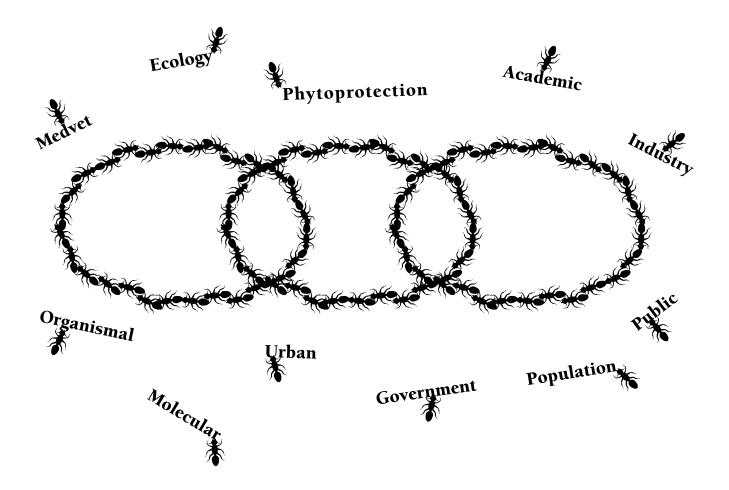
ENTOMOLOGICAL SOCIETY OF AMERICA

EASTERN BRANCH

76TH ANNUAL MEETING



ENTOMOLOGICAL LINKS: THE POWER OF COLLABORATION

MARCH 20 – 22, 2005 HARRISBURG HILTON HOTEL HARRISBURG, PENNSYLVANIA

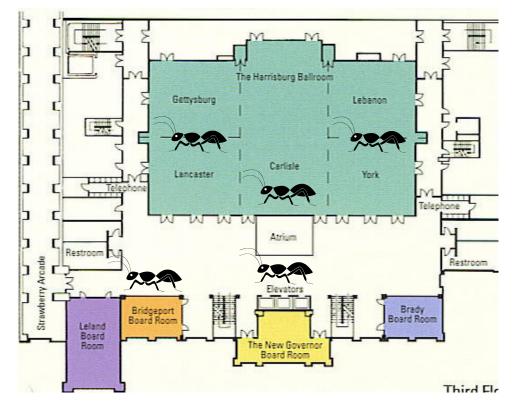
The Program Encapsulated

SUNDAY

Afternoon Evening	Registration Local Arrangements Executive Committee Meeting It's a Bug's World – Outreach Posters and Displays Student Oral Presentation Competition Reception and President's Welcome IDEP Workshop Student Networking Strategic Planning Meeting	1:00-5:00 12:00-6:00 1:00-5:00 1:00-5:00 2:00-5:20 6:00-7:30 7:30-9:00 7:30-9:00 7:30-9:00	Lancaster Lobby New Governor Harrisburger Whitaker Center Carlisle York Carlisle Bridgeport Penn Harris Leland
	MONDAY		
Morning	Registration Local Arrangements Posters and Displays Tree Fruit Symposium IDEP Symposium NE Regional Field Crops Conference Outreach Symposium	8:00-5:00 Until 9:00 pm 8:00-5:00 8:00-12:00 8:00-12:00 8:00-12:00 8:00-12:00	Lancaster Lobby New Governor Carlisle Lancaster Penn Harris York Gettysburg
Afternoon	Small Fruit Symposium Industry Symposium Student Symposium Biological Control Symposium Corn Earworm Resistance Discussion	1:00-5:00 1:00-5:00 1:00-4:35 1:00-5:00 2:00-5:00	Lancaster York Penn Harris Gettysburg Lochiel Boardroom
Evening	Social and cash bar Banquet and awards Linnaean Games	5:30-6:00 6:00-8:30 9:00	Carlisle York/Lebanon Lancaster
	TUESDAY		
Morning	Registration Local Arrangements Eastern Branch Business Meeting Posters and Displays Acarology Symposium Forestry Symposium Disease Vector Symposium Submitted Papers Adjourn	8:00-10:00 8:00-12:00 7:00-7:45 8:00-12:00 8:00-10:50 8:00-12:00 8:00-11:45 8:30-11:45 12:00	Lancaster Lobby New Governor Lebanon Carlisle York Lancaster Gettysburg Lebanon

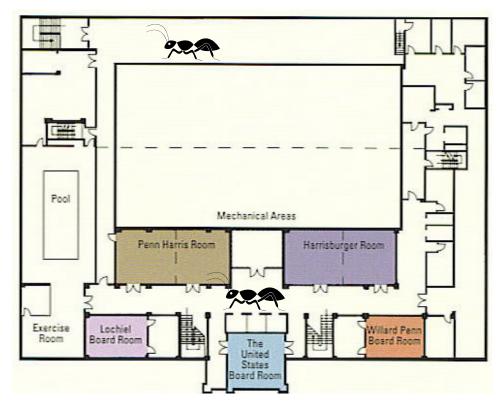
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Harrisburg Hilton Floor Plan



Second Floor

Third Floor



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Thank you!

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2005 Eastern Branch ESA Award Winners

ESA Distinguished Achievement Award in Teaching

Michael Saunders



Michael C. Saunders is a Professor of Entomology at Penn State University. He was born and raised in Tidewater, Virginia. He received his B.S. in Zoology from Duke University in 1975, his M.S. in Biology from Old Dominion University in 1978, and his Ph.D. in Entomology from the University of Georgia in 1984. He spent 18 months as a postdoctoral scholar at Texas A&M before joining the Penn State entomology faculty in 1985. He has taught Introductory Entomology since 1992. He also teaches Introductory Agroecology, and coordinates the Agroecology major. As program coordinator, he advises nearly 20 undergraduate students. He is also the graduate program coordinator in the Entomology Department at Penn State. In addition, he also serves as a faculty member of the Intercollege Graduate Degree Program in Ecology, and as a faculty member in the Dual Degree Program in Operations Research.

ESA Distinguished Achievement Award in Extension



Roger Youngman

Roger 'Rod' R. Youngman was born and raised in Southern California. He attended California State University Fullerton where he received his B.A. in biology in 1978. Rod relocated to Riverside in the fall of 1979 to pursue graduate studies in entomology at the University of California Riverside under the direction of Dr. Martin Barnes. He received his Ph.D. in entomology with minors in acarology and statistics in 1984. He remained at Riverside for the next four years working as a postdoctoral research entomologist. From 1984-1986, Rod worked for Dr. Nick Toscano on several cotton and vegetable insect pest management projects. From 1986-1988, he joined Dr. Tom Baker's insect behavior lab where he ran electroantennogram analyses on carob moth sex pheromone components and conducted wind tunnel bioassays on host seeking and ovipositional behaviors in female navel orangeworm moths.

In 1988, Rod accepted an Assistant Professor and Extension Specialist position in the Department of Entomology at Virginia Tech. He was promoted to Associate Professor with tenure in 1994 and Professor in 2002. His current position assignment is 75% Extension, 15% Research, and 10% Teaching. Rod's primary area of responsibility is to develop and disseminate new knowledge on insect pest management programs for field corn and alfalfa. He is additionally responsible for disseminating new and relevant information on pest management programs and management tactics for grass hay and pasture, sorghum, and large animals and poultry. He conducts research that complements his extension programs. Examples of recent and ongoing research projects include studies on insect resistant transgenic corn hybrids and glandular-haired alfalfa cultivars; efficacy and role of novel insecticidal seed treatments on secondary corn insects; ecology, cultural, and biological control of corn and alfalfa insects; and regional surveys of grower IPM practices and pest injury on forage crops.

ESA Recognition Award in Entomology

Anthony Shelton



Dr. Shelton has built a nationally and internationally recognized program in applied entomology for vegetable pest management that has had spin-offs to other systems. During the last five years, his contributions to insecticide resistance management (IRM) have been most notable and it is for this work he is being nominated. This work covers his valuable contributions on IRM to Bt transgenic plants, but also his substantial work on IRM to conventional insecticides. Dr. Shelton wishes to thank his co-workers since this award is a reflection of their work as part of our overall program.

L.O. Howard Distinguished Achievement Award



Ronald John Prokopy

We honor Ronald John Prokopy as the 2005 L.O. Howard Award recipient for distinguished achievement in the field of Entomology. By uniquely blending elements of behavioral ecology and evolutionary biology, Ron developed the premier program for managing the most important tree fruit pests in the Northeast. He pioneered the use of plant visual and odor cues for developing control tactics. His studies of foraging behavior and investigations of genetic and environmental components of behavior were used as the basis for creating new, biologically based approaches for pest management. Ron was recognized as a regional, national, and international scholar and was regularly invited to present the results of his research in this country and aboard. Ron published widely in the very best journals of the discipline. He was the author of more than 450 publications. He supported his research through highly competitive grant sources. He was active in the Branch and the Society. He received numerous awards and honors, including Fulbright and Guggenheim Fellowships, Distinguished Academic Outreach Award in 1998, University of Massachusetts Chancellor's Medal in 1985, J.E. Buzzart Memorial Award from the Entomological Society of America in 1984, Distinguished Research Award from the Massachusetts Agricultural Experiment Station in 1983, Wooster School Alumni of the Year award in 1983. In addition to his scholarly accomplishments Ron was a renaissance man who fully enjoyed science, art, music, sports and the natural world. He was an avid runner, swimmer, golfer, cross-country skier, gardener, and opera fan.

Herb Streu Meritorius Service Award

Susan Whitney King

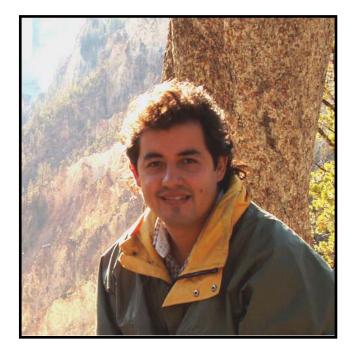


Susan Whitney King served on the ESA Eastern Branch Executive Committee from 1995 to 2004 and, with her committee assignments, attended eleven consecutive summer planning meetings. Susan was instrumental in starting the changes to the EB Constitution and Bylaws that made electronic voting possible in the Branch saving us thousands of dollars. Offices and Committee assignments that she held were: President, Eastern Branch. 2002 -2003. EB Representative to the ESA Governing Board. 1996 – 1999. Member-at-Large, EB Executive Committee. 1995. Chair, EB Local Arrangements Committee. 1997-1998. Chair, EB Finance Committee, 1995-1996. Chair, EB Program Committee, 1994-1995. Member, ESA Strategic Planning Committee, 1995 – 1997. Chair, ESA Governing Board Committee on Human Diversity, 1994 – 1996.

King currently serves as the EB Parliamentarian.

John Henry Comstock Award

Jaime C. Piñero

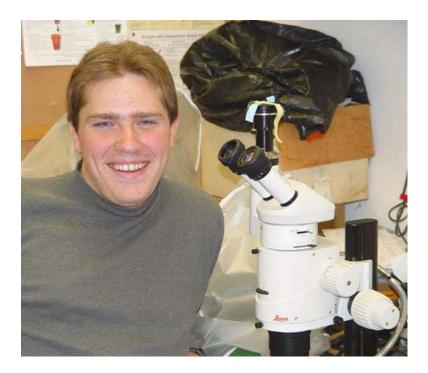


I was born in Mexico City on November 19, 1969, and lived for nearly 30 years in Xalapa, Veracruz, Mexico, (along the Gulf of Mexico). From 1987 to 1992, I studied at the University of Veracruz, where I got my B.S. degree in Agronomy. While an undergraduate, I became involved in the field of Entomology at the Institute of Ecology (Xalapa, Veracruz, Mexico). It was there, while I was executing a research project for my B.S. thesis (a requirement of my University to get the bachelor's degree), that I realized how much I loved doing research in general, and the field of Entomology in particular. Subsequently, from 1992 to 1999 I worked (at the same institution) as a research assistant supporting several research projects related to the behavior and ecology of a group of tephritid flies that are pests of several species of tropical fruit, under the supervision of Dr. Martin Aluja.

In spring of 2000, I started graduate school in the Department of Entomology (nowadays Department of Plant, Soil, and Insect Science) at the University of Massachusetts, in Amherst, where I had the great fortune of being supervised by Dr. Ronald J. Prokopy. Ron Prokopy was a great advisor, and one of the most amazing and unique individuals I have ever met. He died unexpectedly in his sleep on May 14, 2004. As my way of honoring his memory, I am dedicating this John H. Comstock Award, and my entire Doctoral dissertation, to Ron Prokopy.

Asa Fitch Memorial Award

Benjamin Werling



Ben Werling was born in Evanston, Illinois on the 23rd of January in 1979. After graduating in 1997 from Lutheran high School Westland, he attended Luther College in Decorah, Iowa, receiving his B. A. in Biology in 2001. In 2001 he started working towards his M. S. in Entomology at Cornell University, working with Dr. Brian A. Nault at the New York State Agricultural Experiment Station and received his degree in 21 January 2004. He is currently a doctoral student in the Department of Entomology at the University of Wisconsin working with Dr. Claudio Gratton.



SUNDAY MARCH 20, 2005

Afternoon

Registration Dean Polk, Rutgers University, Cream	<i>Lancaster Lobby</i> Ridge, NJ	1:00-5:00		
Local Arrangements Karl Valley, PA Dept. of Agriculture, J	<i>New Governor</i> Harrisburg, PA	12:00-6:00		
Executive Committee Meeting	Harrisburger	1:00-5:00		
Public Outroach Program	Whitehon Conton	1.00 5.00		
Public Outreach Program	Whitaker Center	1:00-5:00		
	<i>Whitaker Center</i> "It's a Bug's World" n, Delaware Department of Agricu			

Bugs for the Gourmet David Gracer, Providence, RI

Ancient Chinese Jade Insects Doug Fleury, Holyoke, MA

STARS, Magnificent Mouths of Mini-Beasts The Sacred Scarab Kristin Shughart, Harrisburg, PA

Carrie Murray Nature Center Insect Zoo Lloyd Tydings, Baltimore, MD

Forensic Entomology: When You Die, the Bugs, Don't Lie John Wallace, Millersville, PA

program is in cooperation with the Whitaker Center and Oakes Museum of Natural History.

Insects of Pennsylvania David Foster, Grantham, PA

Waterworld Mike Hutchinson, PA DEP

The Wealth of Insect Diversity Fred Paraskevoudakis, MD Entomological Society

York County 4-H Bug Club Ryan Bridge

Capital Area Beekeepers Jim Hoover, Enola, PA

Invasive Insects Threatening PA Forest Health Shalia Werner, Middletown, PA



Student Competition Posters	Carlisle	1:00-5:00

Thomas Kuhar, Virginia Tech, Painter, VA

1. Larval host plant density in eastern regal fritillary [*Speyeria idalia idalia* (Drury) (Nymphalidae)] occupied fields at Fort Indiantown Gap military base, Annville, Pennsylvania.

Mark Swartz, and Betty Ferster, Fort Indiantown Gap Office, Annville, PA; Gregory Paulson, Shippensburg University, Shippensburg, PA

2. Odonate diversity of permanent pools at Fort Indiantown Gap, a military installation in Annville, PA.

David Zapotok, Shippensburg University, Shippensburg, PA; Betty Ferster, the Nature Conservancy, Annville, PA and Gregory Paulson, Shippensburg University, Shippensburg, PA

3. The influence of biotic and abiotic factors on the invertebrate communities of eighteen vernal pools in Michaux State Forest, Franklin County, and State Game Lands #176, Centre County, Pennsylvania.

Betsy Ray, The Nature Conservancy, Middletown, PA; Gregory Paulson and Larry Klotz Shippensburg University, Shippensburg, PA

- 4. Immunocompetence in the dampwood termite *Zootermopsis angusticollis*: Encapsulation rates as a measure of cellular immunity. Nicole Uhlig, Rebeca Rosengaus and Donald O'Malley, Northeastern University, Boston, MA
- 5. Choosing the right partner: Mate choice in the dampwood termite, *Zootermopsis gusticollis*. Danielle Bulgier, Navina Mehta and Rebeca Rosengaus, Northeastern University, Boston, MA
- 6. Effect of soil moisture on questing and survival in nymphal black-legged ticks, *Ixodes scapularis*.

Christine Zolnik, Sarah Rodgers, Thomas Mather, Josef Gorres and Howard Ginsberg, University of Rhode Island, Kingston, RI

- An evaluation of MODIS: a tool to predict tick populations?
 Maureen Brindley, Sarah Rodgers and Thomas Mather, University of Rhode Island, Kingston, RI
- 8. Competitive interactions among three exotic predators of hemlock woolly adelgid, *Laricobius nigrinus, Sasajiscymnus (=Pseudoscymnus) tsugae*, and *Harmonia axyridis*. Robbie Flowers, Scott Salom and Loke Kok, Virginia Tech, Blacksburg, VA
- **9.** Cellulose digestion in the Asian longhorned beetle (*Anoplophora glabripennis*). Scott Geib and Kelli Hoover, The Pennsylvania State University, University Park, PA



- **10.** The role of olfaction in insect feeding behavior. Carlos Uquillas and Frank Hanson, UMBC, Baltimore, MD
- 11. The effect of European corn borer stalk tunneling on juvenile penetration and egg production by root knot nematode, *Meloidogyne incognita*, in corn. Siddharth Tiwari, Roger Youngman, Virginia Tech, Blacksburg, VA and Edwin Lewis, University of California, Davis, CA
- 12. Comparison of trap types for collecting *Halyomorpha halys* (Hemiptera: Pentatomidae). Anne Nielsen, Rutgers University, New Brunswick, NJ and Peter Shearer, Rutgers University, Bridgeton, NJ

Submitted Posters	Carlisle	1:00-5:00

- 13. *Tipula paludosa* Meigen and *T. oleracea* Meigen, European crane flies new to the eastern United States: Potentially serious turfgrass and pasture pests. Richard Hoebeke and Carolyn Klassl, Cornell University, Ithaca, NY
- 14. Turfgrass pest alert: Leatherjackets (Diptera: Tipulidae) cross into western New York. Daniel Peck, Cornell University Geneva, NY
- **15. Invasive swallow-worts and associated insect herbivores in Rhode Island.** Megan Dyer, Lisa Tewksbury and Richard Casagrande, University of Rhode Island, Kingston, RI
- 16. Ecological investigations of natural enemies for an interstate biological control program against Spartina grasses. David Viola, Lisa Tewksbury and Richard Casagrande, University of Rhode Island, Kingston, RI
- 17. Phragmites australis and the mealy plum aphid: Differential resistance on native and non-native haplotypes.
 Paula Hawkins, Adam Lambert, Richard Casagrande and Lisa Tewksbury, University of Rhode Island, Kingston, RI
- 18. Effects of some insecticides on lacewing abundance and their parasitoids in New Jersey peach orchards. Atanas Atanassov and Peter Shearer, Rutgers University, Bridgeton, NJ
- **19. Ovicidal effects of acetamiprid on selected insect pests of vegetables.** John Aigner, Thomas Kuhar and Jack Speese, Virginia Tech, Painter, VA



- 20. Foliar insecticide evaluations for lepidopterous pest control in collards (*Brassica oleracea* var. acephala) in Virginia. Roberto Cordero, Virginia Tech, Blacksburg, VA; Thomas Kuhar and John Speese III, Virginia Tech, Painter, VA
 21. Highbush blueberry insecticide use. Changes and trends.
- 21. Highbush blueberry insecticide use Changes and trends. Dean Polk, Rutgers University, Cream Ridge, NJ; Eugene Rizio, Rutgers Cooperative Extension of Atlantic County and Peter Cottingham, Rutgers Cooperative Extension - Consultant
- 22. A laboratory evaluation of chemical control methods against the invasive European fire ant, *Myrmica rubra*. Carrie Graham, Eleanor Groden and Frank Drummond, University of Maine, Orono, ME
- 23. Biological control of two-spotted spider mites in New Jersey high tunnel production systems. Joseph Ingerson-Mahar and Kristian Holmstrom, Rutgers University, New Brunswick, NJ
- 24. Control of varroa mites in honey bee colonies using a push-pull approach. Jodi Lasko and Dewey Caron, University of Delaware, Newark, DE
- **25. A new look at old systematics: Resurrecting Asa Fitch's aphid notes.** Gary Miller and Jonathan Eibl, USDA, ARS, Beltsville, MD
- 26. Re-evaluation of the induction of specificity in *Manduca sexta* on host plants. Will Gretes and Frank Hanson, UMBC, Baltimore, MD
- 27. Comparison of infusion preferences for *Culex pipiens* and *Culex restuans* (Diptera: Culicidae) in oviposition traps and gravid traps in southwestern Virginia. Bryan Jackson and Sally Paulson, Virginia Tech, Blacksburg, VA



Student Oral	Presentation Competition	York	2:00-5:20
Organizer: Th	omas Kuhar, Virginia Tech, Pa	inter, VA	
2:05	ostriniae to control european	o corn borer in bell	lative releases of <i>Trichogramma</i> pepper. nd Thomas Kuhar, Virginia Tech,
2:17	Using yellow rocket as a trap Francisco Badenes-Perez, Ant NY	-	lback moth. rian Nault, Cornell University, Geneva,
2:29	in the field.	Blacksburg, VA; Th	ter colorado potato beetle movement nomas Kuhar, Virginia Tech, Painter, MD
2:41	Fitness tradeoffs in Colorado Christian Castaldo and Galen	1	to imidacloprid resistance. of Maryland, College Park, MD
2:53	Locomotory response of pota Girish Narayandas and Andrei	-	
3:05	The facultative development Wilma Aponte-Cordero, Denn University, University Park, P	is Calvin and Micha	n different temperatures. ael Saunders, Pennsylvania State
3:17	Natural occurrence and pred leaf beetle. Gaylord Desurmont and Paul V		f several predators against viburnum iversity, Ithaca, NY
3:29	The effects of systemic suble agents of hemlock woolly ad Brian Eisenback, Virginia Tec	elgid, Adelges tsuga	cloprid on two biological control <i>ie.</i>
3:41	Break		
3:56	Age-related immunocompete Jim McNeil, Diana Cox-Foster University Park, PA		· · · · · · · · · · · · · · · · · · ·



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Sunday Afternoon

4:08	You are what you eat: Diet and immunocompetance in the dampwood termite, <i>Zootermopsis angusticollis.</i> Jennifer Schmelter and Rebeca Rosengaus, Northeastern University, Boston, MA			
4:20	Crowding in early life causes deformities in insects. Alexander Bohorquez, UMBC, Baltimore, MD			
4:32	Hygropreference in larval <i>Manduca sexta</i> . Marc Rowley and Frank Hanson, UMBC, Baltimore MD			
4:44	Functional and morphological organization of the antennal lobe of male heliothine moth, <i>Helicoverpa zea.</i> Seong-Gyu Lee, Pennsylvania State University, University Park, PA, Mikael Carlsson and Bill Hanson, SLU, Alnarp, Sweden			
4:56	-	f the annual bluegrass weevil in golf l University, Ithaca, NY and Daniel Pe	-	
5:08	system.	rnative "least toxic" IPM program i sbury and Michael Raupp, University o	•	
		Sunday Evening		
Reception ar	nd President's Welcome	Carlisle	6:00-7:30	
IDEP Works Organizers: J		<i>Bridgeport</i> riculture and Eric Day, Virginia Tech	7:30-9:00	
IDEP Comm	nittee Meeting	Bridgeport	9:00	
Student Netv Doug Pfeiffer	working r, Eastern Branch President	Penn Harris	7:30-9:00	

Strategic Planning Meeting	Leland	7:30-9:00
Organizer: George Hamilton, G	Governing Board Representative	



MONDAY MARCH 21, 2005

Morning

Registration Dean Polk, R	utgers University, Cr	<i>Lancaster Lobby</i> eam Ridge, NJ	8:00-5:00
Local Arran Karl Valley,	gements PA Dept. of Agricultu	<i>New Governor</i> Ire, Harrisburg, PA	Until 9:00 pm
Posters and	Displays	Carlisle	8:00-5:00
Tree Fruit S	ymposium	Lancaster	8:00-12:00
	I	Advances in Tree Fruit Pest Manag n Remembrance of Ron Prokopy" own and Tracy Leskey, USDA-ARS, 1	
8:00	Introduction. Tracy Leskey, USD	A-ARS, Kearneysville, WV	
8:10	peach orchards.	evelopment for monitoring stink bug	
8:35	marmorated stink imported pest. Peter Shearer, Ann Aldrich, Ashot Khr Cooperative Extens	tudies to understand the biology an bug, <i>Halyomorpha halys</i> (Heteropte e Nielsen, George Hamilton, Rutgers, imian, USDA-ARS, Beltsville, MD; K ion, Allentown, PA and Gary Bernon, usion Laboratory, Otis Airbase, MA	ra: Pentatomidae): A recently New Brunswick, NJ; Jeffrey Karen Bernhard, Lehigh County
9:00	curculio and apple	rnell University, Geneva, NY and Jair	
9:25		plum curculio: Isolating key olfact A-ARS, Kearneysville, WV	ory cues.
9:50	Break		



10:20	The yin and yang of sesiid sex pheromones: Can we use behavioral antagonists as management tools? Chris Bergh, Virginia Tech, Winchester, VA; Tracy Leskey, USDA-ARS, Kearneysville, WV and Aijun Zhang, USDA-ARS, Beltsville, MD
10:45	The effects of orchard host plants on the biology of Oriental fruit moth (<i>Grapholita molesta</i> Busck): Implications for integrated management. Clayton Myers and Larry Hull, Pennsylvania State University, Biglerville, PA
11:10	Web broadcasting of apple insect and disease pest models to promote effective and efficient IPM. Glen Koehler, University of Maine Cooperative Extension, Orono, ME

11:35 **Putting it all together: Creating an orchard to optimize pest management.** Mark Brown, USDA-ARS, Kearneysville, WV and Clarissa Mathews, Shepherd University, Shepherdstown, WV

IDEP Symposium

Penn Harris

8:00-12:00

"Pathway Analysis for Exotic Pest Detection"

Organizers: Dick Bean, Maryland Dept. of Agriculture, Annapolis, MD and Jim Stimmel, Bureau of Plant Industry, Pennsylvania Dept. of Agriculture, Harrisburg, PA

- 8:00 **Opening Remarks.** Dick Bean
- 8:05 **Identifying the hot zone.** Joe Messineo, USDA, APHIS, PPQ, Ripley, WV
- 8:45 **Pest detection and USDA quarantine regulations compliance aboard Navy and Marine Corps shore installations.** Shannon Sked, Department of the Navy, Lester, PA
- 9:15 Pathways followed by *Copitarsia decolora* (Lepidoptera: Noctuidae): Implications for risk of establishment. Juli Gould, USDA, APHIS, Otis ANGB, MA
- 9:45 Internet surveillance: Addressing regulatory holes in the net over the world wide web.Jim Smith, USDA-APHIS, Raleigh, NC
- 10:15 Break



Monday Morning

- 10:30 NAPPFAST- A weather based system for pest prediction and risk assessment. Dan Borchert, USDA/APHIS, Raleigh NC
- 11:00 **Safeguarding, intervention, & trade compliance.** John Yankosky, USDA APHIS, Elizabeth, NJ
- 11:30 Pathways of introduction for Sudden Oak Death.Kayimbi Tubajika, Pest Survey Detection and Exclusion Laboratory, Otis ANGB, MA

Field Crops Symposium	York	8:00-12:00

"Northeast Regional Field Crops Insect Conference"

Organizer: Dennis Calvin, Pennsylvania State University, University Park, PA

- 8:00 **Introduction.** Dennis Calvin
- 8:10 Effect of European corn borer on whole-plant yield and forage quality of field corn. Siddharth Tiwari, Rod Youngman and Curt Laub, Virginia Tech, Blacksburg, VA
- 8:30 Non-target effects of clothianidin seed-treated corn on the invertebrate community.

Heather Harmon, Jane Wolfson and Towson University, Towson, MD; Galen Dively, University of Maryland, University Park, MD

8:50 **Control efficacy and plant growth responses of clothianidin seed treatments in field corn.** Terry Patton and Galen Dively, University of Maryland, University Park, MD

9:10 Region monitoring of pyrethroid resistance in adult *Helicoverpa zea* (Boddie) populations in the mid-Atlantic states. Ames Herbert, Sean Malone, Thomas Kuhar, John Speese, Virginia Tech, Suffolk, VA; Gregory Payne, State U. of West Georgia, Carrollton, GA; Shelby Fleischer, Penn State U., University Park, PA; Joanne Whalen, U. of Delaware, Newark, DE; Galen Dively, Terry Patton, U. of Maryland, College Park, MD; Daney Johnson, Penn State U., Landisville, PA



9:30 In-field movement of young adult male European corn borer moths (Lepidoptera: Crambidae) and its significance in respect to *Bt* resistance management. Charles Mason, Kelly Shropshire, John Pesek, Jr., University of Delaware, Newark, DE; Thomas Hunt, University of Nebraska, Concord, NE and Pat Porter, Texas A & M University, Lubbock, TX
9:50 Local movement of *Ostrinia nubilalis* females: Distance, direction, and host maturity effects.

Katharine Guslick and Dennis Calvin, Pennsylvania State University, University Park, PA

- 10:10 Break
- 10:30 Biological and developmental pattern of diapaused and non-diapaused univoltine and bivoltine European corn borer (Ostrinia nubilalis) population of a single geographic location, Centre County, PA. Faruque-Uz Zaman, Dennis Calvin, Edwin Rajotte and Liwang Cui, Pennsylvania State University, University Park, PA
- 10:50 High-resolution geographic specific economic analysis model for European corn borer management using *Bt*-corn hybrids.
 Dennis Calvin and Jeffery Hyde, Pennsylvania State University, University Park, PA; Joseph Russo and Jay Schlegel, ZedX, Inc.
- 11:10 Soybean aphid adult recruitment rate in central Pennsylvania and subsequent population growth and decline.
 Wilma Aponte-Cordero, Dennis Calvin and Michael Saunders, Pennsylvania State University, University Park, PA
- 11:30 Update and discusion about soybean aphid surveys and current status of IPM programs in our region.
 Dennis Calvin, Keith Waldron and Ames Herbert
- 11:50 **Business meeting**



Monday Morning

Outreach Syn	nposium Gettysburg	8:00-12:00
	"Beyond the Fear Factor Enhancing the Status of Insects in Education a Organizers: Betty Faber, Liberty Science Center Faith Kuehn, Delaware Department of Agri	nd Public Information" er, Jersey City, NJ and
8:00	Introduction. Faith Kuehn	
8:05	Excite youth about insect science to build a fut Paul Borth, The Entomological Foundation	ure for entomology.
8:25	What you can do to promote science literacy an Doug Fleury, Caterpillar Catalyst, Inc., National I	
8:45	Insects in children's literature. Lori Lauver, Whitaker Center for Science and the	Arts, Harrisburg, PA
9:05	The Goldenrod Project. Joe Sheldon and Amber Wingert, Messiah Colleg	e, Grantham, PA
9:25	Educating children and the public using extens George Hamilton, Rutgers University, New Bruns	
9:45	Break	
9:55	New pest management approaches to old ant p Rick Cooper, Cooper Pest Solutions, Lawrencevil	
10:35	Cockroaches are the teachers' pet. Betty Faber, Liberty Science Center, Jersey City,	NJ
10:55	Educating the Public About Butterfly Conserv Shelly Grow, Butterfly Conservation Initiative, Si	
11:15	Wrap up and Discussion. Betty Faber	
11:35	View demonstrations and displays	



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Small Fruit S	Symposium	Lancaster	1:00-5:00
	De	pproaches to the Study of Behavi dicated to the Memory of Sridha Anne Averill, University of Massa	r Polavarapu"
1:00	Introductory Anne Averill	remarks: A tribute to Sridhar P	olavarapu.
1:15	organic insec	Sridhar Polavarapu, Bill Sciarappa	Bait sprays, spheres, and and Luis Teixeira, Rutgers University,
1:35	0	of stem gall in lowbush bluebern enzie, Agriculture and Agri-Food C	
1:55		etween field movement of bluebe nond, University of Maine, Orono,	• • • •
2:20		etween habitat movement of cra l, University of Massachusetts, Am	
2:40		s and host choice: Are all <i>Rhago</i> Jr., Cornell University, Geneva, N	
3:05	Break		
3:20	became an ex	<i>hyllophaga</i> using sex attractants: sploration in evolutionary biology Cornell University, Geneva, NY	How a pest problem in cranberries 7.
3:45	beetle.	nd ecological variables that play er, University of Massachusetts, A	a role in mating disruption of oriental mherst, MA
4:05		or white grub management in blu penhöfer, Rutgers University, New	
4:30	-	e se beetle is too many, is IPM the Michigan State University, East La	
4:55	Concluding re Anne Averill	emarks.	



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Industry Syn	nposium	York	1:00-5:00
	Organizers:	Innovative Tactics for Crop Pr Paul Rensner, FMC Corporatio e, Crop Management Strategies,	n, Princeton, NJ and
1:00	Introduction. Paul Rensner		
1:10	0	w insecticide leads: A target s John Lyga and John Dixson, Fl	
1:35	vegetable pests.	A new insecticide for the cont n, Albert Everson and Robert Fa	arol of key row crop and arlow, BASF Corp., Research Triangle
2:00	Rachel Cameron,	acarb global susceptibility more Hector Portillo, Paula Marcon, Crop Protection, Newark, DE	
2:25	Break		
2:45	0 1	on and dispenser technology. C America, Lincoln University,	РА
3:10		s for codling moth control . ertis USA, Columbia, MD	
3:35	discovery.	otom phenotyping: Using digit e, FMC Corp., Princeton, NJ	al imaging as a tool in insecticide
4:00	-	nce with novel pest control me Vista Orchards, Fairfield, PA	thods.
4:25	Wrap-up and di Tim White	scussion.	



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Student Sym	posium Penn Harris	1:00-4:35
	erspectives in Entomology: As a Link to Other Disci nizer: Wilma Aponte-Cordero, Pennsylvania State Univ	
1:00	Introduction. Wilma Aponte-Cordero, Chair, Student Affairs Comm	ittee
1:05	Life history and ecology of <i>Phloeotribus liminaris</i> (phardwood stands. Joshua Bogart, SUNY College of Environmental Scier	<i>,</i>
1:30	Participatory integrated pest management program parks located in the northeastern United States. Friedaricka Steed, Pennsylvania State University, Univ	-
1:55	Onion maggot adult dispersal in New York commer for management. Benjamin Werling, University of Wisconsin, Madison	-
2:20	Locomotory response of potato aphid to environme Narayandas Girish Kumar, University of Maine, Orone	
2:45	Break	
2:55	Mayflies as integrative insects: Using knowledge of create novel techniques to biomonitor aquatic syste Brigid O'Donnell, University of Connecticut, Storrs, C	ms.
3:20	The advantages of arthropods for advancing ecolog Loren Benton Byrne, Pennsylvania State University, U	
3:45	The use of molecular tools for understanding mayfl and gene flow among headwater streams in fragme Laurie Alexander, University of Maryland, College Pa	nted landscapes.
4:10	Insect EF-1 alpha alignment Jessica Litman, Rutgers University, New Brunswick, N	ŊJ



Biological Co	ontrol Symposium	Gettysburg	1:00-5:00
	v	"What Ever Happened To?" Roger Fuester, USDA-ARS, New grande, University of Rhode Island	-
1:00	Introductory rema Roger Fuester	rks.	
1:05		ed to the mexican bean beetle? Iersey Department of Agriculture, T	Γrenton, NJ
1:25		ed to the clover root curculio? University/NYS IPM Program, Itha	aca, NY
1:45		ed to the alfalfa snout beetle? ell University, Ithaca, NY	
2:05		ed to the European corn borer? iversity of Delaware, Newark, DE	
2:25		ed to the pink hibiscus mealybug: SDA-APHIS-PPQ, Riverdale, MD	?
2:55	Break		
3:10		ed to the gypsy moth? University, Ithaca, NY	
3:30		ed to the brown-tail moth? niversity of Massachusetts, Amhers	st, MA
3:50		ed to the Hemlock woolly adelgid University of Massachusetts, Amh	
4:10		ed to the Larch sawfly? sylvania Department of Environme	ental Resources, Middletown, PA
4:30	on Biological Cont		Northeast Technical Committee gston, RI
4:50	Closing Remarks. Roger Fuester		



Eastern Branch Workshop Lochiel Boardroo	<i>m</i> 2:00-5:00
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Corn Earworm Synthetic Pyrethroid Resistance Roundtable Discussion Organizer: Shelby Fleischer, Pennsylvania State University, University Park, PA

Monday Evening

Social gathering and cash bar	Carlisle	5:30-6:00	
Banquet and Awards	York/Lebanon	6:00-8:30	
ESA Distinguished Achievem	ents in Teaching Award		
ESA Distinguished Achievements in Extension Award			
ESA Recognition Award in E			
L.O. Howard Distinguished A	0,		
Herb Streu Meritorious Servic			
Asa Fitch Award			
John Henry Comstock Award			

"Science With Practice: Neuroethology of Insect Pheromone Olfaction"

Linnaean Games	Lancaster	9:00
Doug Pfeiffer, Moderator		



Tuesday March 22, 2005

Morning

Registration Dean Polk, Ru	utgers University, Cream	<i>Lancaster Lobby</i> Ridge, NJ	8:00-10:00
Local Arrang Karl Valley, F	gements PA Dept. of Agriculture, I	<i>New Governor</i> Harrisburg, PA	8:00-12:00
Eastern Brar	ch Business Meeting	Lebanon	7:00-7:45
Posters and Displays		Carlisle	8:00-12:00
Acarology Sy	mposium	York	8:00-10:50
		lites, the New Pest Frontier nald Ochoa, USDA-ARS, Beltsv	ille, MD
8:00	Introduction. Ronald Ochoa		
8:05	Rose rosette disease, multiflora rose and eriophyid mites. James Amrine, West Virginia University, Morgantown, WV		
8:30	Phytoseidae (Acari) of North America. Gregory Evans, Harold Denmark and Calvin Welbourn, APHIS, USDA, Baltimore, MD		
8:55	8:55 Tritrophic interactions in mite predator-prey-plant systems with an emphasis on the role of leaf trichomes. Jan Nyrop, Cornell University, Ithaca, NY		
9:15	Break		
9:30	Eriophyidae).	e Canada thistle (<i>Cirsium arven</i> Ochoa, USDA-ARS, Beltsville,	, , , , , , , , , , , , , , , , , , ,
9:55	e. e	ent of the cereal rust mite on the Patton, University of Maryland,	
10:20	Plant feeding mites: Pa Ronald Ochoa, USDA-	ast, present, and future. ARS, Beltsville MD	



Tuesday Morning

Forestry Sym	posium Lancaster	8:00-12:00
	"Linking the Past, Present, and Future" Organizer: Scott Salom, Virginia Tech, Blacksburg, VA	X
8:00	Opening Remarks. Scott Salom	
8:05	Insect-host plant interactions. Dylan Parry, SUNY, Syracuse, NY	
8:23	Population dynamics. Joe Elkinton, University of Massachusetts, Amherst, MA	
8:41	Chemical ecology. Stephen Teale, SUNY, Syracuse, NY	
8:59	Biodiversity. Stephen Woods, University of Maine, Orono, ME	
9:17	Break	
9:32	Preventing exotic forest pests from entering our borders. Robert Rabaglia, Maryland Department of Agriculture, Annapoli	s, MD
9:50	Renewed efforts in biological control. Scott Salom, Virginia Tech, Blacksburg, VA	
10:08	Chemical control of forest insects: Hemlock wooly adelgid as Richard Cowles, Connecticut Agricultural Experiment Station, W	•
10:26	Implementation of mating disruption for a forest pest. Ksenia Tcheslavskaia, Virginia Tech, Blacksburg, VA	
10:44	Break	
10:59	State approaches to forest pest management. Sven-Erik Spichiger, Pennsylvania Department of Conservation a Middletown, PA	and Natural Resources,
11:17	Educating graduate and undergraduate students. Doug Allen, SUNY, Syracuse, NY	
11:35	Open forum	



Tuesday Morning

Disease Vector Symposium		Gettysburg	8:00-11:45
"High-T	Cech and Improved Control Strategi Organizers: Victoria Solberg, Walt Silver Spring, MD and James Ste	er Reed Army Institute of Res	search,
8:00	Introduction. Victoria Solberg		
8:05	Advantages and disadvantages of t legged deer ticks, <i>Ixodes scapularis</i> Victoria Solberg, Walter Reed Army	·.	
8:35	Control of <i>Ixodes scapularis</i> on wh Nick Hamon, Bayer Environmental S		nent of Lyme disease.
9:05	Addressing vector management at Andy Kyle, PA Department of Envir Harrisburg, PA		Management,
9:35	West Nile virus: Military response Melissa Miller, Alexandra Spring, Ge Kenneth McPherson, US Army Cent Ft. Meade, MD	eorgette Saba, Benedict Pagao	c, Karl Neidhardt and
10:05	Break		
10:15	Field detection of arthropod borne LTC Monica O'Guinn, US Army Me Detrick, MD	1 0	fectious Diseases, Fort
10:45	Potential for management of vector Kathryn Aultman, National Institute		enic technology.
11:15	Discussion		



Tuesday Morning

Submitted Pa	pers	Lebanon	8:30-11:45
Moderator: Gi	reg English-Loe	b, Cornell University, Geneva, NY	
8:30	•	e predator community affecting cruc Carlo Moreno and Pedro Barbosa, Univ	
8:42	riparian Macı	species: Exploring species abundance solepidoptera. versity of Maryland, College Park, MD	
8:54		REP vegetation type on arthropod d and Galen Dively, University of Maryl	•
9:06	0	x abundance for Lyme disease risk as and Thomas Mather, University of Rho	
9:18	Sternorrhync	rt system for the identification of scale ha; Coccoidea). er and Alessandra Rung, USDA-ARS, E ltsville, MD	· - · ·
9:30		urce populations of introduced organ Michael Raupp and David Hawthorne,	6
9:42	surface protei	olbachia strains associated with plum n (wsp) gene in eastern United States hirley Luckhart and Douglas Pfeiffer, V	·.
9:54	chemical isola Efat Abou-Fak	selected indigenous medicinal plant s tion of one bioactive extract. hr Hammad, University of Florida, Gai can University of Beirut, Beirut, Leban	nesville, Florida and Abdallah
10:06	and peach hos	nomena of the oriental fruit moth (Le at crops. nd Larry Hull, Pennsylvania State Univ	
10:18	Break		



Tuesday morning

10:33	The influence of habitat isolation and dispersal capability on the population substructure of Hemiptera: Delphacidae and Isoptera: Termitidae in the British Virgin Islands. Gwen Shlichta, David Hawthorne and Robert Denno, University of Maryland, College Park, MD
10:45	Evaluation of hypoxia for cultural control of Tortricid pests in cranberry. Luis Teixeira, Rutgers University, Chatsworth, NJ
10:57	The role of reduced-risk insecticides in the conservation biological control of leafrollers in New York apple orchards.

Mark Sarvary, Harvey Reissig and Jan Nyrop, Cornell University, Geneva, NY

- 11:09 **Viburnum leaf beetle: Update on an exotic landscape pest.** Paul A Weston, Cornell University, Ithaca, NY
- 11:21 Systematic revision of the Cossulinae (Lepidoptera: Cossidae) of Costa Rica. Steve Davis, University of Maryland, College Park, MD

Adjourn

12:00

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