON FEBRUARY 11

Oral 15. Genomics

LOCATION: Glenwood Ballroom Salon I
TIME: 1:15 PM-4:30 PM Eastern
MODERATORS: Isabelle Noe, University of Illinois Urbana-Champaign, IL

***SPEAKER**

01:15 PM **364. Establishment of a *Rhizobium rhizogenes*-Mediated Hairy Root Transformation System for Functional 15 Genomics in *Amaranthus palmeri*.** Mithila Jugulam*[1], Manikandan Ramasamy[2], Chi-Kuan Tu[2], Kranthi Mandadi[2]. [1]*Texas A&M University AgriLife, Weslaco, TX,* [2]*Texas A&M AgriLife Research and Extension Center, Weslaco, TX*

01:30 PM **365. The Parasitic Weed Egyptian Broomrape (*Phelipanche aegyptiaca*) Adapts Its Gene Expression to Integrated with Different Host Species.** James Westwood*[1], Jaret Arnold[1], Sukhmanpreet Kaur[2], Soyon Park[3]. [1] *Virginia Polytechnic Institute and State University, Blacksburg, VA,* [2]*Lawrence Berkley National Lab, Berkley, CA,* [3]*University of Missouri, Columbia, MO*

01:45 PM **366. An Annotated Telomere-to-Telomere Genome Assembly of Mayweed Chamomile (*Anthemis cotula*) Reveals Candidate Genes for Mechanisms of Local Adaptation.** Raissa Na-ah*[1], P. Jeff Maughan[2], Samuel Revolinski[3], Subodh Adhikari[4], Rick Jellan[2], P. Weston Maughan[1], Ian Burke[5], Olivia Landau[6]. [1]*Washington State University, Pullman, WA,* [2]*Brigham Young University, Provo, UT,* [3]*University of Kentucky, Lexington, KY,* [4]*Utah State University, Logan, UT,* [5]*North Carolina State University, Raleigh, NC,* [6]*USDA-ARS*

Wheat Health, Genetics, and Quality Research Unit, Pullman, WA

02:00 PM **367. Genomic Basis of Rapid Herbicide Resistance Evolution from Recurrent Selection in *Lolium rigidum*.** Célia Neto*[1], Todd Gaines[2], Paul Neve[1]. *[1]University of Copenhagen, Copenhagen, Denmark, [2]Colorado State University, Ft. Collins, CO*

02:15 PM **368. Sorting Sorghum: Development of KASP Assay for Distinguishing *S. bicolor*, *halepense*, and their Hybrids.** Connor Purvis*[1], Eric L. Patterson[1], Erin E. Burns[1]. *[1]Michigan State University, East Lansing, MI*

02:30 PM **369. Pooled Whole-Genome Sequencing for Assessing Herbicide Resistance Genetics.** Acer VanWallendael*[1]. *[1]North Carolina State University, Raleigh, NC*

02:45 PM **370. Survey of Weed Population Genetics Across North Carolina Field Stations.** Nikolai Hay*[1], Morgan Alexander[1], Audrey Fahey[1], Leigh Schwinden[1], Emily Hochschild[1], Acer VanWallendael[1]. *[1]North Carolina State University, Raleigh, NC*

03:00 PM **BREAK**

03:15 PM **371. Trait Mapping Utilizing a Newly Constructed Genome for Allohexaploid Invasive Eurasian Watermilfoil *Myriophyllum spicatum* Reveals a Non-Target Site QTL Associated with Fluridone Resistance.** Gregory Chorak*[1], Del Hannay[1], Ryan Thum[1]. *[1]Montana State University, Bozeman, MT*

03:30 PM **372. The Evolution of Sex Chromosomes in Amaranthus.** Damilola Raiyemo[1], Isabel Werle Noe[1], Ramandeep Kaur[1], Lauren Whitt[2], Sarah Carey[2], Haley Hale[2], Alex Harkess[2], Victor Llaca[3], Kevin Fengler[3], Eric Patterson[4], Todd Gaines[5], Patrick Tranel*[1]. *[1]University of Illinois Urbana-Champaign, Urbana-Champaign, IL, [2]HudsonAlpha, Huntsville, AL, [3]Corteva AgriScience, Indianapolis, IN, [4]Michigan State University, East Lansing, MI, [5]Colorado State University, Ft. Collins CO*

03:45 PM **373. Genotyping by Sequencing Reveals Population Dynamics and Molecular Pathways Underlying the Adaptation of Kentucky Johnsongrass to the Appalachian**

Highlands. Lichun Zhou[1], Samuel Revolinski*[1], Jose Villanos[1], Zoe Shroeder[1], Melinda Yerka[2]. *[1]University of Kentucky, Lexington, KY, [2]University of Nevada Reno, Reno, NV*

04:00 PM **374. Dissecting Copy Number Variation as an Evolutionary Mechanism for Glyphosate Resistance.** Ivana Santos Moisinho*[1], Adrian Veron Zarate[1], Caio Brunharo[1]. *[1]The Pennsylvania State University, University Park, PA*

04:15 PM **375. Identification and Functional Validation of Two Cytochrome P450 Genes Conferring Imazamox Resistance in Feral Rye.** Todd Gaines*[1], William Kramer[1], Fatemeh Abdollahi[1], Franck Dayan[1]. *[1]Colorado State University, Ft. Collins, CO*

04:30 PM **376. Spray-On Gene Silencing in Weeds Using FANA Antisense Oligonucleotides.** Fatemeh Abdollahi*[1], Veenu Aishwarya[2], Todd Gaines[1]. *[1]Colorado State University, Fort Collins, CO, [2]Aum LifeTech, Philadelphia, PA*

WEDNESDAY AFTERNOON FEBRUARY 11

ORAL - 01. Agronomic Crops

LOCATION: Glenwood Ballroom Salon II
TIME: 3:15-5:30 PM Eastern
MODERATORS: Craig Alford Corteva AgriScience Johnston, IA

***SPEAKER**

03:15 PM **377. Golden Pennycress (*Thlaspi arvense*) and Winter Camelina (Camelina sativa) Response to Herbicide Applied Preemergence.** Mark Bernards*[1]. *[1]Rosen's, Inc., Fairmont, MN*

03:30 PM **378. Comparing Tillage Systems for Weed Control in Truvera Sugarbeet.** Michael Dodde*[1], Brian Stiles II[1], Christy Sprague[1]. *[1]Michigan State University, East Lansing, MI*

03:45 PM **379. Evaluating PRE Herbicide Options With and Without Glufosinate POST in Triple-Stacked Herbicide-Resistant Sugarbeet in the**

Western United States. Andrew Kniss*[1], Jenna Meeks[1], Nevin Lawrence[2], Albert Adjesiwor[3], Joel Felix[4]. *[1]University of Wyoming, Laramie, WY, [2]University of Nebraska-Lincoln, Lincoln, NE, [3]University of Idaho, Twin Falls, ID, [4]Oregon State University, Ontario, OR*

04:00 PM **380. Weed Suppression in Continuous Cereal Monocultures Under Varied Management.** Vhuthu Ndou*[1], Fernando Oreja[2], Jennifer Gourlie[1], Stephen Machado[1], Francisco Calderón[1], Judit Barroso[1]. *[1]Oregon State University, Adams, OR, [2]Clemson University, Clemson, SC*

04:15 PM **381. Beyond Weed Control: Sub-lethal Herbicide Exposure Alters Aphid Infestation Dynamics in Cotton.** Purushottam Gyawali*[1], Ubaldo Torres[1], Gregory A. Sword[1], David L. Kerns[1], Muthukumar V. Bagavathiannan[1]. *[1]Texas A&M University, College Station, TX*

04:30 PM **382. Does Short-Statured Corn Change Weed Control? Evaluating Herbicide Timing, Architecture, and Population.** Kyle Elizalde*[1], Erin Burns[1]. *[1]Michigan State University, East Lansing, MI*

04:45 PM **383. Corrections in Adjuvant Use for Optimizing Herbicide Activity.** Richard Zollinger*[1], Kirk Howatt[2], Greg Armel[1]. *[1]AMVAC Chemical Company, Newport Beach, CA, [2]North Dakota State University, Fargo, ND*

05:00 PM **384. An Automated Pipeline for Weed Detection and Segmentation for the National Agricultural Image Repository.** Navjot Singh*[1], Chris Reberg-Horton[2], Matthew Kutugata[3], Muthukumar Bagavathiannan[1], Steven Mirsky[3]. *[1]Texas A&M University, College Station, TX, [2]North Carolina State University, Raleigh, NC, [3]USDA-ARS Sustainable Agricultural Systems Laboratory, Beltsville, MD*

05:15 PM **385. An Evaluation of Four Open Source Artificial Intelligence Platforms for Use in Weed Control Decision Making.** Thomas Mueller*[1], Joe Beeler[1], Nicholas Basinger[2], Charles Cahoon[3]. *[1]University of Tennessee, Knoxville, TN, [2]University of Georgia, Athens, GA, [3]North Carolina State University, Raleigh, NC*

WEDNESDAY AFTERNOON FEBRUARY 11

ORAL - 02. Horticultural Crops

LOCATION: Glenwood Ballroom Salon III & IV
TIME: 1:00-4:45 PM Eastern
MODERATORS: Thierry Besancon
Rutgers University
New Brunswick, NJ

***SPEAKER**

03:15 PM **386. Icafolin-Methyl - a New Molecule in the Chemical Class (Isoxazolin-Carboxamides) from Bayer CropScience.** Angela Kazmierczak*[1], Christopher Mansiere[1], Allan Kaastra[1], Lothar Lorentz[1]. *[1]Bayer CropScience, St. Louis, MO*

03:30 PM **387. Onion Weed Control in North Dakota: A Five-Year Summary.** Harlene Hatterman-Valenti*[1], Collin Auwarter[1]. *[1]North Dakota State University, Fargo, ND*

03:45 PM **388. Evaluating the Efficacy of Herbicide Programs for Weed Control in Columbia Basin Onion Production.** Sohaib Chattha*[1], Tim Waters[2], Rui Liu[1]. *[1]Washington State University, Prosser, WA, [2]Washington State University, Pasco, WA*

04:00 PM **389. One Beam, Many Benefits? Laser Weeding Impacts on Onion Vigor and Disease Pressure.** Lynn Sosnoskie*[1], Christy Hoepting[1], Brian Nault[1]. *[1]Cornell University, Ithaca, NY*

04:15 PM **390. IR-4 Weed Science Update - Food Crops.** Roger B. Batts*[1]. *[1]IR-4 Project, Raleigh, NC*

04:30 PM **391. The Minor Use Foundation: History, Development, and Results.** Dirk Drost*[1]. *[1]Minor Use Foundation, Greensboro, NC*

04:45 PM **392. Use of Biodegradable Non-Woven Straw Mats for Annual Weed Control in Vegetable Crops.** Jonathan Gressel*[1]. *[1]Hi-Cap Formulations (Israel) Ltd, Rehovot, Israel and Weizmann Institute of Science, Rehovot, Israel*

05:00 PM **393. Evaluating Herbicide Programs for Yellow Nutsedge Control in Pacific Northwest Potato Production.** Rui Liu*[1], Joel Felix[2], Tim Waters[1]. *[1]Washington State University, Prosser, WA, [2]Oregon State University, Ontario, OR*

WEDNESDAY AFTERNOON FEBRUARY 11

ORAL – 10. Biocontrol of Weeds

LOCATION: Glenwood Ballroom Salon I
TIME: 4:45-5:15 PM Eastern
MODERATORS: Cara McCauley Corteva AgriScience Indianapolis, IN

***SPEAKER**

04:45 PM **394. Characterization and Control of Metolachlor-resistant NC Palmer Ecotypes in Controlled Environment Studies.** Wesley Everman*[1], Chad Brommer[2], Jiyi Zhang[2], Isabel Benson[2], Clint Blankenship[2], Diego Contreras[3], Jackson Alsdorf[3]. *[1]Iowa State University, Ames, IA, [2]Harpe BioHerbicide, Raleigh, NC, [3]North Carolina State University, Raleigh, NC*

05:00 PM **395. Essential Oils as Multi-Target botanical Pesticides: A Fifteen-Year Journey from Laboratory to Market.** Sofien Ben Kaab[1], Jonas Hoffmann[1], Thomas Demortier[1], Estelle Bourgeois[2], Emma Voisin[2], Clément Burgeon[1], [2], Simon Dal Maso[2], M. Haissam Jijakli*[1], [2]. *[1]Integrated and Urban Plant Pathology Laboratory, University of Liège, Gembloux Agro-Bio Tech, Gembloux, Belgium, [2]APEO SRL (Agronomical Plant Extracts & Essential Oils) Gembloux, Belgium*

11:45 AM Business Meeting

WEDNESDAY AFTERNOON FEBRUARY 11

WSSA Student Scientific Writing Workshop

LOCATION: City of Oaks Ballroom
TIME: 3:30-5:00 PM Eastern
MODERATORS: Navdeep Godara
North Carolina State University
Raleigh, NC

WSSA Student and Photo Awards

LOCATION: Glenwood Ballroom
Salon III & IV
TIME: 5:30-7:00 PM Eastern
MODERATORS: Darrin Dodds
Mississippi State University
Starkville, MS

Society Social Reception

LOCATION: City of Oaks Ballroom
TIME: 7:00-9:00 PM Eastern

Sponsored by BASF Corporation

THURSDAY MORNING FEBRUARY 12

WSSA Business Meeting/Breakfast

LOCATION: City of Oaks Ballroom
TIME: 6:30-8:00 AM Eastern
MODERATOR: Hilary Sandler
UMass Cranberry Station
East Wareham, MA
CO-MODERATOR: Ian Burke
North Carolina State
University, Raleigh, NC

Registration

LOCATION: Creedmore
TIME: 6:30 AM-8:00 AM Eastern
MODERATOR: Eric Gustafson
WSSA Executive Secretary

Poster Take-Down

LOCATION: Crabtree Ballroom
TIME: 8:00 AM-11:00 AM Eastern

THURSDAY MORNING FEBRUARY 12

Travel Enrichment Experience and Science Policy Fellows

LOCATION: Glenwood Ballroom Salon I
TIME: 8:00-9:45 PM Eastern
MODERATOR: Cara McCauley
Corteva Agriscience
Indianapolis, IN

***SPEAKER**

08:00 AM **396. How Crop Protection Products Are Developed: Insights from a Visit to FMC.** Francielli Santos de Oliveira*[1]. [1]*Utah State University, Logan, UT*

08:15 AM **397. Weeds and Washington: Reflections on the WSSA Science Policy Fellowship Experience.** Aleah Butler-Jones*[1], Matthew Woolard[2], Lee Van Wychen[3]. [1]*Cornell University, Ithaca, NY,* [2]*Texas Tech University, Lubbock, TX,* [3]*Weed Science Society of America, Alexandria, VA*

08:30 AM **398. From Discovery to Product Support: Insights Gained Through My WSSA Travel Enrichment Experience at Syngenta.** Vipin Kumar*[1]. [1]*University of Nebraska Lincoln, Lincoln, NE*

08:45 AM **399. Weeds in the Northeast: Insights from My Travel Enrichment Experience Across New Jersey and New York.** Ryan Hamberg*[1].

[1]*Texas A&M University, College Station, TX*

09:00 AM **400. Travel Enrichment Experience: Syngenta Tour.** Matthew Woolard*[1]. [1]*Texas Tech University, Lubbock, TX*

09:15 AM **401. Weed Science Society of America Science Policy Fellowship Experience.** Matthew Woolard*[1], Aleah Butler-Jones[2], Lee Van Wychen[3]. [1]*Texas Tech University, Lubbock, TX,* [2]*Cornell University, Geneva, NY,* [3] *Weed Science Society of America, Alexandria, VA*

09:30 AM **402. WSSA Travel Enrichment Experience: Corteva Agriscience, Indianapolis, IN.** Preetaman Bajwa*[1], [1]*Cornell University, Ithaca, NY*

THURSDAY MORNING FEBRUARY 12

ORAL – 07. Teaching and Extension

LOCATION: Glenwood Ballroom Salon II
TIME: 8:00-10:00 AM Eastern
MODERATOR: Sarah Lancaster Kansas State University Manhattan, KS

***SPEAKER**

08:00 AM **403. Herbicide Resistance, Targeted Herbicide Applications, and Cover Crops: Updates from Wisconsin.** Rodrigo Werle*[1]. [1]*University of Wisconsin-Madison, Madison, WI*

08:15 AM **404. Most Common and Troublesome Weeds in Broadleaf Crops, A Comparison Over Time.** Lee Van Wychen*[1], Cole Woolard[2], Aleah Butler-Jones[3]. [1]*Weed Science Society of America, Alexandria, VA,* [2]*Texas Tech University, Lubbock, TX,* [3]*Cornell University, Ithaca, NY*

08:30 AM **405. Situation Report: A Briefing on the War Against Weeds.** Sarah Lancaster*[1], Joseph Ikley[2], Alyssa Essman[3]. [1]*Kansas State University, Manhattan, KS,* [2]*North Dakota State University, Fargo, ND,* [3]*The Ohio State University, Columbus, OH*

08:45 AM **406. Things A Grad Ought to Know: Comparing Skill Preparation in European and US Weed Science Programs.** Theresa Reinhardt Piskackova*[1]. [1]*Czech University of Life Sciences, Prague, Czech Republic*

09:00 AM **407. Where Are the Women in Weed Science? A National Profile of Faculty Rank, Training, and Career Progression.** Sirwan Babaei*[1], Maryam Babaei[1], Mocin Javid[1], Eric C. Brevik[1], [1], Amir Sadeghpour[1], Karla Gage[1]. [1]*Southern Illinois University Carbondale, IL*

09:15 AM **408. Winged Water Primrose (*Ludwigia decurrens*): Spread and Mapping in California.** Whitney Brim-DeForest*[1], Jens Beets[2], Taiyu Guan[1], Luis Espino[1], Sarah Marsh Janish[1]. [1]*University of California Division of Agriculture and Natural Resources,* [2] *USDA-ARS Invasive Species and Pollinator Health Research Unit, Albany, CA*

09:30 AM **409. Advancing Weed Ecology Education in Kansas, Montana, and New York.** Sophie Westbrook*[1], Emma Kubinski[2], Fabian Menalled[2], Antonio DiTommaso[3]. [1]*Kansas State University, Manhattan, KS,* [2]*Montana State University, Bozeman, MT,* [3]*Cornell University, Ithaca, NY*

09:45 AM **410. What's Next if We Lose Glyphosate?** John Byrd*[1]. [1]*Mississippi State University, Starkville, MS*

THURSDAY MORNING FEBRUARY 12

ORAL – 13. Integrated Weed Management

LOCATION: Glenwood Ballroom Salon III & IV
TIME: 8:00-11:45 AM Eastern
MODERATORS: Nick Bassinger University of Georgia Athens, GA

***SPEAKER**

08:00 AM **411. The Good, the Bad, and the Ugly of Cover Crops: Lessons from the Upper Midwest.** Debalin Sarangi*[1], Eric Yu[1], Axel Garcia y Garcia[1], Anna Cates[1], Lizabeth Stahl[1], Sithin Mathew[1], Gregg Johnson[1]. *[1]University of Minnesota, Twin Cities, MN*

08:15 AM **412. Effect Of Regenerative and Traditional Systems on Weed Growth and Population.** Paulo Watanabe Nakazama[1], Peter J Dittmar*[1], Danielle Treadwell[1]. *[1]University of Florida, Gainesville, FL*

08:30 AM **413. Impact of Cereal Rye Cover Crop Termination Timing on Soil Moisture Dynamics in Soybean.** Sithin Mathew*[1], Aaron Lorenz[1], Seth Naeve[1], Vasudha Sharma[1], Debalin Sarangi[1]. *[1]University of Minnesota, St. Paul, MN*

08:45 AM **414. Cover Crop Residues Enhance the Susceptibility of Weeds to Postemergence Herbicide Applications.** Gustavo Camargo Silva*[1], Debora Neuberger[1, 2], Willian Larini[1, 2], Letícia Vilela Barbosa[1, 3], Muthukumar Bagavathiannan[1]. *[1]Texas A&M University, College Station, TX, [2]Federal University of Paraná, Paraná, Brazil [3]Federal University of Lavras, Lavras, Brazil*

09:00 AM **415. On-Farm Studies to Evaluate Cover Crop Termination Timing on Weed Suppression in Corn and Soybean Production.** Anita Dille*[1], Luke Chism[1], Isaac Barnhart[1], Kraig Roozeboom[1], Gretchen Sassenrath[2]. *[1]Kansas State University,*

Manhattan, KS, [2]Kansas State University, Parsons, KS

09:15 AM **416. The Use of Mixed Cover Crops in Irrigated Orchards and Vineyards and Their Effects on Selected Ecosystem Services.** Connie Echaiz*[1], Héctor Valdés-Goméz[1], Léo Garcia[2], Fiorella Gattini[3], Rodrigo Figueroa[1]. *[1]Pontificia Universidad Católica de Chile, Santiago, Chile, [2]INRAE, Montpellier, France, [3]Syngenta Crop Protection Chile, Santiago, Chile*

09:30 AM **417. 5-Year 13 Integrated Weed Management Implementation for Palmer amaranth in Cotton.** Amar Godar*[1], Jason Norsworthy[1], L. Tom Barber[2]. *[1]University of Arkansas, Fayetteville, AR, [2]University of Arkansas Cooperative Extension Service, Lonoke, AR*

09:45 AM **418. Modeling Interaction Effects That Mediate Weed Responses to Cover Crop Surface Residues.** Lilly Sencenbaugh*[1], John Wallace[1]. *[1]The Pennsylvania State University, College Park, PA*

10:00 AM **BREAK (15 MINUTES)**

10:15 AM **419. Effectiveness of Directed Energy for Destroying Weed Seeds: A Harvest Weed Seed Control Strategy.** Sarah Chu*[1], Lauren Lazaro[2], Shuyang Zhen[1], Muthukumar Bagavathiannan[1]. *[1]Texas A&M University, College Station, TX, [2]Former Affiliation: Blue River Technology, Sunnyvale, CA*

10:30 AM **420. Electrical Weeding in Cotton: Performance Optimization and Comparative Efficacy with Cultivation.** Ryan Hamberg*[1], Megan Singletary[2], Robert Hardin[1], Scott Nolte[1], Gaylon Morgan[4], Peter Dotray[2,3], Muthukumar Bagavathiannan[1]. *[1]Texas A&M University, College Station, TX, [1]Texas Tech University, Lubbock, TX, [2]Texas A&M AgriLife Research and Extension, Lubbock, TX, [4]Cotton Incorporated, Cary, NC*

10:45 AM **421. Overcoming Weed Resistance with Novel Modes of Action.** Laura Davies*[1], Shuji Hachisu[1]. *[1]Moa Technology, Oxford, UK*

11:00 AM **422. Efficacy and Phytotoxicity of Herbicides in California Wild Rice (*Zizania palustris*) Systems.** Taiyu Guan*[1], Alex Ceseski[1], Rohith

Vulchi[2], Roger Batts[3], Kari Arnold[2], Consuelo Baez Vega[4], Whitney Brim-DeForest[1]. *[1]University of California Agriculture and Natural Resources, [2]University of California, Davis, Davis, CA, [3]NC State University, Raleigh, NC, [4]California State University, Chico, CA*

11:15 AM **423. Assessing Seed Retention in Downy Brome (*Bromus tectorum* L.): A Comparison of Three Seed-Collection Methodologies.** Noemi Codina-Pascual*[1], Vhuthu Ndou[1], Fernando H. Oreja[2], Jennifer A. Gourlie[1], Judit Barroso[1]. *[1]Oregon State University, Adams, OR, [2]Clemson University, Clemson, SC*

11:30 AM **424. Evaluating Corn Planting-Green in Cereal Rye Cover Crop for Palmer amaranth Seed Production, Corn Productivity, and Economic Returns.** Vipin Kumar*[1], Amit Jhala[1], Humberto Blanco-Canqui[1], Saleh Taghvaeian[1], Sam Wortman[1]. *[1]University of Nebraska – Lincoln, Lincoln, NE*

THURSDAY MORNING FEBRUARY 12

ORAL – 12. Regulatory Aspects

LOCATION: Glennwood Ballroom
Salon I
4th Floor, North Tower
TIME: 10:15-11:00 AM Eastern
MODERATOR: Bill Chism
EPA, Retired
Point of Rocks, MD

***SPEAKER**

10:15 AM 425. **Establishing Pollinator Habitat to Protect Sensitive Species and Preserve the Use of Pesticides.** Taylor Randell-Singleton*[1], Nick McGhee[2], Richard Barrett[2]. *[1]University of Georgia, Athens, GA, [2]USDA-NRCS Jimmy Carter Plant Materials Center, Americus, GA*

10:30 AM **426. Endangered Species Act: What is the WSSA Committee Doing?** Bill Chism*[1], Cameron Douglass[2]. *[1]EPA Emeritus, Point of Rocks, MD, [2]Compliance Services Inc., Lakewood, WA*

10:45 AM **427. Prehistoric pesticide labels get a face lift.** Stanley Culpepper*[1], Bill Chism[2]. *[1]University of Georgia, Tifton, GA, [2]EPA Emeritus, Point of Rocks, MD*

11:00 AM Business Meeting

THURSDAY MORNING FEBRUARY 12

ORAL – 03. Turf and Ornamentals

LOCATION: Glenwood Ballroom Salon II
TIME: 10:15-11:00 AM Eastern
MODERATOR: Hannah S. Wright
University of Arkansas
Division of Agriculture
Little Rock, AR

***SPEAKER**

10:15 AM **428. Optimizing Weed Management Practices for Pollinator Protection and Understanding Foraging Behavior.** Suzannah Hale*[1], Navdeep Godara[2], Shawn Askew[1]. *[1]Virginia Polytechnic Institute and State University, Blacksburg, VA, [2]North Carolina State University, Raleigh, NC*

10:30 AM **429. Comparison of treatments for yellow nutsedge control.** Jeffrey Derr*[1]. *[1]Virginia Polytechnic Institute and State University, Virginia Beach, VA*

10:45 AM 430. **Exploring Factors Affecting Weed Detection in Bermudagrass Turf: Ground Resolution, Ambient Light Conditions, and Platform Speed.** Mikerly Joseph*[1], Lukasz Wnorowski[1], Katarzyna A. Gawron[1], Chang Zhao[1], Arnold W. Schumann[1], Gregory MacDonald[1], Nathan Boyd[1], Pawel Petelewicz[1]. *[1]University of Florida, Gainesville, FL*

11:00 AM Business Meeting

ORAL – 04. Pastures, Rangelands, Forests, and Rights of Way

LOCATION: Glenwood Ballroom Salon II
TIME: 11:15-11:45 AM Eastern
MODERATOR: David Russell
Auburn University
Auburn, AL

***SPEAKER**

11:15 AM **431. Weed Control and Crop Tolerance in No-Till Orchardgrass (*Dactylis glomerata* L.) Establishment.** Hannah Wright-Smith*[1], Thomas Mueller[1], Will Phillips[1], Kimberlin Mann[1], Bruno Pedreira[1]. [1]*University of Tennessee, Knoxville, TN*

11:30 AM 432. **Effectiveness Of Integrated Approaches to Manage Woody Invasive Plants in Midwestern Forests.** Mark Renz*[1], Stefania Cartoni[1]. [1]*University of Wisconsin-Madison, Madison, WI*

11:45 AM Business Meeting

THURSDAY AFTERNOON FEBRUARY 12

TOURS – Cotton Incorporated, BASF, and Museum of Natural History

LOCATION: Meet in Lobby
TIME: 12:30-4:30 PM Eastern

Cotton Incorporated
Gaylon Morgan
Cotton Incorporated
Raleigh, NC

BASF
Dallas Taylor
BASF
Raleigh, NC

Museum of Natural History
Andrew Blythe
Corteva AgriScience
Raleigh, NC

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Meeting Conduct Reminder

The WSSA Code of Ethics defines professional conduct binding on all members of the Society. Members should recognize that this code of ethics and conduct signifies a voluntary assumption of the obligation of self-discipline and members should strive to uphold and maintain the honor and dignity of the Society. The following rules and standards of conduct have been developed for the safe and efficient operation of the WSSA and for the benefit and protection of the rights and safety of all. WSSA members are expected to observe the highest standards of professional conduct at all times, while at work or engaged in Society business.

1. **Obey all laws, rules and regulations governing our business.** The WSSA is subject to applicable federal laws in the state or country of the meeting or event. It is the policy of the WSSA that all laws, rules and regulations are complied with fully and completely. If it is unclear whether an action or activity is a legal or ethical violation, contact the WSSA President and/or Executive Secretary immediately for advice. Any incident or situation that violates the law or this policy should be immediately reported to the President and/or Executive Secretary; in person or via this contact information: info@wssa.net or 720-445-4789.

2. **Be honest, truthful, fair and trustworthy in all WSSA activities and relationships.** The WSSA expects each member to treat other members with respect and honesty. This includes providing information that is accurate, complete, objective, timely, relevant, and understandable.

3. **Respect and protect WSSA assets.** Assets are anything of value owned by the WSSA. All WSSA members are expected to be custodians of those assets. Members are responsible to maintain Society assets in good condition and to protect them from loss. This includes, but is not limited to, real assets and equipment as well as "soft assets" such as intellectual property, member lists, and other confidential information owned by the Society. WSSA assets of any kind should not be used for personal benefit.

4. **Avoid all conflicts of interest between Society business and personal affairs.** All WSSA members are expected to act with total objectivity regarding WSSA business. Accordingly, it is improper for a WSSA member to be in a position where their personal interests' conflict, or appears to conflict, with WSSA interests. WSSA members should not use their position within the WSSA to influence WSSA members or others for their personal benefit. If a member believes that a conflict of interest has developed or may develop, it should be promptly reported to the WSSA President and/or Executive Secretary. The Society's Conflict of Interest Policy is outlined in 5.8.

5. **Promote a culture of respect for all WSSA members.** The WSSA supports and adheres to laws and regulations dealing with fair member practices. Membership discrimination in our Society based on sex, race, age, religion, national origin, or sexual preference will not be tolerated. Sexual harassment will not be tolerated. Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature that explicitly or implicitly affects an individual's membership in the society, unreasonably interferes with an individual's activities within the society, or creates an intimidating, hostile or offensive society environment. This also includes inappropriate use of nudity and/or sexual images in public spaces (including within visual presentations, Twitter, and other online media); deliberate intimidation, stalking, or unwelcome following; harassing photography or recording; and sustained disruption of talks or other events.

6. **Use your best efforts to maintain a safe environment and protect the Society.** The WSSA believes in and supports the laws designated to keep our Society safe and designed to protect the environment. If you believe that an unsafe condition exists in our Society, bring it immediately to the attention of the President, a member of the Board, or Executive Secretary. If an accident takes place, report it pursuant to policy and immediately take action to address the problem. Any incident or situation that violates the law or this policy should be immediately reported to the President and/or Executive Secretary; in person or via this contact information: info@wssa.net or 720-445-4789.

7. **Promote an ethical culture for all WSSA members.** The WSSA always expects all of its members to conduct themselves ethically and to encourage and support that behavior in their fellow members. Members exercise integrity in scientific research activities and in the reporting of results.

8. **Relation of professionals to the public.** They shall not knowingly permit the publication of reports or other documents for any unsound or illegitimate undertaking.

9. **Respect fellow WSSA members.** Members shall freely give credit for work done by others to whom the credit is due and shall refrain from plagiarism in oral and written communication, and not knowingly accept credit rightfully due to another person.

10. **Reporting alleged violations.** Violation of the WSSA Code of Ethics and Conduct may subject a member to disciplinary action up to and including membership revocation. At the annual conference, when "Safe WSSA" members become aware of a complaint, they will seek out the alleged victim(s) and offender(s) separately and gather facts. Immediate responses at the conference may range from warning a harasser to cease his or her behavior immediately, to ending a speaker's talk early if

the speaker uses inappropriate language or images, to requiring a harasser to leave the conference immediately with no refund, to banning a harasser from future events “either indefinitely or for a certain time period.” Law enforcement may be engaged if circumstances require.

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