

**88th Annual Meeting
of the
Southeastern Branch
Entomological Society
of America**

**2-4 March 2014
Greenville
South Carolina**



**David Hall
President, 2013-2014**

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ESA SECTIONS

Medical, Urban & Veterinary Entomology (MUVE) deals with insect interactions with other animals, including humans, including medical entomology, urban entomology, veterinary entomology, forensic entomology, epidemiology, integrated disease management, human and veterinary parasitology, public health pest management, mosquito control, management of structural pests (e.g., termites, ants), and others.

Physiology, Biochemistry, and Toxicology (PBT), formerly Integrative Physiological and Molecular Insect Systems or IPMIS, is for people who study insects at the cellular or molecular levels, and it includes topics such as biochemistry, microbiology, toxicology, endocrinology, cytology, molecular biology, allelochemicals, pheromones, hormones, metabolism, and others.

Plant-Insect Ecosystems (P-IE) deals with insect interactions with plants, including behavioral, ecological, and evolutionary relationships in natural landscapes, as well as integrated pest management (IPM) in agriculture, horticulture, forests, and lawn and garden. Aspects of crop protection, host-plant response, plant pathology/vectors, pollination, biological control, microbial control, and others are relevant.

Systematics, Evolution, and Biodiversity (SEB) is for people who study insect anatomy, classification and history. As the name implies, it focuses on systematics, evolution and biodiversity, but it could also include morphology, ecology, population dynamics, genetics, phylogeny, nomenclature, biogeography, zoology, and other specialties.

PROGRAM SUMMARY

SUNDAY, 2 MARCH

7:00 AM-10:30	Breakfast <i>Atrium</i>
8:00 AM	5K Fun Run <i>Lobby</i>
11:00 AM-12:00	Final Local Arrangements/Program Committee Meeting <i>Greenbrier</i>
1:00 PM-5:00	Executive Committee Meeting <i>Columbia/Charleston</i>
1:00 PM-5:00	Student Affairs Committee Meeting <i>Spartanburg</i>
1:00 PM-5:00	Registration <i>Atrium</i>
1:00 PM-6:30	Golf Tournament <i>Lobby</i>
2:00 PM-5:00	S-1058 Multi-State Biological Control of Arthropod Pests and Weeds <i>Greenbrier</i>
3:00 PM-7:00	Audiovisual <i>Asheville</i>
1:00 PM-7:00	Job Placement <i>Embassy Ballroom Prefunction</i>
5:00 PM-7:00	Linnaean Games, Preliminary Rounds <i>Doral</i>
5:00 PM-7:00	Southern Corn Insect Working Group <i>King's Mill</i>
5:00 PM-10:00	Student Poster Competition Set Up <i>Embassy Ballroom Prefunction</i>

PROGRAM SUMMARY

MONDAY, 3 MARCH

6:00 AM-8:00	Breakfast <i>Atrium</i>
7:00 AM-5:00	Audiovisual <i>Asheville</i>
7:00 AM-5:00	Job Placement <i>Embassy Ballroom Prefunction</i>
7:00 AM-5:00	Registration <i>Atrium</i>

PROGRAM SUMMARY

MONDAY, 3 MARCH (Cont.)

7:00 AM-8:00	Student Poster Competition Set Up <i>Embassy Ballroom Prefunction</i>
8:00 AM-4:00	Student Poster Competition Judging <i>Embassy Ballroom Prefunction</i>
8:00 AM-5:00	Student Poster Exhibits <i>Embassy Ballroom Prefunction</i>
8:00 AM-10:15	Opening and Plenary Session <i>Pinehurst/Doral</i>
10:15 AM-10:30	Break <i>Embassy Ballroom Prefunction</i>
10:30 AM-12:00	M.S. Student Oral Presentations I <i>King's Mill</i>
10:30 AM-12:00	M.S. Student Oral Presentations II <i>Columbia/Charleston</i>
10:30 AM-12:00	Ph.D Student Oral Presentations I <i>Greenbrier</i>
12:00 PM-1:30	Lunch- Buffet <i>Atrium</i>
12:00 PM-1:40	ESA Certification Board Luncheon <i>Atrium – Tables Reserved</i>
1:40 PM-2:40	Poster Presenters at Display Presentation <i>Embassy Ballroom Prefunction</i>
1:40 PM-3:20	B.S. & M.S. Student Oral Presentation III <i>King's Mill</i>
1:40 PM-3:51	Ph.D. Student Oral Presentation III <i>Harbour Town</i>
1:40 PM-2:55	M.S. Student Oral Presentation IV <i>Columbia/Charleston</i>
1:40 PM-3:40	Contributed Papers I <i>Spartanburg</i>
1:40 PM-4:00	Vegetable Entomology Symposium <i>Florence</i>
5:00 PM-7:00	Student Poster Competition Removal <i>Embassy Ballroom Prefunction</i>
5:00 PM-7:00	Linnaean Games, Final Round <i>Pinehurst/Doral</i>

PROGRAM SUMMARY

MONDAY, 3 MARCH (Cont.)

5:30 PM-7:30	Hotel Reception <i>Atrium</i>
7:30 PM-9:00	Monday Night Reception <i>Outside Terrace</i>
7:00 PM-10:00	General Poster Set Up <i>Embassy Ballroom Prefunction</i>

PROGRAM SUMMARY

TUESDAY, 4 MARCH

6:00 AM-8:00	Breakfast- <i>Atrium</i>
7:00 AM-3:30	Audiovisual <i>Asheville</i>
7:00 AM-5:00	Job Placement <i>Embassy Ballroom Prefunction</i>
7:00 AM-12:00	Registration <i>Atrium</i>
7:00 AM-8:00	Past Presidents Breakfast <i>Café Verdae Restaurant</i>
7:00 AM-8:00	General Poster Set Up <i>Embassy Ballroom Prefunction</i>
8:00 AM-5:00	General Poster Presentations <i>Embassy Ballroom Prefunction</i>
8:00 AM-11:20	Student Symposium-Chemical Cues in Insect Ecology <i>Harbour Town</i>
8:30 AM-11:25	Contributed Papers II <i>King's Mill</i>
8:30 AM - 9:54	Contributed Papers III <i>Greenbrier</i>
8:30 AM-12:00	Turf and Ornamental Symposium <i>Columbia/Charleston</i>
10:15 AM-10:30	Break <i>Embassy Ballroom Prefunction</i>
12:00 PM-1:30	Awards Luncheon and Photo Salon <i>Pinehurst/Doral</i>

PROGRAM SUMMARY

TUESDAY, 4 MARCH (Cont.)

1:40 PM-3:40	Contributed Papers IV <i>Greenbrier</i>
1:40 PM-2:40	Contributed Papers V <i>Harbour Town</i>
2:30 PM-3:30	Poster Presenters at Display Presentation <i>Embassy Ballroom Prefunction</i>
3:00 PM-3:15	Break <i>Embassy Ballroom Prefunction</i>
4:30 PM-6:30	Final Business Meeting <i>Columbia/Charleston</i>
3:30 PM-6:00	Submitted Poster Removal <i>Embassy Ballroom Prefunction</i>
5:30 PM-7:30	Hotel Reception <i>Atrium</i>
7:30 PM- 9:00	Closing Reception <i>Palmetto Ballroom</i>

MEETING NOTICES AND POLICIES

REGISTRATION: Everyone attending the SEB-ESA meeting is expected to register. On-site registration fees include a luncheon ticket, and are: Active Members-\$190; Student Members-\$90; Guests-\$65; and Non-members-\$240. One-day registration-\$190. Honorary Members, Emeritus Members, and Non-members giving invitational papers must register, but will not pay registration fees. Registration Desk is located in The Atrium, and will be open on Sunday (1:00 PM-5:00 PM), Monday (7:00 AM-5:00 PM) and Tuesday (7:00 AM-12:00 PM).

ACCOMPANYING GUEST ACTIVITIES/ FUNCTIONS:

We have several activities that should be of interest to accompanying registered guests at no extra cost, except for anyone wanting to participate in the golf event.

Sunday: 7:00-10:30 AM Breakfast (*Atrium*)

8:00 AM Participate in 5K Run

1:00 PM-6:00 Participate in Golf Tournament (fee based)

Monday: 6:00-9:00 AM Breakfast (*Atrium*)

10:15-10:30 AM Break (*Embassy Ballroom Prefunction*)

10:30-11:00 AM Special Program for Accompanying Guests (*Suite # 917; on 9th floor*)

11:15 AM Gather in Lobby for transportation to downtown Greenville.

11:30AM-12:30 PM Complimentary Lunch (*Westin Poinsett Hotel, Spoonbread*)

12:30-3:30 PM On your own to explore shops, parks, etc.

3:30-4:00 PM Complimentary Tea Time (*Westin Poinsett Hotel, Spoonbread*)

4:00 PM Gather in Lobby of Westin Hotel for transportation to Embassy Suites

7:30-9:00 PM Monday Night Reception (*Outdoor Terrace*)

Tuesday: 6:00-9:00 AM Breakfast (*Atrium*)

10:05-10:30 AM Break (*Embassy Ballroom Prefunction*)

12:00-1:30 PM Awards Luncheon (*Pinehurst/Doral*)

3:00-3:15 PM Break (*Embassy Ballroom Prefunction*)

7:30-9:00 PM Closing Reception (*Palmetto Ballroom, Entertainment TBA*).

As a registered accompanying guest at this meeting, you will be eligible for all of the above. In addition, you are welcome to attend any of the other meeting events including, Opening Session, Linnaean Games, daily Hotel Reception, etc.

ESA CERTIFICATION BOARD INFORMATION

DESK: Information on the Certification Board of the Entomological Society of America will be offered in the Registration area during Registration periods. Please contact the Certification Board Manager at the National Office to make arrangements to take the Certification Board Examination at the meeting.

PROGRAM SCHEDULE: Sessions must adhere to the printed schedule. It is the moderators' responsibility to keep speakers on schedule. If a scheduled presentation is not given, the moderator should ensure that the next speaker does not begin until his/her scheduled time. Timing devices will be provided.

AUDIOVISUAL: Digital projectors will be provided in each meeting room, along with pointing devices. Please design your material so that it can be read easily by the audience when it is projected. Presentations may be previewed in the Asheville Room from 7:00 AM to 5:00 PM on Monday and from 7:00 AM to 2:30 PM on Tuesday. Upload presentations in this room as early as possible on Sunday afternoon, Monday morning, or Tuesday morning.

DISPLAY PRESENTATIONS: Poster boards measuring 4 ft. wide x 4 ft. tall will be provided for each display presentation (posters should be no larger than 44x44"). Displays for the Student Competition on Monday should be set up on Sunday from 5:00 PM to 10:00 PM or Monday morning from 7:00 AM to 8:00 AM in the hall in front of Pinehurst/Doral. All student posters must be removed by 7:00 PM on Monday evening. Displays for Tuesday exhibition should be set up on Monday evening from 7:00 PM to 10:00 PM or Tuesday morning from 7:00 AM to 8:00 AM in the hall in front of Pinehurst/Doral. Displays should be mounted on the boards (assigned by the number of the presentation) with Velcro fasteners (hook side). Authors are asked to bring their own stick-on Velcro fasteners (preferred) for mounting their posters. All prints, figures, tables, etc. should be large enough to be read easily from a distance of at least 3 feet. Presentations should be available for viewing from 8 AM to 5 PM on the date displayed. Student presenters should be available at their displays between 1:40 PM and 2:40 PM on Monday, and presenters of regular posters should be at their posters from 1:30 PM to 2:30 PM on Tuesday. Be sure to remove all displays by 9:00 PM on Tuesday, 5 March.

JOB PLACEMENT CENTER: The Student Affairs Committee will sponsor a job placement board in the hall in front of Pinehurst/Doral for all interested employers and prospective employees from 7:00 AM to 5:00 PM on Monday and from 7:00 AM to 3:30 PM on Tuesday. If you have either a job vacancy or are seeking employment, please bring an announcement or résumé to the Asheville Room or post it directly on the appropriate board in the hall in front of Pinehurst/Doral.

PUBLIC RELATIONS: The Public Relations Committee will sponsor a Press Release area near the Registration desk during regular meeting hours. Press releases and public relations information may be brought to this area.

**SOUTHEASTERN BRANCH-ESA
2013-2014
OFFICERS AND COMMITTEES**

Executive Committee

David Hall, *President*

Catharine Mannion, *President-Elect*

David Buntin, *Past President*

Juang-Horng 'JC' Chong (2015), *Secretary-Treasurer*

Tim Schowalter (2016), *Gov. Board Representative*

Gus Lorenz (2016), *Member-at-Large*

Natalie Hummel (2015), *Member-at-Large*

Melissa Seibert (2014), *Member-at-Large*

Program Committee

David Jenkins, PR, *Chair*

Rizana Mahroof, SC

Katherine Parys, MS

Jesusa Legaspi, FL

Yasmin Cardoza, NC

Ted Cottrell, GA, *Ex officio*

Greg Hodges, FL, *Ex officio*

Membership Committee

Fred Musser, MS (2014) *Chair*

Alex Segarra, PR (2014)

Sarah Page Lawson, TN (2014)

Caydee Savinelli, NC (2014)

Tim Kring, AR (2015)

Vacant, GA (2015)

Xing Ping Hu, AL (2016)

Jeff Davis, LA (2016)

Vacant, SC (2016)

Eileen Buss, FL (2016)

Member Award Committee

Marianne Shockley, GA (2015), *Chair*

David Jenkins, PR (2014)

Francis Reay-Jones, SC (2015)

Michelle Samuel-Foo, AL (2016)

Phil Stansly, FL (2016)

Anna Meszaros, LA (2016)

Greg Wiggins, TN, *Ex Officio*

Archives Committee

Vacant (2018)

Resolutions Committee

Alejandro Calixto, FL, *Chair*

Dak Seal, FL (2014)

Jerome Grant (2014)

Student Awards Committee

Babu Srinivasan, GA (2014), *Chair*

Paula Mitchell, SC (2014)

Alejandro Calixto, FL (2015)

Will Hudson, GA (2015)

Xing Ping Hu, AL (2016)

Francis Reay-Jones, SC (2015)

Gregg Nuessly, FL, *Ex Officio*

Student Affairs Committee

Erika Machtinger, FL (2014), *Co-Chair*

Hamilton Allen, SC (2015), *Co-Chair*

Jessica Hartshorn, AR (2015)

Colin Funaro, NC (2015)

Daniel Fleming, MS (2015)

Matthew VanWeelden, LA (2014)

Stephanie Weldon, GA (2014)

Elizabeth Benton, TN (2015)

Eutychus Kariuki, FL (2015)

Vacant, AL (2015)

Angel Rivera-Colón, PR (2015)

Carey Minter, AR (Nov 2013), *Ex Officio*

Public Relations Committee

L. Fudd Graham, AL (2014), *Chair*

Alan Morgan, LA (2014)

David Donnell, SC (2014)

Audit Committee

Raymond Hix, FL (2014), *Chair*

Secretary-Treasurer Elect (2014)

Vacant (2014)

JC Chong, SC, *Ex Officio*

Local Arrangements Committee

Greenville, SC Meeting (2014)

Alvin Simmons, SC, *Chair*

Robert Bellinger, SC

Eric Bensen, SC

Jeremy Greene, SC

Rizana Mahroof, SC

Paula Mitchell, SC

Francis Reay-Jones, SC

Matt Turnbull, SC

Patricia Zungoli, SC

JC Chong, SC, *Ex Officio*

Edith Simmons, SC, *Chair Associates Program*

Meeting Location/Time: Mississippi (2015)

Fred Musser, MS, *Chair*

Don Cook, MS

Jeff Gore, MS

Meeting Location/Time: NC (2016)

Hanna Burrack, NC (2016), *Chair*

Ed Vargo, NC (2016)

Board Certification Committee

Dennis Ring (2015), LA, *Chair****

3 vacancies

**International Congress of Entomology Meeting 2016
Organizing Committee**

Alvin Simmons, SC, *Co-Chair and SEB Liaison*

***Ad hoc* Linnaean Games Enhancement Committee**

Mike Williams, AL, *Chair*

Jerome Grant, TN

Raymond Hix, FL

***Ad hoc* Insect Photo Salon Committee**

Daniel Fleming, MS, *Chair*

***Ad hoc* Job Placement Committee**

Daniel Fleming, MS, *Chair*

***Ad hoc* Annual Meeting Sponsorship Committee**

Jeremy Greene, SC, *Chair*

***Ad hoc* Natinal Offices Nominating Committee**

Catharine Mannion, *Chair*

***Ad hoc* Student Awards Evaluation Committee**

David Hall, *Chair*

Gregg Nuessly

Melissa Siebert

Babu Srinivasan

JC Chong

***Ad hoc* By-Laws Committee**

Michael Toews, GA, *Chair*

ESA Central Finance Committee

Faith Oi, (Nov. 2014), *Representative*

ESA Central Student Affairs Committee

Erika Machtinger, FL (Nov. 2015), *Representative*

SEB AWARDS-2014

ESA DISTINGUISHED ACHIEVEMENT AWARD IN EXTENSION



DR. GUS LORENZ is Professor, Extension Entomologist for the University of Arkansas, Division of Agriculture at the Lonoke Research and Extension Center, Lonoke, AR. After completion of his M.S., Gus worked as a research associate in Entomology at Mississippi State University. He then returned to Arkansas serving as a county agent in Jefferson County, Area Soybean Specialist, Area Soybean and Wheat Specialist, and Area Cotton Specialist. He completed his Ph.D in 1995 at the University of Arkansas and became Extension Entomologist, IPM Coordinator. Since becoming an Extension Entomologist, he has authored or co-authored over 90 Extension Publications, 75 Bulletin/Reports, and 200 Proceedings. Gus has taken an active role in professional societies. As a member of ESA, Gus served on the judging panel for the Applied Entomology Award, Graduate Students (2006-2008), and Outstanding Extension Entomology Award (2005-2008; Chair 2008). At the Branch level, Gus has served on several committees: Membership, Local Arrangements 2012 (chair 2002), Student Awards Committee (Chair 2001), and Member Awards Committee. Gus has served as a board member (1991-2001) and President (2001-2002) for the Arkansas Crop Protection Association; Secretary (2000) and Chair (2001) of the Southern Region IPM- IEG; Secretary (2001) and Chair (2002) of the Southern Region Boll Weevil-IEG. Gus is co-chair of the Cotton Insect Research and Control Conference for the Beltwide Cotton Conference; is a member of the Steering Committee for the National Cotton Council and serves on the National Boll Weevil Technical Advisory Committee. Gus currently serves as major advisor for four MS students. Awards and recognition include: USDA-APHIS Recognition for Support of Programs (2001), Award for Outstanding Specialist (2002), Riceland Foods Recognition for Educational Program (2004), Outstanding Faculty Educator Award (University of Arkansas Division of Agriculture) (2008), Southern Region IPM Team Award (2010), Gamma Sigma Delta Merit Award (2011), Educational Materials Award (American Society of Agronomy) and Team Extension Excellence Award (UA) in 2012.

SEB AWARDS-2014

ESA DISTINGUISHED ACHIEVEMENT AWARD IN HORTICULTURAL ENTOMOLOGY



DR. STEVEN FRANK, earned his MS and PhD at the University of Maryland advised by Drs. Paula Shrewsbury and Bob Denno. After a short postdoc in Micky Eubanks's lab at Texas A&M, Dr. Frank took a position as Assistant Professor and Extension Specialist at North Carolina State University. His research and extension programs focus on pest management in nurseries, greenhouses, and urban landscapes. The overall goal of his research is to improve pest management by understanding the biological and environmental factors that cause pest outbreaks. Members of his lab investigate how temperature, plant stress, natural enemies, and pesticides interact to affect pest abundance and damage. They use this information to develop integrated pest management and biological control programs. All of this work helps growers and landscapers reduce pesticide use and protect plant quality.

SEB AWARDS-2014

DISTINGUISHED ACHIEVEMENT AWARD IN TEACHING



DR. GEORGE MBATA, obtained his Ph.D. from the University of Ibadan, Nigeria in 1982 and, following a number of productive positions, he joined the faculty of Fort Valley State University in 2000. Dr. Mbata is currently the Head of Department of Biology and Professor of Entomology; he oversees 14 teaching faculty, laboratory and clerical staff. In that capacity Dr. Mbata has made extensive and outstanding contributions to teaching, curriculum development and undergraduate research in entomology. Between 2008 and 2012, Dr. Mbata enhanced the entomology program at Fort Valley State University to incorporate cutting edge issues with particular emphasis on insect pathology and chemical ecology. He procured state of the art laboratory equipment to enable students to study insect-associated microbial agents and the role of semiochemicals in insect ecology. Furthermore, he implemented a robust undergraduate research program in entomology whereby student interns were placed internally in Fort Valley State University or in advanced research labs in nearby institutions where they carried out independent research projects. In addition to Dr. Mbata's exceptional contributions to teaching and curricula, he has managed to maintain a highly productive academic career. Dr. Mbata is a world recognized expert on stored product pests and their management. His expertise has frequently been called upon to provide leadership in suppressing stored product pests, particularly in developing countries. For example, Dr. Mbata currently leads a team of agricultural scientists working on potato tuber moth IPM in the West African countries of Mali and Senegal. Dr. Mbata has received a number of prestigious awards including multiple Fulbright scholarships, service as Fulbright Senior Specialist on Postharvest IPM (5 years), and an Alexander von Humboldt Research Fellowship. Furthermore, Dr. Mbata has been extremely successful in grantsmanship having garnered funding totaling more than 4 million US dollars. Confirmation of Dr. Mbata's academic prowess is also clearly evidenced in his authorship of more than 60 refereed journal articles, two book chapters and numerous non-refereed papers on suppression of stored product pests.

SEB AWARDS-2014

ESA RECOGNITION AWARD IN INSECT PHYSIOLOGY, BIOCHEMISTRY, AND TOXICOLOGY



DR. FIONA GOGGIN, Professor of Entomology at the University of Arkansas, earned her B.S. in Plant Science from Cornell University and her Ph.D. from the University of California, Davis. She is interested in plant-insect interactions, host plant resistance to insects and nematodes, and plant biotechnology. She conducts research on the defenses plants employ against herbivory, focusing on vascular feeders, such as aphids and root-knot nematodes. Vascular feeders can cause massive physiological changes in their host plant, including galling, and many of these herbivores transmit devastating plant pathogens. Little is known about the physiological or molecular basis of plant responses to vascular herbivory. Fiona uses tomato and *Arabidopsis thaliana* as model systems to investigate the relationship of plant defenses induced by aphids and nematodes.

SEB AWARDS-2014

ESA AWARD FOR EXCELLENCE IN INTEGRATED PEST MANAGEMENT



DR. JESUSA LEGASPI, (Susie) received her Ph.D. in Entomology from Purdue University in Indiana, USA; M. Sc. in Applied Entomology from the University of Newcastle-upon-Tyne in England; and B.S. in Biology from the University of the Philippines at Los Baños, Philippines. Her professional experience began as a research assistant at the Southeast Asian Regional Center for Agriculture and Graduate Studies and the International Rice Research Institute in the Philippines. In the U.S., she began her research career as a Postdoctoral Research Entomologist at USDA, ARS Biological Control of Pests Research Unit, in Weslaco, TX. Thereafter, she accepted an Assistant Professor position at the Texas A&M Agricultural Experiment Station in Weslaco, Texas. After receiving tenure as Associate Professor, she returned to USDA-ARS as a Research Entomologist at the Insect Behavior and Biocontrol Research Unit, Gainesville, FL. She joined the Center for Biological Control (CBC), a satellite laboratory in partnership with APHIS and Florida A&M University (FAMU), an 1890 Land Grant Institution in Tallahassee FL. CBC received the Friends of IPM Pulling Together Team Award in 2010 from the Southern Region IPM Center. She was appointed co-Director of CBC and also currently serves as Acting Research Leader. Dr. Legaspi has over 30 years research experience and is internationally-recognized as an authority on IPM and biological control. Dr. Legaspi has authored or co-authored over 175 scientific publications, has made over 173 presentations in 12 countries and has focused on a number of pests, including innovative management of the sweetpotato whitefly, ficus whitefly, sugarcane stalkborers, and citrus blackfly using biological control agents and IPM strategies. She has obtained over \$2 million in federal, state, university, commodity and private company grants. Currently, Dr. Legaspi serves in several societal committees (co-chair of the Diversity Committee of the International Congress of Entomology to be held in Orlando, FL 2016), and member of the Program Committee, SEB-ESA. She also serves as secretary of the scholarship committee for the Big Bend Filipino American Association which provides university scholarships to low income but deserving students from the Philippines.

SEB AWARDS-2014

ESA RECOGNITION AWARD IN URBAN ENTOMOLOGY



DR. NANCY HINKLE received her bachelor's and master's degrees from Auburn University, completing an M.S. in medical entomology, investigating mosquito biological control with Dr. Gary Mullen, then went to the University of Florida where she worked on fleas in Dr. Phil Koehler's urban entomology lab.

She taught at the University of California, Riverside, for nine years before joining the University of Georgia's Department of Entomology in 2001.

Dr. Hinkle is a medical-veterinary entomologist who has a wide range of interests, including most bloodsucking arthropods. Her research program has involved mosquitoes, bloodsucking flies, human myiasis, biting midges, fleas, ticks, lice, mites, and other ectoparasites. She identified the range of brown recluse spiders in Georgia, illustrating how rare they are in the state. Her lab is currently working on avian mites, beetles that transmit *Salmonella*, and pest flies. She has written chapters for the Mallis Handbook of Pest Control, *Medical and Veterinary Entomology*, and the World Health Organization, among others, and has published several dozen refereed scientific publications and over a hundred technical publications.

Because she works with avian mites, individuals commonly contact her, thinking that they are infested with bird mites. These cases of "invisible bugs" were synopsized in "Ekbohm Syndrome: The Challenge of 'Invisible Bug' Infestations" in the 2010 *Annual Review of Entomology*. In 2011, *Current Psychiatry Reports* included her article, "Ekbohm Syndrome: a delusional condition of 'bugs in the skin,'" to help mental health professionals understand the condition.

As many of her interests overlap with urban pest problems, Dr. Hinkle remains involved with urban entomologists and frequently addresses pest management conferences around the country. She has made over 300 presentations to pest control groups, including 21 state associations, the National Conference on Urban Entomology, the Purdue Pest Management Conference, and the National Pest Management Association.

SEB AWARDS-2014

JOHN HENRY COMSTOCK AWARD

Outstanding Ph.D. Student



PAUL MICHAEL BARDUNIAS grew up in Westchester County, New York, in a suburban setting that provided a budding entomologist with an endless supply of insects to play with. He received his Bachelor of Science degree from the University of Miami, and his Masters in Entomology from the University of Kansas for work on three-dimensional path integration with Dr. Deborah Smith and Dr. Rudolf Jander. He earned his Ph. D. in Entomology and Nematology from the University of Florida for his work with Dr. Nan-Yao Su to uncover the mechanics of self-organized excavation behavior in subterranean termites. He has authored 19 peer reviewed papers and a book chapter and designed a protocol that is being implemented to protect endangered parrot species from Africanized honey bees in Central and South America along with Caroline Efstathion and Dr. William Kern of the University of Florida. Paul is currently working as a post-doctoral associate for Dr. Scott Turner of the State University of New York, College of Environmental Science & Forestry. He is continuing his work on self-organization in social insects in collaboration with the Termites Project of the Wyss Institute at Harvard University by originating algorithms for autonomous construction in robots based on termite models. He is also adjunct faculty at Florida Atlantic University, where he passes on his knowledge of invertebrates in hopes of rearing a new crop of entomologists. In his spare time he pens articles on ancient Greek history.

SEB AWARDS-2013

KIRBY L. HAYS AWARD

Outstanding M.S. Student



ZACHARY DEVRIES was born in Columbus, Ohio, but raised in Auburn, Alabama. As an undergraduate at Auburn University, Zach jumped right in to field work, exploring his interests in biology. Zach worked for Dr. Rusty Wright (Dept. of Fisheries and Allied Aquaculture), assisting teams collecting fish throughout Alabama (particularly the Mobile Delta). During his undergraduate career, Zach also worked for Dr. Craig Guyer (Dept. of Biological Sciences), assisting in the construction of cages for the reintroduction of the Eastern Indigo snake to previously occupied habitats in southern Alabama. Zach later began conducting research with Dr. Ray Henry (Dept. of Biological Sciences), studying the physiology and behavior of giant aquatic salamanders. Zach completed his B.S. degree in Zoology with a minor in Statistics in 2011. He enjoyed his work in biological sciences, but was ultimately attracted to the more applied aspects and fascinating diversity of entomology. He thus began his master's degree in Entomology at Auburn University working with Dr. Art Appel. His research focused on the physiology of urban pests, such as silverfish, firebrats, and bed bugs. His work has led to some interesting discoveries about the metabolism of these species as well as numerous collaborations with other departments and universities. Zach completed his master's degree in Entomology in 2013, and is now continuing his studies as a doctoral student working with Dr. Coby Schal of North Carolina State University. During his Ph.D., Zach intends to continue his research on the physiology of urban pests.

STUDENT AWARDS-2013

ROBERT T. GAST AWARDS

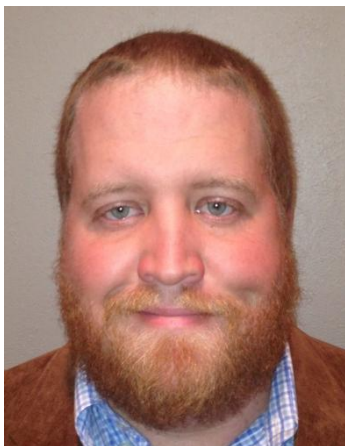
Outstanding Ph.D. Oral Presentations

Session I



BILL REID recently graduated with his PhD from Dr. Nannan Liu's lab group at Auburn University in the Department of Entomology and Plant Pathology. His dissertation work was on the genomic characterization of insecticide resistance in the Southern house mosquito, *Culex quinquefasciatus*. Presently, he is a post-doctoral research associate at the University of Maryland working for Dr. David O'Brochta's group where his research is focused on the use of transposons to identify genes and enhancer regions of interest in *Anopheles stephensi*.

Session II



BRIAN ADAMS is currently a third year Ph.D. student at Mississippi State University. His research currently focuses on re-evaluation of corn earworm damage thresholds in soybean, as well as simulated damage studies and the plant's ability to compensate for simulated corn earworm damage. Mr. Adams graduated in 2012 with his M.S. degree in Entomology from Mississippi State University where his research focused on cultural control of tarnished plant bugs in cotton. Mr. Adams obtained his B.S. degree in Agribusiness from The University of Tennessee at Martin in 2008.

STUDENT AWARDS-2013

ROBERT T. GAST AWARDS

Outstanding Ph.D. Oral Presentations (cont.)

Session III



ALEJANDRO MERCHÁN hails from Cali, Colombia, where he developed a deep love of nature, the outdoors and science in general. He studied Biology at Universidad de Los Andes, one of the top universities in South America, where he obtained his Bachelor's degree. He also did his Masters in Biology in the same university studying the evolution and population genetics of color pattern genes in *Heliconius* butterflies. His work with these butterflies took him to remote locations in Colombia, Peru and Panama, where Alejandro did his field work. He continued to work in genetics at the University of Puerto Rico and NC State and also worked as a lab assistant before developing a keen interest in agricultural science, particularly entomology. He began his PhD in Entomology in fall 2011, working with Dr. Hannah Burrack in tobacco pest management, focusing on the interactions of green peach aphid (*Myzus persicae*) with pesticides and naturally occurring chemicals in tobacco leaves. He plans to study how different chemicals, natural and synthetic, affect gene expression levels in the aphid. Alejandro lives in Durham with his wife and their two cats. In his free time he enjoys both watching and playing sports, especially soccer.

STUDENT AWARDS-2013

Outstanding M.S. Oral Presentations

Session I



ADAM ALFORD, a native of Cincinnati Ohio received his B.S. in biology at the College of Mount Saint Joseph. After completing a REU in Ireland on the biological control of *Lemna minuta*. There he discovered his passion for insects and pursued a MS degree in entomology at the University of Arkansas. His research investigated the larval development of *Larinus minutus*, a biological control agent of invasive knapweeds, and modeled the spread of this weevil from its release sites in Northwest Arkansas. He is currently studying the translocation of clothianidin in corn as well as its non-target effects at Purdue University.

Session II

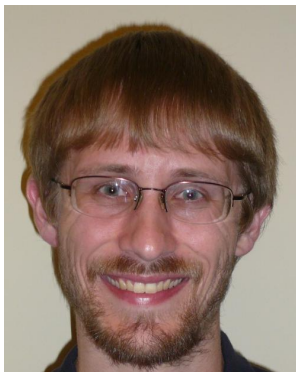


JONI BLOUNT is originally from a small town in the mountains of western New Mexico where farming and ranching are the major industries of the area. She was homeschooled by her mother until she began to attend public school in the 7th grade. Throughout junior high and high school Joni was active in 4-H and FFA participating at the state level on the Entomology Judging team. Upon graduation she obtained a scholarship to attend NMSU and began studying Entomology as the primary focus of an Agricultural Biology degree. During her undergraduate studies she worked for Dr. Scott Bundy as a lab and field worker in the IPM lab of the Entomology Plant Pathology and Weed Science Department. During this time she completed an undergraduate project on beet leaf hopper biology in southern NM. In 2012 Joni was accepted as a graduate student in the Entomology Department at UGA. She is currently pursuing her PhD on the biology and host preference of the kudzu bug, *Megacopta cribraria* under the guidance of Dr. David Buntin at UGA Griffin.

STUDENT AWARDS-2013

Outstanding M.S. Oral Presentations (cont.)

Session III



ZACHARY DEVRIES was born in Columbus, Ohio, but raised in Auburn, Alabama. As an undergraduate at Auburn University, Zach jumped right in to field work, exploring his interests in biology. Zach worked for Dr. Rusty Wright (Dept. of Fisheries and Allied Aquaculture), assisting teams collecting fish throughout Alabama (particularly the Mobile Delta). During his undergraduate career, Zach also worked for Dr. Craig Guyer (Dept. of Biological Sciences), assisting in the construction of cages for the reintroduction of the Eastern Indigo snake to previously occupied habitats in southern Alabama. Zach later began conducting research with Dr. Ray Henry (Dept. of Biological Sciences), studying the physiology and behavior of giant aquatic salamanders. Zach completed his B.S. degree in Zoology with a minor in Statistics in 2011. He enjoyed his work in biological sciences, but was ultimately attracted to the more applied aspects and fascinating diversity of entomology. He thus began his master's degree in Entomology at Auburn University working with Dr. Art Appel. His research focused on the physiology of urban pests, such as silverfish, firebrats, and bed bugs. His work has led to some interesting discoveries about the metabolism of these species as well as numerous collaborations with other departments and universities. Zach completed his master's degree in Entomology in 2013, and is now continuing his studies as a doctoral student working with Dr. Coby Schal of North Carolina State University. During his Ph.D., Zach intends to continue his research on the physiology of urban pests.

STUDENT AWARDS-2013

Outstanding Undergraduate Oral Presentation

NICHOLAS ALLEN (NCSU) won Outstanding Undergraduate Oral Presentation for his talk, "Effects of imidacloprid on feeding and osmoregulation in the aphid *Myzus persicae*."

SEB AWARDS-2013 OUTSTANDING M.S. DISPLAYS

Session I



KHEM RAJ, B.C., received B. V. Sc. & A. H. degree from the Institute of Agriculture and Animal Science, Tribhuvan University, Rampur, Nepal in 2010. He started his M. S. in biological sciences, at The University of Southern Mississippi from 2011-2013, under the direction of Dr. Shahid Karim studying the microbial diversity of ticks and cysteine protease inhibitors. He is currently pursuing his Ph.D. in the same lab. He is interested in studying the arthropods' physiology, exploring broad range of vector-pathogen-host triad to identify unique molecular target for controlling arthropods' ability in maintaining and transmitting disease agents in animals and humans.

SEB AWARDS-2013 OUTSTANDING M.S. DISPLAYS

Session II

XUAN CHEN (LSU) won Outstanding M.S. Display for her poster titled "Effect of induced plant resistance on soybean looper (*Chrysodeixis includes*) in soybean."

SEB AWARDS-2013

OUTSTANDING PH.D. DISPLAYS

Session I



DEEPAK KUMAR works on the molecular characterization of the neuropeptide corazonin and its receptor in the black-legged tick *Ixodes scapularis*. His focus is to understand the role of putative neuropeptide corazonin in tick physiology and specifically in tick blood-feeding. Findings show a widespread distribution and conservation of corazonin sequence in diverse insect groups. Because corazonin is highly conserved in different arthropods, it is assumed that their physiological functions would also be conserved, but to date no conserved function has been discovered.

SEB AWARDS-2013

OUTSTANDING PH.D. DISPLAYS

(cont.)

Session II



ERIKA MACHTINGER is a PhD student at the University of Florida. She received her BS from the University of Delaware in Wildlife Conservation and her MS in entomology from the University of Florida. Erika was raised in the natural areas surrounding the coast of Maine which fostered her love of the environment and wildlife. Erika has worked at the USDA-BIIRL Laboratory in Newark, DE and also as a wildlife biologist and Environmental Scientist. Erika has been an avid equestrian for over 26 years and has competed on a national and international level. Because of her background with horses, involvement in the equestrian community, and interest in insects and biological control, Erika has been focusing her research on biological control of filth flies in equestrian properties in Florida. Erika was awarded the best MS Thesis and Outstanding MS Student scholarship in the University of Florida Department of Entomology and Nematology for her pioneering work with filth fly management on small equine farms in Florida. With the support of Dr. Leppla and Dr. Chris Geden of the USDA, ARS – Center for Medical, Agricultural and Veterinary Entomology as co-chairs, she is continuing her work by focusing on the olfactory stimuli associated with host location by Pteromalid pupal parasitoids of filth flies.

SEB AWARDS-2013

OUTSTANDING PH.D. DISPLAYS

(cont.)

Session III



DR. ABDUL HAKEEM received his M.S. (Entomology and Plant Pathology) and Ph.D. (Integrated Pest Management) degrees from the University of Tennessee and is currently working as a postdoctoral research fellow in Cotton Entomology Program at Texas A&M University AgriLife Research. Dr. Hakeem's doctoral research, under Dr. Jerome Grant's supervision, focused on developing more efficient and effective tools to assess impacts of exotic biological control agents of hemlock woolly adelgid in the eastern forests, which earned him more than nine professional awards and recognitions. These awards include "Outstanding Student Display Award 2008, 2010 and 2013" (ESA-SEB), Second Place "Student Poster Competition 2011" (North American Forest Insect Work Conference), Second Place "Student Poster Competition 2012" (ESA-SEB), First Position, "Student Paper Presentation 2010 and 2012" (Tennessee Entomological Society), "Graduate Student Award of Merit 2012" (Gamma Sigma Delta Agricultural Honor Society, and "President's Prize 2012" (ESA). Dr. Hakeem has published eight peer-reviewed journal articles, including six as senior author. He is also a recipient of two international fellowships: Fulbright and Netherlands Fellowship. Dr. Hakeem has presented his research, in both oral and display formats, at state, regional, and national professional conferences. He also has been active in numerous entomological outreach programs.

SEB AWARDS-2013

OUTSTANDING UNDERGRADUATE DISPLAY



CLINTON E. TRAMMEL is an undergraduate at the University of Arkansas as a candidate for a B.S. in Biology with a minor in Entomology. Although all aspects of entomology are of interest to him, he is most enthusiastic about the taxonomy, systematics, behavior, and chemical ecology of Aculeate Hymenoptera, with particular interest in the families Pompilidae, Formicidae, and Mutillidae. He enjoys photography and spending as much time as is possible hiking in his native Ozarks.

Sunday, 2 March

7:00 AM-10:30	Breakfast <i>Atrium</i>
8:00 AM	5 K Run <i>Lobby</i>
11:00 AM-12:00	Local Arrangements and Program Committee Meeting <i>Greenbrier</i>
1:00 PM-5:00	Executive Committee Meeting <i>Columbia/Charleston</i>
1:30 PM-6:00	Golf Tournament <i>Lobby</i>
1:00 PM-5:00	Registration <i>Atrium</i>
2:00 PM-5:00	S-1058 Multi-State Biological Control of Arthropod Pests and Weeds <i>Greenbrier</i>
3:00 PM-7:00	Audiovisual <i>Asheville</i>
5:00 PM-7:00	Linnaean Games, Preliminary Rounds <i>Doral</i>
5:00 PM-7:00	Southern Corn Insect Working Group <i>King's Mill</i>
5:00 PM-10:00	Student Poster Competition Set Up <i>Embassy Ballroom Prefunction</i>

Monday, 3 March

6:00 AM-8:00	Breakfast <i>Atrium</i>
7:00 AM-5:00	Audiovisual <i>Asheville</i>
7:00 AM-5:00	Registration <i>Atrium</i>
7:00 AM-8:00	Student Poster Competition Set Up <i>Embassy Ballroom Prefunction</i>
8:00 AM-4:00	Student Poster Competition Judging <i>Embassy Ballroom Prefunction</i>
8:00 AM-5:00	Student Poster Exhibits <i>Embassy Ballroom Prefunction</i>
8:00 AM-10:15	Opening and Plenary Session <i>Pinehurst/Doral</i>

Monday, 3 March (cont.)

10:15 AM-10:30	Break <i>Embassy Ballroom Prefunction</i>
10:30 AM-11:54	M.S. Student Oral Presentations I <i>King's Mill</i>
10:30 AM-11:54	M.S. Student Oral Presentations II <i>Columbia/Charleston</i>
10:30 AM-11:54	Ph.D Student Oral Presentations I <i>Greenbrier</i>
12:00 PM-1:40	Buffet Lunch <i>Atrium</i>
12:00 PM-1:40	ESA Certification Board Luncheon <i>Atrium (Tables Reserved)</i>
1:40 PM-3:40	Ph.D. Student Oral Presentations II <i>Greenbrier</i>
1:40 PM-2:40	Poster Presenters at Display Presentation <i>Embassy Ballroom Prefunction</i>
1:40 PM-3:16	B.S. & M.S. Student Oral Presentation III <i>King's Mill</i>
1:40 PM-3:16	M.S. Student Oral Presentation IV <i>Columbia/Charleston</i>
1:40 PM-4:04	Ph.D. Student Oral Presentation III <i>Harbour Town</i>
1:40 PM-4:00	Vegetable Insect Symposium <i>Florence</i>
1:40 PM-3:40	Contributed Papers I <i>Spartanburg</i>
5:00 PM-7:00	Student Poster Competition Removal
5:00 PM-7:00	Linnaean Games, Final Round <i>Pinehurst/Doral</i>
7:00 PM-10:00	General Poster Set Up <i>Embassy Ballroom Prefunction</i>
5:30 PM-7:30	Hotel Reception <i>Atrium</i>
7:30 PM-9:00	Monday Night Reception <i>Outside Terrace</i>

Monday, 3 March

**BUSINESS MEETING AND
PLENARY SESSION**

**8:00 AM – 10:15
Pinehurst/Doral**

**Presiding: David Hall, President, Southeastern Branch,
Entomological Society of America**

- 8:00 Call to Order, David Hall, President**
- 8:05 “Welcome to Greenville, Joe Kramer, Vice
President, visitgreenvillesc.com”**
- 8:15 Preliminary Business Meeting
Announcements
Committee Reports
Local Arrangements-Alvin Simmons
Program-David Jenkins
Nominations-Kris Braman
Resolutions-Alejandro Calixto
2015 Meeting Time/Location-Fred Musser**
- 8:40 Address by ESA President-Elect-Frank Zalom**
- 8:50 Message from ESA Executive Director
C. David Gammel**
- 9:00 SEB Representative to the ESA Governing Board
Report -Tim Schowalter**
- 9:05 Announcements from ESA Section
Representatives (P-IE)- John Adamczyk**
- 9:10 Entomological Foundation Report
Alvin Simmons**
- 9:15 International Congress of Entomology Report
Alvin Simmons**
- 9:25 SEB Representative to the ESA Certification
Board Report-Dennis Ring**
- 9:35 Remarks from SEB President- David Hall**
- 9:40 2014 SEB Plenary Address: “Small Hive Beetles,
Honeybees, Yeast and Plants: Evolution of an
Insect Pest?” Dr. Peter E.A. Teal, Research
Physiologist and Research Leader, Chemistry Unit,
Center for Medical, Agricultural, and Veterinary
Entomology, USDA-ARS, Gainesville, FL**
- 10:15-10:30 Break**

Monday, 3 March

M.S. STUDENT ORAL PRESENTATION COMPETITION I

10:30 – 11:54

King's Mill

Moderators:

Katherine Parys & Clint Allen

10:30 1 Intra-ear compensation of field corn, *Zea mays* L., from simulated injury by ear-feeding Larvae. **Sandy Steckel**, ssteckel@utk.edu and Scott D. Stewart, University of Tennessee, Jackson, TN

10:42 2 The impact of threecornered alfalfa hopper, *Spissistilus festinus* on seedling Cotton. **Jeff Ramsey**, jtr98@msstate.edu¹, Angus Catchot¹, Fred Musser¹, Jeff Gore² and Donald Cook², ¹Mississippi State University, Mississippi State, MS, ²Mississippi State University, Stoneville, MS

10:54 3 Impact of corn earworm (*Helicoverpa zea*) on grain sorghum yields in Mississippi. **Chris Dobbins**, cdobbins@drec.msstate.edu, Mississippi State University, Stoneville, MS

11:06 4 Impact of leaf hairiness and planting date on tarnished plant bug, *Lygus lineolaris* (Palisot de Beauvois). **Clinton Wood**, wwwood@drec.msstate.edu¹, Jeff Gore², Don Cook² and Angus Catchot³, ¹Mississippi State University, Cleveland, MS, ²Mississippi State University, Stoneville, MS, ³Mississippi State University, Mississippi State, MS

11:18 5 Effect of nitrogen application rate on tarnished plant bug (*Lygus lineolaris*) in Mid-South cotton. **Chase Samples**, CSamples@pss.msstate.edu¹, Darrin Dodds¹, Jeff Gore², Angus Catchot¹, Bobby Golden², J. Copeland¹, Tyler Dixon¹ and Daniel Reynolds¹, ¹Mississippi State University, Mississippi State, MS, ²Mississippi State University, Stoneville, MS

11:30 6 Evaluating green stink bug damage in edamame soybean. **Benjamin Thrash**, bcthresh@uark.edu¹, Gus Lorenz², Nicki Taillon³, Derek Clarkson¹, Mallory Everett¹ and Luis Orellana¹, ¹University of Arkansas, Fayetteville, AR, ²University of Arkansas, Lonoke, AR, ³University of Arkansas Extension, Lonoke, DC

11:42 7 Potential for managing thrips in seedling cotton using particle films. **Ian Knight**, ianak@uga.edu, Univeristy of Georgia, Tifton, GA, Michael Toews, The University of Georgia, Tifton, GA and Glen Rains, University of Georgia, Tifton, GA

Monday, 3 March

M.S. STUDENT ORAL PRESENTATION COMPETITION II

10:30 – 11:54
Columbia/Charleston

Moderators:
Lambert Kanga & Raymond Hix

10:30 8 Impact of planting date and maturity group on the occurrence of lepidopteran pest in Mississippi soybeans. **Nicholas R. Bateman**, nickbateman@msstate.edu¹, Angus Catchot², Jeff Gore³, Fred Musser², Donald Cook⁴ and Trent Irby¹, ¹Mississippi State University, Starkville, MS, ²Mississippi State University, Mississippi State, MS, ³Mississippi State University, Stoneville, MS, ⁴Mississippi State University, Verona, MS

10:42 9 Evaluation of PRE herbicide and seed treatment on thrips infestation and cotton growth, development, and yield. **Drake Copeland**, jdc872@msstate.edu¹, Darrin Dodds¹, Tyler Dixon¹, D. Reynolds¹, Chase Samples¹, Angus Catchot¹, Jeff Gore² and Davie Wilson³, ¹Mississippi State University, Mississippi State, MS, ²Mississippi State University, Stoneville, MS, ³Monsanto Company, Chesterfield, MO

10:54 10 Drift and deposition of neonicotinoid contaminated seed lubricants on wild flowers. **Adam Whalen**, daw153@msstate.edu¹, Angus Catchot¹, Jeff Gore², Gus Lorenz³, Scott D. Stewart⁴, D. Cook⁵, Fred Musser¹ and Jeffrey W. Harris⁶, ¹Mississippi State University, Mississippi State, MS, ²Mississippi State University, Stoneville, MS, ³University of Arkansas, Lonoke, AR, ⁴University of Tennessee, Jackson, TN, ⁵Mississippi State University, Starkville, MS, ⁶USDA, Agricultural Research Service, Baton Rouge, LA

11:06 11 Determination of potential interaction between nitrogen fertility and insecticide seed treatments for control of the rice water weevil (*Lissorhoptrus oryzophilus*). **Mallory Everett**, mallorye@uark.edu¹, Gus Lorenz², Derek Clarkson¹, Luis Orellana¹ and Benjamin Thrash¹, ¹University of Arkansas, Fayetteville, AR, ²University of Arkansas, Lonoke, AR

11:18 12 How the interaction of insecticide seed treatments and early season herbicides effect thrips populations in early season cotton. **Derek Clarkson**, dclarkso@uark.edu¹, Gus Lorenz², Nicki Taillon³, Benjamin Thrash¹, Mallory Everett¹ and Luis Orellana¹, ¹University of Arkansas, Fayetteville, AR, ²University of Arkansas, Lonoke, AR, ³University of Arkansas Extension, Lonoke, DC

11:30 13 The effect of pre-emergence herbicides on neonicotinoid seed treatments in seedling cotton. **Cory Vineyard**, cvineya2@utk.edu¹, Scott D. Stewart², Heather Kelly² and Larry Steckel², ¹Univeristy of Tennessee, Knoxville, TN, ²University of Tennessee, Jackson, TN

Monday, 3 March

11:42 14 Efficacy of aphicides on cotton aphids, *Aphis gossypii*, and their natural enemies. **Jenna Lindsay**, jlindsay@agcenter.lsu.edu¹, David L. Kerns², T. Shelby Williams¹ and Sebe Brown², ¹Louisiana State University, Winnsboro, LA, ²LSU AgCenter, Winnsboro, LA

PH.D. STUDENT ORAL PRESENTATION COMPETITION I

10:30 – 11:54
Greenbrier

Moderators:
Muhammad Haseeb and Ash Ahmad

10:30 15 Differential host-seeking cues used by the filth fly parasitoids *Spalangia cameroni* and *Muscidifurax raptor* (Hymenoptera: Pteromalidae). **Erika T. Machtinger**, irishtangerine@ufl.edu¹, Christopher J. Geden², Peter E. A. Teal² and Norman Leppla¹, ¹University of Florida, Gainesville, FL, ²USDA Agricultural Research Service, Gainesville, FL

10:42 16 OFF with their heads! In the competition for fire ant hosts, is *Pseudacteon curvatus* delivering the knock-out punch?. **Kelly Palmer**, ridleka@auburn.edu, Auburn University, Auburn, AL

10:54 17 Evaluation of *Trabulsiella odontotermis*, a termite gut bacterium, as a ‘Trojan horse’ for paratransgenesis based termite control. **Chinmay Tikhe**, cvtikhe@gmail.com, Louisiana State University, Baton Rouge, LA

11:06 18 Comparing flight patterns of the native woodwasp, *Sirex nigricornis* F., with *Sirex noctilio* F., a non-native threat to southeastern pine stands. **Jessica Hartshorn**, jhartsho@uark.edu and Fred M. Stephen, University of Arkansas, Fayetteville, AR

11:18 19 Sea level rise versus habitat enhancement for the Schaus’ swallowtail butterfly (*Heraclides aristodemus ponceanus*), a paradox?. **Jaeson Clayborn**, jclay010@fiu.edu, Florida International University, Miami, FL

11:30 20 Task allocation of Asian needle ant, *Pachycondyla chinensis* (Emery), workers during nest emigrations. **Hamilton R. Allen**, hrallen@clemson.edu, Patricia Zungoli and Eric P. Benson, Clemson University, Clemson, SC

11:42 21 Cascade effect of laurel wilt disease on the palamedes swallowtail butterfly. **John P. Formby**, jpff9@msstate.edu¹, Kelly Oten², Adam Chupp³ and John Riggins¹, ¹Mississippi State University, Mississippi State, MS, ²North Carolina Forest Service, Raleigh, NC, ³Southern Illinois University, Carbondale, IL

Monday, 3 March

BUFFET LUNCH

12:00 PM – 1:40 PM

Atrium

PH.D. STUDENT ORAL PRESENTATION COMPETITION II

1:40 – 3:40

Greenbrier

Moderators:

Fred Musser & Amanda Hodges

1:40 22 Persistence of imidacloprid and olefin in eastern hemlock: Seven years of suppression of hemlock woolly adelgid. **Elizabeth P. Benton**, ebenton3@utk.edu¹, Carla I. Coots¹, Richard Cowles², R. Jesse Webster³, Anthony Lagalante⁴ and Jerome F. Grant¹,
¹University of Tennessee, Knoxville, TN, ²Connecticut Agricultural Experiment Station, Windsor, CT, ³National Park Service, Gatlinburg, TN, ⁴Villanova University, Villanova, PA

1:52 23 Cytochrome P450s and their functions in permethrin resistance in the house fly, *Musca domestica*. **Ming Li**, mzl0025@auburn.edu and Nannan Liu, Auburn University, Auburn, AL

2:04 24 DEET Scrambled the olfactory response of bed bugs to human odorants. **Feng Liu**, fzl0009@auburn.edu and Nannan Liu, Auburn University, Auburn, AL

2:16 25 Bioassays with diamide insecticides in the mid-south. **Andrew Adams**, aadams@entomology.msstate.edu¹, Jeff Gore², Don Cook², Angus Catchot¹, Natraj Krishnan¹ and Fred Musser¹,
¹Mississippi State University, Mississippi State, MS, ²Mississippi State University, Stoneville, MS

2:40 26 Chemical mediation of queen and king recognition in subterranean termites (*Reticulitermes flavipes*). **Colin Funaro**, cffunaro@ncsu.edu and Edward L. Vargo, North Carolina State University, Raleigh, NC

2:52 27 Variability of genetic resistance to parasitism in the pea aphid. **Adam J. Martinez**, adamjmtz@gmail.com and Kerry M. Oliver, University of Georgia, Athens, GA

3:04 Break

Monday, 3 March

3:15 28 Investigation of *Amblyomma* cement proteins. **Rebekah Bullard**, rebekah.bullard@eagles.usm.edu, and Shahid Karim, University of Southern Mississippi, Hattiesburg,

3:27 29 Cystatins play role in tick blood feeding and pathogen infection. **Khemraj Budachetri**, khem.bc@eagles.usm.edu and Shahid Karim, The University of Southern Mississippi, Hattiesburg, MS

M.S. STUDENT ORAL PRESENTATION COMPETITION III

1:40 PM – 3:16
King's Mill

Moderators:
Greg Hodges and Paula Mitchell

1:40 30 Designing a more effective hydrilla biocontrol agent, *Cricotopus lebetis*. **Julie Baniszewski**, jbaniszewski10@ufl.edu, Emma N. I. Weeks and James P. Cuda, University of Florida, Gainesville, FL

1:52 31 Effect of peppermint (*Mentha piperita*) extract on feeding behaviors of brown marmorated stink bug, *Halyomorpha halys* (Hemiptera: Pentatomidae). **Michael Hull**, hullm2@winthrop.edu and Paula Mitchell, Winthrop University, Rock Hill, SC

2:04 32 Evaluation of monitoring methods for the redbay ambrosia beetle (*Xyleborus glabratus*), a new invasive species from southeast Asia. **Latasha D. Tanner**, latasha.tanner27@gmail.com, Florida Agricultural and Mechanical University, Tallahassee, FL, Lambert Kanga, Florida A&M University, Tallahassee, FL and Leroy Whilby, Florida Dept. of Agriculture and Consumer Services (FDACS), Division of Plant Industry, Gainesville, FL

2:16 33 Reproductive status of trapped female *Drosophila suzukii*. **Douglas McPhie**, drmcphie@ncsu.edu, North Carolina State University, Raleigh, NC

2:28 34 Evaluation of repellency of proprietary trail pheromone product to the Argentine ant (*Linepithema humile*). **Jacob Holloway**, jbh301@gmail.com, Athens, GA

2:40 35 Effect of sugar feeding and mating on the fecundity of *Pseudacteon obtusus* - natural enemy of imported fire ants. **Olufemi Ajayi**, osa0001@auburn.edu, and Henry Fadamiro, Dept. of Entomology & Plant Pathology, Auburn University, Auburn, AL

2:52 36 Use of *Amblyseius swirskii* and banker-plant systems for biological control of *Polyphagotarsonemus latus* in high-tunnel pepper. **Lorena Lopez**, lorelopezq.257@ufl.edu¹, Hugh A. Smith², Marjorie A. Hoy¹, Ronald D. Cave³ and Bielinski Santos², ¹University of Florida, Gainesville, FL, ²University of Florida, Wimauma, FL, ³University of Florida, Fort Pierce, FL

Monday, 3 March

3:04 37 Recovery and assessment of *Spathius agrili* (Hymenoptera: Braconidae), a parasitoid of emerald ash borer, in the southeastern U.S. **Nicholas Hooie**, nhooie@utk.edu¹, Paris L. Lambdin¹, Jerome F. Grant¹, Gregory J. Wiggins¹ and Jonathan Lelito², ¹University of Tennessee, Knoxville, TN, ²USDA, Animal and Plant Health Inspection Service, Brighton, MI

M.S. STUDENT ORAL PRESENTATION COMPETITION IV

1:40 – 3:16
Columbia/Charleston

Moderators:
Lieceng Zhu & David Jenkins

1:40 38 Molecular detection of spotted fever group rickettsia in Ixodid ticks from Pakistan. **Jaclyn Williams**, jaclyn.williams@eagles.usm.edu¹, Nabanita Mukherjee¹, Zafar Iqbal², Kelsey Carter¹, Dmitry Apanaskevich³ and Shahid Karim¹, ¹University of Southern Mississippi, Hattiesburg, MS, ²University of Agriculture, Faisalabad, Pakistan, ³Georgia Southern University, Statesboro, GA,

1:52 39 Genomic assessments of honey bee (*Apis mellifera*) health under different levels of Varroa mite infestations in conventional and organically-kept apiaries. **Shalom Siebert**, shalomsiebert@gmail.com, Lambert H. B Kanga and Mehboob Sheikh, Florida A&M University, Tallahassee, FL

2:04 40 Susceptibility of Cry1F resistant fall armyworms, *Spodoptera frugiperda*, to cotton expressing pyramided Bt toxins. **T. Shelby Williams**, Twilliams@Agcenter.lsu.edu, Louisiana State University, Winnsboro, LA, Fangneng Huang, Louisiana State University Agricultural Center, Baton Rouge, LA and David L. Kerns, LSU AgCenter, Winnsboro, LA

2:16 41 Distribution of Heliothine complex in cotton/soybean landscapes. **Taylor Dill**, tdd169@msstate.edu¹, Angus Catchot¹, Jeff Gore², Fred Musser¹, Don Cook² and Michael Caprio¹, ¹Mississippi State University, Mississippi State, MS, ²Mississippi State University, Stoneville, MS

2:28 42 Correlations of benthic invertebrate community metrics and co-located sediment samples at the TVA King'ston Ash Release Site in Tennessee. **Suzanne Walls**, syoung50@utk.edu¹, Jerome F. Grant¹, J. Kevin Moulton¹ and Teresa Mathews², ¹University of Tennessee, Knoxville, TN, ²Oak Ridge National Laboratory, Oak Ridge, TN

2:40 43 Insecticide resistance management in the ectoparasitic mite, *Varroa destructor* of honey bee, *Apis mellifera* populations and susceptibility of this invasive alien pest to fungal pathogens. **Courtnee Eddington**, cce8706@yahoo.com and Lambert H. B Kanga, Florida A&M University, Tallahassee, FL

Monday, 3 March

2:52 44 Comparing larval performance traits on known host vs. novel host. Is dragon fruit a host for *Cactoblastis cactorum*? **Angela Galette**, angela.galette@ars.usda.gov¹, Stephen Hight², James E. Carpenter³ and Anthony Ananga¹, ¹Florida A&M University, Tallahassee, FL, ²USDA-ARS, Tallahassee, FL, ³USDA-ARS, Tifton, GA

3:04 45 Molecular systematics of the Phasiinae (Diptera: Tachinidae). **Jeremy Blaschke**, jeremy.blaschke@gmail.com, University of Tennessee, Knoxville, TN

PH.D. STUDENT ORAL PRESENTATION COMPETITION III

1:40 – 4:05
Harbortown

Moderators:
Alejandro Calixto & Xavier Martini

1:40 46 Biological comparisons of Mississippi Delta and Hills populations of the tarnished plant bug (*Lygus lineolaris*): development time, survival, fecundity, and hatch. **Daniel Fleming**, defl8@msstate.edu and Fred Musser, Mississippi State University, Mississippi State, MS

1:52 47 Determining the attractive distance of Mexican rice borer (*Eoreuma loftini*) pheromone traps in rice agro-ecosystems. **Blake Wilson**, bwils26@tigers.lsu.edu¹, Matthew T. VanWeelden², Julien M. Beuzelin³, Jeremy D. Allison⁴ and T. E. Reagan², ¹Louisiana State University AgCenter, Baton Rouge, LA, ²LSU AgCenter, Baton Rouge, LA, ³LSU AgCenter, Alexandria, LA, ⁴Natural Resources Canada, Great Lakes Forestry Centre, Sault St Marie, ON, Canada

2:04 48 Evaluating *Pachycrepoideus* as a potential biological control agent for silk flies in sweet corn. **David Owens**, owensd119@ufl.edu¹, Gregg Nuessly¹ and Michael W. Gates², ¹University of Florida, Belle Glade, FL, ²USDA-ARS, Washington, DC

2:16 49 Assessment of cross-vane traps as a sampling tool for *Megacopta cribraria* (Hemiptera: Plataspidae) in soybean. **Francesca Stubbins**, sstubbi@clermson.edu¹, Francis Reay-Jones² and Jeremy K. Greene¹, ¹Clemson University, Blackville, SC, ²Clemson University, Florence, SC

2:28 50 Evaluation of treatment thresholds for management of *Megacopta cribraria* (Hemiptera: Plataspidae) in soybean. **Nicholas Seiter**, nseiter@clermson.edu¹, Alejandro Del Pozo², Jeremy K. Greene¹, Francis Reay-Jones³, Phillip M. Roberts⁴ and Dominic R. Reisig⁵, ¹Clemson University, Blackville, SC, ²North Carolina State University, Raleigh, NC, ³Clemson University, Florence, SC, ⁴University of Georgia, Tifton, GA, ⁵North Carolina State University, Plymouth, NC

Monday, 3 March

2:40 51 Host preference of *Megacopta cribraria* (Hemiptera: Plataspidae) on selected edible beans and soybean. **Joni L. Blount**, jonilb@uga.edu¹, G. David Buntin¹ and Alton N. Sparks, Jr.², ¹University of Georgia, Griffin, GA, ²University of Georgia, Tifton, GA

2:52 52 The effects of Western corn rootworm (*Diabrotica virgifera virgifera*) infestation and refuge scenario on *Bt* toxin expression in transgenic corn. **Stephanie L. Gorski**, slgorski@ncsu.edu and Yasmin Cardoza, North Carolina State University, Raleigh, NC

3:04 Break

3:15 53 Duration of plant damage by *Heliothis virescens* caterpillars affects attraction of two parasitoids with varying degree of host specificity (*Microplitis croceipes* and *Cotesia marginiventris*) to cotton. **Tolulope Morawo**, tom0002@auburn.edu and Henry Fadamiro, Auburn University, Auburn, AL

3:27 54 Effect of simulated *Helicoverpa zea* damage in soybean. **Brian Adams**, bpa31@msstate.edu¹, Angus Catchot¹, Don Cook² and Jeff Gore², ¹Mississippi State University, Mississippi State, MS, ²Mississippi State University, Stoneville, MS

3:39 55 Effects of foliar applied jasmonic acid and seed applied imidacloprid on phytohormone expression and twospotted spider mite populations. **Sebe Brown**, SBrown@agcenter.lsu.edu¹, Michael J. Stout², T. Shelby Williams³, Jenna Lindsay³ and David L. Kerns¹, ¹LSU AgCenter, Winnsboro, LA, ²Louisiana State University, Baton Rouge, LA, ³Louisiana State University, Winnsboro, LA

3:51 56 Relating stink bug density to percentage pecan nut damage. **Brian Cowell**, cowell@uark.edu, Donn Johnson and M. Garcia, University of University, Fayetteville, AR,

VEGETABLE ENTOMOLOGY SYMPOSIUM

1:40 – 4:00

Florence

Organizers:

Hugh A. Smith and David Riley

1:40 57 Management of American serpentine leafminer, *Liriomyza trifolii* (Burgess) (Diptera: Agromyzidae), using new insecticides. **Dakshina Seal**, dseal@ifas.ufl.edu, University of Florida, Homestead, FL

1:55 58 Management of the cowpea curculio, *Chalcodermus aeneus*, in southern peas. **David Riley**, dgr@uga.edu, The University of Georgia, Tifton, GA

2:10 59 Efficacy of selected insecticides against sweetpotato whitefly (*Bemisia tabaci*) in South Georgia. **Alton N. Sparks, Jr.**, asparks@uga.edu, University of Georgia, Tifton, GA

Monday, 3 March

2:25 60 The effects of host plant resistance on vector-virus interactions in *Tomato yellow leaf curl virus* pathosystem.

Rajagopalbabu Srinivasan, babusri@uga.edu, Saioa Legarrea and David Riley, The University of Georgia, Tifton, GA

2:40 61 Whitefly transmission of *Sweetpotato leaf curl virus* in sweetpotato. **Alvin M. Simmons**, alvin.simmons@ars.usda.gov,

Kai-Shu Ling, D. Michael Jackson and Howard F. Harrison, USDA-ARS, Charleston, SC,

2:55 62 Insect monitoring in sweetpotatoes. **Tahir Rashid**¹,

trashid@alcorn.edu, Paul J. McLeod² and Randall Luttrell³; ¹Alcorn State University, Alcorn State, MS, ²University of Arkansas, Fayetteville, AR, ³USDA - ARS, Stoneville, MS

3:10 Break

3:30 63 Effects of sweetpotato weevil infestation on aphid feeding behavior. **Jeffrey A. Davis**, jeffdavis@agcenter.lsu.edu and M. J.

Murray, Louisiana State University, Baton Rouge, LA

3:45 64 Managing broad mites (*Polyphagotarsonemus latus*) in

Florida pepper. **Hugh A. Smith**, hughasmith@ufl.edu, University of Florida, Wimauma, FL

CONTRIBUTED PAPERS I

**MEDICAL, URBAN & VETERINARY ENTOMOLOGY
PHYSIOLOGY, BIOCHEMISTRY & TOXICOLOGY
SYSTEMATIC, EVOLUTION & BIODIVERSITY
P-IE – PLANT DISEASE VECTORS**

1:40 – 3:40

Spartanburg

Moderators:

Marianne Shockley & Nancy Hinkle

1:40 65 Totality™ WT: a new product for structural wood protection. **Brian Mount**, Brian.mount@fmc.com, FMC Corporation, Bradenton, FL

1:52 66 Distance of the repellency of dead *Reticulitermes flavipes* (Isoptera: Rhinotermitidae) nestmates. **Thomas Shelton**, tshelton@fs.fed.us, USDA, Forest Service, Starkville, MS

2:04 67 Kudzu bug (*Megacopta cribraria*) sensitivity to residual dinotefuran. **Daniel R. Suiter**, dsuiter@uga.edu, and Monica L. Townsend University of Georgia, Griffin, GA

2:16 68 Laboratory evaluations of the susceptibility of the kudzu bug (Hemiptera: *Megacopta cribraria*) to various insecticides.

Stephanie Piper, spiper1@my.westga.edu and Gregory Payne, University of West Georgia, Carrollton, GA

2:28 69 Walnut twig beetle in the forest: Implications for spread of thousand cankers disease. **Gregory J. Wiggins**,

wiggybug@utk.edu¹, Jerome F. Grant¹, Paris L. Lambdin¹, Paul Merten², Mark T. Windham¹, Danny Johnson¹ and Katheryne Nix¹, ¹University of Tennessee, Knoxville, TN, ²USDA Forest Service, Asheville, NC

Monday, 3 March

2:40 70 The number one blood-sucking pest of chickens: northern fowl mites (*Ornithonyssus sylviarum*) and the problems they cause. **Nancy Hinkle**, nhinkle@uga.edu, Ethan Reese, Brent Phelan, Annie Rich and Jessica Rook, University of Georgia, Athens, GA

2:52 71 Bugs and Bones: Developing a Forensic Entomology Course. **Marianne Shockley**, entomolo@uga.edu, University of Georgia, Athens, GA

3:04 Break

3:15 72 Antennal transcriptome pyrosequencing of the invasive insect pest species *Popillia japonica* (Newman) and characterization of genes involved in the odorant-sensory system. **Steven Adamson**, steven.adamson@usm.edu, University of Southern Mississippi, Hattiesburg, MS and Shahid Karim, The University of Southern Mississippi, Hattiesburg, MS

3:27 73 Effects of the synthetically produced anhydrosericic acid and sericic acid formulation on *Lasioderma serricornis* mating success. **Rizana M. Mahroof**, rmahroof@scsu.edu, South Carolina State University, Orangeburg, SC

STUDENT POSTER PRESENTATION COMPETITION

8:00 AM to 5:00 PM
Embassy Ballroom Prefunction

**PRESENTERS AT POSTERS FROM 1:40
TO 2:40 PM**

M.S. STUDENT POSTER PRESENTATION COMPETITION I

DSP1 Presence of pathogenic microorganisms in German cockroach (*Blattella germanica*) infested residential homes in rural North Carolina. **Jeremy O'Neal**, joneal86@gmail.com, Catherine White, Beatrice N. Dingha and Louis EN. Jackai, North Carolina A&T State University, Greensboro, NC

DSP2 Insecticide resistance management in the ectoparasitic mite, *Varroa destructor* of honey bee, *Apis mellifera* populations and Susceptibility of this Invasive Alien Pest to Fungal Pathogens.

DSP3 Monitoring for susceptibility of the Asian citrus psyllid to insecticides and potential microbial control agents. **Julius Eason**, jeason21@gmail.com and Lambert H. B Kanga, Florida A&M University, Tallahassee, FL

DSP4 Impact of *Cactoblastis cactorum* on *Opuntia stricta* in a protected Florida inter-dune area. **Angela Galette**, angela.galette@ars.usda.gov, Florida A&M University, Tallahassee, FL, Stephen Hight, USDA-ARS, Tallahassee, FL, James E. Carpenter, USDA-ARS, Tifton, GA and Emily Montgomery, Hawaii Invasive Species Council, Honolulu, HI

Monday, 3 March

DSP5 Field evaluation of soybean genotypes for resistance to the invasive kudzu bug (*Megacopta cribraria*). **Bradley Fritz**, bjfritz@ncsu.edu¹, Dominic R. Reisig², Clyde E. Sorenson¹ and Thomas Carter³, ¹North Carolina State University, Raleigh, NC, ²North Carolina State University, Plymouth, NC, ³USDA-ARS, Raleigh, NC

DSP6 Effects of soybean looper feeding and jasmonic acid application on green peach aphid feeding behavior in soybean. **John Dryburgh**, jdrybul@tigers.lsu.edu and Jeffrey A. Davis, Louisiana State University, Baton Rouge, LA

DSP7 Evaluation of the effect of K fertilization rate on soybean yield and soybean looper (*Chrysodeixis includens*) development. **Xuan Chen**, xchen52@lsu.edu, Dustin Harrell and Jeffrey A. Davis, Louisiana State University AgCenter, Baton Rouge, LA

DSP8 Assessment of the walnut twig beetle's (*Pityophthorus juglandis*) ability to colonize treated black walnut (*Juglans nigra*) wood. **Jackson Audley**, jaudley@utk.edu¹, Albert Mayfield², Scott W. Myers³ and Adam M. Taylor¹, ¹University of Tennessee, Knoxville, TN, ²USDA, Forest Service, Asheville, NC, ³USDA-APHIS, Buzzards Bay, MA

DSP9 Frequency of alleles conferring resistance to Cry2Ab2 corn in field populations of *Spodoptera frugiperda* (Lepidoptera: Noctuidae) in the southern region of the United States. **Ying Niu**, yniu@agcenter.lsu.edu¹, Robert L. Meagher², Xiangbing Yang³, Graham Head⁴, David L. Kerns⁵, D. Henne³, Xinzhi Ni⁶, Ronnie Levy⁷, Fei Yang¹, Vikash Dangal¹ and Fangneng Huang¹, ¹Louisiana State University Agricultural Center, Baton Rouge, LA, ²USDA, Agricultural Research Service, Gainesville, FL, ³Texas A&M Agrilife Research and Extension Center, Weslaco, TX, ⁴Monsanto Company, St. Louis, MO, ⁵LSU AgCenter, Winnsboro, LA, ⁶USDA, Agricultural Research Service, Tifton, GA, ⁷Louisiana State University, Alexandria, LA

DSP10 Performance of generalist corn pests as affected by nitrogen inputs and mycorrhizal colonization. **Paul Adams III**, pradams2@ncsu.edu, Dolly Watson, Michelle Schroeder-Moreno, D. Wes Watson and Yasmin Cardoza, North Carolina State University, Raleigh, NC

DSP11 Comparing conventional and novel methods of tick collection. **Sarah E. Mays**, sarahmays12@gmail.com, Allan E. Houston and Rebecca T. Trout Fryxell, University of Tennessee, Knoxville, TN

DSP12 Historical study of tiger beetle distributions in Georgia. **Elizabeth Studer**, lstuder@uga.edu, University of Georgia, Athens, GA

DSP13 Evaluation of planting date, variety, and PRE herbicide on thrips infestation and cotton growth, development, and Yield. **Drake Copeland**, jdc872@msstate.edu¹, Darrin Dodds¹, Tyler Dixon¹, D. Reynolds¹, Chase Samples¹, Angus Catchot¹, Jeff Gore² and Davie Wilson³, ¹Mississippi State University, Mississippi State, MS, ²Mississippi State University, Stoneville, MS, ³Monsanto Company, Chesterfield, MO

DSP14 Molecular systematics of the Subfamily Phasiinae (Diptera: Tachinidae). **Jeremy Blaschke**, jeremy.blaschke@gmail.com, University of Tennessee, Knoxville, TN

PH.D. STUDENT POSTER PRESENTATION COMPETITION I

DSP15 What is the maximum foraging depth of *Cricotopus lebetis* to mine the apical stems of the noxious aquatic weed *Hydrilla*?

Eutychus Kariuki¹, eutychus1.kariuki@fam.u.edu, Raymond L. Hix¹, and James P. Cuda², ¹Florida A & M University, Tallahassee, FL, ²University of Florida, Gainesville, FL

DSP16 Monitoring of resistance allele frequencies in the glassy-wing sharpshooter *Homalodisca vitripennis*, the destructive pest of grape. **Gunasegaran Chelliah**, cgsegaran369@gmail.com and Lambert H. B Kanga, Florida A&M University, Tallahassee, FL

DSP17 Elucidating the functional role of tick thioredoxin reductase (TrxR). **Khemraj Budachetri**, khem.bc@eagles.usm.edu, Rebecca Browning, Steven Adamson² and Shahid Karim, The University of Southern Mississippi, Hattiesburg, MS,

DSP18 An insight into the microbiome of the spotted wing *Drosophila* (*Drosophila suzukii*). **Deepak Kumar**, Deepak.Kumar@eagles.usm.edu¹, Blair Sampson², John J. Adamczyk³, Steven Adamson¹ and Shahid Karim¹, ¹University of Southern Mississippi, Hattiesburg, MS, ²USDA, Agricultural Research Service, Poplarville, MS, ³USDA-ARS-Thad Cochran Southern Hort. Lab, Poplarville, MS

DSP19 Biological rhythm of the polygalacturonase gene and protein in *Lygus lineolaris*. **Daniel Fleming**, defl8@msstate.edu, Natraj Krishnan and Fred R. Musser, Mississippi State University, Mississippi State, MS

DSP20 Measuring the effect of nitrogen fertilization on Mexican rice borer (Lepidoptera: Crambidae) injury in bioenergy sorghum. **Matthew T. VanWeelden**¹, mvanwe2@lsu.edu, Blake Wilson¹, Julien M. Beuzelin², T.E. Reagan¹, and MO. Way³, ¹LSU AgCenter, Baton Rouge, ²LSU AgCenter, Alexandria, LA, ³Texas A&M University, Beaumont, TX

DSP21 Effect of temperature on *Diaphorina citri* Kuwayama gene expression and energy metabolism. **Ibrahim El-Shesheny**, ishento@yahoo.com¹, Faraj Hijaz¹, Ibrahim El-Hawary², Ibrahim Mesbah² and Nabil Killiny¹, ¹Citrus Research and Education Center, IFAS, University of Florida, Lake Alfred, FL, ²Faculty of Agriculture, Tanta University, Egypt, Tanta, Egypt

DSP22 The earlier the better? Impact of planting date and maturity group on *Megacopta cribraria* management in soybeans. **Alejandro Del Pozo**, aidelpoz@ncsu.edu¹, Nicholas J. Seiter², Dominic R. Reisig³, Jeremy K. Greene², Jack S. Bachelier¹ and Clyde E. Sorenson¹, ¹North Carolina State University, Raleigh, NC, ²Clemson University, Blackville, SC, ³North Carolina State University, Plymouth, NC

Monday, 3 March

DSP23 Pollen contamination, occurrence and ear damage of corn earworm in mixed plantings of non-Bt and pyramided Bt corn. **Fei Yang**, fyang@agcenter.lsu.edu¹, David L. Kerns², B. Rogers Leonard¹, Graham P. Head³, Isaac Oyediran⁴, Tony Burd⁵, Ying Niu¹ and Fangneng Huang¹, ¹Louisiana State University Agricultural Center, Baton Rouge, LA, ²LSU AgCenter, Winnsboro, LA, ³Monsanto LLC, Saint Louis, MO, ⁴Syngenta Biotechnology Inc., Research Triangle Park, NC, ⁵Syngenta, Greensboro, NC

DSP24 Cis-jasmone inhibits lipoxygenase pathway and induces defense of tomato plant against chewing herbivore. **Joseph Disi**, jod0003@auburn.edu, Simon Zebelo, Esther Ngumbi and Henry Fadamiro, Auburn University, Auburn, AL

UNDERGRADUATE STUDENT POSTER PRESENTATION COMPETITION

DSP25 Investigating the indirect effects of fish community assemblage in Trinidadian streams on populations of a shredding caddisfly. **Kelly Murray**, kmmurray14@gmail.com, Troy Simon and Catherine Pringle, University of Georgia, Athens, GA

TAKE DOWN STUDENT POSTERS 5:00 – 7:00

LINNAEAN GAMES, FINAL ROUND

5:00 – 7:00
Pinehurst/Doral

SUBMITTED POSTER SET UP 7:00 – 10:00

Embassy Ballroom Prefunction

HOTEL RECEPTION

5:30 – 7:30
Atrium

MONDAY NIGHT RECEPTION

7:30 – 9:00
Outside Terrace

Tuesday, 4 March

6:00 AM-8:00	Breakfast-Atrium
7:00 AM-3:30	Audiovisual <i>Asheville</i>
7:00 AM-12:00	Registration-Atrium
7:00 AM-8:00	Past Presidents Breakfast <i>Atrium</i>
7:00 AM-8:00	General Poster Set Up <i>Embassy Ballroom Prefunction</i>
8:00 AM-5:00	General Poster Presentations <i>Embassy Ballroom Prefunction</i>
8:00 AM-12:00	Turf and Ornamental Symposium <i>Columbia/Charleston</i>
8:00 AM-11:20	Student Symposium-Chemical Cues in Insect Ecology <i>Harbour Town</i>
8:30 AM-11:18	Contributed Papers II <i>King's Mill</i>
8:30 AM-9:54	Contributed Papers III <i>Greenbrier</i>
12:00 PM-1:30	Awards Luncheon and Photo Salon <i>Pinehurst/Doral</i>
1:40 PM-3:51	Contributed Papers IV <i>Greenbrier</i>
1:40 PM-2:52	Contributed Papers V <i>Harbour Town</i>
1:30 PM-2:30	Poster Presenters at Display Presentation <i>Embassy Ballroom Prefunction</i>
2:40 PM-3:30	Break
3:30:00 PM-6:00	Submitted Poster Removal <i>Embassy Ballroom Prefunction</i>
4:30 PM-6:30	Final Business Meeting <i>Columbia/Charleston</i>
5:30 PM-7:30	Hotel Reception <i>Atrium</i>
7:30-9:00 PM	Closing Reception Palmetto Club

Tuesday, 4 March

TURF AND ORNAMENTAL SYMPOSIUM

8:00 – 12:00
Harbour Town

Organizers and Moderators:
Catharine M. Mannion & Amanda C. Hodges

8:00 Welcoming Remarks

8:05 74 Successfully using social media for ornamental entomology and plant pathology outreach. **Frank Hale**, fahale@utk.edu¹, Alan Windham¹, Debbie Joines¹ and Darrell Hensley², ¹University of Tennessee Extension, Nashville, TN, ²University of Tennessee Extension, Knoxville, TN

8:20 75 Scared half to death: increasing the susceptibility of western flower thrips (*Frankliniella occidentalis*) to parasites and pathogens through non-consumptive predator effects. **Sarah Jandricic**, sej48@cornell.edu and Steven D. Frank, North Carolina State University, Raleigh, NC

8:35 76 Diverse grain mixture effects on aphid banker plant systems. **Travis McClure**, tjmcclur@ncsu.edu and Steven D. Frank, North Carolina State University, Raleigh, NC

8:50 77 Prospects for biological control of rugose spiraling whitefly in Florida using parasitoid wasps. **Anthony Boughton**, anthonyboughton@yahoo.com¹, Catharine M. Mannion¹ and Lance Osborne², ¹University of Florida, Homestead, FL, ²University of Florida, Apopka, FL

9:05 78 Management of rugose spiraling whitefly. **Catharine M. Mannion**, cmannion@ufl.edu, University of Florida, Homestead, FL

9:20 79 Outside the box uses of BotaniGard; dips and bark sprays to control insects. **Chris Hayes**, chayes@bioworksinc.com, BioWorks, Land O Lakes, FL

9:35 80 Tritrophic interactions reveal conservation opportunities. **S. Kristine Braman**, kbraman@uga.edu, University of Georgia, Griffin, GA

9:50 81 Are all plants equal? Insect visitation in a conservation garden. **Bethany Harris**, bah5191@uga.edu and S. Kristine Braman, University of Georgia, Griffin, GA

10:05 Break

10:15 82 Sycamore lace bug: update on a 12 year old provenance study and some bionomics. **Russell Mizell**, RFMizell@ufl.edu, University of Florida, Quincy, FL

Tuesday, 4 March

10:30 83 Managing scale insects on urban trees. **Steven D. Frank**, sdfrank@ncsu.edu, Adam Dale and Emily K. Meineke, North Carolina State University, Raleigh, NC

10:45 84 Life history and distribution of the armored scale *Melanaspis deklei* in three southeastern states. **Juang-Horng Chong**, juanghc@CLEMSON.EDU, Clemson University, Florence, SC

11:00 85 Natural enemies of oak lecanium scale in 4 states of the southeast region. **Ernesto Robayo Camacho**¹, crobayo@clemson.edu, Juang Horng Chong², S. Kristine Braman³, Steven D. Frank⁴, and Peter B. Schultz⁵; ¹Clemson University, Florence, SC, ²Clemson, Florence, SC, ³University of Georgia, Griffin, GA, ⁴North Carolina State University, Raleigh, NC, ⁵Virginia Tech, Virginia Beach, VA

11:15 86 XXpire™, a new insecticide for control of ornamental plant pests from Dow AgroSciences, LLC. **Anita Alexander**, alalexander@dow.com, Dow AgroSciences, Lawrenceville, GA, James Breuninger, Dow AgroSciences, Indianapolis, IN, Daniel Loughner, Dow AgroSciences, Lawrenceville, NJ and Vanelle Peterson, Dow AgroSciences LLC, Mulino, OR

11:30 87 Mainspring™ - a new insecticide for the ornamental market from Syngenta. **Nancy Rechcigl**, nancy.rechcigl@syngenta.com, Syngenta Professional Products, Bradenton, FL and Marla Faver, Syngenta, Robertsedale, AL

11:45 88 Neonicotinoid stewardship in turf and ornamentals. **Joe Chamberlin**, jcham@valent.com, Valent USA Corp, Snellville, GA and Julie Schlekau, Valent, Washington, DC

STUDENT SYMPOSIUM

Chemical Cues in Insect Ecology

8:00 – 11:20
Harbour Town

Organizers and Moderators:
Erika Machtinger & Stephanie Weldon

8:00 89 Host location cues for management of the brown dog tick, *Rhipicephalus sanguineus*. **Emma N. I. Weeks**, eniweeks@ufl.edu, University of Florida, Gainesville, FL

8:25 90 Pheromones, hormones, and reproductive maturity in insects. **Peter E. A. Teal**, peter.teal@ars.usda.gov, USDA Agricultural Research Service, Gainesville, FL

8:50 91 Competitive and noncompetitive mating disruption: mechanisms or illusion?. **Stephen L. Lapointe**, stephen.lapointe@ars.usda.gov, USDA, Agricultural Research Service, Fort Pierce, FL

Tuesday, 4 March

9:15 92 The race to identify reliable olfactory stimuli for monitoring the invasive brown marmorated stink bug: From scientific progress to commercialization. **Tracy C. Leskey**, tracy.leskey@ars.usda.gov, USDA, Agricultural Research Service, Kearneysville, WV

9:40 93 Fruit and host-derived compounds and their effect on orientation and oviposition in Tephritid parasitoids. **Charles Stuhl**, Charles.Stuhl@ars.usda.gov, USDA-ARS, Gainesville, FL

10:05 Break

10:30 94 Chemical ecology: A behavioral perspective. **Karla Adesso**, kaddesso@tnstate.edu, Tennessee State University, Nashville, TN

10:55 95 Pathogen-mediated interactions between plants, herbivores, and their parasitoids in the context of chemical ecology. **Xavier Martini**, xmartini@ufl.edu, Lukasz Stelinski, Emily Kuhns and Kirsten S Pelz-Stelinski, University of Florida Citrus Research and Education Center, Lake Alfred, FL,

CONTRIBUTED PAPERS II P-IE: Field Crop IPM

8:30 – 11:54

King's Mill

Moderators:

Scott Stewart & Phillip Roberts

8:30 96 Dow AgroSciences' Intrepid Edge Insecticide: A new tool for managing lepidoptera pests in southern U.S. soybean. **Melissa Willrich Siebert**, mwillrichsiebert@dow.com, Dow AgroSciences, Greenville, MS, Gary D. Thompson, Dow AgroSciences, Omaha, AR, Larry Walton, Dow AgroSciences, Tupelo, MS and James E. Dripps, Dow AgroSciences, LLC, Indianapolis, IN

8:42 97 Transform ® insecticide performance against tarnished plant bug in small and large plot cotton tests. **Gary D. Thompson**, gdthompson@dow.com, Dow AgroSciences, Omaha, AR, Melissa Willrich Siebert, Dow AgroSciences, Greenville, MS, Larry Walton, Dow AgroSciences, Tupelo, MS, Robert Haygood, Dow AgroSciences, Indianapolis, IN, Ryan Viator, Dow AgroSciences, Houma, LA, Mike Lovelace, Dow AgroSciences, Lubbock, TX and John Richburg, Dow AgroSciences, Headland, AL

8:54 98 Pollen analyses of tarnished plant bugs. **Clint Allen**, clint.allen@ars.usda.gov, USDA - ARS, Stoneville, MS and Gretchen Jones, USDA-ARS, College Station, TX

9:06 99 Foliar applications of insecticides to field corn for the control of ear feeding pests. **Scott D. Stewart**, sdstewart@utk.edu, University of Tennessee, Jackson, TN, Angus Catchot, Mississippi State University, Mississippi State, MS and Don Cook, Mississippi State University, Stoneville, MS

Tuesday, 4 March

9:18 100 Bean leaf beetle management in soybeans. **Don Cook**, DCook@drec.msstate.edu¹, Angus Catchot², Jeff Gore¹ and Fred Musser², ¹Mississippi State University, Stoneville, MS, ²Mississippi State University, Mississippi State, MS

9:30 101 Choosing the right plant: how aphids react to the anti-feeding effect of imidacloprid in tobacco. **H. Alejandro Merchán**, hamercha@ncsu.edu and Hannah J. Burrack, North Carolina State University, Raleigh, NC

9:42 102 Association of soil and crop characteristics with thrips and stink bugs in cotton. **Francis Reay-Jones**, freayjo@clemson.edu, Clemson University, Florence, SC, Jeremy K. Greene, Clemson University, Blackville, SC and Phil Bauer, USDA-ARS, Florence, SC

9:54 103 Novel insecticide types and methods of application for thrips management in the Southeast. **Dominic R. Reisig**, dominic_reisig@ncsu.edu¹, Jack S. Bachelier², Jeremy Greene³, D. Ames Herbert⁴, Francis Reay-Jones³, Tim Reed⁵, Phillip Roberts⁶, Ronald Smith⁷ and Michael Toews⁸, ¹North Carolina State University, Plymouth, NC, ²North Carolina State University, Raleigh, NC, ³Clemson University, Florence, SC, ⁴Virginia Tech, Suffolk, VA, ⁵Alabama CES, Madison, AL, ⁶University of Georgia, Tifton, GA, ⁷Auburn University, Auburn, AL, ⁸The University of Georgia, Tifton, GA

10:06 Break

10:30 104 In-furrow, at-plant options for controlling thrips in cotton in the southeastern USA. **Jeremy K. Greene**, greene4@clemson.edu¹, Ames Herbert², Jack S. Bachelier³, Dominic Reisig⁴, Phillip M. Roberts⁵, Michael Toews⁶, Ronald Smith⁷, Francis Reay-Jones⁸, Todd Spivey³ and Tim Reed⁹, ¹Clemson University, Blackville, SC, ²Virginia Polytechnic Institute and State University, Blacksburg, VA, ³North Carolina State University, Raleigh, NC, ⁴North Carolina State University, Plymouth, NC, ⁵University of Georgia, Tifton, GA, ⁶The University of Georgia, Tifton, GA, ⁷Auburn University, Auburn, AL, ⁸Clemson University, Florence, SC, ⁹Alabama CES, Madison, AL

10:42 105 Outbreak of sugarcane aphid, *Melanaphis sacchari* on sorghum: notes on distribution, crop injury and management. **David L. Kerns**, dkerns@agcenter.lsu.edu¹, Michael J. Brewer², J. Scott Armstrong³, M.O. Way⁴, Raul Villanueva⁵, Sebe Brown¹ and Julien M. Beuzelin⁶, ¹LSU AgCenter, Winnsboro, LA, ²Texas A&M University, Corpus Christi, TX, ³ARS, USDA, Stillwater, OK, ⁴Texas A&M University, Beaumont, TX, ⁵Texas A&M Agrilife Extension, Weslaco, TX, ⁶LSU AgCenter, Alexandria, LA

10:54 106 Impacts and species composition of thrips (*Frankliniella fusca*) on seedling cotton in the midsouth. **John North**, jhn39@msstate.edu, Mississippi State University, Mississippi State, MS

11:06 107 Influence of PRE herbicides on thrips management programs in cotton. **Phillip Roberts**, proberts@uga.edu¹, Michael Toews², Stanley Culpepper¹, Jeremy Greene³, Michael Marshall⁴, Ames Herbert⁵, Hunter Frame⁵ and Ronald Smith⁶, ¹University of Georgia, Tifton, GA, ²The University of Georgia, Tifton, GA, ³Clemson University, Florence, SC, ⁴Clemson University, Blackville, SC, ⁵Virginia Tech, Suffolk, VA, ⁶Auburn University, Auburn, AL

Tuesday, 4 March

CONTRIBUTED PAPERS III

P-IE: Host-Plant Resistance and Transgenic Crops

8:30 – 9:54
Greenbrier

Moderators:
Lieceng Zhu & Bill Hendrix

8:30 108 Transient heat stress compromises the resistance of wheat (Poales:Poaceae) seedlings to Hessian fly (Diptera: Cecidomyiidae) infestation. **Lieceng Zhu**, lzhu@uncfsu.edu, Fayetteville State University, Fayetteville, NC

8:42 109 Role of salicyclic acid in helping wheat maintain resistance against hessian fly (*Mayetiola destructor*) infestation under heat stress. **Joshua Underwood**, junderwo@broncos.uncfsu.edu¹, John Glenn Moch¹, Lieceng Zhu¹ and Ming-Shun Chen², ¹Fayetteville State University, Fayetteville, NC, ²USDA-ARS-NPA-GMPRC-PSERU, Manhattan, KS

8:54 110 Recent evaluations of advanced Bt cotton under heavy natural pressure from bollworm (*Helicoverpa zea*). **Jeremy K. Greene**, greene4@clemson.edu, Dan Robinson and James Smoak, Clemson University, Blackville, SC

9:06 111 WideStrike 3 – a performance and status report from Dow AgroSciences. Melissa Willrich Siebert¹, Gary D. Thompson², Bo Braxton³, **Bill Hendrix**, wmhendrix@dow.com⁴, Larry Walton⁵, John Richburg⁶, Robert Haygood⁴, Mike Lovelace⁷ and Ryan Viator⁸, ¹Dow AgroSciences, Greenville, MS, ²Dow AgroSciences, Omaha, AR, ³Dow AgroSciences, Travalers Rest, SC, ⁴Dow AgroSciences, Indianapolis, IN, ⁵Dow AgroSciences, Tupelo, MS, ⁶Dow AgroSciences, Headland, AL, ⁷Dow AgroSciences, Lubbock, TX, ⁸Dow AgroSciences, Houma, LA

9:18 112 TwinLink™ and TwinLink™ Plus: New cotton traits for improved Lepidopteran control. **Ben Von Kanel**, ben.vonkanel@bayer.com¹, Scott Baker¹, Mark Rinehardt² and Walt Mullins³, ¹Bayer CropScience, Memphis, TN, ²Bayer CropScience, Zebulon, NC, ³Bayer CropScience, Collierville, TN

9:30 113 Assessment of grain sorghum hybrids for resistance to insect and bird damage at three planting dates. **Xinzhi Ni**¹, xinzhi.ni@ars.usda.gov, Michael Toews², and G. David Buntin³ ¹USDA, Agricultural Research Service, Tifton, GA, ²The University of Georgia, Tifton, GA, ³University of Georgia, Griffin, GA

Tuesday, 4 March

**AWARDS LUNCHEON
AND PHOTO SALON**

12:00 – 1:30 PM
Pinehurst/Doral

CONTRIBUTED PAPERS IV

**P-IE: Biocontrol, Resistance
Management, Horticultural IPM**

1:40 – 3:51
Governor Room

Moderators:
Albert Mayfield & John McCullers

1:40 114 Designing a more effective Hydrilla biocontrol agent, *Cricotopus lebetis*. **Julie Baniszewski**, jbaniszewski10@ufl.edu, Emma N. I. Weeks and James P. Cuda, University of Florida, Gainesville, FL

2:04 115 Phytosanitary treatments for the walnut twig beetle (*Pityophthorus juglandis*) and the thousand cankers disease pathogen (*Geosmithia morbida*). **Albert Mayfield**, amayfield02@fs.fed.us¹, Scott W. Myers², Stephen W. Fraedrich³, Adam M. Taylor⁴, Paul Merten⁵ and Jackson Audley⁴, ¹USDA, Forest Service, Asheville, NC, ²USDA-APHIS, Buzzards Bay, MA, ³USDA, Forest Service, Athens, GA, ⁴University of Tennessee, Knoxville, TN, ⁵USDA Forest Service, Asheville, NC

2:16 116 Trap crops for managing leaf-footed and stink bug species in Alabama peaches. **Clement Akotsen-Mensah**, cakotsen@ug.edu.gh¹, Henry Fadamiro¹, Rammohan Rao Balusu¹ and Joseph Anikwe², ¹Auburn University, Auburn, AL, ²Cocoa Research Institute of Nigeria, Ibadan, Nigeria

2:28 117 Monitoring and management of insects and mites in fruits produced in high tunnels. **Donn Johnson**, dtjohnso@uark.edu, M. Garcia and Curt Rom, University of Arkansas, Fayetteville, AR

2:40 118 Potential for predation on Pentatomidae by Coccinellidae. **Ted E. Cottrell**, ted.cottrell@ars.usda.gov, USDA-ARS, Byron, GA and P. Glynn Tillman, USDA - ARS, Tifton, GA

2:52 119 Effect of bait, bait age and wild host on captures of spotted wing drosophila in southern highbush blueberries. **Oscar Liburd**, oeliburd@ufl.edu, Teresia Nyoike and Lindsay E. Iglesias, University of Florida, Gainesville, FL

3:04 Break

Tuesday, 4 March

3:15 120 Sampling techniques and population estimation for *Atherigona reversura* Villeneuve (Diptera:Muscidae) in bermudagrass hay fields. J.T.McCullers, johnmmccullers@yahoo.com, and W.G. Hudson, University of Georgia, Athens, GA

3:27 121 Closer™ SC: a new insecticide for the control of sap-feeding insects in citrus and vegetables in Florida. James D. Thomas¹, **Alejandro Calixto**, AACalixto@dow.com², Anthony W. Weiss³, Joe E. Eger⁴, Luis Gomez¹, Melissa Willrich Siebert⁵, Linda Lindenberg⁶ and Scott Houk⁷, ¹Dow AgroSciences, Indianapolis, IN, ²Dow AgroSciences LLC, Wesley Chapel, FL, ³Dow AgroSciences, Brandon, FL, ⁴Dow AgroSciences, Tampa, FL, ⁵Dow AgroSciences, Greenville, MS, ⁶Dow AgroSciences LLC, Greenville, MS, ⁷Dow AgroSciences LLC, Estero, FL

3:39 122 Spotted wing drosophila: A major threat to small fruits in the US. **Ash Sial**, ashsial@uga.edu, University of Georgia, Athens, GA

CONTRIBUTED PAPERS V

P-IE: Pollinators, Ecology, Exotics

1:40 – 3:51

Harbour Town

Moderators:

Joseph Culin & Leslie Bayas

1:40 123 Invasion strategies of the bean plataspid. **Xing Ping Hu**, huxingp@auburn.edu, Auburn University, Auburn, AL

1:52 124 The moths of Congaree National Park. **Joseph Culin**, jculin@clemson.edu, Clemson University, Clemson, SC, Brian G. Scholtens, College of Charleston, Charleston, SC and John Snyder, Furman University, Greenville, SC

2:04 125 Exotic ant activity in Biscayne National Park. **Leslie Bayas**, lbaya002@fiu.edu, Florida International University, Miami, FL

2:16 126 Operation Pollinator in Multifunctional Landscapes. **Caydee Savinelli**, caydee.savinelli@syngenta.com¹, James D. Ellis², Jaret C. Daniels², Rufus Isaacs³ and Neal M. Williams⁴, ¹Syngenta Crop Protection, Greensboro, NC, ²University of Florida, Gainesville, FL, ³Michigan State University, East Lansing, MI, ⁴University of California, Davis, Davis, CA

2:28 127 A mason bee, *Osmia ribifloris*, as a potentially manageable pollinator of cultivated blueberries in the South. **Blair Sampson**, blair.sampson@ars.usda.gov, USDA, Agricultural Research Service, Poplarville, MS, Timothy Rinehart, USDA-ARS Thad Cochran Southern Horticultural Research Laboratory, Poplarville, MS, Grant Kirker, USDA-FS Forest Products Laboratory, Madison, WI and Chris Werle, Louisiana State University, Baton Rouge, LA

Tuesday, 4 March

2:40 128 A novel assay for assessing Asian citrus psyllid (*Diaphorina citri*) responses to volatiles. **David Hall**, David.hall@ars.usda.gov, and Joseph Patt, USDA, Agricultural Research Service, Fort Pierce,

POSTER PRESENTATIONS

8:00 AM to 5:00 PM

Embassy Ballroom Prefunction

Presenters at Posters from 1:30 to 2:30

Education

DSP26 Is online education really so distant?. **Nancy Miorelli**, University of Georgia, Athens, GA

Plant-Insect Ecosystems: Biocontrol

DSP27 Group behavior in insect parasitic nematode dispersal. **David Shapiro-Ilan**¹, David.Shapiro@ARS.USDA.GOV, Edwin Lewis², and Paul Schliekelman³, ¹USDA-ARS, SE Fruit and Tree Nut Research Unit, Byron, GA, ²University of California, Davis, CA, ³University of Georgia, Athens, GA

DSP28 *Spirulina* microalga as a supplement for a suboptimal meridic diet for *Coleomegilla maculata* (Coleoptera: Coccinellidae). **M. Guadalupe Rojas**, guadalupe.rojas@ars.usda.gov, Eric Riddick, Zhixin Wu and Juan Morales-Ramos, USDA, Agricultural Research Service, Stoneville, MS

DSP29 Abrupt temperature change during shipment in styrofoam and simulated effect on egg hatch of ladybird beetle, *Coleomegilla maculata*. **Eric Riddick**, eric.riddick@ars.usda.gov and Juan Morales-Ramos, USDA, Agricultural Research Service, Stoneville, MS

DSP30 Growth, development, and reproduction of *Podisus maculiventris* (Heteroptera: Pentatomidae) feeding on larvae versus pupae of the factitious prey *Tenebrio molitor* (Coleoptera: Tenebrionidae). **Juan Morales-Ramos**¹, juan.moralesramos@ars.usda.gov, M. Guadalupe Rojas¹, Thomas A. Coudron², and Kent S. Shelby³, ¹USDA, Agricultural Research Service, Stoneville, MS, ²USDA - ARS, Columbia, MO, ³USDA-ARS-BCIRL, Columbia, MO

DSP31 Biological control of the two major pests, Varroa mite and the small hive beetle, in honey bee colonies. **Lambert H. B Kanga**, lambert.kanga@famu.edu and Sandra A. Wheeler, Florida A&M University, Tallahassee, FL

Plant-Insect Ecosystems: Forest Pests

DSP32 Walnut alert: A regional outreach plan to slow the movement of thousand cankers disease through education. **Jerome F. Grant**, jgrant@utk.edu¹, Alan Windham², Frank Hale², Elizabeth Long¹, Mark T. Windham¹, Katheryne Nix¹, Renee Follum¹, Gregory J. Wiggins¹ and Paris L. Lambdin¹, ¹University of Tennessee, Knoxville, TN, ²University of Tennessee Extension, Nashville, TN

DSP33 Post hemlock woolly adelgid damage: Hemlock assessment in the southeastern United States. **Layla Burgess**, laylab@clemsun.edu and Joseph Culin, Clemson University, Clemson, SC

DSP34 Spatial distribution and pattern of HWA induced hemlock mortality in the southern Appalachians. **Tuula Kantola**, tuulak@neo.tamu.edu¹, Maria Tchakerian¹, Päivi Lyytikäinen-Saarenmaa², Markus Holopainen², Robert Coulson¹ and Douglas St. t³, ¹Texas A&M University, College Station, TX, ²University of Helsinki, Helsinki, Finland, ³USDA Forest Service, Pineville, LA

Plant-Insect Ecosystems: IPM

DSP35 Evaluating companion plants and plant products to control sweetpotato whitefly, *Bemisia tabaci*. **Jesusa C. Legaspi**¹, Jesusa.Legaspi@ars.usda.gov, Alvin M. Simmons², and Neil Miller³; ¹United States Dept. of Agriculture- Agricultural Research Service, CMAVE, Center for Biological Control, Florida A&M University, Tallahassee, FL, , USDA-ARS, ²Charleston, SC, ³USDA-ARS-CMAVE, Tallahassee, FL

DSP36 Effect of corn earworm (*Helicoverpa zea*) on yield in field corn. **Glenn Studebaker**, gstudebaker@uaex.edu, and Logan Towles, University of Arkansas, Keiser, AR

DSP37 Severity of Asian citrus psyllid infestation influenced by elevation, environment and farming practices. **David A. Jenkins**, David.Jenkins@ars.usda.gov, Veronica Rodriguez, Christian Millan, Robert McPhail and Ricardo Goenaga, USDA-ARS-Tropical Agriculture Research Station, Mayaguez, PR

DSP38 El Nino-Southern Oscillation (ENSO) effects on Hessian fly infestation in the Southeastern USA. Prem Woli¹, Brenda Ortiz¹, **G. David Buntin**, gbuntin@uga.edu² and Kathy Flanders¹, ¹Auburn University, Auburn, AL, ²University of Georgia, Griffin, GA

DSP39 Farmscaping: Potential use of ornamental plants as trap crops in managing pests. **Rufina Ward**, rufina.ward@aamu.edu, Alabama A&M University, Normal, AL

DSP40 Current status and management of melon thrips, *Thrips palmi* Karny (Thysanoptera: Thripidae) in South Florida. **Dakshina Seal**, dseal@ifas.ufl.edu, and Catherine Sabines, University of Florida, Homestead, FL

DSP41 Specialty crop insect management. **Kenneth A. Sorensen**, kenneth_sorensen@ncsu.edu, North Carolina State University, Raleigh, NC

Tuesday, 4 March

DSP42 Fruits and vegetables IPM using best management practices in North Florida. **Muhammad Haseeb**, Muhammad.Haseeb@FAMU.EDU, Florida A&M University, Tallahassee, FL and Tavia Gordon, Center for Biological Control, Tallahassee, FL

DSP43 Semiochemical-mediated oviposition preference of *Callosobruchus maculatus* on seed legumes. **Olufunmilayo Ajayi**, oea0001@auburn.edu, Henry Fadamiro and Rammohan Rao Balusu, Auburn University, Auburn, AL

DSP44 Monitoring populations of the potato tuber moth (*Phthorimaea operculella*) in potato plots and in storage in Senegal. **George Mbata**, mbatag@FVSU.edu, Fort Valley State University, Fort Valley, GA, Kemo Badji, Crop Protection Directorate (DPV), Dakar, Senegal and Carlyle C. Brewster, Virginia Tech, Blacksburg, VA

DSP45 Host Plant Resistance: Evaluating cotton resistance and tolerance to tarnished plant bug in Arkansas. **Tina Teague**, tteague@astate.edu¹, Glen Studebaker² and F. Bourland², ¹Arkansas State University, State University, AR, ²University of Arkansas, Northeast Research & Extension Center, Keiser, AR

DSP46 Impact of irrigation regime and water salinity on soybean loopers feeding on soybean. **Julien M. Beuzelin**, jbeuzelin@agcenter.lsu.edu¹, Alix Boulard¹, Dana M. May¹ and Jeffrey A. Davis², ¹LSU AgCenter, Alexandria, LA, ²LSU AgCenter, Baton Rouge, LA

DSP47 Priority setting and channeling 'project clearance requests' (PCRs) through the IR-4 Southern Region Program. **Michelle Samuel-Foo**, mfoo@ufl.edu, University of Florida, Gainesville, FL and Alvin M. Simmons, USDA-ARS, Charleston, SC

DSP48 Evaluation of neonicotinoid insecticides as an alternative for aldicarb for early-season cotton pest management in Louisiana. **Karla Emfinger**, kemfinger@agcenter.lsu.edu, T. Shelby Williams, Nathaniel Jones, David L. Kerns and Jenna Lindsay, ¹LSU AgCenter, Winnsboro, LA

DSP49 Comparative activity of commercial formulations of *Bacillus thuringiensis*, Cry1Ac protein and lyophilized tissue from Bt crops: options for tracking susceptibility in *Helicoverpa zea* and *Heliothis virescens*. **Randall Luttrell**, randy.luttrell@ars.usda.gov, Kenya Dixon, Michelle Mullen and Nathan Little, USDA - ARS, Stoneville, MS

DSP50 F₂ screen and characterization of Cry2Ab2 resistance in sugarcane borer, *Diatraea saccharalis* (F.). **Fangneng Huang**, fhunag@agcenter.lsu.edu¹, Mao Chen², Thomas L. Clark², Konasale J. Anilkumar², Fei Yang¹, Ying Niu¹ and Vikash Dangal¹, ¹Louisiana State University Agricultural Center, Baton Rouge, LA, ²Monsanto Company, Chesterfield, MO

DSP51 Influence of landscape heterogeneity on insecticide resistance in the tarnished plant bug, *Lygus lineolaris* (Palisot de Beauvois). **Katherine Parys**, katherine.parys@ars.usda.gov, Gordon Snodgrass and Clint Allen, USDA - ARS, Stoneville, MS

DSP52 Influence of *Megacopta cribraria* infestations on vegetative soybeans. **Phillip Roberts**, proberts@uga.edu, University of Georgia, Tifton, GA, Michael Toews, The University of Georgia, Tifton, GA, David Buntin, University of Georgia, Griffin, GA and John All, University of Georgia, Athens, GA

Tuesday, 4 March

Medical, Urban and Veterinary Entomology

DSP53 Use of climate controlled chamber to explore host-seeking behavior of nymphal *Amblyomma maculatum* Koch (Acari: Ixodidae) ticks. **Jose Portugal**, jsp281@msstate.edu and Jerome Goddard, Mississippi State University, Mississippi State, MS

DSP54 Comparison of monitors used to detect bed bugs (*Cimex lectularius*) in occupied multifamily housing units. **Jennifer Chandler**, jchand11@utk.edu, Karen M. Vail, Ann Reed and Xiaocun Sun, University of Tennessee, Knoxville, TN

DSP55 Environmental investigation using cemeteries following a La Crosse encephalitis case fatality in Tennessee, 2012. Kimberly Freyman¹, **Rebecca T. Trout Fryxell**, RFryxell@utk.edu², Armando Ulloa³, Brian M. Hendricks², Dave P. Paulsen² and A. C. Moncayo¹, ¹Tennessee Dept. of Health, Nashville, TN, ²University of Tennessee, Knoxville, TN, ³Regional Center for Public Health Investigation, Tapachula, Mexico

DSP56 Evaluation of methionine as a larvicide, and its potential for use in mosquito IPM. **Emma N. I. Weeks**, eniweeks@ufl.edu¹, Sandra A. Allan², Julie Baniszewski¹, Alissa Marie Berro¹, Bruce R. Stevens¹ and James P. Cuda¹, ¹University of Florida, Gainesville, FL, ²USDA, Agricultural Research Service, Gainesville, FL

DSP57 Effects of testing procedures and collection methods on feeding of Formosan subterranean termites on untreated wood. **Dennis R. Ring**, dring@agctr.lsu.edu, Todd Shupe, Qinglin Wu and Jay Curole, Louisiana State University Agricultural Center, Baton Rouge, LA

Physiology, Biochemistry and Toxicology

DSP58 Microbes and proteins from the brown marmorated stink bug (*Halyomorpha halys*). **Louis EN. Jackai**, lejackai@ncat.edu, Mulumebet Worku and Beatrice N. Dingha, North Carolina A&T State University, Greensboro, NC

DSP59 Laboratory rearing and field monitoring of the brown marmorated stink bug (*Halyomorpha halys*) in the Greensboro area of North Carolina. **Beatrice N. Dingha**, bndingha@ncat.edu and Louis EN. Jackai, North Carolina A&T State University, Greensboro, NC

DSP60 Odorant-binding protein gene activity in the larval castes of the polyembryonic wasp *Copidosoma floridanum*. **David Donnell**, donnell1@citadel.edu, The Citadel, Charleston, SC

DSP61 Impact of transient heat stress on polar lipid metabolisms of wheat near-isogenic lines contrasting in Hessian fly resistance. **Yaleaka B. Currie**, ycurrie@broncos.uncfsu.edu, Fayetteville State University, Fayetteville, NC

Tuesday, 4 March

FINAL BUSINESS MEETING

4:30 – 6:30

Columbia/Charleston

HOTEL RECEPTION

5:30 – 7:30

Atrium

CLOSING RECEPTION

7:30 – 9:00

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PAST PRESIDENTS OF THE ESA-SEB (formerly the *Cotton States Branch*)

President	Date	Meeting Site
W. E. Hinds	3-4 Feb. 1926	Atlanta, GA
G. M. Bentley	29 Dec. 1927	Nashville, TN
G. M. Bentley	1-2 Feb. 1928	Memphis, TN
F. L. Thomas	6-7 Feb. 1929	Houston TX
B. R. Coad	6-7 Feb. 1930	Jackson, FL
J. M. Robinson	5-6 Feb. 1931	Atlanta, GA
R. W. Harned	31 Dec. 1931	New Orleans, LA
R. W. Harned	3-4 Feb. 1932	Birmingham, AL
J. W. Folsom	2-3 Feb. 1933	New Orleans, LA
R.W. Leiby	1-2 Feb. 1934	Memphis, TN
S. W. Bilsing	31 Jan.-2 Feb. 1935	Atlanta, GA
C. Lyle	5-6 Feb. 1936	Jackson, MS
W. E. Anderson	18-20 Feb. 1937	San Antonio, TX
W. E. Dove	3-5 Feb. 1938	New Orleans, LA
C. O. Eddy	7-9 Feb. 1940	Birmingham, AL
Z. P. Metcalf	5-8 Feb. 1941	Waco, TX
F. A. Fenton	4-6 Feb. 1942	Memphis, TN
O. W. Rosewall	1-3 Feb. 1944	New Orleans, LA
E. W. Laake	24-25 Jan. 1945	New Orleans, LA
C. E. Smith	3-6 Dec. 1945	Dallas, TX
R. C. Gaines	11-16 Jan. 1947	Biloxi, MS
D. Isley	4-6 Feb. 1948	Atlanta, GA
J. T. Creighton	31 Jan.-2 Feb. 1949	Baton Rouge, LA
E. W. Dunnam	13-16 Dec. 1949	Tampa, FL
J. W. Ingram	5-7 Feb. 1951	Memphis, TN
C. H. Alden	4-6 Feb. 1952	Atlanta, GA
K. L. Cockerham	9-11 Feb. 1953	New Orleans, LA
F. S. Arant	25-27 Jan. 1954	Biloxi, MS
W. G. Bruce	17-19 Jan. 1955	Tampa, FL
H. C. Young	6-8 Feb. 1956	Atlanta, GA
A. N. Tissot	4-6 Feb. 1957	Birmingham, AL
N. Allen	2-5 Dec. 1957	Memphis, TN
C. G. Lincoln	2-4 Feb. 1959	Memphis, TN
F. E. Guyton	25-27 Jan. 1960	Savannah, GA
I. J. Becnel	23-25 Jan. 1961	Mobile, AL
C. N. Smith	27-30 Nov. 1961	Miami, FL
R. J. Kowal	29-31 Jan. 1963	Jackson, MS
W. C. Nettles	28-29 Jan. 1964	Asheville, NC
L. D. Newsom	25-26 Jan. 1965	Little Rock, AR
J. C. Alden	29 Nov.-2 Dec. 1965	New Orleans, LA
M. E. Merkl	30 Jan.-2 Feb. 1967	Atlanta, GA
J. S. Roussel	29 Jan.-1 Feb. 1968	Charleston, SC
C. M. Beckham	27-30 Jan. 1969	Biloxi, MS
S. R. Morris	26-29 Jan. 1970	Hot Springs, AR
W. G. Eden	30 Nov.-3 Dec. 1970	Miami, FL
C. R. Jordan	1-3 Feb. 1972	Mobile, AL
C. F. Smith	30 Jan.-1 Feb. 1973	Savannah, GA
T. R. Pfrimmer	9-31 Jan. 1974	Memphis, TN
S. B. Hays	28-30 Jan. 1975	Raleigh, NC
T. D. Canerday	30 Nov.-3 Dec. 1975	New Orleans, LA
J. B. Graves	25-27 Jan. 1977	Charleston, SC
A. N. Sparks	24-26 Jan. 1978	Gainesville, FL
F. G. Maxwell	23-25 Jan. 1979	Nashville, TN
S. G. Turnipseed	29-31 Jan. 1980	Biloxi, MS
D. F. Martin	30 Nov.-4 Dec. 1980	Atlanta, GA
J. E. Paine, Sr.	25-28 Jan. 1982	Mobile, AL
R. L. Rabb	24-27 Jan. 1983	Little Rock, AR
K. L. Hays	23-26 Jan. 1984	New Orleans, LA
G. J. Musick	28-31 Jan. 1985	Greenville, SC
M. H. Bass	8-12 Dec. 1985	Hollywood, FL
D. V. Allemann	26-29 Jan. 1987	Jackson, MS
B. R. Wiseman	25-28 Jan. 1988	Raleigh, NC
T. E. Skelton	30 Jan.-2 Feb. 1989	Nashville, TN
J. W. Todd	4-8 Feb. 1990	Orlando, FL
E. R. Mitchell	10-13 Mar. 1991	Orange Beach, AL

D. J. Boethel	8-11 Mar. 1992	Savannah, GA
G. A. Herzog	7-10 Mar. 1993	Little Rock, AR
R. E. Lynch	6-9 Mar. 1994	Baton Rouge, LA
J. E. Eger	5-8 Mar. 1995	Charleston, SC
D. C. Herzog	3-6 Mar. 1996	Biloxi, MS
D. F. Williams	2-5 Mar. 1997	Asheville, NC
J. D. Culin	1-4 Mar. 1998	Chattanooga, TN
D. R. Johnson	28 Feb.-3 Mar. 1999	Sandestin, FL
R. G. Luttrell	27 Feb.-1 Mar. 2000	Mobile, AL
F. S. Guillot	4-7 Mar. 2001	Augusta, GA
G. L. Lentz	3-6 Mar. 2002	Little Rock, AR
B. L. Sparks	9-12 Mar. 2003	Baton Rouge, LA
M. L. Williams	16-18 Feb. 2004	Charleston, SC
G. R. Mullen	7-9 Mar. 2005	Tunica, MS
W. A. Gardner	5-8 Mar. 2006	Wilmington, NC
R. K. Sprenkel	2-5 Mar. 2007	Knoxville, TN
J. D. Harper	2-5 Mar. 2008	Jacksonville, FL
A. M. Simmons	8-11 Mar. 2009	Montgomery, AL
S. K. Braman	7-10 Mar 2010	Atlanta, GA
F. A. Hale	19-22 Mar. 2011	San Juan, PR
N. C. Leppla	4-7 Mar. 2012	Little Rock, AR
G. D. Buntin	3-5 Mar. 2013	Baton Rouge, LA



SEB members

Mark your calendars for our next
annual meeting!

**At the Beau Rivage Resort and
Casino in Biloxi, Mississippi
March 15-18 2015!**

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Driving Directions to Embassy Suites Greenville Golf Resort and Conference Center

The Embassy Suites Greenville Golf Resort and Conference Center is located near the heart of downtown Greenville.

Address: 670 Verdae Boulevard, Greenville, SC 29607;

Telephone (864) 676-9090.

From Atlanta, GA

Take I-85 North. Merge onto Laurens Rd/US-276 W via Exit 48B towards Greenville. Turn right onto Verdae Blvd. The hotel will be on the right.

From Greenville/Spartanburg Int'l Airport

Take I-85 South. Merge onto I-385 N via Exit 51C toward Downtown Greenville. Take Roper Mtn Rd Exit 37 and turn left onto Roper Mountain Rd/Marcus Whitfield Rd. Roper Mountain Rd/Marcus Whitfield Rd becomes Verdae Blvd. Hotel is on left.

From Charlotte, NC and Spartanburg, SC

Take I-85 South. Merge onto I-385 N via Exit 51C toward Downtown Greenville. Take Roper Mtn Rd Exit 37 and turn left onto Roper Mountain Rd/Marcus Whitfield Rd. Roper Mountain Rd/Marcus Whitfield Rd becomes Verdae Blvd. Hotel is on left.

From Columbia, SC: Take I-26 West

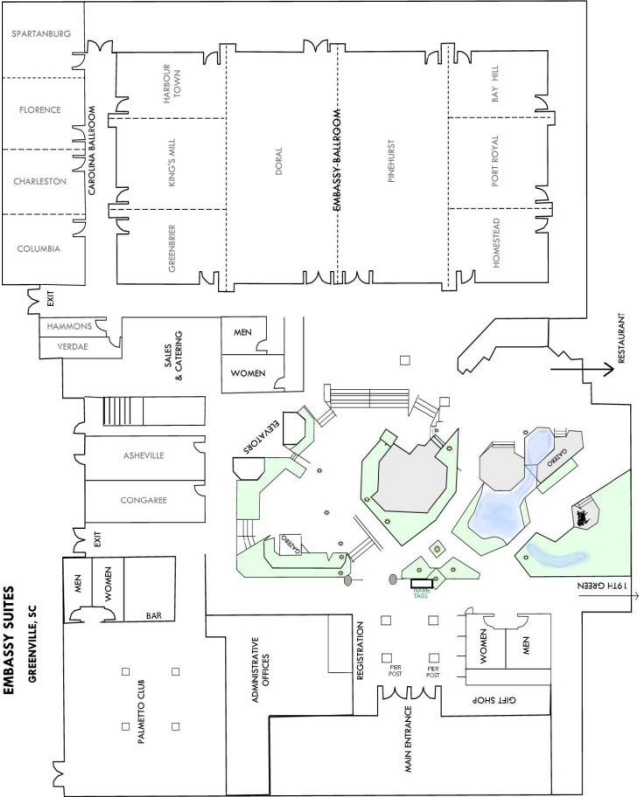
Merge onto I-385 North via Exit 51. Take Roper Mtn Rd Exit 37 and turn left onto Roper Mountain Rd/Marcus Whitfield Rd. Roper Mountain Rd/Marcus Whitfield Rd becomes Verdae Blvd. Hotel is on left.

Parking

Self Parking: Free

We look forward to seeing you in Greenville!

Layout of the Embassy Suites Hotel, Greenville, SC



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