EASTERN BRANCH

ENTOMOLOGICAL SOCIETY OF AMERICA
73rd ANNUAL MEETING

“Digital Tools in Teaching, Research and Extension”

MARCH 10-12, 2002
CAROUSEL BEACHFRONT HOTEL AND SUITES
OCEAN CITY, MD
## Program Overview

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<td><strong>Afternoon</strong></td>
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<tr>
<td>Registration</td>
<td>1:00 – 5:00</td>
<td>The Plaza (inner courtyard)</td>
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<tr>
<td>Executive Committee meeting</td>
<td>1:00 – 5:00</td>
<td>Rm 612</td>
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<tr>
<td>Poster setup and display</td>
<td>1:00 -</td>
<td>Pennsylvania</td>
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<tr>
<td><strong>Evening</strong></td>
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<tr>
<td>Welcome Social</td>
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<td>Pennsylvania</td>
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<tr>
<td>Student networking roundtable</td>
<td>7:00 – 8:00</td>
<td>Delaware 1</td>
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<tr>
<td>Exotic pest workshop</td>
<td>8:00 – 10:00</td>
<td>Delaware 2</td>
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<tr>
<td>Small fruit workshop</td>
<td>8:00 – 10:00</td>
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<td><strong>Monday</strong></td>
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<tr>
<td>Registration</td>
<td>8:00 – 12:00</td>
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<td>Poster display</td>
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<td>Pennsylvania</td>
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<tr>
<td>Symposium: New challenges and approaches in structural and community pest control</td>
<td>8:30 – 11:45</td>
<td>Delaware 2</td>
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<tr>
<td>Symposium: NE field crops insect conference</td>
<td>8:30 – 11:30</td>
<td>Washington</td>
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<tr>
<td>Symposium: DNA technologies in entomological research</td>
<td>8:30 – 11:30</td>
<td>Delaware 1</td>
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<td><strong>Noon</strong></td>
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<tr>
<td>Students meet with Executive committee and ESA President</td>
<td>12:00 – 1:00</td>
<td>Delaware 1</td>
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<tr>
<td><strong>Afternoon</strong></td>
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<tr>
<td>Student paper competition</td>
<td>1:00 – 2:45</td>
<td>Washington</td>
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<td>Submitted papers</td>
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<td>Washington</td>
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<td>Symposium: Distributed education and technology</td>
<td>2:45 – 5:30</td>
<td>Delaware 1</td>
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<tr>
<td><strong>Evening</strong></td>
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<tr>
<td>Banquet and awards presentations</td>
<td>6:00 – 8:30</td>
<td>Maryland</td>
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<td>Linnaean games</td>
<td>8:30 – 10:00</td>
<td>Pennsylvania</td>
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<td><strong>Tuesday</strong></td>
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<td>8:30 – 11:40</td>
<td>Washington</td>
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<td>Symposium: Info and geo technologies advancing population ecology and management</td>
<td>8:30 – 12:15</td>
<td>Delaware 1 &amp; 2</td>
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<td><strong>Noon</strong></td>
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<tr>
<td>5k Run / Walk</td>
<td>12:30 – 1:30</td>
<td>Meet in Plaza</td>
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<td>Symposium: Northeast working group on biological control: Natural enemy augmentation – recent Progress</td>
<td>1:30 – 5:00</td>
<td>Washington</td>
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Sunday afternoon and evening

**Registration  1:00 – 5:00**  
*The Plaza (inner courtyard)*

**Executive Committee Meeting  1:00 – 5:00**  
Rm 612

**Welcome Social   5:30 – 7:00**  
*Pennsylvania*

**Student Networking Roundtable  7:00 – 8:00**  
*Delaware 1*

Convener: Susan Whitney, University of Delaware, Newark, DE

**Workshop: Recently Introduced and Potential Pests in the Northeastern U.S  8:00 – 10:00**  
*Delaware 2*

Insect Detection Evaluation and Prediction Committee  
Eric R. Day  
Dept. of Entomology  
VPI & SU  
Blacksburg, VA

This informal workshop provides an opportunity for entomologists to see exotic pests that are either new to the Northeast region or have the potential to spread into this area. Members of the IDEP Committee will bring specimens of pest including: Soybean aphid, Viburnum Leaf Beetle, Asian Tiger Mosquito, Imported Red Fire Ant, *Noctua pronuba*, Hemlock Woolly Adelgid, Cotton Boll Weevil, Lily Leaf Beetle, Exotic Bark Beetles, Browntail moth, Brown Garden Snail, and others. Microscopes will be set up, so stop by and sometime during the session and visit our "exotic pest show-and-tell."

**Workshop: Small Fruit Entomology Workshop  8:00 – 10:00**  
*Washington*

Sridhar Polavarapu  
Blueberry and Cranberry Research and Extension Center  
Rutgers University  
Chatsworth, NJ
Poster Displays (on display for entire meeting)

Pennsylvania

1. **Bulb Mite, *Rhizoglyphus robini* (Claparede) as a pest of onion in New York**
   Richard W. Straub and Peter J. Jentsch, Department of Entomology, Cornell University, Highland, NY

2. **Apple burr knot borers in New York revisited**
   David P. Kain¹, Richard W. Straub² and Arthur M. Agnello¹, ¹Department of Entomology, Cornell University, NYS Agricultural Experiment Station, Geneva, NY, ²Department of Entomology, Cornell University, NYS Agricultural Experiment Station, Hudson Valley Laboratory, Highland, NY

3. **The effect of straw mulch on pests and beneficials in simulated conventional and pot-in-pot nurseries**
   Colin D. Stewart and Paula M. Shrewsbury, University of Maryland, Department of Entomology, College Park, MD

4. **Pilot mass-trapping of *Hoplia equina* (Coleoptera: Scarabeidae) using its newly-identified sex pheromone, 2-tetradecanone**
   Donald C. Weber¹, Paul Robbins², Aijun Zhang³ and Anne Averill⁴, ¹USDA-ARS Insect Biocontrol Laboratory, BARC-West, Beltsville, MD, ²Soil Insect Ecology Laboratory, Department of Entomology, NYSAES, Cornell University, Geneva, NY, ³Chemicals Affecting Insect Behavior Laboratory, BARC-West, Beltsville, MD, ⁴Department of Entomology, University of Massachusetts, Amherst, MA

5. **Synchrony of *Macrocentrus cingulum* (Hymenoptera: Braconidae) with its host, *Ostrinia nubililas* Hubner (Lepidoptera: Crambidae) - implications of the effects of Bt corn on this interaction**
   Shannon Leif Sked and Dennis D. Calvin, Department of Entomology, Pennsylvania State University, University Park, PA

6. **Varroa mite sampling for IPM threshold decisions**
   J. Hubner and Dewey M. Caron, Department of Entomology & Applied Ecology, University of Delaware, Newark, DE

7. **Impact of peach extrafloral nectar on key biological characteristics of *Grapholita molesta***
   Atanas Atanassov and Peter W. Shearer, Rutgers Agricultural Research & Extension Center, Bridgeton, NJ

8. **Potency of the Diamondback moth nucleopolyhedrovirus and its enhancement with fluorescent brighteners**
   Robert R. Farrar Jr.¹, Martin Shapiro¹, A. H. McIntosh¹ and Merle Shepard², ¹USDA-ARS, ²Clemson University
9. Biological control release and monitoring studies for an invasive species  
Donna R. Ellis, Department of Plant Science Unit 4163, University of Connecticut, Storrs, CT

10. Non-Target effects of Bt sweet corn on honey bees  
Robyn I. Rose¹, Galen P. Dively² and Jeffrey S. Pettis³, ¹Environmental Protection Agency, ²University of Maryland at College Park, and ³USDA/ARS

11. Can systemic insecticide residues kill predatory bugs on landscape plants?  
Adrianna Szczepaniec¹, Michael Raupp¹ and Stanton Gill², ¹Department of Entomology, University of Maryland, College Park, MD, ²Central Maryland Research and Education Center, Ellicott City, MD

12. Affects of temperature on the life history parameters of Anoplophora glabripennis (Coleoptera: Cerambycidae)  
Melody A. Keena, Steve M. Ulanecki and Paul M. Moore, USDA Forest Service, Northeastern Research Station, Northeastern Center for Forest Health Research, Hamden, CT

E. Richard Hoebeke¹ and Karen M. Bernhard², ¹Department of Entomology, Cornell University, Ithaca, NY, ²Lehigh County Extension Office, Pennsylvania State University, Allentown, PA

14. A hard look at soft scale invasions: Past and present  
Gary L. Miller and Douglass R. Miller, Systematic Entomology Laboratory, ARS, USDA, Beltsville, MD

15. The Rice Thrips, Stenchaetothrips biformis Bagnall (Thripidae: Thysanoptera), and its risk to U.S. Agriculture  
Susan Broda, Thysanoptera Specialist, USDA, APHIS, PPQ, Baltimore, MD

16. Image analysis of caterpillar feeding behavior  
Marc Rowley¹, Frank Hanson¹ and Joe Stitt², ¹Department of Biological Sciences, University of Maryland, Baltimore County, Baltimore, MD, ²Applied Research Laboratory, Pennsylvania State University, State College, PA

17. Using low-cost digital photomicrography in an undergraduate aquatic entomology course  
John R. Wallace and Larry N. Reinking, Department of Biology, Millersville University, Millersville, PA

18*. Distribution of natural enemies of Euonymus scale, Unaspis euonymi (Comstock.) (Homoptera: Diaspididae) in the state of New Jersey
Deepak Matadha, George C. Hamilton and James H. Lashomb, Department of Entomology, Rutgers, New Brunswick, NJ

19*. Monitoring Obliquebanded leafroller parasitism in apple orchards and wild sites in New York
Mark A. Sarvary, Harvey Reissig and Jan Nyrop, Department of Entomology, Cornell University, Geneva, NY

20*. A multiple regression technique for predicting white grub abundance in golf course turf
William J. Dimock, Carlyle C. Brewster and Edwin E. Lewis, Department of Entomology, Virginia Tech, Blacksburg, VA

21*. A survey of the non-target effects of Imidacloprid on the arthropod community in a potato field
Maisie E. Miller and Galen P. Dively, University of Maryland, College Park, MD

22*. Evaluation of arthropod diversity associated with native woody plants
Miles D. Lepping and Paula M. Shrewsbury, University of Maryland, College Park, MD

23*. Survey of arthropod communities on Maryland golf courses
Steve Frank and Paula Shrewsbury, Department of Entomology, University of Maryland, College Park, MD

24*. Mites and ticks: A virtual introduction
Ethan C. Kane¹ and Ronald Ochoa², ¹Department of Entomology, University of Maryland, College Park, MD , ²Systematic Entomology Laboratory, USDA-ARS, Beltsville, MD

25*. Gender specific esterase activity in different life stages and ages of the oriental fruit moth *Grapholita molesta* (Busck)
Jeon J. Hong, Lena B. Brattsten and Peter W. Shearer, Department of Entomology, Rutgers University, New Brunswick, NJ
Symposium: New Challenges and Approaches in Structural and Community Pest Control
Delaware 2

Organizers / Moderators
Glen Holbrook and Nancy Ostiguy
Department of Entomology
Pennsylvania State University
University Park, PA

8:30  **Opening Remarks**  Glen Holbrook

8:35  **The evolving demand-side: IPM in schools in Pennsylvania**
Ed Rajotte\(^1\), Lyn Garling\(^1\), Ken Long\(^2\) and Lee Bentz\(^2\)
\(^1\)PAIPM and Department of Entomology, Pennsylvania State University, University Park, PA, \(^2\)PAIPM and Pennsylvania Department of Agriculture, Harrisburg, PA

9:00  **New approaches to structural pest control**
Chuck Silcox, Agricultural Division, Bayer Corporation, Perkasie, PA

9:25  **Initiatives in Navy entomology**
Chris Harding, Environmental Protection Specialist, Navy Applied Biology, Department of the Navy, Lester, PA

9:50  **Cost and efficacy comparison of IPM strategies versus calendar-based insecticide applications for German cockroach control**
Dini Miller, Department of Entomology, Virginia Polytechnic Institute, Blacksburg, VA

10:15  **BREAK**

10:25  **The state of cockroach control: How a good situation can turn bad**
Glenn Holbrook, Department of Entomology, Pennsylvania State University, University Park, PA

10:50  **Social organization in subterranean termites: Insights from molecular markers**
Ed Vargo, Department of Entomology, North Carolina State University, Raleigh, NC

11:15  **Sociality in new environments: Colony social organization and ecology in Solenopsis invicta and other pest ant species**
Mark Mescher, Department of Biology, Pennsylvania State University, University Park, PA
Symposium: Northeast Field Crops Insect Conference
Washington

Organizer / Moderator
Galen Dively
Department of Entomology
University of Maryland
College Park, MD

8:30  **Review of nontarget effects of Imidacloprid with emphasis on the potato system**
M. Miller and Galen Dively, Department of Entomology, University of Maryland,
College Park, MD

8:45  **New seed treatments for field corn soil insect pests**
M. Spellman and J. Whalen, Department of Entomology and Applied Ecology,
University of Delaware, College of Ag and Natural Resources, Room 250 Townsend Hall,
Newark, DE

9:00  **Fall aphid management in wheat**
J. Whalen and M. Spellman, Department of Entomology and Applied Ecology,
University of Delaware, College of Ag and Natural Resources, Room 250 Townsend Hall,
Newark, DE

9:50  **Are mid-western soybean problems moving east? – A 2001 Virginia survey for Soybean Aphid and Bean Pod Mottle virus**

9:35  **BREAK**

9:45  **Evidence for tolerance in glandular-haired alfalfa: Effect of Potato Leafhopper on photosynthesis**
W.O. Lamp and M. Nguyen, Department of Entomology, University of Maryland,
College Park, MD

10:00 **Biology and management of the Cereal Rust Mite on timothy**
Jessica Nelson, Terry Patton and Galen Dively, Department of Entomology, University of Maryland, College Park, MD

10:15 **Multi-county survey results of European Corn Borer injury in non-Bt cornfields of western Virginia**
R. R. Youngman, C. A. Laub and T. A. Dellinger, Virginia Tech, Department of Entomology, Blacksburg, VA
10:30  **Influence of conservation tillage on insect pest populations on flue-cured tobacco**  
Paul J. Semtner and T. David Reed, Virginia Tech Southern, Piedmont AREC, Blackstone, VA

10:45  **Open discussion of field crop pest problems**

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**Symposium: DNA Technologies in Entomological Research- Graduate student symposium**  
*Delaware I*

Moderator / Organizer  
Ellen G. Klinger  
5722 Deering Hall  
University of Maine  
Orono, ME

8:30  **Opening Remarks** Ellen Klinger

8:40  **From shovels to micropipettors: A field entomologist’s perspective on molecular research methods**  
Theresa Dellinger, Department of Entomology, 216 Price Hall, Virginia Tech.  
Blacksburg, VA

9:10  **Phyllophaga and phylogenetics: examining intraspecific relationships using mtDNA**  
Paul Robbins, Cornell University, NYSAES, Department of Entomology Geneva, NY

9:50  **Nuclear markers in population genetics: Adaptive evolution of pea aphids**  
Joan West, University of Maryland, 11705 Cherry Grove Drive, North Potomac, MD

10:20  **BREAK**

10:35  **Shooting the RAPDs…. and other molecular pitfalls**  
Michele McClnan, Fruit Entomology, 205 C Price Hall, Blacksburg, VA
Students meet with Executive Committee and ESA President  12:00-1:00pm
Delaware 1

Graduate Student Paper Competition
Washington

Moderator / Organizer
Melody Keena
Northeastern Center For Forest Health Research
51 Mill Pond Road
Hamden, CT

1:00  Asa Fitch award winner presentation

1:15  Improving monitoring and dormant spray management in the San Jose scale
Quadraspidoitus perniciosus in almond orchards
Francisco R. Badenes-Perez, Department of Entomology, Cornell University, Ithaca, N.Y

1:27  Wolbachia and plum curculio, Conotrachelus nenuphar (Herbst)
Michelle E. G. McClanan, Shirley Luckhart and Douglas G. Pfeiffer, Department of
Entomology, Virginia Tech, Blacksburg, VA

1:39  Response of natural enemies of the European Corn Borer to a buckwheat intercrop
in corn
Andrew H. Smith and Dale G. Bottrell, Department of Entomology, University of
Maryland, College Park, MD

1:51  What limits the population size of the saltmarsh planthopper Delphacodes
penedecta?
Scott M. Ferrenberg and Robert F. Denno, Department of Entomology, University of
Maryland, College Park, MD

2:03  The effect of landscape mulches on the foraging patterns of subterranean termites
(Isoptera: Reticulitermes)
Catherine E. Long, Barbara L. Thorne, Nancy L. Breisch and Larry W. Douglass,
University of Maryland, College Park, MD

2:15  Susceptibility of adult Colorado potato beetle to the fungal entomopathogen
Beauveria bassian
Ellen G. Klinger and Eleanor Groden, Department of Biological Sciences, University of
Maine, Orono, ME
Monday afternoon

2:27 **The German cockroach as a carrier of *Salmonella***
Laura Yerges, Jenna Bartz, Annie Steed, Aidan Wilson and Glenn Holbrook, Department of Entomology, Pennsylvania State University, University Park, PA

2:39 **Aggression in *Myrmica rubra*, a noxious pest on the rise in New England**
David Bell¹, Jessica Felse¹, Mark Mescher² and Glenn Holbrook¹, ¹Department of Entomology, Pennsylvania State University, University Park, PA, ²Department of Biology, Pennsylvania State University, University Park, PA

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Submitted Paper Session
Washington
Moderator

2:45 **New tactics for controlling cucumber beetles on cucurbits**
John Speese III, Virginia Tech, Eastern Shore AREC, 33446 Research Drive, Painter, VA

2:57 **Large scale house fly trapping in New York poultry facilities**
P. E. Kaufman and D. A. Rutz, Department of Entomology, Cornell University, Ithaca, NY

3:09 **Syrphid complex associated with the woolly apple aphid in Virginia orchards**
Brent D. Short and J. Christopher Bergh, Department of Entomology, Virginia Tech, Blacksburg, VA

3:21 **Reduced rates of Imidacloprid and Carbaryl in managing Hudson Valley leafhopper complex**
Peter J. Jentsch and Richard W. Straub, Department of Entomology, Cornell University, Highland, NY

3:33 **Phenology of plum curculio and varietal susceptibility**
Sridhar Polavarapu, Blueberry and Cranberry Research and Extension Center, Rutgers University, Chatsworth, NJ

3:45 **Preliminary evidence for bivoltinism of dogwood borer in apple in the mid-Atlantic region**
J. Christopher Bergh¹, Tracy C. Leskey² and Starker. E. Wright², ¹Virginia Tech AHS AREC, Winchester, VA, ²USDA Appalachian Tree Fruit Research Station, Kearneysville, WV

3:57 **Diuretics as enhancers of the gypsy moth, *Lymantria dispar*, (Lepidoptera: *Lymantriidae*) nucleopolyhedrovirus**
Martin Shapiro, USDA-ARS Insect Biocontrol Laboratory, Beltsville, MD

4:09 **Effects of environmental chemicals on subterranean termite foraging activity (Isoptera: Recitulitermies)**
4:21  **Mayflies of headwater streams: Analysis of geographic isolation and gene flow**
Laurie C. Alexander, William O. Lamp and David J. Hawthorne, Department of Entomology, University of Maryland, College Park, MD

4:33  **The distribution and diversity of spider populations: Investigations in lowbush blueberry agroecosystems in Maine**
Darlene Maloney, Department of Entomology, University of Maine, Orono, ME

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**Symposium: Distributed Education and Technology**

*Delaware 1*

Organizer / Moderator
John Stoffolano
Department of Entomology
University of Massachusetts
Amherst, MA

2:30  **Opening Remarks** John Stoffolano

2:35  **Best practices in a large enrollment undergraduate entomology course taught online**
Tim Mack, Professor and Head, Department of Entomology, and Assistant Dean for Information Technology, College of Agriculture and Life Sciences 216 Price Hall, Virginia Tech, Blacksburg, VA

3:16  **Systematic integration of online assessment into the undergraduate curriculum**
Dave Hart, Executive Director, Center for Computer-Based Instructional Technology and Center for Knowledge Communication, Computer Science Department, University of Massachusetts, Box 34610, Amherst, MA

3:57  **Break**

4:07  **Using diverse multimedia to deliver a distance learning course to teachers-the best way to deliver different types of course content**
John Stoffolano, Department of Entomology, University of Massachusetts, Amherst, MA

4:48  **Video production techniques for teaching and extension delivery**
Jim Lashomb\(^1\) and George Hamilton\(^2\), \(^1\)Department of Entomology, Rutgers University, Blake Hall 92-Lipman Dr., New Brunswick, NJ, \(^2\)Pest Management Office, Rutgers University, Blake Hall 93-Lipman Drive, New Brunswick, NJ
Monday evening

Banquet and presentation of ESA awards  6:00-8:30pm  
Maryland

Linnaean games  8:30-10:00pm  
Pennsylvania
Town hall gathering and business meeting  7:30 - 8:30 am  
Pennsylvania

Symposium: Interplay of Biocontrol and Systematics: Effects on Non-target Organisms and Implications for Biodiversity
Washington

Moderators / Organizers  
Michael Gates and Becky Simmons  
USDA-ARS-SEL  
Washington D.C.

8:30  Opening Remarks

8:35  Using databases in systematics: A world revision of the armyworm genus *Spodoptera* Guenee (Lepidoptera: Noctuidae)  
Mike Pogue,  USDA-ARS-SEL, Washington D.C.

9:10  The use of molecular systematics in assessing host specificity of potential biocontrol agents  
Sonja Scheffer, USDA-ARS-SEL, Beltsville, MD

9:45  Parasitic Hymenoptera (Chalcidoidea) and biocontrol: Helping or hindering?  
Michael Gates/Michael Schauff, USDA-ARS-SEL, Washington D.C.

10:20  Break

10:30  Non-target effects: case studies in Diptera, Coleoptera and Hymenoptera  
Jeff Boettner, Department of Entomology, University of Massachusetts, Amherst, MA

11:05  Non-target impact of releasing exotic natural enemies against the pink hibiscus mealybug, *Maconellicoccus hirsutus* (Green), in St. Kitts, West Indies with a twist in Hawaii  
Dale Meyerdirk, USDA-APHIS, NBCI, Riverdale, MD
Symposium: Info and Geo Technologies Advancing Population Ecology and Management  
*Delaware 1 & 2*

Organizer / Moderator  
Shelby Fleischer  
Department of Entomology  
Pennsylvania State University  
University Park, PA

8:30  **Opening Remarks** Shelby Fleischer

8:35  **Presenting time sensitive pest data and developing pest models using GIS/GPS technologies**  

9:10  **Modeling within field spatial dynamics and developing regional views of pest pressure**  
Paul Blom and Shelby J. Fleischer, Pennsylvania State University, University Park, PA

9:45  **Coupling simulation and geographic information systems in pest and agroecosystem management**  
Casey Hoy, V. Krishna Prasad and John Cardina, Ohio Agricultural Research and Development Center, The Ohio State University, Wooster, OH

10:20  **Break**

10:30  **Sampling and statistical techniques coupled with remote sensing for precision IPM**  
Jeffrey Willers¹, Deborah Boykin², Mike Seal³, Kenneth Hood⁴ and Wendell Ladner⁵, ¹USDA, ARS, Crop Science Research Laboratory, Mississippi State, MS, ²USDA, ARS, Delta State Research Center, Stoneville, MS, ³ITD Spectral Visions, Stennis Space Center, MS, ⁴Perthshire Farms, Gunnison, MS

11:05  **Remote sensing and spatial ecology approaches in area-wide studies of insect populations**  
Carlyle C. Brewster, Christopher Barker, Bill Dimock, Sally Paulson and Edwin E. Lewis, Virginia Tech, Blacksburg, VA

11:40  **The application of RS and GIS to investigate the epidemiology of Bartonellosis**  
Richard Andre¹, Penny Masuoka¹, Eliska Rejmankova², Roberto Fernandez³, Nelson Solorzano⁴, Scott Gordon¹, Jesus Gonzalez³, Paul Pachas⁵, Nicole Achee¹, Donald Roberts¹ and Phillip Lawyer¹, ¹Department of Preventive Medicine and Biometrics, Uniformed Services University of the Health Sciences, Bethesda, MD, USA ²Department of Environmental Science and Policy, University of California, Davis, CA, USA
3Department of Entomology, Naval Medical Research Center Detachment, Lima, Peru,
4Hospital “San Juan de Dios” Caraz, Ministerio de Salud, Caraz, Peru Oficina General de Epidemiologia, Ministerio de Salud Lima, Peru

5K run / walk   12:30-1:30pm
meet in Plaza
Symposium: Northeast Working Group on Biological Control Natural Enemy Augmentation–Recent Progress  
Washington  

Organizers / Moderators  
Roger W. Fuester  
USDA-ARS  
Beneficial Insects Introduction Research  
Newark, DE  
Richard A. Casagrande  
Department Plant Sciences  
University of Rhode Island  
Kingston, RI  

1:30 Opening Remarks Roger Fuester  

1:35 Augmentative biological control: A commercial perspective  
Carol Glenister, IPM Laboratories, Inc., Locke, NY  

2:00 Augmentation to manage key insect pests of ornamentals: How effective is it?  
Paula Shrewsbury and Kreshnik Bejleri, Department of Entomology, University of Maryland, College Park, MD  

2:25 Evaluating the potential for augmentative biocontrol of Pyrrhalta viburni, a new landscape pest in the northeast, with generalist predators  
Paul Weston, Department of Entomology, Cornell University, Ithaca, NY  

2:50 Entomopathogenic nematodes for control of Black Vine Weevil in greenhouses and perennial nurseries  
Stanton Gill, Joanne Lutz, Paula Shrewsbury and Michael Raupp, University of Maryland, College Park, MD  

3:15 BREAK  

3:30 Biological control of European Corn Borer with Trichogramma ostriniae  
Thomas Kuhar¹, Michael P. Hoffmann², Mark G. Wright³ and Sylvie A. Pitcher²,  
¹Department of Entomology, Eastern Shore Agric. Res. & Ext. Ctr., VPI & SU, Painter, VA, ²Department of Entomology, Cornell University, Ithaca, NY  

3:55 Integration of a biological control intensive program following annual releases of the egg parasitoid Edovum puttleri  
James Lashomb, Department of Entomology and Economic Zoology, Rutgers University, New Brunswick, NJ
Tuesday afternoon

4:20  **Pheromonal augmentation of the predatory Spined Soldier Bug, Podisus maculiventris (Heteroptera: Pentatomidae)**  
Jeffrey R. Aldridge and Kevin Thorpe, USDA-ARS, Chemicals Affecting Insect Behavior Laboratory & Insect Biocontrol Laboratory, Beltsville, MD

4:45  **Discussion: Plans for next year** Richard Casagrande

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**Symposium: Digital Methods in Extension**  
*Delaware 1 & 2*

**Organizer / Moderator**
Doug Pfeiffer  
Department of Entomology  
Virginia Tech  
Blacksburg, VA

1:30  **Opening Remarks** Doug Pfeiffer

1:35  **How I made my first million (hits)**  
Eric Day, Department of Entomology, Virginia Tech, Blacksburg, VA

1:55  **Georeferencing pest populations in fruit crops**  
Dean Polk, Rutgers Fruit Research And Extension Center, Cream Ridge, NJ

2:05  **VICE-Corn: A Virginia insect control expert for corn**  
Rod Youngman, Department of Entomology, Virginia Tech, Blacksburg, VA

2:25  **BREAK**

2:40  **On the front line: Blending new and traditional media to extend IPM information to clientele**  
Ames Herbert, Tidewater Agric. Res. And Ext. Ctr., Suffolk, VA

3:00  **Web-based degree-day predictions**  
Greg Krawczyk, Penn State Fruit Research Center, Biglerville, PA

3:20  **Interfacing web-based information delivery and PDAs**  
D. G. Pfeiffer, Department of Entomology, Virginia Tech, Blacksburg, VA

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**Executive Committee**  5:00-6:00pm  
*Rm 612*