NORTHEASTERN WEED SCIENCE SOCIETY CONFERENCE





Boston, MA; January 8-11, 2024 Hyatt Regency Boston

IMPORTANT DEADLINES

Slides Uploads:

Upload your slides file to your submitted title page at weedscimeetingabstract.com

Student Contest Oral Presentations: January 6, 2024 by 11:59 PM

Other Presentations: January 6, 2024 by 11:59 PM

Abstract Submission:

Upload your abstract to your submitted title page at weedscimeetingabstract.com

All Abstracts due January 4, 2024 by 11:59 PM

SUSTAINING MEMBERS 2024

NEWSS would like to thank the individuals and organizations that help sustain our operations.

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https://www.newss.org/about/sustaining-members/

Meeting Location

HYATT REGENCY Boston

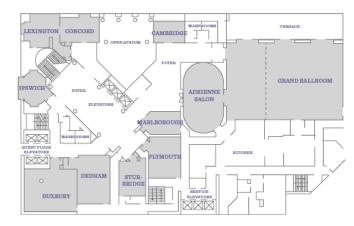
Wifi Access Meeting Rooms: Network: @Hyatt_Conference Password: newss

www.hyattregencyboston.com

Main lobby:



4th Floor:



SOCIETY EXECUTIVES

<u>NEWSS</u>

Wes Everman, President Erin Hitchner, President-elect Thierry Besancon, Vice President Jacob Barney, Past President Larissa Smith, Treasurer

NEWSS PROGRAM COMMITTEE

Erin Hitchner, Program Chair Thierry Besancon Katherine Diehl Eli Russell

CONDENSED PROGRAM

MONDAY JANUARY8

NEWSS Board Meeting	12:00PM – 3:00PM	Plymouth
Weed Contest Committee	3:00PM - 4:00 PM	Marlborough
Endowmen Committee	t 3:00 PM - 3:30 PN	/ Cambridge
Section Chair Committee	3:30 PM - 4:00 PN	/ Concord
Treasurer Audit Committee	3:30 PM - 4:00 PN	I Lexington
Opening Session & Awards	4:00 PM - 6:00 PN	l Grand Ballroom B
Poster Slam Session	6:00 PM - 7:00 PM	Adrienne Salon

TUESDAY JANUARY 9

Student Poster (<u>EVEN</u> Authors present)	7:30 AM - 8:30 AM	Grand Ballroom A
Research Posters	7:30 AM - 8:30 AM	Grand Ballroom A
Student Ora Presentatio	al 8:45 AM - 10:30 A n	M Grand Ballroom B
Presentatio Student Ora Presentatio	al 10:45 AM - 11:45	AM Grand Ballroom B
WORKSHC - Grad Student Lunch	DP 12:00 PM - 1:30) PM Martha's Vineyard
Student Ora Presentatio	al 1:45 PM - 3:45 PN m	A Grand Ballroom B
SYMPOSIL Connecting Across Difference: Building Sk for Communica with the Pu	ills ating	PM Grand Ballroom B
Dessert Social	9:00 PM - 11:00 PM	Adrienne Salon

WEDNESDAY JANUARY 10

Student 7 Poster (<u>ODD</u> Authors present)	:00 AM - 8:00 AM	Grand Ballroom A
Weed Ecology & Invasive Species	8:00 AM - 9:30 PM	Grand Ballroom B
Agronomic Crops I	9:45 AM - 12:00 PM	l Grand Ballroom B
Agronomic Crops Roundtable	1:15 PM - 2:00 PM	1 Grand Ballroom B
Turf, Ornamental, and Non- Crop - Roundtable	1:15 PM - 2:15 PM	1 Plymouth
Fruit, Vegetable, and Tree Crops Roundtable	2:00 PM - 2:30 PM	l Grand Ballroom B
Turf, Ornamental, and Non- Crop I	2:30 PM - 4:00 PN	/ Plymouth
Fruit, Vegetable, and Tree Crops	2:45 PM - 4:15 PM	Grand Ballroom B

Business Meeting	4:30 PM - 5:30 PI	M Grand Ballroom B
NEWSS Social & Student	5:30 - 6:30 PM	Grand Ballroom B
Quiz Bowl		-

THURSDAY JANUARY 11

Meeting

Past President's Breakfast	7:00 AM - 8:00 AM	Plymouth
Agronomic Crops II		Grand Ballroom B
Turf, Ornamental, and Non- Crop II	9:30 AM - 11:00 AM	Grand Ballroom B
NEWSS Board	11:30 AM - 2:00 PM	Plymouth

EXPANDED PROGRAM

Monday Evening, January 8

NEWSS Opening Session

LOCATION: TIME: Grand Ballroom B 4:00 PM - 6:00 PM Eastern Time Erin Hitchner Syngenta Elmer, NJ

MODERATOR:

Welcome and Keynote Address Winton Pitcoff Deputy Commissioner/Legislative Policy Director

> Massachusetts Department of Agricultural Resources

Presidential Addresses Wes Everman

NEWSS Awards

NEWSS Fellow

Award of Merit

Outstanding Researcher Award

Robert D. Sweet Outstanding Graduate Student - Ph.D.

M.Garry Schnappinger Award of Service

NEWSS Social

LOCATION: TIME: Adrienne Salon 6:00 PM - 7:00 PM Eastern Time

TUESDAY MORNING JANUARY 9

RESEARCH POSTERS

LOCATION: TIME:

CHAIR:

Grand Ballroom A 07:30 AM - 08:30 AM Eastern Time Anthony L. Witcher Tennessee State University McMinnville, TN

*PRESENTER

RESPONSES OF WEEDS AND MICROARTHROPOD COMMUNITIES TO ZASSO ELECTRICAL WEEDING. Aleah L. Butler-Jones^{*1}, Elizabeth C. Maloney², John Owens¹, Gregory M. Peck¹, Kyle Wickings², Marcelo L. Moretti³, Brad Hanson⁴, Lynn M. Sosnoskie²; ¹Cornell University, Ithaca, NY, ²Cornell University, Geneva, NY, ³Oregon State University, Corvallis, OR, ⁴University of California, Davis, Davis, CA (1)

EFFICACY AND SAFETY OF PYRIDATE IN MID-ATLANTIC SWEET CORN. Lynn M. Sosnoskie^{*1}, Thierry E. Besancon², Mark J. VanGessel³, Dwight Lingenfelter⁴; ¹Cornell University, Geneva, NY, ²Rutgers University, Chatsworth, NJ, ³University of Delaware, Georgetown, DE, ⁴Penn State University, University Park, PA (2)

PRE-TRANSPLANT APPLIED FLUMIOXAZIN, OXYFLUORFEN, AND SULFENTRAZONE EFFICACY AND SAFETY IN CABBAGE AND BROCCOLI IN NEW YORK AND NEW JERSEY. Lynn M. Sosnoskie^{*1}, Thierry E. Besancon²; ¹Cornell University, Geneva, NY, ²Rutgers University, Chatsworth, NJ (3)

EVALUATION OF THE AUTONOMOUS NAIO OZ ROBOT FOR WEED CONTROL IN SEEDED CORN AND TRANSPLANTED CABBAGE CROPS. Wesley M. Bouchelle^{*1}, Carrie Mansue¹, Lynn M. Sosnoskie², Thierry E. Besancon¹; ¹Rutgers University, Chatsworth, NJ, ²Cornell University, Geneva, NY (4) WEED CONTROL AND FIELD CORN TOLERANCE WITH SOIL ADJUVANTS MIXED WITH RESIDUAL HERBICIDE AT PLANTING. Lynn M. Sosnoskie¹, Wesley M. Bouchelle², Thierry E. Besancon^{*2}; ¹Cornell University, Geneva, NY, ²Rutgers University, Chatsworth, NJ (5)

ELUCIDATING WEED COMPETITION AND MANAGEMENT IN SOUTH CAROLINA HEMP. Lynn M. Sosnoskie¹, Matthew A. Cutulle², Harrison T. Campbell^{*2}; ¹Cornell University, Geneva, NY, ²Clemson University, Charleston, SC (6)

IR-4 PROJECT: SUCCESS AND BENEFITS TO SPECIALTY CROP GROWERS. Roger B. Batts*, Alice Axtell, Jaimin Patel, Jerry Baron, Debbie Carpenter, Hannah Ross; IR-4 Project HQ, NC State University, Raleigh, NC (7)

WEED AND CHRISTMAS TREE RESPONSE TO TOPRAMEZONE HERBICIDE. Jatinder S. Aulakh*1, Vipan Kumar²; ¹The Connecticut Agricultural Experiment Station, Windsor, CT, ²Cornell University, Ithaca, NY (8)

CONTROL OF GLYPHOSATE-RESISTANT COMMON WATERHEMP (AMARANTHUS TUBERCULATUS) IN 2,4-

D/GLYPHOSATE/GLUFOSINATE-RESISTANT SOYBEANS IN NEW YORK. Vipan Kumar*1, Mike Stanyard², Mike Hunter³, Lynn M. Sosnoskie⁴, Jatinder S. Aulakh⁵; ¹Cornell University, Ithaca, NY, ²Cornell University, Newark, NY, ³Cornell University, Watertown, NY, ⁴Cornell University, Geneva, NY, ⁵The Connecticut Agricultural Experiment Station, Windsor, CT (9)

DOES PERENNIAL AND COVER CROP DIVERSITY INFLUENCE MICROBIALLY-MEDIATED WEED SEED MORTALITY? Kara E. Eckert*, Carolyn Lowry, Eric Larson, Sharifa Crandall, Estelle Couradeau; Penn State University, University Park, PA (10)

ARE ORGANIC HERBICIDES EFFECTIVE FOR BURNDOWN PRIOR TO CROP ESTABLISHMENT? Dwight Lingenfelter*; Penn State University, University Park, PA (11) EFFICACY OF TIAFENACIL +/- GLUFOSINATE ON SUMMER ANNUAL WEEDS. Christopher D. Harlow*, Joe C. Neal; North Carolina State University, Raleigh, NC (12)

OPTIONS FOR HORSENETTLE CONTROL IN LANDSCAPE AND NURSERY SITES. Joseph C. Neal*, Christopher D. Harlow; North Carolina State University, Raleigh, NC (13)

INCENTIVIZING PRODUCTION OF CLIMATE SMART LEAFY GREENS IN SOUTH CAROLINA. Matthew A. Cutulle^{*1}, Brian Ward¹, Kari Buck², Lacy Barnette³, Jhessye Moore-Thomas³, Kelly Flynn², Paula Agudelo²; ¹Clemson University, Charleston, SC, ²Clemson University, Clemson, SC, ³Clemson, Columbia, SC (14)

DELAYED CEREAL RYE TERMINATION INFLUENCES WEED RECRUITMENT: A REGIONAL PERSPECTIVE. Grant M. Hoffer*1, John M. Wallace², Karla L. Gage³, Mark J. VanGessel⁴, John Lindquist⁵, Wesley Everman⁶, Erin Haramoto⁷, Eugene P. Law⁸, Nicholas T. Basinger⁹, Eric J. Miller¹⁰; ¹Pennsylvania State University, University Park, PA, ²Penn State University, University Park, PA, ³Southern Illinois University Carbondale, Carbondale, IL, ⁴University of Delaware, Georgetown, DE, ⁵University of Nebraska, Lincoln, NE, ⁶North Carolina State University, Raleigh, NC, ⁷University of Kentucky, Lexington, KY, ⁸University of Delaware, Beltsville, MD, ⁹The University of Georgia, Athens, GA, ¹⁰Southern Illinois University, Carbondale, IL (15)

SMALL CARPETGRASS (ARTHRAXON HISPIDUS) IS SUSCEPTIBLE TO COMMONLY USED PRE AND POST NON-CROP HERBICIDES. Arthur E. Gover*; Penn State, University Park, PA (16)

MANAGING AN INVASIVE KNAPWEED (CENTAUREA NIGRANS) IN COOL-SEASON PASTURES. Rakesh S. Chandran*; West Virginia University, Morgantown, WV (17)

AN INTEGRATED APPROACH FOR THE RESTORATION OF TEMPERATE GRASSLANDS INVADED BY AN NASSELLA TRICHOTOMA. Talia J. Humphries*; Texas A&M University, College Station, TX (18) 2023 SURVEY RESULTS FOR THE MOST COMMON AND TROUBLESOME WEEDS IN GRASS CROPS, PASTURE AND TURF. Cynthia Sias¹, Annu Kumari², Lee Van Wychen*³; ¹Virginia Tech, Blacksburg, VA, ²Crop, Soil & Environmental Sciences Department, Auburn University, Auburn, AL, ³Weed Science Society of America, Alexandria, VA (19)

ADVANCING WEED SCIENCE RESEARCH, EXTENSION, AND EDUCATION: NIFA GRANTS AND PANEL REVIEWER OPPORTUNITIES. Annu Kumari¹, Cynthia Sias², James Kells³, Vijay Nandula⁴, Lee Van Wychen*⁵; ¹Crop, Soil & Environmental Sciences Department, Auburn University, Auburn, AL, ²Virginia Tech, Blacksburg, VA, ³Michigan State University, East Lansing, MI, ⁴USDA, Stoneville, MS, ⁵Weed Science Society of America, Alexandria, VA (20)

TUESDAY MORNING JANUARY9

POSTER - Student Poster

EVEN Authors Present

LOCATION:	Grand Ballroom A
TIME:	07:30 AM - 08:30 AM
	Eastern Time
CHAIR:	Anthony L. Witcher
	Tennessee State
	University
	McMinnville, TN

*PRESENTER † STUDENT CONTEST

†A MUTATION IN A TRANSCRIPTION FACTOR IMPARTS NON-TARGET SITE HERBICIDE RESISTANCE IN RICE. Srishti Gupta*; Colorado State University, Fort Collins, CO (21)

†CROP AND WEED DETECTION USING MACHINE LEARNING. Rutvij S. Wamanse*1, Dhiraj Srivastava², Fatemeh Esmaeilbeiki³, Vijay Singh²; ¹Eastern Shore Agricultural Research and Extension Center, Virginia Tech, Painter, VA, ²Virginia Tech, Painter, VA, ³Virginia Tech, Blacksburg, VA (22)

†EVALUATING REDUCED TILLAGE WITH A LIVING MULCH AS AN IPM TOOL IN BROCCOLI PRODUCTION. Carrie Mansue*¹, Dwayne D. Joseph², Wesley M. Bouchelle¹, Cerruti Rr Hooks³, Thierry E. Besancon¹; ¹Rutgers University, Chatsworth, NJ, ²University of Maryland, Chestertown, MD, ³University of Maryland, College Park, MD (23)

†HERBICIDE RESISTANT REDROOT PIGWEED POPULATIONS IN NORTH CAROLINA. Ronel J. Argueta*; North Carolina State University, Raleigh, NC (24)

†INVESTIGATING EFFECTS OF MILKWEED ESTABLISHMENT STRATEGY ON RHIZOSPHERE COMMUNITY ASSEMBLY. Linnea C. Smith*1, Antonio DiTommaso¹, Jenny Kao-Kniffin²; ¹Soil and Crop Sciences Section, School of Integrative Plant Science, Cornell University, Ithaca, NY, ²Horticulture Section, School of Integrative Plant Science, Cornell University, Ithaca, NY (25)

†MULTIPLE HERBICIDE-RESISTANT ITALIAN RYEGRASS IN VIRGINIA. Milos Viric*¹, Akashdeep Singh Brar¹, Vipin Kumar², Michael L. Flessner³, Vijay Singh¹; ¹Virginia Tech, Painter, VA, ²University of Nebraska-Lincoln, Lincoln, NE, ³Virginia Tech, Blacksburg, VA (26)

†PERSISTENCE AND RELOCATION OF DISLODGABLE HERBICIDE RESIDUE FROM SIMULATED RAINFALL FOLLOWING GLYPHOSATE TREATMENT TO DORMANT ZOYSIAGRASS TURF. Navdeep Godara*, Clebson G. Goncalves, Jordan M. Craft, Shawn Askew; Virginia Tech, Blacksburg, VA (27)

†PHYTOENE DESATURASE INHIBITION WITH TOPICAL APPLICATIONS OF SIRNA. Caroline E. Barrett*, Ramsey Lewis, Ralph Dewey, Ramon G. Leon; North Carolina State University, Raleigh, NC (28)

†POSTEMERGENCE HERBICIDES APPLIED IN CONJUNCTION WITH NITROGEN FOR FALSE-GREEN KYLLINGA (KYLLINGA GRACILLIMA) CONTROL. Katherine H. Diehl*, Trevor S. Watson, Matthew T. Elmore, Daniel P. Tuck; Rutgers University, New Brunswick, NJ (29)

†REDUCED ATRAZINE RATES FOR WEED
CONTROL IN CORN. Akashdeep Singh Brar*1,
Milos Viric¹, Mark J. VanGessel², Kurt M. Vollmer³,
Vijay Singh¹; ¹Virginia Tech, Painter, VA,
²University of Delaware, Georgetown, DE,
³University of Maryland, Queenstown, MD (30)

†RESPONSE OF HERBICIDE-RESISTANT ANNUAL BLUEGRASS BIOTYPES TO ENDOTHALL. Juan Romero*, John M. Peppers, Shawn Askew; Virginia Tech, Blacksburg, VA (31)

†CROP DIVERSITY AND COVER CROP MANAGEMENT IMPACTS ON WEED ABUNDANCE IN FORAGE GRAIN CROP SYSTEM. Noelle A. Connors*1, John M. Wallace², Heather Karsten²; ¹Pennsylvania State University, State College, PA, ²Penn State University, University Park, PA (32)

†SEED KILL OF PROBLEMATIC WEED SPECIES IN WHEAT AND SOYBEAN BY TWO SEED IMPACT MILLS. Eli C. Russell*, Kevin Bamber, Michael L. Flessner; Virginia Tech, Blacksburg, VA (33)

†STANDARDIZATION OF UNMANNED AERIAL SYSTEM-BASED HERBICIDE APPLICATION IN CORN. Fatemeh Esmaeilbeiki*¹, Dhiraj Srivastava², Daniel Martin³, Vijay Singh¹; ¹Virginia Tech, Eastern Shore Agricultural Research And Extension Centre, VA, ²Donald Danforth plant sciense center, St Louis, MO, ³USDA, College Station, TX (34)

†STATEWIDE SCREEN OF NORTH CAROLINA ITALIAN RYEGRASS (LOLIUM MULTIFLORUM) POPULATIONS WITH RESIDUAL HERBICIDES. Diego J. Contreras*, Jackson W. Alsdorf, Ronel J. Argueta, Edgar Posadas, Colden Bradshaw, Wesley Everman; North Carolina State University, Raleigh, NC (35)

†SURVEY OF HERBICIDE RESISTANT PALMER AMARANTH POPULATIONS IN NORTH CAROLINA. Jackson W. Alsdorf*, Diego J. Contreras, Ronel J. Argueta, Colden Bradshaw, Edgar Posadas, Wesley Everman; North Carolina State University, Raleigh, NC (36) †USING UV-FLUORESCENT DYE TO MEASURE MULTIPASS DEPOSITION PATTERNS OF AERIAL AND GROUND APPLICATION EQUIPMENT. Daewon Koo*, Navdeep Godara, Juan Romero, Shawn Askew; Virginia Tech, Blacksburg, VA (37)

†WEED EMERGENCE TIMING IN A WARMER WORLD. Nasib Koirala^{*1}, Carolyn Lowry², Richard G. Smith³, Alexandra Contosta³; ¹The Pennsylvania State University, State College, PA, ²The Pennsylvania State University, University Park, PA, ³University of New Hampshire, Durham, NH (38)

†WEED IDENTIFICATION USING IMAGE ANALYSIS AND MACHINE LEARNING. Akhilesh Sharma*, Vipan Kumar, Louis Longchamps; Cornell University, Ithaca, NY (39)

†CORN YIELD LOSS PREDICTION WITH UAV MEASURED CROP-WEED LEAF COVER. Avi S. Goldsmith*, Robert Austin, Charlie W. Cahoon, Ramon G. Leon; North Carolina State University, Raleigh, NC (40)

TUESDAY MORNING JANUARY 9

ORAL - Student Oral Presentation

LOCATION: TIME:	Grand Ballroom B 8:30 AM - 12:00 PM
MODERATOR:	Eastern Time Katherine H. Diehl Rutgers University
CO-MODERATOR:	New Brunswick, NJ

*SPEAKER † STUDENT CONTEST

08:30 AM †CONFIRMATION OF AN ATRAZINE RESISTANT PALMER AMARANTH POPULATION IN NORTH CAROLINA. Ronel J. Argueta*; North Carolina State University, Raleigh, NC (41)

- 08:45 AM †BEYOND BIOMASS: WEED SUPPRESSION BENEFITS OF CEREAL RYE AT HIGH SEEDING RATES. Laurel Wellman*1, John M. Wallace²; ¹The Pennsylvania State University, State College, PA, ²Penn State University, University Park, PA (42)
- 09:00 AM †INFLUENCE OF LASER INTENSITY ON SMOOTH CRABGRASS CONTROL IN CREEPING BENTGRASS PUTTING GREENS. Juan Romero*, Shawn Askew; Virginia Tech, Blacksburg, VA (43)
- 09:15 AM †WEED CONTROL AND WATERMELON YIELD RESPONSE TO COVER-CROP TERMINATION TIMING. Carrie Mansue*1, Thierry E. Besancon1, Kurt M. Vollmer²; ¹Rutgers University, Chatsworth, NJ, ²University of Maryland, Queenstown, MD (44)
- 09:30 AM †CONFIRMATION OF GLYPHOSATE RESISTANT PALMER AMARANTH (AMARANTHUS PALMERI) BIOTYPES IN NEW YORK AND RESPONSES TO ALTERNATIVE CHEMISTRIES. Aleah L. Butler-Jones*1, Elizabeth C. Maloney², Sarah Morran³, Todd A. Gaines³, Lynn M. Sosnoskie²; ¹Cornell University, Ithaca, NY, ²Cornell University, Geneva, NY, ³Colorado State University, Fort Collins, CO (45)
- 09:45 AM †SEED IMPACT MILLS' WEED SEED KILL RATE AND HORSEPOWER DRAW AS INFLUENCED BY CHAFF FLOW RATE AND MOISTURE. Eli C. Russell*, Kevin Bamber, Michael L. Flessner; Virginia Tech, Blacksburg, VA (46)
- 10:00 AM Break

- 10:15 AM †EVALUATING HERBICIDE TOLERANCE ON COSMOS BIPINNATUS. Jose H. de Sanctis¹, Brock A. Dean¹, Jacob C. Forehand², James H. Lee^{*1}, Zachary R. Taylor³, Charlie W. Cahoon¹; ¹North Carolina State University, Raleigh, NC, ²North Carolina State Unviersity, Raleigh, NC, ³North Carolina State University, Sanford, NC (47)
- 10:30 AM †INVESTIGATING THE MECHANISM OF PARAQUAT RESISTANCE IN ITALIAN RYEGRASS POPULATIONS FROM NORTH CAROLINA. Jose H. de Sanctis*1, Charlie W. Cahoon¹, Travis W. Gannon¹, Wesley Everman¹, Katherine M. Jennings¹, Zachary R. Taylor²; ¹North Carolina State University, Raleigh, NC, ²North Carolina State University, Sanford, NC (48)
- 10:45 AM †CHARACTERIZING VARIOUS SPRAYER SETTINGS ON JOHN DEERE SEE & SPRAY™. Diego J. Contreras*1, Lauren M. Lazaro², William L. Patzoldt², Jackson W. Alsdorf¹, Ronel J. Argueta¹, Edgar Posadas¹, Wesley Everman¹; ¹North Carolina State University, Raleigh, NC, ²Blue River Technology, Sunnyvale, CA (49)
- 11:00 AM †POLLINATORS ALTER THEIR FORAGING BEHAVIOR DEPENDING ON HERBICIDE MODE OF ACTION AND PLACEMENT ON WHITE CLOVER. Navdeep Godara*, Shawn Askew; Virginia Tech, Blacksburg, VA (50)
- 11:15 AM †EXPLORING ANAEROBIC SOIL DISINFESTATION AS NEW NON-CHEMICAL TACTIC FOR WEED MANAGEMENT IN ORGANIC WATERMELON PRODUCTION. Sohaib Chattha*, Matthew A. Cutulle; Clemson University, Charleston, SC (51)

11:30 AM †SCREENING STRATEGIES AND HERITABILITY ESTIMATION FOR ALLELOPATHY IN RYE (SECALE CEREALE). Aliyah Warris*¹, James B. Holland², Virginia M. Moore³, S Chris Reberg-Horton¹, Steven B. Mirsky⁴, Ramon G. Leon¹; ¹North Carolina State University, Raleigh, NC, ²USDA ARS, North Carolina State University, Raleigh, NC, ³Cornell University, Ithaca, NY, ⁴USDA ARS, Beltsville, MD (52)

TUESDAY AFTERNOON JANUARY 9

WORKSHOP - Grad Student Lunch -Learning to Listen and Listening to Learn: An Experiential Workshop in Understanding

LOCATION: TIME:	Martha's Vineyard 12:00 PM - 1:30 PM
	Eastern Time
MODERATOR:	Katherine H. Diehl
	Rutgers University
	New Brunswick, NJ
CO-MODERATOR:	Eli C. Russell
	Virginia Tech
	Blacksburg, VA

TUESDAY AFTERNOON JANUARY 9

ORAL - Student Oral Presentation

LOCATION:	Grand Ballroom B
TIME:	1:45 PM - 4:30 PM
	Eastern Time
MODERATOR:	Katherine H. Diehl
	Rutgers University
	New Brunswick, NJ
CO-MODERATOR:	Eli C. Russell
	Virginia Tech
	21

*SPEAKER † STUDENT CONTEST

- 01:45 PM †UAV SPRAY HEIGHT INFLUENCES DROPLET VAPORIZATION AND WEED CONTROL EFFICACY. Daewon Koo*, Navdeep Godara, Juan Romero, John M. Peppers, Shawn Askew; Virginia Tech, Blacksburg, VA (53)
- 02:00 PM **+HIGHER SEEDING RATES FOR** WEED SUPPRESSION IN ORGANIC KERNZA (INTERMEDIATE WHEATGRASS) PRODUCTION. Natasha Djuric*1, Antonio DiTommaso², Jacob Jungers³, Tim Crews⁴, Jose Franco⁵, Leonardo Deiss⁶, Steve Culman⁷, Matthew Ryan⁸; ¹Cornell University, Soil and Crop Sciences, Ithaca, NY, ²Soil and Crop Sciences Section, School of Integrative Plant Science, Cornell University, Ithaca, NY, ³University of Minnesota, Twin Cities, MN, ⁴The Land Institute, Salina, KS, ⁵Dairy Forage Research Center, Madison, WI. ⁶The Ohio State University. Wooster, OH, ⁷Washington State University, Pullman, WA, 8Cornell University, Ithaca, NY (54)
- 02:15 PM †IMPACT OF PARTIAL SALTWATER AGROECOSYSTEMS ON WEED COMPETITION IN WATERMELON. Matthew A. Cutulle¹, Brian Ward², Joseph F. Bazzle^{*2}, Sandra Branham³, Amnon Levi⁴, Hailey Schopp²; ¹Clemson University, Charleston, SC, ²Clemson University, Clemson, SC, ³Clemson, Charleston, SC, ⁴USDA-USVL, Charleston, SC (55)
- 02:30 PM Break
- 02:45 PM †GOOSEGRASS (ELEUSINE INDICA) ECOTYPES AFFECTED BY CULTURAL MANAGMENT AND PLANT GROWTH REGULATORS IN TURFGRASS. Katherine H. Diehl*,

Matthew T. Elmore; Rutgers University, New Brunswick, NJ (56)

- 03:00 PM †SURVEY OF HERBICIDE RESISTANT ITALIAN RYEGRASS POPULATIONS IN NORTH CAROLINA. Jackson W. Alsdorf*, Diego J. Contreras, Ronel J. Argueta, Colden Bradshaw, Edgar Posadas, Wesley Everman; North Carolina State University, Raleigh, NC (57)
- 03:15 PM †ESTABLISHMENT AND WINTER SURVIVAL OF JOHNSONGRASS (SORGHUM HALEPENSE) IN CENTRAL NEW YORK STATE. Ryan P. O'Briant*1, Lynn M. Sosnoskie², Antonio DiTommaso³; ¹Cornell University - Soil and Crop Sciences, Brooktondale, NY, ²Cornell University, Geneva, NY, ³Soil and Crop Sciences Section, School of Integrative Plant Science, Cornell University, Ithaca, NY (58)
- 03:30 PM †USING 3-D IMAGING TO MAP BIOMASS DISTRIBUTION IN COVER CROPS. April M. Dobbs*¹, Avi S. Goldsmith¹, Daniel J. Ginn², Søren K. Skovsen³, Muthukumar V. Bagavathiannan², Steven B. Mirsky⁴, Chris S. Reberg-Horton¹, Ramon G. Leon¹; ¹North Carolina State University, Raleigh, NC, ²Texas A&M University, College Station, TX, ³Aarhus University, Aarhus, Denmark, ⁴USDA ARS, Beltsville, MD (59)

TUESDAY AFTERNOON JANUARY 9

<u>SYMPOSIUM -</u> Connecting Across Difference: Building Skills for Communicating with the Public

LOCATION: TIME: Grand Ballroom B 04:00 PM - 06:00 PM Eastern Time MODERATOR:

Erin Hitchner Syngenta Elmer, NJ

Patty Raun, Director, Center for Communicating Science, Virginia Tech

NEWSS Endowment Fundraiser/Dessert Social

Adrienne Salon

9:00 - 11:00 PM

<u>Thanks to our sponsors!</u> Syngenta BASF FMC Corteva

WEDNESDAY MORNING JANUARY 10

POSTER - Student Poster

ODD Authors Present

(reference list above)

LOCATION: TIME:

CHAIR:

Grand Ballroom A 07:00 AM - 08:00 AM Eastern Time Anthony L. Witcher Tennessee State University McMinnville, TN

WEDNESDAY MORNING JANUARY 10

Weed Ecology and Invasive Species

LOCATION:	Grand Ballroom B
TIME:	8:00 AM - 9:30 AM
	Eastern Time
MODERATOR:	Jacob Barney
	Virginia Tech
	Blacksburg, VA

*SPEAKER

- 08:00 AM PLANTING TIME INFLUENCES ANNUAL FLOWER STRIP ESTABLISHMENT WHEN WEED ABUNDANCE IS LOW. Sophie Westbrook*1, Scott S. Morris², Rebecca Stup¹, Rosa Xia², Ryleigh Coffey², Antonio DiTommaso²; ¹Cornell University, Ithaca, NY, ²Soil and Crop Sciences Section, School of Integrative Plant Science, Cornell University, Ithaca, NY (60)
- 08:15 AM IMPACT OF ROOT SEGMENT LENGTH AND PLANTING DEPTH ON VEGETATIVE PROPAGATION OF COMMON MILKWEED (ASCLEPIAS SYRIACA). Rebecca Stup*1, Sophie Westbrook¹, Antonio DiTommaso²; ¹Cornell University, Ithaca, NY, ²Soil and Crop Sciences Section, School of Integrative Plant Science, Cornell University, Ithaca, NY (61)
- 08:30 AM AN INTEGRATED APPROACH TOWARDS WEEDS MANAGEMENT. Haroon Ur Rashid*; Dubai Community Management L.L.C (Dubai Holding), Dubai, United Arab Emirates (62)
- 08:45 AM PARTHENIUM HYSTEROPHORUS L. IN THE AMERICAS: PREDICTING SUITABLE HABITATS BEYOND ITS NATIVE RANGE UNDER FUTURE CLIMATIC CONDITIONS. Sarah E.

Kezar*¹, Asad Shabbir², Antonio DiTommaso³; ¹Cornell University, Ithaca, NY, ²Biosecurity & Food Safety, Department of Regional NSW, New South Wales, Australia, ³Soil and Crop Sciences Section, School of Integrative Plant Science, Cornell University, Ithaca, NY (63)

09:00 AM EFFECTS OF CROP ROTATION ON COMMON WATERHEMP POPULATION DYNAMICS: AN INVESTIGATION USING A PERIODIC MATRIX MODEL. Huong T. X. Nguyen*1, Matt Liebman²; ¹Cornell University, Ithaca, NY, ²Iowa State University, Ames, IA (64)

09:15 AM RECENT ACTIVITIES OF THE MASSACHUSETTS INVASIVE PLANT ADVISORY GROUP, 2022 -2023. Randall G. Prostak*; University of Massachusetts, Amherst, MA (65)

09:30 AM Break

WEDNESDAY MORNING JANUARY 10

Agronomic Crops I

LOCATION: TIME:	Grand Ballroom B 9:45 AM - 12:00 PM
	Eastern Time
MODERATOR:	Vijay Singh
	Virginia Tech
	PAINTER, VA
CO-MODERATOR:	Ramon G. Leon
	North Carolina State
	University
	Raleigh, NC

*SPEAKER

09:45 AM A NOVEL PREMIX OF QUIZALOFOP-P-ETHYL AND GLUFOSINATE-AMMONIUM DEMONSTRATING BROAD- SPECTRUM WEED CONTROL. Daniel L. Kunkel*; AMVAC, Plainsboro, NJ (66)

- 10:00 AM DEVELOPMENT OF CONVINTRO™ BRAND HERBICIDES FOR MANAGING AMARANTHUS SPECIES IN CORN AND SOYBEAN: FIELD PERFORMANCE UPDATE. John Buol*, Carl Coburn, Richard Leitz, Zewei Miao, Emily Scholting; Bayer, St. Louis, MO (67)
- 10:15 AM FROM LIBERTY 280 (RACEMIC GLUFOSINATE AMMONIUM) TO LIBERTY ULTRA (L-GLUFOSINATE AMMONIUM) HERBICIDE, POWERED BY GLU-L TECHNOLOGY. Liam J. Vincent¹, Shawn C. Beam*², Eric Schultz¹, Alice Harris¹, Marcel Kienle³, Ryan Aldridge¹, Sam Willingham¹, Ingo Meiners¹, Siyuan Tan⁴; ¹BASF, Rtp, NC, ²BASF, Boalsburg, PA, ³BASF, Limburgerhof, Germany, ⁴BASF, Cary, Nc 27519, Usa, NC (68)
- 10:30 AM STOREN HERBICIDE PROVIDING MORE CONSISTENCY AND INCREASED LENGTH OF WEED CONTROL IN CORN. Sudeep A. Mathew*¹, Mark Kitt²; ¹Syngenta, Germantown, MD, ²Syngenta, Greensboro, NC (69)
- 10:45 AM META-ANALYSIS OF MULTIPLE CONSERVATION AGRICULTURAL PRACTICES ON WEED MANAGEMENT IN THE US MIDWEST USING AGEVIDENCE. Maria A. Gannett*; Cornell University and University of Massachusetts, Ithaca, NY (70)
- 11:00 AM CLIMATE CHANGE IMPACTS ON DAIRY AND FIELD CROP WEED MANAGEMENT. Caroline Marschner*1, Sharon N. Bachman², Isabella M. Colucci³, Catalina Ferreira-Dias Rivas⁴, Rebecca Stup¹, Claire Liu⁵, Xindi Liu¹, Sophie Westbrook¹, Antonio DiTommaso⁶;

¹Cornell University, Ithaca, NY, ²Cornell Cooperative Extension, East Aurora, NY, ³Cornell University, Gray, ME, ⁴Columbia Mailman School of Public Health, New York, NY, ⁵Cornell University, New York, NY, ⁶Soil and Crop Sciences Section, School of Integrative Plant Science, Cornell University, Ithaca, NY (71)

11:15 AM HERBICIDE RESISTANT WEEDS IN NORTH CAROLINA, THEIR DISTRIBUTION, AND MANAGEMENT CONCERNS. Wesley Everman*1, Charlie W. Cahoon¹, Eric Jones², Jose H. de Sanctis¹, Jackson W. Alsdorf¹, Diego J. Contreras¹, Ronel J. Argueta¹; ¹North Carolina State University, Raleigh, NC, ²South Dakota State University, Brookings, SD (72)

11:30 AM INTEGRATING FLAME WEEDING FOR EARLY SEASON WEED CONTROL IN ORGANIC SOYBEAN. Kurt M. Vollmer*¹, Dwayne D. Joseph², Alan W. Leslie³; ¹University of Maryland, Queenstown, MD, ²University of Maryland, Chestertown, MD, ³University of Maryland, College Park, MD (73)

WEDNESDAY AFTERNOON JANUARY 10

Turf, Ornamental, and Non-Crop

Roundtable

Location Plymouth Time 1:15 – 2:1 Moderator Matthew

1:15 – 2:15 PM Matthew T. Elmore Rutgers University New Brunswick, NJ

Agronomic Crops

Roundtable

Location	Grand Ballroom B
Time	1:15 – 2:00 PM
Moderator	Vijay Singh
	Virginia Tech
	Painter, VA

Fruit, Vegetable, and Tree Crops

Roundtable

Location	Grand Ballroom B
Time	2:00 – 2:30 PM
Moderator	Kurt Vollmer
	University of Maryland
	Queenstown, MD

WEDNESDAY AFTERNOON JANUARY 10

Turf, Ornamental, and Non-Crop I

LOCATION:	Plymouth
TIME:	2:30 PM - 4:00 PM
	Eastern Time
MODERATOR:	Matthew T. Elmore
	Rutgers University
	New Brunswick, NJ
CO-MODERATOR:	David E. Hillger
	Corteva Agriscience
	Thorntown, IN

*SPEAKER

- 02:30 PM AN OVERVIEW OF PYRIMISULFAN PRODUCTS FOR TURF AND ORNAMENTAL WEED CONTROL. Shawn Askew*¹, Eric Reasor², Dale Sanson³; ¹Virginia Tech, Blacksburg, VA, ²PBI Gordon Corporation, Rowlett, TX, ³PBI Gordon Corporation, Kansas City, MO (74)
- 02:45 PM APPLICATION STRATEGIES USING ARKON (PYRIMISULFAN) FOR CONTROL OF FALSE-GREEN KYLLINGA AND YELLOW NUTSEDGE. Brian A. Aynardi^{*1}, Matthew T. Elmore², Steven J.

McDonald³, Eric Reasor⁴, Jeffrey W. Marvin⁵, Robert C. Williamson⁶, Chrissie A. Segars⁷; ¹PBI-Gordon Corporation, State College, PA, ²Rutgers University, New Brunswick, NJ, ³Turfgrass Disease Solutions, LLC, Spring City, PA, ⁴PBI Gordon Corporation, Rowlett, TX, ⁵PBI-Gordon Corporation, Overland Park, KS, ⁶PBI-Gordon Corporation, Defiance, OH, ⁷PBI-Gordon Corporation, Bend, OR (75)

- 03:00 PM SPRING APPLIED PINOXADEN TOLERANCE ON CREEPING BENTGRASS, FINE FESCUE, POA ANNUA, PERENNIAL RYEGRASS, TALL FESCUE AND LITTLE BLUESTEM IN THE MID-ATLANTIC. Steven J. McDonald*; Turfgrass Disease Solutions, LLC, Spring City, PA (76)
- 03:15 PM CONTROL OPTIONS FOR MULBERRYWEED [FATOUA VILLOSA (THUNB.) NAKAI]. Jeffrey Derr*1, Aman Rana²; ¹Virginia Tech, Virginia Beach, VA, ²Virginia Tech HRAREC, Virginia Beach, VA (77)
- 03:30 PM EFFICACY OF FOLIAR APPLICATIONS ON AUTUMN OLIVE. Jeff Jodon*; Penn State University, University Park, PA (78)
- 03:45 PM CONTROLLING COMMON RAGWEED IN FRASER FIR WITH WHITE CLOVER LIVING MULCH. Joseph C. Neal*¹, Christopher D. Harlow¹, Jeff Owen², Brad Edwards³; ¹North Carolina State University, Raleigh, NC, ²North Carolina State University, Mills River, NC, ³North Carolina Cooperative Extension, Jefferson, NC (79)

WEDNESDAY AFTERNOON JANUARY 10

Fruit, Vegetable, and Tree Crops

LOCATION:	Grand Ballroom B
TIME:	2:45 PM - 4:15 PM
	Eastern Time
MODERATOR:	Kurt M. Vollmer
	University of
	Maryland
	Queenstown, MD
CO-MODERATOR:	Roger B. Batts
	IR-4 Project HQ, NC
	State University
	Raleigh, NC

*SPEAKER

- 02:45 PM EVALUATING A METAMITRON AND ETHOFUMESATE PRE-MIX FOR WEED CONTROL AND CROP SAFETY IN TABLE BEETS AND CARROTS. Lynn M. Sosnoskie*; Cornell University, Geneva, NY (84)
- 03:00 PM WEED CONTROL EFFICACY AND COLE CROPS TOLERANCE TO TANK-MIXED COMBINATION OF CHLOROACETAMIDE HERBICIDES AND OXYFLUORFEN IN NEW YORK AND NEW JERSEY. Lynn M. Sosnoskie¹, Wesley M. Bouchelle², Thierry E. Besancon*²; ¹Cornell University, Geneva, NY, ²Rutgers University, Chatsworth, NJ (85)
- 03:15 PM IR-4 WEED SCIENCE UPDATE -FOOD CROPS. Roger B. Batts*; IR-4 Project HQ, NC State University, Raleigh, NC (86)
- 03:30 PM EVALUATING QUINCLORAC FOR USE IN GRAPES IN NEW YORK AND NEW JERSEY. Lynn M. Sosnoskie*1, Thierry E. Besancon²; ¹Cornell University, Geneva, NY, ²Rutgers University, Chatsworth, NJ (87)
- 03:45 PM WEED CONTROL AND CROP RESONSE WITH POST-FLOODING DORMANT APPLICATION OF

PENDIMETHALIN, FLURIDONE, AND SULFENTRAZONE IN CRANBERRY (VACCINIUM MACROCAPON). Thierry E. Besancon*, Wesley M. Bouchelle; Rutgers University, Chatsworth, NJ (88)

04:00 PM USE OF SULFENTRAZONE ON NEW CRANBERRY PLANTS IN FIELD AND GREENHOUSE ENVIRONMENTS. Katherine Ghantous*1, Hilary A. Sandler²; ¹UMass Amherst, UMass Cranberry Station, East Wareham, MA, ²UMass Cranberry Station, East Wareham, MA (89)

Wednesday Afternoon, January 10

NEWSS BUSINESS MEETING

Location Grand Ballroom B Time 4:30 – 5:30 PM

Wednesday Evening, January 10

NEWSS Social + Student Quiz Bowl

Location Grand Ballroom B Game Jacob Barney Master 5:30 – 6:30 PM Time

THURSDAY MORNING JANUARY 11

ORAL - Agronomic Crops II

LOCATION: TIME: MODERATOR: Grand Ballroom B 8:00 AM - 9:00 AM Vijay Singh Virginia Tech, VA

CO-MODERATOR: Ramon G. Leon North Carolina State University, NC

*SPEAKER

- EIGHT YEARS OF HARVEST WEED 08:00 AM SEED CONTROL RESEARCH IN VIRGINIA. Michael L. Flessner*; Virginia Tech, Blacksburg, VA (80)
- MANAGING ROLLED-CRIMPED 08:15 AM COVER CROPS FOR ORGANIC NO-TILL WHEAT (TRITICUM AESTIVUM). Uriel D. Menalled*1, Sandra Wayman¹, Terry J. Rose², Christopher Pelzer¹, Matthew Ryan¹; ¹Cornell University, Ithaca, NY, ²Southern Cross University, Lismore, Australia (81)
- WEED BIOMASS IN THREE COVER 08:30 AM CROP BICULTURES IN THE NORTHEASTERN USA. Huong T. X. Nguyen^{*1}, Richard G. Smith², Helen Boniface³, K. Ann Bybee-Finley⁴, Heather M. Darby⁵, Sjoerd W. Duiker⁶, Masoud Hashemi⁷, Sarah M. Hirsh⁸, Ivy Krezinski⁵, Ellen B. Mallory⁹, Tosh R. Mazzone⁶, Steven B. Mirsky⁴, Thomas Molloy¹⁰, Arthur Siller⁷, Resham Thapa¹¹, Kate Tully¹², Mark J. VanGessel¹³, John M. Wallace⁶, Nicholas D. Warren¹⁴, Sandra Wayman¹⁵, Mathew R. Ryan¹⁵; ¹Cornell University, Ithaca, NY. ²Natural Resources and Environment, University of New Hampshire, Durham, NH, ³Soil Health Institute, Morrisville, NC, ⁴Sustainable Agricultural Systems Lab, USDA-ARS, Beltsville, MD, ⁵Plant and Soil Science Department, University of Vermont, Burlington, VT, ⁶Department of Plant Science, Pennsylvania State University, University Park, PA, ⁷Stockbridge School of Agriculture, University of Massachusetts-Amherst, Amherst, MA, ⁸Extension Somerset County, University of Maryland, Princess Anne, MD, 9School of Food and Agriculture and Cooperative

Extension, University of Maine, Orono, ME, ¹⁰Cooperative Extension, University of Maine, Orono, ME, ¹¹Department of Agricultural and Environmental Sciences, College of Agriculture, Tennessee State University, Nashville, TN, ¹²Plant Science and Landscape Architecture. University of Maryland, College Park, MD, ¹³" Department of Plant and Soil Sciences, University of Delaware, Georgetown, DE, ¹⁴Natural Resources and the Environment, University of New Hampshire, Durham, NH. ¹⁵School of Integrative Plant Sciences - Soil & Crop Sciences, Cornell University, Ithaca, NY (82)

08:45 AM WEED SEED PERSISTENCE WITHIN THE PERENNIAL FORAGE PHASE OF A CROP ROTATION. Carolyn Lowry*; Pennsylvania State University, University Park, PA (83)

THURSDAY MORNING JANUARY 11

ORAL - Turf, Ornamental, and Non-Crop II

LOCATION:	Plymouth
TIME:	9:30 AM - 11:00 AM
	Eastern Time
MODERATOR:	Matthew T. Elmore
	Rutgers University
	New Brunswick, NJ
CO-MODERATOR:	David E. Hillger
	Corteva Agriscience
	Thorntown, IN
*QDEVKED	

*SPEAKER

09:30 AM PREEMERGENCE HERBICIDE APPLICATION TIMING ON ROOTING CUTTINGS OF NURSERY CROPS. Anthony L. Witcher*¹, Isha Poudel²; ¹Tennessee State University, Mcminnville, TN, ²University of Tennessee, Jackson, TN (90)

- 09:45 AM PRE-EMERGENCE HERBICIDE PROGRAMS FOR JAPANESE STILTGRASS (MICROSTEGIUM VIMINEUM) CONTROL. Daniel P. Tuck*, Matthew T. Elmore; Rutgers University, New Brunswick, NJ (91)
- 10:00 AM ANNUAL BLUEGRASS ENCROACHMENT INTO COOL-SEASON TURFGRASS TRIALS SUBJECTED TO TRAFFIC. Bradley S. Park*, James A. Murphy; Rutgers University, New Brunswick, NJ (92)
- 10:15 AM BENTGRASS ENCROACHMENT INTO AN ANNUAL BLUEGRASS FAIRWAY VARIES BY CULTIVAR. Matthew T. Elmore*, Daniel P. Tuck; Rutgers University, New Brunswick, NJ (93)
- 10:30 AM DISSIPATION OF SPRING-APPLIED METHIOZOLIN IN TURFGRASS SYSTEMS. Shawn Askew*1, John M. Peppers¹, Suk Jin Koo², Ki-Hwan Hwang³; ¹Virginia Tech, Blacksburg, VA, ²Moghu Research Center, Daejeon, South Korea, ³Moghu Research Center Ltd., Daejeon, South Korea (94)

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