

NEPPSC

NORTHEASTERN PLANT, PEST AND SOILS CONFERENCE



THE NORTHEASTERN PLANT, PEST, AND SOILS CONFERENCE

2019

A joint meeting of:



Hunt Valley, MD; January 8-10, 2018

The Delta Hotel Baltimore
Hunt Valley, MD

Participating Societies.

Northeastern Weed Science Society (Host Society)

Northeastern Regional Branch of American Society of Agronomy, Crop Science Society of America, & Soil Science Society of America

American Society of Horticultural Science - Northeast Division

Sustaining Members

The societies comprising the NEPPSC would like to thank the individuals and organizations that help sustain our operations.

Sustaining Members for each society are displayed at the registration desk.

If you would like more information about a sustaining member, click on any of the logos on the "Sponsors" page at:

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

Meeting Location

The Delta Hotel Baltimore
245 Shawan Rd.
Hunt Valley, MD 21031

<https://www.marriott.com/hotels/travel/bwidh-delta-hotels-baltimore-hunt-valley/?app=resvlink>

Directions and Transportation

From the South: Take I-95 N, merge onto I-695 W via exit 49B toward Towson. Stay on I-695W for 17 miles then merge onto I-83N via exit 24, stay on I-83 for 5.5 miles then take exit 20A for Shawan Rd. East, Stay in the far right lane while exiting. The hotel entrance will be immediately on the right coming off the exit ramp.

From the west, follow I-70 East to I-695 North and follow directions above.

From the North take I-95 South to exit 64, and Merge onto I-695 W toward Towson. Stay on I-695W for 10 miles then merge onto I-83N via exit 24. Stay on I-83 for 5.5 miles then take exit 20A for Shawan Rd. East, Stay in the far right lane while exiting. The hotel entrance will be immediately on the right coming off the exit ramp.

From the North taking I-83, follow I-83 south to exit 20A for Shawan Rd. East, Stay in the far right lane while exiting. The hotel entrance will be immediately on the right coming off the exit ramp

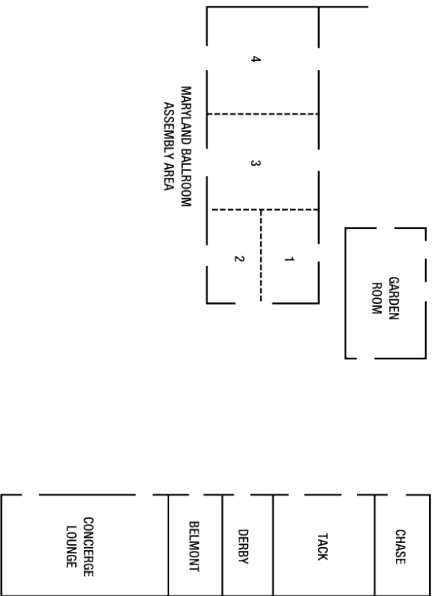
Parking: Complimentary on-site parking

Subway Station, Hunt Valley Light Rail only 0.3 miles N from Hotel

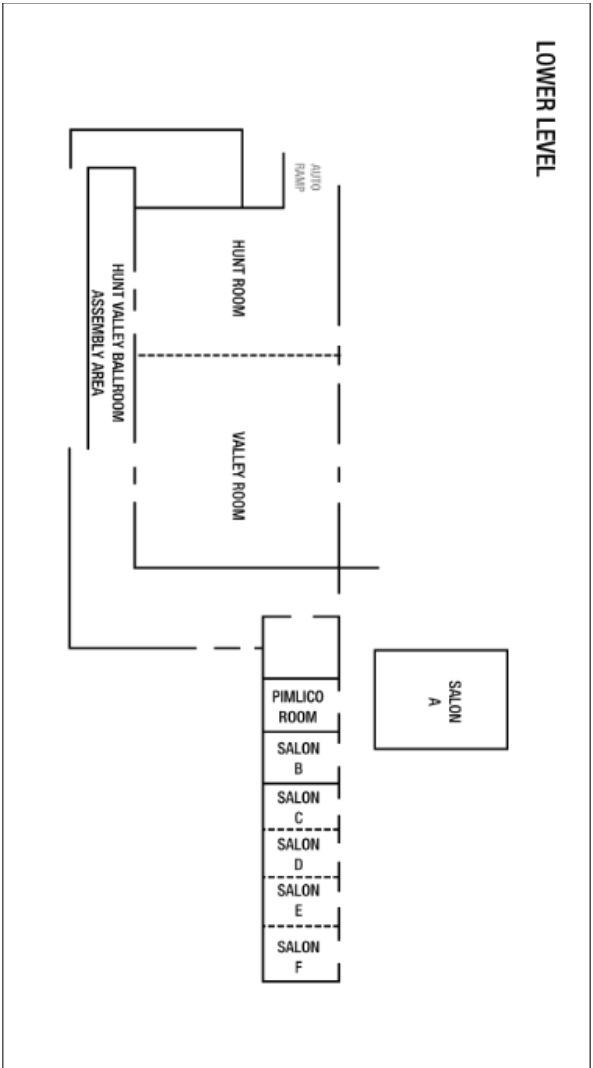
Complimentary shuttle service, within a 3-mile radius available Monday to Friday, 6:30am to 9pm.
Call: 410-785-7000

Hotel Floor Plan

LOBBY LEVEL



Hotel Floor Plan



SOCIETY PRESIDENTS

Carroll Moseley, NEWSS President

carroll.moseley@syngenta.com

Karen Gartley, NE-ASA/CSSA/SSSA President

kgartley@udel.edu

Matt Taylor, NE-ASHS President

mtaylor@longwoodgardens.org

NEPPSC PROGRAM COMMITTEE

Daniel Kunkel, Program Chair & NEWSS Rep.

daniel.kunkel@Rutgers.edu

Karen Gartley, NE-ASA/CSSA/SSSA Rep.

kgartley@udel.edu

Matt Taylor, NE-ASHS President

mtaylor@longwoodgardens.org

COMMITTEE MEETINGS

For a schedule of individual society committee meetings,
please visit <http://neppsc.org/>

CONDENSED PROGRAM

MONDAY, JANUARY 7, 2019

- | | |
|------------------------|---|
| 3:00 p.m. - 4:30 p.m. | NEWSS Board Meeting
(Salon A) |
| 4:30 p.m. - 5:00 p.m. | NEPPSC Program
Committee Meeting
(Salon A) |
| 5:00 p.m. - 5:30 p.m. | NEPPSC Program
Committee & Session
Chairs Meeting (Salon A) |
| 8:00 p.m. - 10:00 p.m. | College Football
Championship Game
Social (Garden Room) |

TUESDAY, JANUARY 8, 2019

- | | |
|-------------------------|---|
| 10:00 a.m. - 12:00 p.m. | Committee Meetings:
Awards/Nominations (Salon
CD), Weed Contest/
Endowment (Salon EF) |
| 10:30 a.m. - 4:00 p.m. | Registration (Hunt Valley
Registration) |
| 1:00 p.m. - 2:00 p.m. | Industry and Extension
Roundtable Discussions

Agronomic Crops & Soils,
led by John Wallace and
Dwight Lingenfelter, Penn
State. (Salon CD)

Fruit, Veg., and Tree Crops,
led by Wes Kline, Rutgers
(Salon EF)

Turf & Ornamental, led by
Shawn Askew, VT
(Salon A) |
| 2:00 p.m. - 3:00 p.m. | Glyphosate: Get the Facts
(Hunt Ballroom) |
| 3:00 p.m. - 3:15 p.m. | Break |

3:15 p.m. - 5:15 p.m.	NEPPSC Opening Ceremony (Hunt Ballroom)
3:15 p.m. Welcome	Carroll Moseley, NEWSS; Karen Schilke-Gartley, NE-Tri-Societies; Matt Taylor, NE-ASHS
4:00 p.m. - 5:00 p.m.	Featured Speaker: Dr. Barbara Glenn, CEO National Association of State Departments of Ag.
5:00 p.m. - 5:15 pm	Announcements/Close out Opening Ceremony
5:30 p.m. - 7:30 p.m.	NEPPSC Social Mixer & Grad Student Quiz Bowl (Valley Ballroom)
8:00 p.m. - 10:00 p.m.	Poster Setup (Valley Ballroom)
8:00 p.m. - 10:00 p.m.	Commercial Display Setup (Valley Ballroom)

WEDNESDAY, JANUARY 9, 2019

7:00 a.m. - 8:30 a.m.	NEPPSC Posters – <u>authors present</u> (including student posters) (Valley Ballroom)
7:30 a.m. - 4:00 p.m.	Registration (Hunt Valley Registration)
8:45 a.m. - 10:00 am.	Student Oral Presentations: (Salon CD)
10:00 a.m. - 10:15 a.m.	Break
10:15 a.m. - 11:45 am.	Student Oral Presentations: (Salon CD)
11:45 a.m. - 1:15 p.m.	Lunch Break
11:50 a.m. - 1:00 p.m.	Grad Student Luncheon (Garden room)
1:15 p.m. -2:45 p.m.	Student Oral Presentations:

	(Salon CD)
2:45 p.m. - 3:00 p.m.	Break
3:00 p.m. - 5:00 p.m.	Symposium: The Art and Science of Science Communication (Hunt Ballroom)
5:15 p.m. - 6:30 p.m.	NEWSS Awards (Hunt Ballroom)
5:15 p.m. - 6:30 p.m.	NE-ASHS Business Meeting (Salon EF)
9:00 p.m. - 11:00 p.m.	Industry Dessert Social and Special Interaction Activity Sponsored by BASF, Bayer, and Syngenta (Valley Ballroom)

THURSDAY, JANUARY 10, 2019

7:00 a.m. - 8:30 a.m.	NEWSS Past Presidents' Breakfast (Garden Room)
7:30 a.m. - 3:00 p.m.	Registration (Hunt Valley Registration)
8:15 a.m. - 10:00 a.m.	Fruit, Veg., & Tree Crops (Salon CD)
8:30 a.m. - 10:00 a.m.	Agronomic Crops (Salon A)
8:45 a.m. - 10:00 a.m.	Turf and Ornamentals (Salon EF)
10:00 a.m. - 10:15 a.m.	Break
10:15 a.m. - 12:00 p.m.	Fruit, Veg., & Tree Crops (Salon CD)
10:15 a.m. - 12:00 p.m.	Agronomic Crops (Salon A)
10:15 a.m. - 11:45 a.m.	Turf and Ornamentals (Salon EF)
12:00 p.m. - 1:15 p.m.	Lunch Break

1:15 p.m. - 2:45 p.m.	Turf and Ornamentals (Salon EF)
1:15 p.m. - 2:45 p.m.	Veg. Mgt. and Restoration (Salon CD)
2:45 p.m. - 3:00 p.m.	Break
3:00 p.m. - 5:00 p.m.	SYMPOSIUM: The Benefits and Challenges of Participatory Research (Salon EF)
3:00 p.m.-5:00 p.m.	Workshop: Weed Management in Pollinator Plantings (Salon CD)
3:00 p.m. - 5:00 p.m.	Tour:
5:00 p.m. - 6:30 p.m.	NEWSS Business Meeting (Hunt Ballroom)
5:00 p.m. - 6:30 p.m.	NE-ASA/CSSA/SSSA Business Meeting (Salon E/F)
3:15 p.m. - 6:30 p.m.	Poster & Commercial Display Removal (Valley Ballroom)
6:30 p.m. - 7:00 p.m.	NEPPSC Organizing Committee (Salon EF)

FRIDAY, JANUARY 11, 2019

8:30 a.m. - 10:30 a.m.	NEWSS Board Meeting (Tack Room)
------------------------	------------------------------------

!! IMPORTANT !!

Deadline for Uploading
Presentations

Sunday, January 6, 2019

All presentations* must be uploaded
before this deadline to

<http://www.wssaabstracts.com>

Questions regarding presentation
upload or special formatting should be
directed to the respective section
moderator.

*Note to students: A 10-point penalty
will be assessed in contest scoring for
late submissions.

PROGRAM

WEDNESDAY MORNING JANUARY 9

Student Contest Poster (Authors Present)

LOCATION: Valley Ballroom
TIME: 7:00 AM - 8:30 AM
CHAIR: Katelyn Venner
BASF
Raleigh, NC
MODERATOR: Katelyn Venner
BASF
Raleigh, NC

***PRESENTER † STUDENT POSTER
CONTEST**

†Evaluation of Weed Size and Water Carrier pH on Suppress Herbicide Efficacy. D.G. Lewis*, M.A. Cutulle, T. Campbell, and D. Jeffris, Clemson, Clemson, SC (1)

†Utilizing UAVs and Spectral Imaging to Distinguish Select Weed Species in a Field Environment. E.A. Jones*, J.T. Sanders, W.J. Everman, D.J. Contreras, and M.A. Granadino, North Carolina State University, Raleigh, NC (2)

†Bulbous Bluegrass: A Weed of Ornamental Turf. J. Brewer* and S.D. Askew, Virginia Tech, Blacksburg, VA (3)

†Dicamba Injury Varies with Soybean Variety and Maturity Group. M.A. Granadino*, W.J. Everman, J.T. Sanders, D.J. Contreras, and E.A. Jones, North Carolina State University, Raleigh, NC (4)

†Critical Period of Weed Control for Ryegrass in Wheat. D.J. Contreras* and W.J. Everman, North Carolina State University, Raleigh, NC (5)

†Modeling Palmer Amaranth (*Amaranthus palmeri*) Emergence Using Chronological, Thermal, and

Hydro-thermal Time. T.A. Reinhardt Piskackova*, C. Reburg-Horton, R.J. Richardson, K.M. Jennings, and R.G. Leon, North Carolina State University, Raleigh, NC (6)

†**Confirming Glyphosate Resistance in Horseweed Through Seed Germination and Whole Plant Assay Evaluation.** C.S. Jennings* and A. Witcher, Tennessee State University, McMinnville, TN (7)

†**Hayfield Sward Response to Application Timing of Auxin Herbicides with and without Pendimethalin.** A.P. Lassiter*, K.W. Bamber, and M.L. Flessner, Virginia Tech, Blacksburg, VA (8)

†**Evaluating Weed Control and Crop Response to Preemergence Herbicide Options in Tignnut (*Cyperus esculentus*).** L. Black*, B.L. Carr, A. Ayeni, and T.E. Besançon, Rutgers University, New Brunswick, NJ (9)

†**Common Ragweed (*Ambrosia artemisiifolia*) Survival and Fecundity After Various Herbicide Treatments and Application Timings.** E.B. Scruggs* and M.L. Flessner, Virginia Tech, Blacksburg, VA (10)

†**Comparison of Nutritional Traits of Tomato Cultivars.** P. Kanabar*, V.R. Long, C. Ling, L. Herbst, X. Zhu, M. Langston, M. Shimizu, and A.E. Kleintop, Delaware Valley University, Doylestown, PA (11)

†**Establishing a Core Collection of *Corylus americana* from Wild Germplasm for Hazelnut Breeding and Pollenizer Efforts.** A. Mayberry*, J. Capik, and T.J. Molnar, Rutgers University, New Brunswick, NJ (12)

†**Tarping Duration and Tillage Treatment Effects on Weed Species Composition and Biomass.** C. Verrill*, M.S. Kifer, N. Rowley, and M.G. Hutton, University of Maine, Orono, ME (13)

†**Impact of Tarping Duration and Tillage Intensity on Beet Stand and Yield.** M.S. Kifer*, C. Verrill, N. Rowley, and M.G. Hutton, Bowdoin College, Brunswick, ME (14)

†**Delineating Precision Agriculture Management Zones Using Satellite imagery, Web Soil Survey, and Machine Learning.** C. Ferhatoglu*, Raleigh, NC (15)

WEDNESDAY MORNING JANUARY 9

Research Poster (Authors Present)

LOCATION: Valley Ballroom
TIME: 7:00 AM - 8:30 AM
CHAIR: Katelyn Venner
BASF
Raleigh, NC
MODERATOR: Katelyn Venner
BASF
Raleigh, NC

***PRESENTER**

GROW: A Science Based Resource Tool for Integrated Weed Management. C.G. Rubione*, K.B. Pittman, S. Mirsky, M.L. Flessner, L. Lazzaro, M.J. VanGessel, and M. Bagavathiannan, University of Delaware, Georgetown, DE (16)

Establishing a Weed Identification Network in New York: Improving Early Detection in an Era of Rapid Weed Range Expansion. C. Marschner* and A. DiTommaso, Cornell University, Ithaca, NY, NY (17)

Soil Health After 25 Years of Vegetable, Cover Crop, and Leaf Mulching Rotations. M.L. Infante-Casella*, Rutgers NJAES Cooperative Extension, Clarksboro, NJ (18)

Exploring the Link Between the Soil Microbial Community and Differential Weed Species Response to High Carbon Soil Amendments. M.A. Gannett*, A. DiTommaso, and J. Kao-Kniffin, Cornell University, Ithaca, NY (19)

Tracking Potential Human Pathogens in Organic Vegetable Systems After Pre-Plant Manure Application. N. Rowley*, M. Hutchinson, J. Lilly, A. Pires, T. De Melo Ramos, J. Stover, M. Jay-Russel, P. Pagliari, P. Millner, and F. Hashem, University of Maine Cooperative Extension, Monmouth, ME (20)

High Tunnel Colored Bell Pepper Variety Evaluations in SE Pennsylvania. T. Elkner*, Penn State Extension, Lancaster, PA (21)

Assessment of the Effect of Rootstock on Bitterpit Incidence in Mature 'Honeycrisp' Apples Grown in New Jersey. M. Muehlbauer*, R. Magron, and W. Cowgill, Rutgers University, New Brunswick, NJ (22)

Use of Drone Imaging for Assessing Weed Control and Disease Pressure in Highbush Blueberry. M.G. Mars, D.C. Nuhn, B.L. Carr*, T.E. Besançon, and P.V. Oudemans, Rutgers University, Chatsworth, NJ (23)

Cranberry Response to Rate and Application Timing with Flumioxazin and Sulfentrazone. B.L. Carr* and T.E. Besançon, Rutgers University, CHATSWORTH, NJ (24)

Control of Bittercress and Oxalis with Preemergence Herbicides Over Time. J. Altland*, USDA-ARS, Wooster, OH (25)

Preemergence Herbicide Safety to *Sedum rupestre* and *Sedum acre*. C. Harlow* and J. Neal, North Carolina State University, Raleigh, NC (26)

How will Extended Droughts Affect Burcucumber (*Sicyos angulatus*) Competition in Silage Corn in New York? A. DiTommaso*, K.M. Averill, S.H. Morris, and M.C. Hunter, Cornell University, Ithaca, NY (27)

WSSA Advocates for Weed Controls that Protect Soybean Export Value. C.M. Moseley*, L. Van Wychen, H. Curlett, J. Schroeder, P.D. Laird, and S.P. Conley, Syngenta, Greensboro, NC (28)

Japanese stiltgrass (*Microstegium vimineum*) Management in a Pasture: Using a GDD Model to Apply Pendimethalin. R.S. Chandran*, D. Shipman, and B.M. Loyd, West Virginia University, Morgantown, WV (29)

Role of N-Fertilization and Herbicides in Integrated Management of Mugwort (*Artemisia vulgaris* L.) in a Cool-Season Grass Pasture. J.S. Aulakh*, The Connecticut Agricultural Experiment Station, Windsor, CT (30)

WEDNESDAY MORNING JANUARY 9

Student Contest Oral Presentations

LOCATION: Salon CD
TIME: 8:45 AM - 11:45 AM
CHAIR: Shawn Askew
Virginia Tech
Blacksburg, VA
MODERATOR: Shawn Askew
Virginia Tech
Blacksburg, VA

***SPEAKER † STUDENT CONTEST**

- 8:45 †Understanding the Interaction of Crop Management System and Crop Identity on Biologically-mediated Plant-soil Feedbacks.** U.D. Menalled*, T. Seipel, and F.D. Menalled, Cornell University, Ithaca, NY (1)
- 9:00 †Interaction of Organic Herbicides and Cover Crops on Weed Suppression and Insect Dynamics in No Till Systems.** D.G. Lewis*, M.A. Cutulle, R. Schmidt-Jeffris, C. Blubaugh, T. Campbell, and J. Coffey, Clemson University, Clemson, SC (2)
- 9:15 †Implications of a Biphasic Model to Predict Wild Radish (*Raphanus raphanistrum* L.) Emergence.** T.A. Reinhardt Piskackova*, C. Reburg-Horton, R.J. Richardson, K.M. Jennings, and R.G. Leon, North Carolina State University, Raleigh, NC (3)
- 9:30 †Temperatures During and After Treatment Affect Zoysiagrass Response to Glyphosate and Glufosinate.** J.M. Craft*, S.D. Askew, and J. Brewer, Virginia Tech, Blacksburg, VA (4)
- 9:45 †Annual Bluegrass Weevil (*Listronotus maculicollis*) and Paclobutrazol for Annual Bluegrass (*Poa annua*) Control in Fairways.** K. Diehl*, M. Elmore, A. Koppenhöfer, J. Murphy, D.P. Tuck, and O. Kostromytska, Rutgers University, New Brunswick, NJ (5)
- 10:00 Break**
- 10:15 †Effect of Planting Dates on Soybean Response to Dicamba.** M.A. Granadino*, W.J. Everman, J.T. Sanders, D.J. Contreras,

and E.A. Jones, North Carolina State University, Raleigh, NC (6)

- 10:30** †**Triclopyr Amine Basal Bark Treatments Can Replace Oil-based Stem Treatments in Aquatic Settings.** E. Weaver* and A. Gover, Penn State University, University Park, PA (7)
- 10:45** †**Critical Period of Weed Control for Grass Species in Grain Sorghum.** D.J. Contreras* and W.J. Everman, North Carolina State University, Raleigh, NC (8)
- 11:00** †**Determining Sorgoleone Efficacy on Select Wheat (*Triticum aestivum* ssp.) Cultivars and Weed Species.** E.A. Jones*, M. Bansel, W.J. Everman, J.T. Sanders, D.J. Contreras, and M.A. Granadino, North Carolina State University, Raleigh, NC (9)
- 11:15** †**Weed Control Response and Crop Tolerance to Fluridone in Pumpkin.** F. DAMico*, B.L. Carr, and T.E. Besançon, University of Delaware, Georgetown, DE (10)
- 11:30** †**Evaluation of Chelated Fe and other Safeners for use in Broccoli.** M.A. Cutulle, G.A. Caputo*, M. Farnham, B. Ward, T. Campbell, and D. Couillard, Clemson University, Charleston, SC (11)

WEDNESDAY AFTERNOON JANUARY 9

Student Contest Oral Presentations

LOCATION: Salon CD
TIME: 1:15 AM - 2:45 AM
CHAIR: Shawn Askew
Virginia Tech

Blacksburg, VA
MODERATOR: Shawn Askew
Virginia Tech
Blacksburg, VA

***SPEAKER † STUDENT CONTEST**

- 1:15 †Comparison of Nutritional Traits of Hot and Sweet Pepper Cultivars.** V.R. Long*, P. Kanabar, C. Ling, L. Herbst, X. Zhu, M. Langston, M. Shimizu, and A.E. Kleintop, Delaware Valley University, Doylestown, PA (12)
- 1:30 †Improving the Quality of the Pineapple (*Ananas comosus* var. *comosus*) Reference Genome.** A.G. Yow*, North Carolina State University, Raleigh, NC (13)
- 1:45 †Using Simple Sequence Repeat (SSR) Markers and Open Pollinated Seedlings for Quantitative Trait Loci (QTL) Mapping Population Development in *Cornus florida*.** E. Pfarr*, J. Vaiciunas, C. Kubik, J. Honig, J. Capik, and T.J. Molnar, Rutgers University, New Brunswick, NJ (14)
- 2:00 †Effects of Harvest Date on Chemical Quality Metrics of Hops.** M. Black*, Rutgers University, New Brunswick, NJ (15)
- 2:15 †Using Stable Water Isotopes to Characterize Pathways of Subsurface P Loss in a Ditch-drained Field.** L. Mosesso*, A. Shober, A. Collick, T. Buda, and C. Kennedy, University of Delaware, Newark, DE (16)
- 2:30 †Comparing Annual and Perennial Small Grain Cropping Systems: Agronomy, Economics, and Soil Health.** E.P. Law*, S. Wayman, C. Pelzer, M.R. Ryan, and A. DiTommaso, Cornell University, Ithaca, NY (17)
- 2:45 Break**

WEDNESDAY AFTERNOON JANUARY 9

Symposium: The Art and Science of Science Communication.

LOCATION: Hunt Ballroom
TIME: 3:00 PM - 5:00 PM
MODERATOR: Art Gover

3:00 Introductory Remarks, A. Gover

The symposium is in two parts, an Oxford-style debate followed by a panel session analyzing the rhetoric and content of the debate. The debate consists of a pre-debate audience yes/no vote on the resolution; opening statements, open questions from the audience, and closing statement from the debate panels; concluded with a post-debate audience vote. The side that changes their vote most positively wins; the following panel will analyze the rhetorical approaches and execution of the debaters

3:05 **Oxford-style Debate** on the resolution:
“Weed Seed Bank Management is More Effective Than Critical Period Management in Non-herbicide Production Systems”

Debate Panelists For:

Eric Jones, North Carolina State
Eugene Law, Cornell

Debate Panelists Against:

John Brewer, Virginia Tech
Uriel Menalled, Cornell

3:55 Break

4:10 **Panel – How Well was the Science Communicated?**

Margaret Michels

Assistant Head and Teaching Professor
Department of Communication Arts and Sciences, Penn State University

Dustin Greenwalt

Assistant Teaching Professor
Department of Communications Arts and Sciences, Penn State University

THURSDAY MORNING JANUARY 10

Fruit, Vegetable and Herb Crops

LOCATION: Salon CD
TIME: 8:15 AM - 12:00 PM
CHAIR: Ramon Arancibia
Virginia Tech
Painter, VA
MODERATOR: Ramon Arancibia
Virginia Tech
Painter, VA

***SPEAKER**

- 8:15 Pre-transplant Herbicide Application and Cultivation to Manage Weeds in Eastern Broccoli Production.** M.A. Cutulle*, H.T. Campbell, B. Ward, M. Farnham, and D. Couillard, Clemson University, Charleston, SC (18)
- 8:30 Reusable Opaque Plastic Tarps Suppress Weeds and Increase Yields in Organic Reduced Tillage Systems for Beets.** H.R. Rylander*, M.G. Hutton, N. Rowley, and A. Rangarajan, Cornell University, Ithaca, NY (19)
- 8:45 Use of Particle Film Technologies for Stress Management in Vegetable Crops.** G.C. Johnson*, University of Delaware, Georgetown, DE (20)
- 9:00 Assessing Cover Crop Impact on Weed Emergence and Vegetative Growth in Cabbage Production.** B.L. Carr*, T.E. Besançon, and J. Heckman, Rutgers University, Chatsworth, NJ (21)
- 9:15 Overlapping S-metolachlor Treatments in Lima Bean.** K.M. Vollmer*, M.J. VanGessel, Q.R. Johnson, and B.A. Scott, University of Delaware, Georgetown, DE (22)

- 9:30 Snap Bean Variety Trials to Assess Heat Tolerance.** E.G. Ernest*, University of Delaware, Georgetown, DE (23)
- 9:45 Development of a Hydroponics Assay to Screen for S-metolachlor tolerance in Sweet Potato.** M.A. Cutulle, H.T. Campbell*, P. Wadl, and L. Lees, Clemson University, Charleston, SC (24)
- 10:00 Break**
- 10:15 Root System Architectural Traits under Phosphorus Deficiency in Sweetpotato: Interpreting Efficiency, Utilization and Physiological Performance.** L. Duque*, Penn State University, University Park, PA (25)
- 10:30 Laser Scarecrow Technology for Prevention of Bird Damage.** R.N. Brown*, D.H. Brown, and R. Gheshm, University of Rhode Island, Kingston, RI (26)
- 10:45 Moss Impacts and Control Efforts in Cranberry.** K.M. Ghantous* and H.A. Sandler, UMass Cranberry Station, East Wareham, MA (27)
- 11:00 How Trends and Events Shape the Acquisition of New Management Tools for Cranberries.** H.A. Sandler* and K.M. Ghantous, UMass Cranberry Station, East Wareham, MA (28)
- 11:15 Effect of Environmental Factors on Vegetative Growth and Rhizome Production of Carolina Redroot (*Lachnanthes caroliniana*).** B.L. Carr and T.E. Besançon*, Rutgers University, Chatsworth, NJ (29)
- 11:30 Implementing the On Farm Readiness Review in New Jersey: What Do Growers Need to Become Compliant with the FSMA Produce Safety Rule.** M.V. Melendez*, W.L. Kline, and J. Matthews, Rutgers Cooperative Extension, Trenton, NJ (30)
- 11:45 IR-4 Program Update, 2018.** J.J. Baron*, D. Kunkel, R. Batts, and M.J. Arsenovic, Rutgers University, IR-4 Project, Princeton, NJ (31)

THURSDAY MORNING JANUARY 10

Turf & Ornamentals

LOCATION: Salon EF
TIME: 8:45 AM - 11:45 AM
CHAIR: Matthew Elmore
Rutgers University
New Brunswick, NJ
CO-CHAIR: Jatinder Aulakh
The Connecticut
Agricultural Experiment
Station
Windsor, CT
MODERATOR: Matthew Elmore
Rutgers University
New Brunswick, NJ

***SPEAKER**

- 8:45 Sod Removal, Spot Treatment, and Selective Herbicides for Roughstalk Bluegrass Control in Cool-season Turf.** J. Brewer* and S.D. Askew, Virginia Tech, Blacksburg, VA (32)
- 9:00 Green *Kyllinga* (*Kyllinga brevifolia*) Control with Post-emergent Herbicide Treatments in Cool Season Turf.** J.M. Craft*, S.D. Askew, and J. Brewer, Virginia Tech, Blacksburg, VA (33)
- 9:15 False-green *Kyllinga* (*Kyllinga gracillima*) Control with Autumn Herbicide Applications.** M.T. Elmore*, D.P. Tuck, and K. Diehl, Rutgers University, New Brunswick, NJ (34)
- 9:30 Weed Control Options During Four Methods of Zoysiagrass Establishment.** S. Askew* and M. Goatley, Virginia Tech, Blacksburg, VA (35)

- 9:45 Oxadiazon Preemergence Programs for Controlling Goosegrass (*Eleusine indica*) with Putative Resistance to Microtubule-Inhibiting Herbicides in Cool-Season Turfgrass.** D.P. Tuck*, M. T Elmore, S. McDonald, J. T. Brosnan, J. J. Vargas, G. K. Breeden, Rutgers University, New Brunswick, NJ (36)
- 10:00 Break**
- 10:15 Dimethenamid Leaching in Pine Bark versus Field Soil.** J. Derr* and L. Robertson, Virginia Tech, Virginia Beach, VA (37)
- 10:30 Postemergence Options for Managing Horsetail (*Equisetum spp.*).** A. Senesac* and D. Barcel, Cornell Cooperative Extension, Riverhead, NY (38)
- 10:45 Evaluation of Liquid Over-the-Top Herbicide Application for Field Grown Herbaceous Perennial Soon After Planting.** H.M. Mathers*, Mathers Environmental Science Services, LLC, Gahanna, OH (39)
- 11:00 Evaluation of Current Herbicides for Phytotoxicity and Efficacy on Five Herbaceous Perennial Species in Containers.** H.M. Mathers*, Mathers Environmental Science Services, LLC, Gahanna, OH (40)
- 11:15 Controlling Glyphosate-tolerant *Conyza* in NC Fraser Fir Production.** J. Neal*, C. Harlow, and J. Owen, North Carolina State University, Raleigh, NC (41)
- 11:30 Short-term Effects of Basal Stem Glyphosate Applications to Nursery Trees.** A. Witcher*, Tennessee State University, McMinnville, TN (42)

THURSDAY MORNING JANUARY 10

Agronomic Crops

LOCATION: Salon A
TIME: 8:30 AM - 12:00 PM
CHAIR: Larissa Smith
Syngenta
King Ferry, NY
MODERATOR: Larissa Smith
Syngenta
King Ferry, NY

***SPEAKER**

- 8:30 Extension Efforts of GROW (Getting Rid of Weeds): A National Team Researching and Driving Adoption of Integrated Weed Management.** M.L. Flessner*, M.J. VanGessel, K.B. Pittman, C. Rubione, S. Mirsky, and M. Bagavathiannan, Virginia Tech, Blacksburg, VA (43)
- 8:45 Assessing Weed Emergence Models in the Northeast.** C. Marschner*, M.J. VanGessel, A. DeGaetano, and A. DiTommaso, Cornell University, Ithaca, NY, NY (44)
- 9:00 Effect of Cover Crops on Potato Yield and Quality.** J.M. Jemison*, University of Maine, Orono, ME (45)
- 9:15 What's New.** S.A. Mathew*, D. Porter, D. Black, S. Cully, and G. Letendre, Syngenta, Germantown, MD (46)
- 9:30 Palmer Amaranth Control in Alfalfa/Grass Mix: Any Herbicide Options? D.** Lingenfelter*, Penn State, University Park, PA (47)
- 9:45 Evaluating Management Tradeoffs in Full- and No-Tillage Organic Soybean Production.** J.M. Wallace*, R. Champagne, and W.S. Curran, Pennsylvania State University, University Park, PA (48)
- 10:00 Break**

- 10:15 Palmer Amaranth Control in Grain Sorghum Or Soybeans: Does It Matter?**
M.J. VanGessel*, Q.R. Johnson, and B.A. Scott, University of Delaware, Georgetown, DE (49)
- 10:30 Evaluation of Population and Growth Rate of Palmer Amaranth following Various Pre-emergent Residual Herbicides in Soybeans.** B. Beale*, University of Maryland, Leonardtown, MD (50)
- 10:45 Tavium™ Plus VaporGrip® Technology- A Tool for Weed Management in Conventional and No-Till Dicamba Tolerant Soybeans.** L. Smith*, A. Franssen, B. Miller, T. Beckett, and D. Porter, Syngenta, King Ferry, NY (51)
- 11:00 Horseweed (*Conyza canadensis*) Control with Pre-Plant Herbicides after Mechanical Injury from Small Grain Harvest.** M.L. Flessner* and K.B. Pittman, Virginia Tech, Blacksburg, VA (52)
- 11:15 Gramoxone Magnum: A New Option for Burndown and Residual Weed Control.** E. Hitchner*, D. Bowers, R. Lins, A. Moses, and M. Saini, Syngenta, 08098, NJ (53)
- 11:30 Harness® MAX Herbicide: A Flexible Product for Weed Management in Corn.** R.A. Recker*, D.J. Mayonado, R.F. Montgomery, C.M. Mayo, and G.G. Camargo, Bayer Crop Sciences, St. Louis, MO (54)

THURSDAY AFTERNOON JANUARY 10

Turf & Ornamentals

LOCATION: Salon EF
TIME: 1:15 AM - 2:45 AM
CHAIR: Matthew Elmore
Rutgers University
New Brunswick, NJ
CO-CHAIR: Jatinder Aulakh
The Connecticut
Agricultural Experiment
Station
Windsor, CT
MODERATOR: Matthew Elmore
Rutgers University
New Brunswick, NJ

***SPEAKER**

- 1:15 Banded and In-Furrow Activated Charcoal Improves Wildflower Tolerance to Preemergent Herbicides.** S. Askew* and M. Shock, Virginia Tech, Blacksburg, VA (55)
- 1:30 Update on 2018 Weed Science Research in the IR-4 Environmental Horticulture Program.** C. Palmer* and E. Veal, IR-4 Project, Princeton, NJ (56)
- 1:45 Living Acres: A Biodiversity Research Initiative That is Helping Landowners Create a Space for Monarch Butterflies.** K.E. Kalmowitz* and H. Coble, BASF Corp, Raleigh, NC (57)
- 2:00 Growth and Quality of Selected Ornamentals Irrigated with Graywater Made with Conventional and Alternative Laundry Products.** R.I. Cabrera*, Rutgers University, Bridgeton, NJ (58)
- 2:15 Utilizing Sticky Soil to Establish Moss on Rock Surfaces.** M. Taylor*, A. Clayton, and R. Date, Longwood Gardens, Kennett square, PA (59)
- 2:30 Effects of Roadway Contaminants in Green Infrastructure Plantings Along Philadelphia's I-95 Corridor.** S.W. Eisenman*, J.S. Caplan, A. Behbahani, A.

Chattin, S. Chattin, and E.R. McKenzie,
Temple University, Ambler, PA (60)

2:45 **Break**

THURSDAY AFTERNOON JANUARY 10

Vegetation Management and Restoration

LOCATION: Salon CD
TIME: 1:15 AM - 5:00 AM
CHAIR: Lane Heimer
 Maryland Department of
 Agriculture
 Annapolis, MD
CO-CHAIR: Arthur Gover
 Penn State University
 University Park, PA
MODERATOR: Lane Heimer
 Maryland Department of
 Agriculture
 Annapolis, MD

***SPEAKER**

1:15 Invasive Vascular Plant Species at J.N. Ding Darling National Wildlife Refuge, Sanibel Island, Florida . R. Stalter* and E. Lamont, St Johns University, Queens, NY (61)

1:30 MDOT SHA Landscape Management Guide - A Performance Based Guide for Managing Green Assets Along Maryland Highways. J.K. Krouse*, MDOT - SHA, Baltimore, MD (62)

1:45 Cooperative Weed Control Programs and Their Impact on Noxious and Invasive Weeds in Maryland. L.K. Heimer*, Maryland Department of Agriculture, Annapolis, MD (63)

- 2:00** **What is the Current Known Status of Wavyleaf Basketgrass (*Oplismenus undulatifolius*) in Pennsylvania?** A. Gover*, E.B. Euker, and E.B. DePaulis, Penn State University, University Park, PA (64)
- 2:15** **Timing Pre-emergent Control of Japanese stiltgrass (*Microstegium vimineum*): Field Trials for Efficacy of Indaziflam and Pendimethalin.** B.F. McDonnell*, National Park Service, Bushkill, PA (65)
- 2:30** **Is Indaziflam A Viable Alternative To Existing Herbicides for Japanese Stiltgrass (*Microstegium vimineum*) Management?** A. Gover*, A.C. Causey, and M.L. Fuchs, Penn State University, University Park, PA (66)
- 2:45** **Break**

THURSDAY AFTERNOON JANUARY 10

Symposium: *The Benefits and Challenges of Participatory Research.*

LOCATION: Salon EF
TIME: 3:00 PM - 5:00 PM
MODERATOR: Theresa A. Reinhardt-
Piskackova

3:00 Introductory Remarks, Theresa A.
Reinhardt-Piskackova

3:05 Panel Presentation:

Nicholas Polanin, Chair of Department of
Agriculture and Natural Resources and
County Agent II Rutgers Cooperative
Extension of Somerset County.

Meredith Melendez, Agricultural Agent III
Rutgers Cooperative Extension of Mercer
County.

Alison Cawood, Citizen Science
Coordinator at Smithsonian Environmental
Research Center.

Steven Mirsky, Sustainable Agricultural
Systems Laboratory Research Ecologist at
Beltsville (tentative)

4:00 Discussion

THURSDAY AFTERNOON JANUARY 10

Workshop: *Weed Management in Pollinator Plantings*

LOCATION: Salon CD
TIME: 3:00 PM - 5:00 PM
MODERATOR: Art Gover

3:00 Introductory Remarks, Art Gover, Moderator

3:05 **Critical Elements of Pollinator Plantings.**
Harland Patch, Assistant Research Professor,
Penn State University

3:25 **NRCS Programs and Establishment
Guidance.** Steve Strano, State Biologist,
USDA-NRCS, Maryland Critical Elements
of Pollinator

3:40 **Preliminary Results and
Recommendations for Pollinator Habitat
Establishment on Roadsides.** Lisa Kuder,
Graduate Research Assistant, University of
Maryland

3:55 **Plan ‘A’ Didn’t Work – Let’s Try it
Again: Learning Pollinator Habitat
Establishment the Hard Way.** Brian
McDonnell, Team Leader, NE Region
Exotic Plant Management Team, National
Park Service, Bushkill, PA

4:05 **A Very Brief Overview of Selective
Herbicide Approaches for Pollinator
Habitat Establishment and Maintenance.**
Art Gover, Wildland Weed Management
Program, Penn State University

4:20 **Panel Discussion:**
Harland Patch, Penn State
Steve Strano, USDA-NRCS, Maryland
Lisa Kuder, University of Maryland
Art Gover, Penn State
Lane Heimer, MD Dept. of Agriculture
John Krouse, MD State Highway Authority

THURSDAY AFTERNOON JANUARY 10

**5:00 PM NEWSS Business Meeting –
Valley Ballroom**

**5:00 PM NE ASA/CSSA/SSSA Business
Meeting – SALON CD**

**6:45 PM NEPPSC Organizing Committee
SALON CD**

FRIDAY MORNING JANUARY 12

**8:30 AM NEWSS Board Meeting –
Salon A**

**See you in Philadelphia
in 2020!!!***

*** tentative location**