

NEPPSC

NORTHEASTERN PLANT, PEST AND SOILS CONFERENCE



THE NORTHEASTERN PLANT, PEST, AND SOILS CONFERENCE

2017

A joint meeting of:



Philadelphia, PA; January 3-6, 2017

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:

<http://www.newss.org>

Meeting Location

Sheraton Society Hill Hotel
One Dock Street
Philadelphia, PA 19106
(215) 238-6000

<http://www.sheraton.com/SocietyHill>

Directions and Transportation

From Philadelphia International Airport (South)

Take Interstate 95 North to Exit 20 (Columbus Boulevard). Turn left at the traffic light onto Columbus. Turn left at the sixth light, for Dock Street. Turn right at the stop sign. The hotel is on the right-hand side.

From East

Take Ben Franklin Bridge from Camden, stay in the right lane. Take the first right off of bridge to Sixth Street then follow Sixth Street to Market Street and turn left. Follow Market to Second Street and turn right. Follow Second Street to Dock Street and the hotel is on the left.

From North

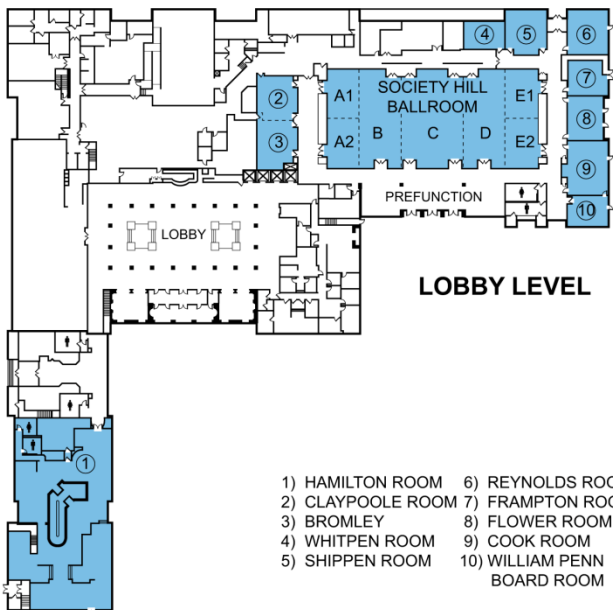
Take Interstate 95 South to Exit 20 (Columbus Boulevard). At the bottom of the ramp, turn left onto Columbus Boulevard. Follow for 3 traffic lights to Dock Street and turn left. Continue to a dead end and turn right. The hotel will be on the right.

From West

Take Pennsylvania Turnpike to 76 East (Exit 326 - Valley Forge). Follow 76 East to 676 East (Exit 344 - Central Philadelphia). Continue on 676 East to Interstate 95 South. Take I-95 South to Penn's Landing (Exit 20). At the bottom of the ramp, turn left onto Columbus Boulevard. Follow to Dock Street and turn left. Continue to the dead end and turn right. The hotel is on the right-hand side.

Sheraton Society Hill Hotel

Floor Plan



SOCIETY PRESIDENTS

Shawn Askew, NEWSS President

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NEPPSC PROGRAM COMMITTEE

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COMMITTEE MEETINGS

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

CONDENSED PROGRAM

MONDAY, JANUARY 2, 2017

- | | |
|-----------------------|--|
| 5:00 p.m. - 6:00 p.m. | NEPPSC Organizing
Committee Meeting (Cook) |
| 6:00 p.m. - 6:45 p.m. | NEPPSC Program
Committee & Session
Chairs Meeting (Cook) |

TUESDAY, JANUARY 3, 2017

- | | |
|------------------------|--|
| 10:30 a.m. - 4:00 p.m. | Registration (Ballroom
Foyer) |
| 9:00 a.m. – 5:30 p.m. | Northeastern IPM
Sessions: PD) Workshop &
NEERA-1004 Meeting
(Reynolds) |
| 1:00 p.m. - 4:00 p.m. | Industry and Extension
Roundtable Discussions

Agronomic Crops & Soils
(Flower)

Fruit, Veg., and Tree Crops
(Cook)

Turf & Ornamental
(Bromley/Claypoole) |
| 4:45 p.m. - 5:45 p.m. | NEPPSC Opening
Ceremony (Ballroom AB) |
| 6:00 p.m. - 8:00 p.m. | NEPPSC Social Mixer
(Ballroom DE) |
| 8:00 p.m. - 10:00 p.m. | Poster Setup (Ballroom C) |
| 8:00 p.m. - 10:00 p.m. | Commercial Display Setup
(Ballroom C) |

WEDNESDAY, JANUARY 4, 2017

- | | |
|------------------------|---|
| 7:00 a.m. - 8:45 a.m. | NEPPSC Posters – authors present (including student posters) (Ballroom C) (authors present) |
| 7:30 a.m. – 4:00 p.m. | Registration (Ballroom Foyer) |
| 9:00 a.m. - 11:45 a.m. | Student Oral Presentations:
Part one [NEWSS]
(Ballroom AB)

Symposium:
Communicating with Non-
Science Audiences
(Ballroom AB) |
| 5:30 p.m. 6:30 p.m. | NEWSS Awards
(Bromley/Claypoole) |
| 5:30 p.m. – 6:15 p.m. | NE-ASHA business meeting (Flower) |
| 9:00 p.m. – 11:00 p.m. | Industry Dessert Social
(Ballroom CDE) |

THURSDAY, JANUARY 5, 2017

- | | |
|------------------------|--|
| 7:00 a.m. – 8:45 a.m. | NEWSS Past Presidents' Breakfast (Taste 2) |
| 7:30 a.m. - 4:00 p.m. | Registration (Ballroom Foyer) |
| 8:30 a.m. - 11:45 a.m. | Student Oral Presentations:
Part 2 [all societies]
(Ballroom AB) |
| 1:00 p.m. - 5:55 p.m. | Agronomic Crops
(Ballroom AB) |
| 1:00 p.m. - 6:10 p.m. | Turf and Ornamentals
(Bromley/Claypoole) |
| 1:00 p.m. - 4:55 p.m. | Fruit, Vegetable and Herb Crops (Flower) |

5:15 p.m. - 6:30 p.m.	NEWSS business meeting
5:15 p.m. - 6:30 p.m.	NE-ASA/CSSA/SSSA business meeting
8:00 p.m. - 10:00 p.m.	Poster removal (Ballroom C)

FRIDAY JANUARY 6, 2017

9:00 a.m. - 11:00 p.m.	Vegetation Management & Restoration (Flower)
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!! IMPORTANT !!

**Deadline for Uploading
Presentations**

**All presentations* must be uploaded by
6:00 PM on the evening before the
appointed presentation time**

@

<http://www.wssaabstracts.com>

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

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

PROGRAM

TUESDAY MORNING JANUARY 3

Northeastern IPM Sessions:

I. Project Director (PD) Workshop

II. NEERA-1004 Meeting

LOCATION: Reynolds
TIME: 9:00 AM - 5:30 PM
MODERATOR: Steve Young
NE IPM Center

9:00 – 9:05 Steve Young, Northeastern IPM Center.
Director

9:05-9:15 Herb Bolton, USDA-NIFA, National
Program Leader, Crop Protection Pest
Management Program – Applied Research and
Development Program (ARDP) and Regional
Coordination Program

9:15-9:30 Erika Salaau-Rojas, University of
Massachusetts “Challenges and Opportunities in
Cranberry Fruit Rot Management” 2015 NEIPMC
Grant.

9:30-9:45 Hilary Sandler, University of Massachusetts
“Multi-level Extension Delivery to Support IPM
for MA Vegetable and Fruit Growers-Year 2”
2014 EIPM Grant

9:45-10:00 Maria Gorgo, (Ed Rajotte PD), Penn State
University, “Hispanic IPM programming in the
mushroom industry” 2014 NEIPMC Grant

10:00-10:15 Dion Lerman and/or Michelle
Niedermeier (Ed Rajotte PD, Penn State
University, “Urban IPM in Philadelphia” 2014
NEIPMC Grant

10:15-10:30 Changlu Wang, Rutgers University
“Reducing pest infestations and insecticide
residues in low income housing” 2015 ARDP
Grant

10:30-10:45 Break

10:45-11:00 Sarah Pethybridge, Cornell University,
“Towards a durable management strategy for
Cercospora leaf spot in table beet” 2015 ARDP
Grant

11:00-11:15 Bill Fry, Cornell University “Information-
based ecological management of late blight,” 2015
ARDP Grant

11:15-11:30 Yolanda Chen, University of Vermont,
“Examining barriers to a pheromone-mating
disruption system for the invasive swede midge,”
2014 ARDP Grant.

11:30-11:45 John M. Jemison, Jr., R. Kersbergen and
C. Majewski, University of Maine and University
of New Hampshire “Early Adopters to No-Till
Corn Production: key qualitative and quantitative
findings,” 2015 NEIPMC Grant

11:45-12:00 Ann Hazelrigg, University of Vermont,
2014 EIPM Grant

12:00 -12:15 Jenny Kao-Kniffin, Cornell University,
"Making the Grass Greener on the Other Side:
Repetitive Overseeding of Playing Fields," 2014
ARDP Grant

12:15-12:30 Jennifer Grant, NYS IPM “NYS IPM use
of CPPM-EIP funds,” 2014 EIPM Grant

12:30–1:15 Buffet lunch
compliments of the Northeastern IPM Center

II. NEERA-1604 Main Meeting

NEERA-1604 meeting point of contact: Ed
Rajotte, 814 863-4641, egrajotte@psu.edu

1:15-5:30pm TBD

TUESDAY AFTERNOON JANUARY 3

Industry Extension Roundtable Discussions

1:00 PM - 4:00 PM

Informal discussion on topics that attendees select
Rooms will not have AV available

Agronomic Crops and Soils (Flower)

Turf and Ornamentals (Cook)

Fruit, Vegetable and Herb Crops
(Bromley/Claypoole)

WEDNESDAY MORNING JANUARY 4

Poster (Authors Present)

LOCATION: Ballroom C

TIME: 7:00 AM - 8:45 AM

***PRESENTER † STUDENT POSTER
CONTEST**

Wheat variety tolerance to metribuzin. M.L. Flessner*
and W.E. Thomason, Virginia Tech, Blacksburg, VA
(1)

Field trials to evaluate low-risk pesticides for adult
Japanese beetles, *Popillia japonica* Newman, in
commercial nurseries. S.A. Gill*, B.A. Kunkel, C.F.
Schuster, and S. Klick, University of Maryland
Extension, Ellicott City, MD (2)

Comparing cultures for new cultivar releases of Rutgers
Scarlet lettuces. W.J. Sciarappa* and W. Kline, Rutgers
University, Freehold, NJ (3)

Cold injury in New Jersey vineyards following the
2013-14 and 2014-15 winters – a survey. H. Gohil* and
D. Ward, Rutgers University, Clayton, NJ (4)

Protein and chlorophyll content effect on cranberry photosynthetic capacity. I.M. McCahill and P.G. Jeranyama*, University of Massachusetts Amherst, East Wareham, MA (5)

An update on sources of resistance to eastern filbert blight disease of hazelnuts in New Jersey. J. Capik* and T.J. Molnar, Rutgers University, New Brunswick, NJ (6)

Foliar herbicide application can be effective in late fall. J.S. Caplan*, R.D. Whitehead, A.E. Gover, and G.C. Grabosky, Rutgers University, New Brunswick, NJ (7)

Pennsylvania update on allium leafminer, a new invasive pest. T.E. Elkner*, S. Fleischer, and D. Roberts, Penn State Extension, Lancaster, PA (8)

Water temperature and exposure time for killing weed seed on recycled plastic containers. J. Altland*, USDA-ARS, Wooster, OH (9)

2,4-D resistance and tolerance in *Amaranthus palmeri*. W.A. Peer*, University of Maryland, College Park, MD (10)

Effects of phosphate on glyphosate uptake, translocation and transport in eucalypt: Implications for nutrient management. W.A. Peer*, University of Maryland, College Park, MD (11)

The virtual field trip: production tips. J.S. Carleo and N. Polanin*, Rutgers NJAES Cooperative Extension, Bridgewater, NJ (12)

Manage my woods? The Rutgers Woodland Stewards Program. N. Polanin*, Rutgers NJAES Cooperative Extension, Bridgewater, NJ (13)

Early wheat harvest and double-crop soybean yield response to planting date in Pennsylvania. G. Stefani Fae*, G.W. Roth, D. Voight, D. Holshouser, and A. Collins, Penn State University, State College, PA (14)

Tolerance of container-grown dogwood and Virginia sweetspire to SP-1770 herbicide. J.S. Aulakh*, The Connecticut Agricultural Experiment Station, Windsor, CT (15)

Exploring the use of AgroStatR for field map generation and data analysis. A.C. Kirt*, The Pennsylvania State University, State College, PA (16)

Effect of pre-plant nitrogen (N) rates on wheat yield in corn/sorghum-wheat rotation. M.K. Bansal* and W.J. Everman, North Carolina State University, Raleigh, NC (17)

Winter annual weed occurrence in small grains in Delaware. B. Scott* and M. VanGessel, University of Delaware, Georgetown, DE (18)

Overview of the University of Tennessee Weed Diagnostics Center. J.T. Brosnan*, J.J. Vargas, G.K. Breeden, R.N. Trigiano, and S.L. Boggess, University of Tennessee, Knoxville, TN (19)

Efficacy of five preemergence herbicides as influenced by five different seeding intervals before and after application. C. Marble*, C. Stewart, D. Saha, and A. Chandler, Assistant Professor, Mid-Florida Research and Education Center, University of Florida, Apopka, FL (20)

Use of EH1587 for postemergence broadleaf weed control in turf. G.M. Henry*, K.A. Tucker, J.T. Brosnan, G.K. Breeden, and A. Estes, University of Georgia, Athens, GA (21)

Preemergence herbicides in a Palmer amaranth (*Amaranthus palmeri*) management system for cotton. M.C. Askew*, C.W. Cahoon, and A.C. York, Virginia Tech, Blacksburg, VA (22)

Japanese stiltgrass (*Microstegium vimineum*) control in pastures. M.L. Flessner and S.C. Beam*, Virginia Tech, Blacksburg, VA (23)

Effects of sub-lethal dicamba rates applied to soybean at the reproductive growth stage. A.M. Growe* and W.J. Everman, NCSU Crop Science, Raleigh, NC (24)

The IR-4 Project: Update on weed control projects (food uses). M. Arsenovic*, J. Baron, D. Kunkel, and R. Batts, IR-4 Project, Princeton, NJ (25)

Pesticide Application Manager, a program for applicators. B.F. McDonnell*, National Park Service, Bushkill, PA (26)

Germination timing of two hairy vetch varieties in Virginia and implications for weediness. K.B. Pittman*, M.L. Flessner, C.W. Cahoon, J.N. Barney, and T. Hines, Virginia Tech, Blacksburg, VA (27)

Does the belowground fraction of cover crop cocktails exhibit transgressive overyielding? J. Amsili*, Penn State University, State College, PA (28)

Bicyclopyrone: Major league weed control in minor league crops. L. Smith*, C. Dunne, G. Vail, D. Bruns, T. Beckett, and S. Howard, Syngenta, King Ferry, NY (29)

Using rainout shelters to test drought effects on ivyleaf morningglory competition in corn. A. DiTommaso*, K.M. Averill, S.H. Morris, R.J. Richtmyer III, and M.C. Hunter, Cornell University, Ithaca, NY (30)

Comparisons of single versus split postemergence mesotrione applications for spreading dogbane control in wild blueberry fields. D.E. Yarborough and J. D'Appollonio*, University of Maine, Orono, ME (31)

Improving granular herbicide application uniformity in container nurseries. J. Neal* and A. Barker, North Carolina State University, Raleigh, NC (32)

Rattlesnakes-yes, trees-no: quaking aspen suppression in the Jennings Prairie with prescribed fire, mowing, and fall herbicide Applications. A. Gover* and W. Taylor, Penn State University, University Park, PA (33)

†Weed suppression by cover crops mixtures using intra- and interspecific diversity. E. Reiss*, L.E. Drinkwater, and M. Ryan, Cornell University, Ithaca, NY (34)

†Confirmation of glyphosate, ALS- and PPO-resistant common ragweed in North Carolina. B. Schrage* and W.J. Everman, North Carolina State University, Raleigh, NC (35)

†Seed shattering of six prevalent weed species in North Carolina. T.A. Reinhardt*, D. Copeland, and W.J. Everman, North Carolina State University, Raleigh, NC (36)

†Remote Sensing Applications for Palmer Amaranth Detection. J.T. Sanders* and W.J. Everman, North Carolina State University, Raleigh, NC (37)

†Horseweed (*Conyza canadensis*) control with burndown herbicides after winter wheat harvest. S.C. Haring*, M.L. Flessner, and K.B. Pittman, Virginia Tech, Blacksburg, VA (38)

†Nutrient limitations of algae growth in a Delaware estuary. E.M. Loudermilk*, University of Delaware, Newark, DE (39)

†Quantification of salvage applications when managing multiple-resistant Palmer amaranth in Liberty-Link soybeans. D. Copeland* and W.J. Everman, North Carolina State University, Raleigh, NC (40)

†Emergence of 6 Grass Species in North Carolina. W.J. Everman and M.T. Schroeder*, North Carolina State University, Raleigh, NC (41)

†Quality assessment of hops (*Humulus lupulus*) grown in New Jersey. M. Muehlbauer*, R. Pyne, E. Dager, D. Giurleo, L. Maimone, J. Grande, and J. Simon, Rutgers University, New Brunswick, NJ (42)

†First-year plant survival in bioswales along Philadelphia's I-95 corridor. A. Mery*, J. Caplan, and S.W. Eisenman, Temple University, Philadelphia, PA (43)

†Benefits and Challenges of Planting Corn and Soybean into Living Cover Crops in Pennsylvania . H.K. Myer*, H.D. Karsten, J. Tooker, W. Curran, and S. Duiker, Penn State University, State College, PA (44)

†Distribution and mobility of trace metal(loid)s within the plant-soil-water nexus at the St. Jones salt marsh. K.A. Northrup* and A.L. Seyfferth, University of Delaware, Newark, DE (45)

†Evaluation of dollar spot control and turf quality in creeping bentgrass from plant protection and plant health products. J. Ujcich* and M. Fidanza, Pennsylvania State University, Reading, PA (46)

†Nitrogen supply and retention in a reduced tillage organic systems experiment. S.A. Isbell*, J.P. Kaye, and A.H. Morris, The Pennsylvania State University, State College, PA (47)

†Phenotypic characterization of wild American hazelnut (*Corylus americana*) germplasm to support future hybrid hazelnut breeding. A. Mayberry*, J. Capik, and T.J. Molnar, Rutgers University, New Brunswick, NJ (48)

†Molecular characterization of strawberry (*Fragaria × ananassa*) genotypes. A. Biswas*, B. Bougouneau, and K. Melmaiee, Delaware State University, Dover, DE (49)

WEDNESDAY MORNING JANUARY 4

Student Contest Oral Presentations - ONE

NEWSS, NEASHA & NE-ASA/CSSA/SSSA

LOCATION: Ballroom AB

TIME: 9:00 AM - 11:45 PM

MODERATOR: Kathie Kalmowitz
BASF, Corp.

***SPEAKER † STUDENT CONTEST**

9:00 †Impact of herbicide formulation, mulch depth and activation moisture on weed control efficacy in landscape planting beds. D. Saha*, C. Marble, B.J. Pearson, G.E. MacDonald, D. Odero, and H.E. Perez, Graduate Research Assistant, Mid-Florida Research and Education Center, University of Florida, Apopka, FL (50)

- 9:15 †Effects of cover crop management and tillage on weed suppression, soil health, and profitability in organic soybean. K. Crowley* and M. Ryan, Cornell University, Ithaca, NY (51)
- 9:30 †Effects of corn planting density on interseeded cover crops and weed seed predation. C.Z. Youngerman*, A. DiTommaso, J. Losey, W. Curran, S.B. Mirsky, and M. Ryan, Cornell University, Ithaca, NY (52)
- 9:45 †Optimizing herbicide and cover crop programs for integrated weed management in no-till grain systems. J.M. Bunchek*, J.M. Wallace, M. VanGessel, W. Curran, and D.A. Mortensen, The Pennsylvania State University, State College, PA (53)
- 10:00 †Cultural weed management in organic no-till planted soybean: a multi-tactic approach. J. Liebert*, A. DiTommaso, and M. Ryan, Cornell University, Ithaca, NY (54)
- 10:15 †Evaluation of management options for glyphosate, ALS- and PPO-resistant common ragweed in North Carolina. B. Schrage* and W.J. Everman, North Carolina State University, Raleigh, NC (55)
- 10:30 †Soybean tolerance and palmer amaranth (*Amaranthus palmeri*) control over increasing rates of metribuzin. T.A. Reinhardt*, D. Copeland, and W.J. Everman, North Carolina State University, Raleigh, NC (56)
- 10:45 †Critical period of grass weed control in sorghum. M.T. Schroeder* and W.J. Everman, North Carolina State University, Raleigh, NC (57)
- 11:00 †Impact of cover crop quality and quantity on summer annual weed suppression after germination. K.B. Pittman* and M.L. Flessner, Virginia Tech, Blacksburg, VA (58)
- 11:15 †Soybean varietal response to dicamba applied at the vegetative growth stage. A.M. Growe* and W.J. Everman, NCSU Crop Science, Raleigh, NC (59)

11:30 †Cover crop and weed management in a living mulch system using reduced rates of herbicides. V. Bhaskar*, R. Bellinder, A. DiTommaso, and S. Reiners, Cornell University, Ithaca, NY (60)

WEDNESDAY AFTERNOON JANUARY 4

**SYMPOSIUM: COMMUNICATING
WITH NON-SCIENCE AUDIENCES**

1:00 PM - 5:00 PM

Ballroom AB

1:00 – 1:05pm Introductory Remarks, C. Moseley, Syngenta, Moderator

1:05 - 3:00pm Audience Demographic & Learning Techniques, Science Communications Training, C. Moseley, Syngenta; T. Pastoor, Pastoor Science Communications, LLC; P. Minehart, Syngenta

3:00 - 3:20pm Break

3:20 - 4:20pm Audience Demographic & Learning Techniques, Science Communications Training, C. Moseley, Syngenta; T. Pastoor, Pastoor Science Communications, LLC; P. Minehart, Syngenta

4:20 - 5:00pm Discussion Panel – T. Pastoor and P. Minehart

THURSDAY MORNING JANUARY 4

Student Contest Oral Presentations - TWO

NEWSS, NEASHA & NE-ASA/CSSA/SSSA

LOCATION: Ballroom AB

TIME: 8:30 AM - 11:45 PM

MODERATOR: Michael Fidanza, Penn State

***SPEAKER † STUDENT CONTEST**

NEWSS STUDENT PAPERS

8:30 †The impact of residual herbicides on soybean vigor and control of multiple-resistant Palmer amaranth. D. Copeland* and W.J. Everman, North Carolina State University, Raleigh, NC (61)

8:45 †The use of native weeds in ecological restoration. E.P. Law* and S. Diemont, Cornell University, Ithaca, NY (62)

9:00 †Tolerance of seedling forage grasses to herbicides. M.L. Flessner, S.C. Beam*, K.B. Pittman, S.C. Haring, and R.S. Randhawa, Virginia Tech, Blacksburg, VA (63)

9:15 †Herbicide programs for crabgrass and goosegrass control on creeping bentgrass greens. J.R. Brewer*, J. Craft, S. Rana, and S. Askew, Virginia Tech, Blacksburg, VA (64)

9:30 †Temporal patterns of seed shattering and germinability of common lambsquarters (*Chenopodium album*) and common ragweed (*Ambrosia artemisiifolia*). S.C. Haring*, M.L. Flessner, W.J. Everman, and S.B. Mirsky, Virginia Tech, Blacksburg, VA (65)

9:45 †Zoysiagrass response to herbicides during greenup. J.M. Craft*, J.R. Brewer, and S. Askew, Virginia Tech, Blacksburg, VA (66)

10:00 †Comparison of two green manure cover crops and varying tillage timing for managing weeds in an organic corn production system. R. Champagne*, W. Curran, J.M. Wallace, and T.R. Mazzone, Penn State University, State College, PA (67)

10:15 Break

NE-ASHS NEWSS STUDENT PAPERS

10:30 †Characterization of the effects of hybrid hazelnut pollenizers (*Corylus americana* x *C. avellana*) on the oil content and profiles of several European hazelnut (*C. avellana*) cultivars. . M. Muehlbauer*, D. Hlubik, and T.J. Molnar, Rutgers University, New Brunswick, NJ (68)

10:45 †Prioritization of living collections at public gardens. A.V. Bower* and J. Frett, University of Delaware, Newark, DE (69)

11:00 †Grafting melons increases yield and resistance to sudden wilt. J.L. Martin* and J.B. Loy, University of New Hampshire, Durham, NH (70)

ASA/CSSA/SSAA STUDENT PAPERS

11:15 †Speciation of phosphorus on sorbing materials for stormwater filtration using k-edge x-ray absorption near edge structure. Z. Qin*, A. Shoher, K. Scheckel, C. Penn, and K. Clark, University of Delaware, Newark, DE (71)

11:30 †Integrating cover crop mixtures and no-till for sustainable sweet corn production in the northeast. J.S. Fine* and M. Hashemi, Univ. of Massachusetts Amherst, Amherst, MA (72)

THURSDAY AFTERNOON JANUARY 5

AGROMONIC CROPS

LOCATION: Ballroom AB
TIME: 1:00 PM - 5:55 PM
MODERATOR: John Willis
Monsanto

*SPEAKER

1:00 A new S-metolachlor plus dicamba premix as an effective tool in an integrated weed management program in dicamba tolerant soybeans. E. Hitchner*, A. Moses, D. Porter, T. Trower, and J. Holloway, Syngenta, 08098, NJ (73)

- 1:15 Use of winter rye nurse crops following planting in potatoes. J. Jemison*, University of Maine, Orono, ME (74)
- 1:30 Physiological and molecular analysis of glyphosate resistance in giant ragweed (*Ambrosia trifida*). B. Schulz*, K. Segobye, and S.C. Weller, University of Maryland, College Park, MD (75)
- 1:45 Arsenic in rice: Interactions with silicon. M. Limmer* and A. Seyfferth, University of Delaware, Newark, DE (76)
- 2:00 Non-growing season phosphorus losses on the Delmarva peninsula - new technologies to identify the scope of the problem. A.L. Shober*, A. Buda, K. Clark, A. Collick, J. Robinson, A. Andres, L. Slater, R. Bryant, D. Ntarlagiannis, and A. Allen, University of Delaware, Newark, DE (77)
- 2:15 Grape hyacinth (*Muscari botryoides*) control in a wheat-soybean rotation. M.L. Flessner* and M. VanGessel, Virginia Tech, Blacksburg, VA (78)
- 2:30 Development of a field crop diagnostic training program for master gardener volunteers. W.J. Bamka*, Rutgers University, Westampton, NJ (79)
- 2:45 The inside-out of systems approaches in agronomic research and education. D.M. Vietor*, American Society of Agronomy, New York, NY (80)
- 3:00 Break
- 3:15 Efficacy of pendimethalin and quinclorac for control of large crabgrass (*Digitaria sanguinalis* L.) in orchardgrass. Q. Johnson*, M. VanGessel, R. Chandran, and M.L. Flessner, University of Delaware, Georgetown, DE (81)
- 3:30 Improving the yield and quality of rye as a grain crop in Pennsylvania. G.W. Roth*, Penn State, UNIVERSITY PARK, PA (82)
- 3:45 In vitro effects of sorgoleone (sorghum root exudate) on growth of different wheat and weed species. M.K. Bansal* and W.J. Everman, North Carolina State University, Raleigh, NC (83)

- 4:00 Cover crop traits and management strategies influence horseweed suppression in no-till cropping systems. J.M. Wallace*, W. Curran, M. VanGessel, D.A. Mortensen, J.M. Bunchek, and B. Scott, Penn State University, State College, PA (84)
- 4:15 Efficacy of quinclorac and pendimethalin for giant foxtail (*Setaria faberi*) control in hayfields. M.L. Flessner*, R.S. Randhawa, Q. Johnson, and R. Chandran, Virginia Tech, Blacksburg, VA (85)
- 4:30 Cover crop termination timing can affect weed control and crop performance; the pros and cons of planting green. W. Curran*, D. Lingenfelter, and H. Myer, Penn State University, University Park, PA (86)
- 4:45 Development of an educational mapping tool for documenting and researching the spread of herbicide-resistant weeds in the US. A. Klodd*, W. Curran, D. Miller, S. Crawford, D. Lingenfelter, and A. Davis, Pennsylvania State University, University Park, PA (87)
- 5:00 Integrating tillage, cover crops, and herbicides for weed management in Delaware. K.M. Vollmer*, M. VanGessel, Q. Johnson, and B. Scott, University of Delaware, Georgetown, DE (88)
- 5:15 Which POST herbicides will control marehail in agronomic crops? D. Lingenfelter* and W. Curran, Penn State University, University Park, PA (89)
- 5:30 Pendimethalin controls joint-head arthraxon (*Arthraxon hispidus*). R. Chandran*, M.L. Flessner, Q. Johnson, B.M. Loyd, and S. Starcher, West Virginia University, Morgantown, WV (90)
- 5:45 Discussion/Business Meeting, elect vice-chair
- 5:55 Adjourn

THURSDAY AFTERNOON JANUARY 5

TURF AND ORNAMENTALS

LOCATION: Bromley/Claypoole)

TIME: 1:00 PM - 6:10 PM

MODERATOR: Alan Estes
PBI/ Gordon
Pendleton, SC

- 1:00 Fe-HEDTA safety on semi-dormant and actively growing ornamentals. J. Neal* and C.D. Harlow, North Carolina State University, Raleigh, NC (91)
- 1:15 Exciting changes coming for the Journal of Environmental Horticulture. J. Calabro* and J. Derr, Journal of Environmental Horticulture, Washington, DC (92)
- 1:30 Control of turfgrass weeds with two new halauxifen-methyl containing formulations (GF-3566 and GF-2687) in cool and warm season turfgrass. D.D. Loughner*, J.M. Breuninger, A.L. Alexander, and V.F. Peterson, Dow AgroSciences, Lawrenceville, NJ (93)
- 1:45 Halauxifen-methyl: A New, Innovative Herbicide for Control of Broadleaf Weeds in Turfgrass. J.M. Breuninger*, D.D. Loughner, A.L. Alexander, and V.F. Peterson, Dow AgroSciences, Indianapolis, IN (94)
- 2:00 Vexis: New Technology for Turf Weed Control. J. Marvin* and A. Estes, PBI/Gordon, Kansas City, MO (95)
- 2:15 Preemergence Crabgrass spp. Control in turfgrass with EH1579 and EH1580 containing Vexis. G.M. Henry*, K.A. Tucker, J.T. Brosnan, G.K. Breeden, and A. Estes, University of Georgia, Athens, GA (96)
- 2:30 Jointheadgrass control in cool-season turf. J.M. Craft*, J.R. Brewer, and S. Askew, Virginia Tech, Blacksburg, VA (97)

- 2:45 Herbicide programs for creeping bentgrass (*Agrostis stolonifera*) control in Kentucky bluegrass (*Poa pratensis*). M.T. Elmore*, J.A. Murphy, B.S. Park, C. Mansue, and S. Alea, Rutgers University, New Brunswick, NJ (98)
- 3:00 Herbicide options for annual grass weed control during bermudagrass sprig establishment. S. Askew*, J. Craft, and J.R. Brewer, Virginia Tech, Blacksburg, VA (99)
- 3:15 Break
- 3:30 Three years of research on Japanese stiltgrass control in managed turf: What have we learned? J.R. Brewer*, S. Rana, and S. Askew, Virginia Tech, Blacksburg, VA (100)
- 3:45 Using herbicides and perennial ryegrass to renovate turf dominated by annual bluegrass during 2015-16 . B.S. Park*, M.T. Elmore, S. Alea, C. Mansue, and J.A. Murphy, Rutgers, The State University of New Jersey, New Brunswick, NJ (101)
- 4:00 A rapid diagnostic assay to detect herbicide resistance in annual bluegrass. J.T. Brosnan*, J.J. Vargas, G.K. Breeden, and E.H. Reasor, University of Tennessee, Knoxville, TN (102)
- 4:15 Directed liquid applications of flumioxazin evaluated for phytotoxicity and pre- and postemergence control.. H.M. Mathers*, Mathers Environmental Science Services, LLC, GAHANNA, OH (103)
- 4:30 Unintended injury to ornamentals caused by consumer-oriented extended control herbicides. A. Senesac*, Cornell Cooperative Extension, Riverhead, NY (104)
- 4:45 Biathlon efficacy and phytotoxicity in annual bedding plant beds versus Specticle G, FreeHand and SnapShot. . H.M. Mathers* and E.J. Beaver, Mathers Environmental Science Services, LLC, GAHANNA, OH (105)
- 5:00 Weed seed placement effects on preemergence herbicide efficacy. J. Derr*, Virginia Tech, Virginia Beach, VA (106)

- 5:15 Dormant Applications in mature landscape beds Specticle G versus FreeHand and Snapshot. H.M. Mathers* and J.A. Beaver, Mathers Environmental Science Services, LLC, GAHANNA, OH (107)
- 5:30 The impact of compost on pH buffering capacity of soilless substrates. M. Taylor* and R. Kreis, Longwood Gardens, Kennett square, PA (108)
- 5:45 Update on 2016 weed science research in the IR-4 Ornamental Horticulture Program. C. Palmer*, J. Baron, and E. Vea, IR-4 Project, Princeton, NJ (109)
- 6:00 Discussion/Business Meeting, elect vice-chair
- 6:10 Adjourn

THURSDAY AFTERNOON JANUARY 5

FRUIT, VEGETABLE & HERB CROPS

LOCATION: Flower
TIME: 1:00 PM - 4:55 PM
MODERATOR: Jennifer D'Appolonio
University of Maine

- 1:00 Utilizing global resources to register new pest control products on specialty crops. D. Kunkel*, M. Braverman, and J. Baron, IR-4 Project, Princeton, NJ (110)
- 1:15 Are there any new herbicides for sweet corn? D. Lingenfelter* and M. VanGessel, Penn State University, University Park, PA (111)
- 1:30 Strawberry variety evaluations in SE Pennsylvania using plasticulture. T.E. Elkner* and K. Demchak, Penn State Extension, Lancaster, PA (112)
- 1:45 Preemergence and postemergence applications of sulfentrazone and carfentrazone for weed control in wild blueberry (*Vaccinium angustifolium*) fields. D.E. Yarborough* and J. D'Appollonio, University of Maine, Orono, ME (113)

- 2:00 Evaluating biological soil health in highbush blueberry. W.J. Sciarappa*, Rutgers University, Freehold, NJ (114)
- 2:15 Improving Eating Quality in Acorn Squash through Pruning, Grafting and Plant Breeding. J.B. Loy*, University of New Hampshire, Durham, NH (115)
- 2:30 Silicon supplied as wollastonite suppresses powdery mildew disease on pumpkin. Y. Li*, J. Heckman, A. Both, and A. Wyenandt, Rutgers University, New Brunswick, NJ (116)
- 2:45 25 years of processing vegetable variety trials at the University of Delaware. G.C. Johnson* and E.G. Ernest, University of Delaware, Georgetown, DE (117)
- 3:00 Break
- 3:15 Evaluation of herbicide programs for dry bean, lima bean and snap bean in new york. D.E. Telenko*, J.R. Kikkert, and R. Bellinder, Cornell Univeristy, East Aurora, NY (118)
- 3:30 Development of new lima bean (*Phaseolus lunatus*) cultivars for the mid-atlantic region. E.G. Ernest*, University of Delaware, Georgetown, DE (119)
- 3:45 Progress report on beach plum (*Prunus maritima*) propagation research. J.S. Carleo* and W.C. Stiles, Rutgers NJAES Cooperative Extension, Cape May Court House, NJ (120)
- 4:00 Improving weed control in cranberry with novel uses of registered herbicides. K.M. Ghantous* and H. Sandler, UMass Cranberry Station, East Wareham, MA (121)
- 4:15 Colonization by newly planted cranberry vines is influenced by weed management, horticultural and cultivar choices. H. Sandler* and K.M. Ghantous, UMass Cranberry Station, East Wareham, MA (122)
- 4:30 Potato (*Solanum tuberosum*) tolerance and weed control by fluridone applied preemergence after drag-off. C.W. Cahoon*, M.L. Flessner, and T. Hines, Virginia Tech, Painter, VA (123)

4:45 Discussion/Business Meeting, elect vice-chair

4:55 Adjourn

FRIDAY MORNING JANUARY 6

**VEGETATION MANAGEMENT AND
RESTORATION**

LOCATION: Flower

TIME: 9:00 PM - 11:00 PM

MODERATOR: Brian McDonnell
National Park Service
Bushkill, PA

*SPEAKER

9:00 Invasive vascular plant diversity at Caledon State Park, Virginia. R. Stalter*, St Johns University, Queens, NY (124)

9:15 American burnweed, blackberry, and ground ivy control with aminocyclopyrachlor. J.R. Brewer*, J. Craft, and S. Askew, Virginia Tech, Blacksburg, VA (125)

9:30 Comparing a wet-blade pruning device to foliar spray for chemical mobility in woody stems. S. Askew*, T. Burch, S. Rana, and J.R. Brewer, Virginia Tech, Blacksburg, VA (126)

9:45 Effects of phosphate on glyphosate uptake, translocation and transport in eucalypt: Implications for nutrient management. F. Campos Mastrotti Pereira, P. da Costa Aguiar Alves, and W.A. Peer*, University of Maryland, College Park, MD (127)

10:00 Does weed control matter in reforestation with tree seedlings? A. Gover*, Penn State University, University Park, PA (128)

10:15 Demography of poison ivy in forest interior and edge habitats. C. Dickinson* and J.N. Barney, Virginia Tech, Laneview, VA (129)

10:30 Case study: Large-scale Japanese knotweed removal in a remote riparian corridor. A. Gover*, R. Reese, S. Hall, and B. Wallace, Penn State University, University Park, PA (130)

10:45 Discussion/Business Meeting, elect vice-chair

11:00 Adjourn

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