### **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 Overveiw**

Sunday					
	Event	Time	Location		
Afternoon	Registration	1:00 - 5:00	The Plaza (inner		
			courtyard)		
	Executive Committee meeting	1:00 - 5:00	Rm 612		
	Poster setup and display	1:00 -	Pennsylvania		
Evening	Welcome Social	5:30 – 7:30	Pennsylvania		
	Student networking roundtable	7:00 - 8:00	Delaware 1		
	Exotic pest workshop	8:00 - 10:00	Delaware 2		
	Small fruit workshop	8:00 - 10:00	Washington		
Monday					
Morning	Registration	8:00 – 12:00	The Plaza (inner		
			courtyard)		
	Poster display	8:00 -	Pennsylvania		
	Symposium: New challenges and	8:30 – 11:45	Delaware 2		
	approaches in structural and community				
	pest control				
	Symposium: NE field crops insect	8:30 – 11:30	Washington		
	conference				
	Symposium: DNA technologies in	8:30 – 11:30	Delaware 1		
	entomological research				
Noon	Students meet with Executive committee	12:00 – 1:00	Delaware 1		
1,001	and ESA President				
	Student paper competition	1:00-2:45	Washington		
Afternoon	Submitted papers	2:45 – 4:50	Washington		
	Symposium: Distributed education and	2:45 – 5:30	Delaware 1		
	technology				
Evening	Banquet and awards presentations	6:00 – 8:30	Maryland		
	Linnaean games	8:30 – 10:00	Pennsylvania		
Tuesday					
Morning	Town hall gathering and business meeting	7:30 – 8:30	Pennsylvania		
	Poster display	8:00 -	Pennsylvania		
	Symposium: Interplay of biocontrol and	8:30 – 11:40	Washington		
	systematics				
	Symposium: Info and geo technologies	8:30 – 12:15	Delaware 1 & 2		
	advancing population ecology and				
	management				
Noon	5k Run / Walk	12:30 – 1:30	Meet in Plaza		

	Event	Time	Location
Afternoon	Symposium: Northeast working group on biological control: Natural enemy augmentation – recent Progress	1:30 – 5:00	Washington
	Symposium: Digital methods in extension	1:30 - 4:00	Delaware 1 & 2
	Executive committee	5:00 - 6:00	Rm 612

#### 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, *Noctuea pronuba*, Hemlock Woolly Adelgid, Cotton Boll Weevil, Lily Leaf Beetle, Extotic 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 burrknot borers in New York revisited

David P. Kain<sup>1</sup>, Richard W. Straub<sup>2</sup> and Arthur M. Agnello<sup>1</sup>, <sup>1</sup>Department of Entomology, Cornell University, NYS Agricultural Experiment Station, Geneva, NY, <sup>2</sup>Department 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. Weber<sup>1</sup>, Paul Robbins<sup>2</sup>, Aijun Zhang<sup>3</sup> and Anne Averill<sup>4</sup>, <sup>1</sup>USDA-ARS Insect Biocontrol Laboratory, BARC-West, Beltsville, MD, <sup>2</sup>Soil Insect Ecology Laboratory, Department of Entomology, NYSAES, Cornell University, Geneva, NY, <sup>3</sup>Chemicals Affecting Insect Behavior Laboratory, BARC-West, Beltsville, MD, <sup>4</sup>Department 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.<sup>1</sup>, Martin Shapiro<sup>1</sup>, A. H. McIntosh<sup>1</sup> and Merle Shepard<sup>2</sup>, <sup>1</sup>USDA-ARS, <sup>2</sup>Clemson 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. Rose<sup>1</sup>, Galen P. Dively<sup>2</sup> and Jeffrey S. Pettis<sup>3</sup>, <sup>1</sup>Environmental Protection Agency, <sup>2</sup>University of Maryland at College Park, and <sup>3</sup>USDA/ARS
- 11. Can systemic insecticide residues kill predatory bugs on landscape plants?

  Adrianna Szczepaniec<sup>1</sup>, Michael Raupp<sup>1</sup> and Stanton Gill<sup>2</sup>, <sup>1</sup>Department of Entomology ,

  University of Maryland, College Park, MD, <sup>2</sup>Central 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
- 13. The Brown Marmorated Stink Bug, *Halyomorpha halys* (Stal) (Heteroptera: Pentatomidae): A polyphagous asian plant pest newly discovered in North America E. Richard Hoebeke<sup>1</sup> and Karen M. Bernhard<sup>2</sup>, <sup>1</sup>Department of Entomology, Cornell University, Ithaca, NY, <sup>2</sup>Lehigh 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 Rowley<sup>1</sup>, Frank Hanson<sup>1</sup> and Joe Stitt<sup>2</sup>, <sup>1</sup>Department of Biological Sciences,
  University of Maryland, Baltimore County, Baltimore, MD, <sup>2</sup>Applied 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

#### Sunday afternoon and evening

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, Deptartment of Entomology, University of Maryland, College Park, MD

#### 24\*. Mites and ticks: A virtual introduction

Ethan C. Kane<sup>1</sup> and Ronald Ochoa<sup>2</sup>, <sup>1</sup>Department of Entomology, University of Maryland, College Park, MD , <sup>2</sup>Systematic 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<sup>1</sup> Lyn Garling<sup>1</sup>,Ken Long<sup>2</sup> and Lee Bentz<sup>2</sup> <sup>1</sup>PAIPM and Department of Entomology, Pennsylvania State University, University Park, PA, <sup>2</sup>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
- 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

D. A. Herbert, Jr.<sup>1</sup>, E. R. Day<sup>2</sup> and D.Tuckey<sup>3</sup>. VirginiaTech, <sup>1</sup>Tidewater Agric. Res. & Ext. Ctr., Suffolk, VA, <sup>2</sup>Department of Entomology, Blacksburg, VA, <sup>3</sup>Virginia Cooperative Extension, Middlesex Co. Extension Office, Saluda, VA

#### 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

#### Monday morning

- 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

### **Symposium: DNA Technologies in Entomological Research- Graduate student symposium** *Delaware 1*

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 McClanan, 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 Quadraspidiotus 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 penedetecta?

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 Bell<sup>1</sup>, Jessica Felse<sup>1</sup>, Mark Mescher<sup>2</sup> and Glenn Holbrook<sup>1</sup>, <sup>1</sup>Department of Entomology, Pennsylvania State University, University Park, PA, <sup>2</sup>Department of

Biology, Pennsylvania State University, University Park, PA

#### **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 Bergh<sup>1</sup>, Tracy C. Leskey<sup>2</sup> and Starker. E. Wright<sup>2</sup>, <sup>1</sup>Virginia Tech AHS AREC, Winchester, VA, <sup>2</sup>USDA 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)

#### Monday afternoon

- Lois E. Swoboda and Dini Miller, Department of Entomology, Virginia Tech, Blacksburg, VA
- 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

#### 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 Lashomb¹ and George Hamilton², ¹Department of Entomology, Rutgers University,
  Blake Hall 92-Lipman Dr., New Brunswick, NJ, ²Pest Management Office, Rutgers
  University, Blake Hall 93-Lipman Drive, New Brunswick, NJ

### 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

Kristian E. Holmstrom, Sarah D. Walker, Joseph Ingerson-Mahar and Marilyn G. Hughes, Rutgers Cooperative Extension & Center for Remote Sensing, New Brunswick, NJ

- 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 Willers<sup>1</sup>, Deborah Boykin<sup>2</sup>, Mike Seal<sup>3</sup>, Kenneth Hood<sup>4</sup> and Wendell Ladner<sup>1</sup>, <sup>1</sup>USDA, ARS, Crop Science Research Laboratory, Mississippi State, MS, <sup>2</sup>USDA, ARS, Delta State Research Center, Stoneville, MS, <sup>3</sup>ITD Spectral Visions, Stennis Space Center, MS, <sup>4</sup>Perthshire 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 Andre<sup>1</sup>, Penny Masuoka<sup>1</sup>, Eliska Rejmankova<sup>2</sup>, Roberto Fernandez<sup>3</sup>, Nelson
Solorzano<sup>4</sup>, Scott Gordon<sup>1</sup>, Jesus Gonzalez<sup>1</sup>, Paul Pachas<sup>5</sup>, Nicole Achee<sup>1</sup>, Donald
Roberts<sup>1</sup> and Phillip Lawyer<sup>1</sup>, <sup>1</sup>Department of Preventive Medicine and Biometrics,
Uniformed Services University of the Health Sciences, Bethesda, MD, USA <sup>2</sup>Department
of Environmental Science and Policy, University of California, Davis, CA, USA

### Tuesday morning

<sup>3</sup>Department of Entomology, Naval Medical Research Center Detachment, Lima, Peru, <sup>4</sup>Hospital "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 Kuhar<sup>1</sup>, Michael P. Hoffmann<sup>2</sup>, Mark G. Wright<sup>2</sup> and Sylvie A. Pitcher<sup>2</sup>,

  <sup>1</sup>Department of Entomology, Eastern Shore Agric. Res. & Ext. Ctr., VPI & SU, Painter,
  VA, <sup>2</sup>Department 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

#### **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

#### Executive Committee 5:00-6:00pm

Rm 612