91ST ANNUAL MEETING OF THE SOUTHEASTERN BRANCH

ENTOMOLOGICAL SOCIETY OF AMERICA



12-15 MARCH 2017 MEMPHIS, TENNESSEE



David G. Riley President, 2016-2017

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SOUTHEASTERN BRANCH

January 23, 2017

FROM: SEB-ESA President David Riley, dgr@uga.edu

TO: SEB-ESA Membership

SUBJECT: Welcome to the 91st Meeting of the Southeastern Branch of the ESA

It is my pleasure to welcome you to the 91st Meeting of the Southeastern Branch (SEB) of the Entomological Society of America March 12-15, 2017 at the Sheraton Memphis Downtown Hotel, Memphis, TN. Not only do we have a great program this year put together by our Program Chair Ash Sial, but we also have some historically significant decisions to make as a branch society. First, we have proposed to amend our By-Laws and Constitution to raise the Linnaean Games Committee to a SEB standing committee. This has been in the works for several years now and you have the opportunity at our final business meeting on Wednesday to vote on this change which should enhance the recognition and opportunities for this important branch activity. Also, we attempted to modernize our By-Laws and Constitution to allow for things like electronic balloting, etc. Before voting, please review all of the proposed changes at http://www.entsoc.org/sites/default/files/files/2016 SEB Proposed Amendments.pdf.

Our Plenary presentation this year will be delivered by Dr. Audrey Lenhart who is the Centers for Disease Control and Prevention (CDC) Lead of the Integrated Vector Management Team, and Lead for International Activities for the Zika Vector Issues. This will be followed later in the program with symposia dealing with emerging public health issues such as Zika virus and other human and animal diseases. Also this year we have a brand new Extension, Outreach, and Teaching student competition! This is in addition to our regular symposia in applied entomology and the other robust student paper competitions for which we are known.

This year, the SEB won an ESA sponsored coffee break as winners of the recent ESA membership drive. Keep up the good work! You can find other meeting information at our SE Branch Website: http://www.entsoc.org/Southeastern/.

Welcome to Memphis!

David Riley, 2016-2017 SEB President

CAMP. Ry

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-\$210; Student Members-\$90; Guests-\$65; and Non-members-\$260; One-day registration-\$210. Honorary Members, Emeritus Members, and Non-members giving invitational papers must register, but will not pay registration fees. Registration Desk is located in the Lobby, and will be open on Sunday (1:00 PM-5:00 PM), Monday (7:00 AM-5:00 PM), Tues-day (7:00 AM-5:00 PM) and Wednesday (7:00 AM-12:00 PM).

Accompanying Guest Activities and Functions:

We have several activities that should be of interest to accompanying registered guests.

Memphis Botanic Garden Tour:

The Garden strives to enhance lives by connecting people with nature, increasing awareness and appreciation of the environment. The 96-acre property includes 28 specialty gardens, which provide an in-depth look into various families of plants, flowers, and trees. Learn more about the Memphis Botanic Garden. Transportation will be provided.

Date: Monday, March 13

Time: Depart from the Sheraton lobby at 9:00 AM.

Return by 3:00 PM.

Cost: \$8

Graceland Platinum Tour + Airplanes Tour:

Come and visit the home of rock and roll legend Elvis Presley. Highlights of the tour include the mansion and grounds, as well as self-guided tours of Elvis' custom airplanes, Elvis' Automobile Museum, and more! Transportation will be provided.

Date: Wednesday, March 15

Time: Depart from the Sheraton lobby at 9:00 AM.

Return by 5:00 PM.

Cost: \$47.50

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, etc.

ESA CERTIFICATION BOARD INFORMATION:

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 Orpheum Room from 3:00 PM to 7:00 PM on Sunday, 7:00 AM to 5:00 PM on Monday and 7:00 AM to 5:00 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 evening 5:00 PM to 7:00 PM or Monday morning 7:00 AM to 8:00 AM in the Nashville Room. All student posters must be removed by 7:00 PM on Monday evening.

Displays for Tuesday exhibition should be set up on Monday evening 7:00 PM to 9:00 PM or Tuesday morning 7:00 AM to 8:00 AM in the Nashville Room. 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

Meeting Notices and Policies, cont'd

(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 8 AM to 5 PM on the date displayed. Student presenters should be available at their displays 1:45 PM and 2:45 PM on Monday, and presenters of regular posters should be at their posters 1:45 PM to 2:45 PM on Tuesday. Be sure to remove all displays by 7:00 PM on Tuesday, 14 March.

JOB PLACEMENT CENTER:

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

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.

ESA Sections

Medical, Urban & Veterinary Entomology (MUVE) deals with insect interactions with humans and other animals 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.

Southeastern Branch-ESA 2016-2017

Officers and Committees

Executive Committee

David Riley, President

Stephen Lapointe, President-Elect

Nancy Hinkle, Past President

Juang-Horng 'JC' Chong (2018), Secretary-Treasurer

Tim Schowalter (2019), Gov. Board Representative

Emma Weeks (2019), Member-at-Large

David Jenkins (2017), Member-at-Large

Alton "Stormy" Sparks (2018), Member-at-Large

Program Committee

Ash Sial, GA (2017), Chair

Amanda Hodges, FL (2017)

Julien Beuzelin, FL (2017)

Jason Schmidt, GA (2017)

Juan Luis Jurat-Fuentes, TN (2017)

Alton "Stormy" Sparks, UGA, Ex Officio

Membership Committee

David Jenkins, SC (2017), Chair

Jason Oliver, TN (2017)

Pat O'Leary, NC (2017)

Lina Bernaola, LA (2019)

Michael Toews, GA (2019)

Josh Temple, FL (2019)

Member Awards Committee

Ryan W. Kurtz, NC (2017), Chair

David Buntin, GA (2019)

Cindy McKenzie, USDA FL (2019)

Dennis Ring, LA (2019)

Sonja Brannon Thomas, AL (2017)

Michelle Samuel-Foo, FL, Ex Officio

Archives Committee

Jim Harper, NC (2018)

Resolutions Committee

Jason Schmidt, GA (2017), Co-Chair

Kiran R. Gadhave, GA (2017), Co-Chair

Eric Riddick, MS (2017), Ex Officio

Student Awards Committee

Jason Oliver, TN (2018), Chair

Hugh Smith, FL (2019)

Rufina Ward, AL (2017)

Jeremy Greene, SC (2018)

Mohamed Alburaki, TN (2018)

Xing Ping Hu, AL, Ex Officio

John Adamczyk, MS, Ex Officio

Local Arrangements Committee Memphis, TN Meeting (2017)

Scott Stewart, TN, Co-Chair

Jerome Grant, TN, Co-Chair

Chip Graham, Bayer Crop Science

Scott Graham, TN

Katherine Parys, USDA MS

Frank Hale, TN

Student Affairs Committee

Ratnasri Mallipeddi, TN (2017), Chair

Steve Reyna, NC (2017), Co-Chair

Wendy Marchant, GA (2018)

Casey Parker, FL (2018)

Ying Niu, LA (2019)

Beth Ferguson, AR (2017)

Whitney Crow, MS (2017)

Tommy Bilbo, SC (2017)

Tommy McElrath, GA (2017) Ex Officio

ESA Central Student Affairs Committee

Casey Parker, FL (2017), Representative

Public Relations Committee

Frank Hale, TN (2017), Chair

Scott Graham, TN

Greg Wiggins, TN

Audit Committee

Mark Abney, GA (2018), Chair

Jeremy Heath, NC (2017)

JC Chong, SC, Secretary-Treasurer

Meeting Location/Time: Florida (2018)

Jerry Hogsette, FL, Chair

Meeting Location/Time: Alabama (2019)

David Held, AL, Chair

Board Certification Committee

Dennis Ring, LA (2017), Chair

Jeffrey Brown, MS (2017)

Education Committee 2017

Eric Butler, NC (2018), Chair

Oscar Liburd, FL (2017)

Garima Kakkar, FL (2016)

John Guyton, MS (2018)

Marianne Shockley, GA Ex Officio

Nominating Committee (2017)

Babu Srinivasan, GA (2017), Chair

Karen Vail, TN (2017)

Ted Cottrell, USDA-ARS, GA, Government

Brian Sullivan, Forest Service, Government

James "Shine" Taylor, FL, Industry

Daniel Pitts, SC, Industry

ESA Central Education & Outreach Committee 2017

Marianne Shockley, GA, SEB Representative

SEB Representative on the ESA Awards & Honors Committee 2017

Kathleen Kidd, NC (2017)

SEB Representative on the ESA Membership Committee 2017

John Hopkins, AR (2017)

SEB Student Representative on the ESA Governing Board 2017

Lina Bernaola, LA (2017)

SEB Representative on the ESA Finance Committee 2017

Juang-Horng Chong, SC (2017)

SEB Representative on the Science Policy Committee 2017

Lauren Diepenbrock, NC (2018)

STEP Travel Awards Judging Panel 2017

Derrick Mathias, AL (2017)

SEB Representative on the ESA Committee on Diversity and Inclusion 2017

Gloria McCutcheon, SC (2017)

Monsanto Student Research Award Judging Panel 2017

Cory Stanley-Stahr, FL (2017)

Ad hoc Linnaean Games Enhancement Committee 2017

Mike Williams, AL, Chair

Jerome Grant, TN

David Jenkins, SC

Ad hoc Insect Photo Salon Committee 2017

Beth Ferguson, AR, Chair

Whitney Crow, MS

Steven Reyna, NC

Ad hoc Job Placement Committee 2017

Beth Ferguson, AR, Chair

Whitney Crow, MS

Steven Reyna, NC

Ad hoc Annual Meeting Sponsorship Committee 2017

Scott Stewart, NC, Chair

Ad hoc National Offices Nominating Committee 2017

Stephen Lapointe, Chair

David Riley, GA

David Hall, FL

Ad hoc By-Laws Committee 2017

Jeremy Greene, SC, Chair

Philip Roberts, GA

Mike Williams, AL

Ad hoc SEB Reception at ICE 2016 Committee

Alvin Simmons, SC, Chair

Emma Weeks, FL

Stormy Sparks, GA

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 Jan2 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 Jan2 Feb. 1949	Baton Rouge, LA
E. W. Dunnam	13-16 Dec. 1949	Tampa, FL
J. W. Ingram	5-7 Feb. 1951	Memphis, TN

President	Date	Meeting Site
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 Nov2 Dec. 1965	New Orleans, LA
M. E. Merkl	30 Jan2 Feb. 1967	Atlanta, GA
J. S. Roussel	29 Jan1 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 Nov3 Dec. 1970	Miami, FL
C. R. Jordan	1-3 Feb. 1972	Mobile, AL
C. F. Smith	30 Jan1 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 Nov3 Dec. 1975	New Orleans, LA

Past Presidents of the ESA-SEB, cont'd

President	Date	Meeting Site
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 Nov4 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 Jan2 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

President	Date	Meeting Site
D. F. Williams	2-5 Mar. 1997	Asheville, NC
J. D. Culin	1-4 Mar. 1998	Chattanooga, TN
D. R. Johnson	28 Feb3 Mar. 1999	Sandestin, FL
R. G. Luttrell	27 Feb1 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
D. Hall	2-4 Mar. 2014	Greenville, SC
C. Mannion	15-18 Mar 2015	Biloxi, MS
N. C. Hinkle	13-16 Mar 2016	Raleigh, NC

Awards

Southeastern Branch Early Career Award

Dr. Nick Seiter



Dr. Nick Seiter is an Assistant Professor and Extension Entomologist in the Department of Entomology at the University of Arkansas. Dr. Seiter holds an M.S. from Purdue University and a Ph.D. from Clemson University, both in Entomology. In his short time at the University of Arkansas, Dr. Seiter has quickly shown an aptitude to balance and excel at extension, research and teaching activities. His program is

dedicated to providing science-based insect pest management recommendations to Arkansas growers, with an emphasis on the insects and crops that are most relevant to the southeast portion of the state. Since beginning, his Extension program has emphasized emerging pests, including the kudzu bug and the sugarcane aphid.

Southeastern Branch Award for Excellence in Integrated Pest Management

Dr. James P. Cuda



Dr. James P. Cuda is a Professor and Fulbright Scholar in the Department of Entomology & Nematology at the University of Florida. He grew up in Chicago Heights, IL and attended Southern Illinois University, Carbondale, where he obtained his BS (1973)

and MS (1976) degrees in Zoology. He earned his Ph.D. in entomology at Texas A&M University in 1983, was a postdoc/research entomologist with the USDA in Texas and Montana from 1984-1993, and joined the University of Florida in 1994. He currently has a split appointment- 65% research, 25% extension, and 10% teaching. At UF, he is an affiliate faculty member for the School of Natural Resources and the Environment and Center for Aquatic and Invasive Plants. His research involves the sustainable management of invasive weeds with a focus on biological control.

Southeastern Branch Distinguished Service Award to the Certification Program

Dr. Rebecca Baldwin



Dr. Rebecca Baldwin received her M.S. in Biology from The University of Louisiana at Monroe and Ph.D. from at The University of Florida the Department of Entomology and Nematology. Dr. Baldwin has served as Assistant Professor of Entomology at the

University of Florida since 2010 with an 80% teaching and 20% extension and outreach appointment. Dr. Baldwin serves numerous roles in the department, but her primary responsibilities involve undergraduate education including coordination of the undergraduate teaching program as well as teaching the departmental introductory courses.

Dr. Baldwin is also actively involved in extension and coordinates efforts to educate communities about bed bug identification/management as well as training and professional development activities for the pest management industry. She utilizes her teaching strengths and expertise to deliver current information and offers continuing education credits for individuals entering the pest management industry, those maintaining their pest control licenses, and those seeking advanced certification and training.

Southeastern Branch Distinguished Achievement Award in Horticultural Entomology

Dr. Jason Oliver



Dr. Jason Oliver received his B.S. Wildlife & Fisheries Science (1987) and M.S. in Entomology (1990) from the University of Tennessee, Knoxville. He completed his Ph.D. in Entomology from Auburn University in 1999. He has been at the Tennessee State

University Otis L. Floyd Nursery Research Center (NRC) since earning his doctorate and currently has a 100% research appointment at the rank of Research Professor. During his time at the NRC, Dr. Oliver's research program has focused primarily on entomological issues related to nursery and greenhouse crops and has greatly benefitted the U.S. nursery and greenhouse industry through direct research impacts and indirectly through his service on multiple horticultural-related organizations.

Southeastern Branch Distinguished Achievement Award in Urban Entomology

Dr. John Hopkins



Dr. John Hopkins received his M.S. in Entomology from Clemson University and Ph.D. in Entomology, with a minor in Plant Pathology, from the University of Arkansas. Currently, Dr. Hopkins is an Associate Professor & Extension Urban Entomologist with a 100% Extension Appointment at the University of Arkansas.

During Dr. Hopkins' tenure, the urban entomology program has grown into an outstanding program that addresses the needs and concerns of diverse stakeholders such as homeowners, regulators, landscapers, master gardeners, extension personnel and pest management professionals.

Southeastern Branch Distinguished Achievement Award in Extension

Dr. Jennifer Gillet-Kaufman



Dr. Jennifer Gillet-Kaufman received both her M.S. and Ph.D. in Plant Pathology from The University of Florida. Dr. Gillet-Kaufman has been involved in extension, teaching and research for more than 20 years and currently serves as an Associate

Extension Scientist with The University of Florida with a program focusing on IPM in Olives.

Dr. Gillet-Kaufman is highly involved in information dissemination within the department being the Featured Creatures project coordinator/editor, UF/IFAS Entomology and Nematology Department newsletter editor, as well as nationally as the eXtension website co-leader for the Urban IPM Community of Practice. Her work supports the utilization and development of educational material for state and county Extension faculty as well as agricultural and urban clientele. Dr. Gillet-Kaufman also serves as the University of Florida, Institute of Food and Agricultural Sciences (UF/IFAS) contact for the Landscape Maintenance Association of Florida.

Southeastern Branch Distinguished Achievement Award in Teaching

Dr. James Ottea



Dr. James Ottea received his M.S and Ph.D. in Entomology from Texas A&M and The University of California, Davis, respectively. Dr. Ottea began his career at Cornell University but has been with Louisiana State University since 1990 where he serves as Professor of Entomology. His appointment is split between Research and Teaching.

Dr. Ottea teaches a number of graduate level entomology courses within the department as well as undergraduate classes outside the department which are focused on insect biology and science literacy. He has honed his engaging teaching style over the last 25 years and employs multiple exam formats (including oral) to evaluate his students' command of the information presented.

Southeastern Branch Recognition Award in Entomology

Dr. Alvin Simmons



Dr. Alvin Simmons is a Research Entomologist with the USDA, ARS, U.S. Vegetable Laboratory in Charleston, S.C. where he is responsible for conceiving, planning, conducting, and coordinating independent and cooperative research addressing insect management problems. Dr. Simmons received both his M.S. and Ph.D. in Entomology from the University of Kentucky.

Not only is Dr. Simmons actively involved in developing sustainable management practices in specialty crops, but he also is cochair of the program committee of the ESA and recently served as co-chair of the Presidential Committee that won the bid for ESA to host the International Congress of Entomology in Orlando, FL this past September.

Student Awards

JOHN HENRY COMSTOCK AWARD

Outstanding Ph.D. Student

Dr. Blake Wilson



Dr. Blake Wilson began his career in entomology working as a laboratory assistant during the final semester of his undergraduate work at Louisiana State University. After receiving his B.S. in biology, Blake began his M.S. thesis in entomology/experimental statistics under Dr. T. E. (Gene) Reagan. Blake's thesis research focused on host plant resistance and insecticidal management of the Mexican rice borer in

sugarcane in the Rio Grande Valley of Texas. In 2013, Blake began his Ph.D. studies in entomology at LSU under Dr. Reagan and Dr. Julien Beuzelin. Blake's dissertation research focused on development of pheromone trapping strategies for monitoring and management of the Mexican rice borer. Blake received his Ph.D. in May of 2016, and is currently working as a post-doctoral researcher in sugarcane entomology at LSU. Blake's research experience also includes IPM of stem borers in sugarcane, rice, bio-energy feedstocks, conventional and transgenic corn. He has also studied management of the sugarcane aphid in sugarcane and grain sorghum. During his career Blake has been active in research and extension activities for two of Louisiana's most important commodities, sugarcane and rice. He has published 11 peer-reviewed research articles, 10 Arthropod Management Test reports, and numerous extension publications. His research has been presented more than 40 times at professional society meetings in addition to many extension outreach presentations.

KIRBY L. HAYS MEMORIAL AWARD

Outstanding M.S. Student

Casey Parker



Casey Parker, a native of Ocala, Florida, received her B.S. in entomology and nematology with a minor in leadership from the University of Florida in 2014. Casey gained her passion for biology and science from her upbringing on a horse farm where she learned the power of observation and hard work from her father, Adam Parker. During her time as an undergraduate, Casey was very involved in the College of

Agricultural and Life Sciences as an ambassador, a member of the leadership institute, a liaison to the faculty assembly, and an officer in various clubs. She also began conducting research in Dr. Phil Koehler's Urban Entomology lab. Here she studied various organisms including flies and mosquitoes. After receiving her B.S., Casey immediately started her M.S. in entomology and nematology with Dr. Koehler. For the first portion of her studies, she traveled to Thessaloniki, Greece, where she collaborated with the USDA ARS lab and conducted a surveillance project for Aedes albopictus. After returning to the United States, she began evaluating a novel lethal ovitrap for control of the "container mosquitoes", Aedes aegypti and Aedes albopictus. In addition to her research, Casey was a teaching assistant for Medical and Veterinary Entomology as well as Principles of Entomology and participated in departmental outreach. She also attended and spoke at many meetings including the American Mosquito Control Association, the Society for Vector Ecology, the National Pest Management Association, the Mosquito Vector Control Association of California, and the One World Conference. She received honorable mention in the student competition at AMCA and was the grand prize recipient for the One World conference. During her M.S., she began serving on the SEB student Affairs Committee and as the SEB representative to ESA. She was also recently selected as the Vice Chair for the ESA student affairs committee. Casey received her M.S. in entomology and nematology in August 2016. She recently started a Ph.D. program at the Florida Medical Entomology Lab at the University of Florida and is dual enrolled in the Master of Public Health program. After receiving her M.P.H. and Ph.D., she hopes to become a leader in the field of medical and veterinary entomology.

Student Awards - 2016

ROBERT T. GAST AWARDS

Outstanding Ph.D. Oral Presentations

SESSION I

First Place, David Owens



David Owens completed his Ph.D. in May 2016 working with Dr. Gregg Nuessly at the University of Florida's Everglades Research and Education Center in Belle Glade, FL. He worked on silk fly pest management in sweet corn, studying their chemical ecology, biology, and management strategies. Upon completion of his degree, he began working with Dr. Paul Kendra at the USDA Subtropical Horticulture Research Station in Miami, studying ecology of avocado-infesting ambrosia beetles.

Second Place, Lina Bernaola



Lina Bernaola was born in Lima, Peru. She attended the San Marcos National University, where she got her B.S. in biological sciences and a minor in molecular biology. Her professional experience, as well as her passion in the world of plants began when she joined the International Potato Center (CIP) in Lima to perform her undergraduate thesis. Based on this experience, Lina joined Louisiana State

University to pursue her M.S. in agronomy and crop sciences. Currently, she is working on her PhD in the Department of Entomology at LSU. Her research interests include plant-insect and plant-pathogen interactions as well as host plant resistance. Her project involves investigations of the mechanistic basis of plant resistance against above-ground and below-ground organisms in rice. Primarily, she studies the effects of mycorrhizal fungi, a symbiotic soil-borne organism, on rice resistance to insect herbivores. The ultimate goal of Lina's research is to provide a

better understanding of plant-insect-mycorrhizae interactions in rice pests of Louisiana, which will help to develop more effective pest management programs in rice. Lina has been actively involved in the Entomological Society of America since 2013. She has presented her research at several national and Southeastern Branch meetings. Her leadership roles within the ESA include serving as student representative of the P-IE Governing Council and Student Affairs Committee of the Southeastern Branch-ESA (SEB-ESA). She is a member of the LSU Entomology Club having served as vice president and president in the past. She enjoys conducting educational outreach about insects to kids with the Entomology Club.

Second Place, Cory Penca



Cory Penca is a PhD and DPM student at the University of Florida in Gainesville, Florida. Born in Coral Springs, Florida, he attended the University of Florida as an undergraduate majoring in Botany. After his graduation he worked for the Florida Division of Plant Industry as a laboratory technician developing techniques for various biological control projects. He holds an MS degree from UF in Resource Policy

and Administration, during which he investigated the biosecurity implications of increased travel and trade with between the US and Cuba. He maintains a strong interest in the intersection of policy, entomology, and plant health. As a PHD student in Dr. Amanda Hodges' Biosecurity, Research and Extension laboratory he is actively involved in extension activities focused on invasive species, including assisting in *Helicoverpa armigera* identification training and delivering workshop presentations on pest detection and identification. His PhD research focuses on understanding the abundance, seasonality, impact and ecology of cat-facing Heteropteran pests in Florida's burgeoning subtropical peach industry, as well as investigating the manipulation of diapause as a potential IPM tool. In his spare time he drinks coffee, plays rugby, hunts and fishes, and thinks about stink bugs.

ROBERT T. GAST AWARDS

Outstanding Ph.D. Oral Presentations

SESSION II

SESSION III

First Place, Elizabeth Benton



Elizabeth Benton received her PhD from the University of Tennessee in 2016. She is the Forest Health Specialist for the University of Georgia, with a focus on pesticide optimization and risk in forest systems. She conducted an assessment of the hemlock woolly adelgid (HWA) IPM program at Great Smoky Mountains National Park, which is the largest HWA management program in the US. Proj-

ect accomplishments include improved insecticide longevity and dosage recommendations for hemlocks and determination of continued stream water quality in the national park.

Second Place, Joni Blount



Joni Blount grew up in rural New Mexico participating in 4-H and FFA where she developed a love for agriculture and entomology. She received her B.S. in Agricultural Biology with an emphasis on Entomology from the Entomology Plant Pathology and Weed Science Department at NMSU. While at NMSU she was active in the Entomology Club, Linnaean Team and completed an undergraduate research

project under the direction Dr. Scott Bundy. She then was accepted to the University of Georgia Entomology Department working on the biology, host preference, seasonal dynamics and control of *Megacopta cribraria*. Joni completed her PhD work in May of 2016, she has since accepted a role with Monsanto working in Technology Development in Huxley, Iowa.

First Place, Zachary DeVries



Zachary DeVries, a native of Auburn, AL, began his collegiate career at Auburn University. To explore his interest in the natural world, Zach pursued a degree in zoology while gaining both laboratory and field experience in both fish ecology and herpetology. Zach completed his B.S. degree in Zoology with a minor in Statistics in 2011. Upon completion of his B.S., Zach began pursuing 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 in 2013.

Zach is currently a Ph.D. student at North Carolina State University where he is studying the physiology, behavior, and management of urban pests under the direction of Dr. Coby Schal. Zach's dissertation encompasses a number of topics including bed bug host attraction, host-associated divergence among bed bug lineages, and German cockroach management and health effects. Through his work, Zach hopes to improve the management of both bed bugs and German cockroaches by acquiring and integrating both basic and applied knowledge.

Second Place, Francesca Stubbins



Francesca Stubbins received her BA from the University of Cambridge in 2009 and her MSc from the London School of Hygiene and Tropical Medicine in 2011 where she evaluated sugar-baited traps against the malaria vector, *Anopheles arabiensis*, in Tanzania. She joined Clemson University in 2013 to pursue her doctoral degree under the supervision of Dr. Francis Reay-Jones and Dr. Jeremy

Greene and graduated in August 2016. Her research focused on the ecology of the invasive kudzu bug, *Megacopta cribraria*, and implications for management on soybean. ROBERT T. GAST AWARDS

Outstanding M.S. Oral Presentations

SESSION I

First Place, Scott Clem



Scott Clem's fascination with nature and biology was sparked young, through exploring the wooded property behind his house in Athens, Alabama. As an undergraduate at Auburn University, Scott majored in Zoology: Conservation and Biodiversity. He pursued the minor in Entomology and later did undergraduate research under Dr. David Held studying the Asiatic garden beetle (*Maladera*

castanea). By his senior year, he was the president of the Auburn University chapter of the Society for Conservation Biology, and the undergraduate teaching assistant for the General Entomology course. Scott decided to pursue a Master's degree in Entomology under Dr. Held at Auburn. His thesis involves the interactions that native and non-native urban plants have with insect communities, particularly caterpillars and parasitoids. During his master's career, Scott has demonstrated leadership by being the president of the F.S. Arant Entomology Club, coordinating various entomology outreach events, organizing a symposium for ESA 2015, and being the teaching assistant for both the General and Economic Entomology courses. He has also remained a senior volunteer at the Southeastern Raptor Center, working with various birds of prey including the eagles that circle the stadium before every Auburn University home football game. Scott's list of awards includes first place in student paper competitions, the SEB ESA Kirby L. Hays Award, and the Outstanding Graduate Student Award in the Department of Entomology and Plant Pathology. Scott completed his Master's degree in December 2015, and is now pursuing a PhD degree with an interest in studying hoverfly migration and dispersal at the University of Illinois.

Second Place, Colton Zirkle



I've been carrying a bug jar since I was able to walk. Since then, I have jumped at every opportunity to expand my knowledge of the outdoors. In high school I worked with my local university's biology department on a turtle population study and a cave biosurvey. These things lead me to pursue a Wildlife Biology degree at Missouri State University. During my time there

I worked in a freshwater mussel lab and spent my free time with Springfield Plateau Grotto conducting biosurveys for local, state, and federal agencies. It was when I made it to the University of Arkansas that I finally got to pursue my dream of studying insects. I am currently researching the role of insects in pollination of Ozark chinquapin tree, Castanea ozarkensis. My research is taking place in southwest Missouri. I plan to graduate December of 2016 and pursue a Ph.D. or a job with a state or federal conservation agency.

SESSION II

First Place, Chelsea Standish



Chelsea Standish is a graduate of the University of Tennessee at Chattanooga where she completed her undergraduate degrees in Chemistry and Biology. She recently graduated with her Masters of Science in Entomology from the University of Tennessee at Knoxville. After completing her Masters she returned to Chattanooga to work as a Research Chemist for Radical Polymers. Next she plans on pursing a Masters in Business Administration.

Second Place, Jessica Ditillo



Jessica Ditillo is originally from northern Maryland. She received her bachelor's degree in biology from St. Mary's College of Maryland in 2012. During her time at St. Mary's,she researched the phytoremediation of contaminants of coal fly ash by the free floating fern, *Azolla caroliniana*. After graduation, she spent two years working in the Department of Entomology at University Maryland, College

Park, where she developed a passion for agricultural entomology. She went on to attend graduate school at North Carolina State University and received her master's degree under the guidance of Dr. James Walgenbach. Her master's research focused on the effects of insecticides and fungicides commonly used in tomato production on the predatory mite *Phytoseiulus persimilis*.

ROBERT T. GAST AWARDS: Outstanding M.S. Oral Presentations

SESSION III

First Place, Fallon Fowler



Fallon researches whether certain dung beetle groups (dwellers, tunnelers, or rollers) affect nutrient cycling and greenhouse gas production differently. She specifically seeks to answer which, if any, dung beetle traits and species are most beneficial to livestock producers and the environment. Ultimately, she plans on using this research to contribute to alternative, sustainable strategies in livestock

systems, specifically in cattle production systems.

Second Place, Jennifer Williams



Jennifer Williams (Virginia Tech)

ROBERT T. GAST AWARDS

Outstanding Undergraduate Oral Presentation

First Place, Anna Holmquist



Anna Holmquist was born and raised in California where she spent her early years outdoors, catching spiders and insects. In 2013, she moved to Raleigh, North Carolina to study zoology and entomology at North Carolina State University (NCSU). Anna joined the Steve Frank lab of insect ecology and integrated pest management during her second year at NCSU. She entered the lab with a particular interest in

spiders and began studying the effect of urban warming on spider communities residing on street trees. She coauthored a paper with Emily Meineke titled "Spider community changes are associated with urban warming" which has been submitted for review in the Journal of Urban Ecology. Anna graduated from NCSU with honors in June 2016. She now lives in Berkeley, CA where she is working with Dr. Rosemary Gillespie at UC Berkeley and pursuing a Ph.D. in Environmental Science, Policy and Management. Her proposed research focuses upon diversity and niche diversification in orb web spiders across the Indonesian island of Sulawesi. Outside of her research, Anna enjoys playing rugby and the upright bass.

ROBERT T. GAST AWARDS

Outstanding Ph.D. Displays

SESSION I

First Place, Katharine Swoboda Bhattarai



Katharine Swoboda Bhattarai is a PhD candidate in the Department of Entomology at North Carolina State University. She earned a B.S. at the University of Nebraska-Lincoln and an M.S. at Utah State University where she worked with Dr. James Cane. She studied the pollination ecology of a native legume selected for rangeland restoration in the US Intermountain West and evaluated two native,

cavity-nesting bee species for their potential use as managed pollinators of legume seed crops. Katie currently works in the small fruit and specialty crop integrated pest management laboratory led by Dr. Hannah Burrack at NC State. She studies the ecology of *Drosophila suzukii* in blackberry agroecosystems in western North Carolina, focusing on the effects of non-crop habitat on *D. suzukii* infestation in crop fields, the seasonal and diurnal activity patterns of *D. suzukii* adults, and the susceptibility of ripe and ripening caneberries to infestation. Ultimately, Katie would like to combine her experience working with managed pollinators and integrated pest management to help growers both produce and protect their crops.

Second Place, Jie Chen



My name is Jie "J" Chen. I am a native of China and received my bachelor's degree in Plant Protection at Southwest University in China. I moved to the Unites States to pursue my master degree in Entomology at University of Maine, Orono. During my master research, I worked on Colorado potato beetle with Dr. Andrei Alyokhin. Currently, I am a Ph.D. candidate in Entomology at Louisiana State

University, co-advised by Drs. Jeff Davis and Julien Beuzelin. My research focus on integrated pest management of sweetpotato weevils in Louisiana. I am interested in finding control tactics that more efficiently reduce insect population. Besides entomology, I am also passionate about experimental design and statistical modeling in agricultural experiment. I am pursuing a master degree in statistics as well.

ROBERT T. GAST AWARDS

Outstanding M.S. Displays

SESSION I

First Place, Chad Abbott



Chad Abbott, Department: Plant and Soil Sciences, Discipline: Agronomy with a minor in Entomology, Major Professor: Dr. Jason Sarver, Anticipated Graduation: May, 2017, Bio: Mr. Chad Abbott is a native of Augusta, Georgia. He received a B.A.S. in Natural Resource Management, an A.A.S. in Forest Resource Management, and an A.A.S. in Wildlife Technology at

Abraham Baldwin Agricultural College in Tifton, Georgia. During his time at ABAC, he was involved with establishing, running, and participating in professional and recreational student organizations like the ABAC Forestry Club and SAF Student Chapter, the ABAC Wildlife Society Chapter, the ABAC FFA Collegiate Chapter and the ABAC AET Club. Mr. Abbott also worked as an undergraduate student worker in the University of Georgia's cropping systems research program, with research focused on peanut production, along with numerous other crops. Chad worked alongside his now major professor, Dr. Jason Sarver, while Dr. Sarver was completing his Ph. D. at the University of Georgia. Chad is now pursuing his Master's Degree in Plant and Soil Sciences. He is working to evaluate the impact of defoliation timings and levels in hopes to establish new economic defoliation thresholds in peanut. Mr. Abbott plans to stay at Mississippi State University to work toward a Ph.D.

Second Place, Tavia Gordon



Tavia Gordon is originally from Jamaica where she received her Bachelor's degree in Environmental Science at the College of Agriculture, Science and Education 2012 in Portland, Jamaica. While she was in Jamaica, she worked with the Ministry of Agriculture in Plant Protection/Entomology Unit where she had the opportunity to participate in research involving

diagnostics and biological control of various invasive insect pests some of which included, the Asian citrus psyllid, citrus fiddler beetle and beet armyworm. Her experiences there developed an interest towards graduate program in entomology. In fall 2013, Tavia moved to the United States to pursue her Master's degree in the Center for Biological Control at the Florida A&M University (Tallahassee, FL). In 2016, she completed her M.S. degree in entomology under the supervision of Dr. Muhammad Haseeb. Her master's research focused mainly on the integrated pest management of the southern green stinkbug, *Nezara viridula* on tomatoes in north Florida. She is currently working as a Biological Scientist in the Center for Biological Control.

ROBERT T. GAST AWARDS

Outstanding Undergraduate Display

SESSION I

First Place, Natavia Ray



Natavia Ray (Shaw University)

Program Summary

SUNDAY, MARCH 12, 2017			
Program	Time	Location	
S1055: Biology, Impact, and Management of Soybean Insect Pests in Soybean Production Systems	8:00 AM - 5:00 PM	Nashville	
SAC/NCAC Department Heads Meeting	8:00 AM - 5:00 PM	Memphis	
Local Arrangements/Program Committee Meeting	11:00 AM - 12:00 PM	Natchez	
Student Affairs Committee Meeting	1:00 PM - 3:00 PM	Chattanooga	
Executive Committee Meeting	1:00 PM - 4:00 PM	Natchez	
Registration	1:00 PM - 5:00 PM	Lobby	
Audiovisual and Job Placement	3:00 PM - 7:00 PM	Orpheum	
Linnaean Games: Preliminary Rounds	4:00 PM - 7:00 PM	Magnolia Ballroom	
Student Competition Poster Set Up	5:00 PM - 7:00 PM	Nashville	
Sunday Night BBQ Social	7:00 PM - 9:00 PM	TBD	

MONDAY, MARCH 13, 2017			
Program	Time	Location	
Audiovisual and Job Placement	7:00 AM - 5:00 PM	Orpheum	
Student Competition Poster Set Up	7:00 AM - 8:00 AM	Nashville	
Registration	7:00 AM - 5:00 PM	Lobby	
Preliminary Business Meeting and Plenary Address	8:00 AM - 10:15 AM	Heritage Ballroom	
Student Competition Poster Display	8:00 AM - 5:00 PM	Nashville	
Undergraduate Student Poster Competition	8:00 AM - 5:00 PM	Nashville	
M.S. Student Poster Competition I	8:00 AM - 5:00 PM	Nashville	
M.S. Student Poster Competition II	8:00 AM - 5:00 PM	Nashville	
Ph.D. Student Poster Competition	8:00 AM - 5:00 PM	Nashville	
Student Poster Competition Judging	8:30 AM - 4:00 PM	Nashville	
Memphis Botanic Garden Tour	9:00 AM - 3:00 PM	Lobby	
ESA-Sponsored Coffee Break	10:15 AM - 10:30 AM	St. Louis Foyer	
Undergraduate Student Oral Presentation Competition	10:30 AM - 11:30 AM	St. Louis	
Extension, Outreach and Teaching Student Oral Presentation Competition	10:30 AM - 12:10 PM	Natchez	
M.S. Student Oral Presentation Competition I	10:30 AM - 12:35 PM	Memphis	
M.S. Student Oral Presentation Competition II	10:30 AM - 12:35 PM	Knoxville	
M.S. Student Oral Presentation Competition III	10:30 AM - 12:35 PM	Chattanooga	
Lunch and Learn	12:45 PM - 1:45 PM	Magnolia Ballroom	

Program, Monday continued	Time	Location
Student Poster Presenters at Posters	1:45 PM - 2:45 PM	Nashville
Ph.D. Student Oral Presentation Competition I	2:00 PM - 3:40 PM	Natchez
Ph.D. Student Oral Presentation Competition II	2:00 PM - 3:40 PM	Chattanooga
Ph.D. Student Oral Presentation Competition III	2:00 PM - 3:50 PM	Knoxville
M.S. Student Oral Presentation Competition IV	2:00 PM - 3:50 PM	St. Louis
Symposium: Value, Integration, and Regional Specificities of Insecticide Use in Soybean Production Systems	2:00 PM - 4:50 PM	Magnolia Ballroom
Linnaean Games: Finals	5:00 PM - 7:00 PM	Magnolia Ballroom
Student Poster Removal	5:00 PM - 7:00 PM	Nashville
Monday Night Reception	7:00 PM - 9:00 PM	Heritage Ballroom
Regular Poster Set Up	7:00 PM - 9:00 PM	Nashville

TUESDAY, MARCH 14, 2017		
Program	Time	Location
Audiovisual and Job Placement	7:00 AM - 5:00 PM	Orpheum
Registration	7:00 AM - 5:00 PM	Lobby
Past Presidents Breakfast	7:00 AM - 8:00 AM	Heritage Ballroom
Regular Poster Set Up	7:00 AM - 8:00 AM	Nashville
Regular Poster Display	8:00 AM - 5:00 PM	Nashville
Contributed Papers I: Plant-Insect Ecosystems	8:00 AM - 10:35 AM	Natchez
Symposium: New Challenges and Opportunities for Bt Crops in the Southeast	8:00 AM - 10:45 AM	St. Louis
Symposium: Zika Virus in the Americas: Transmission, Epidemiology and Vector Management	8:00 AM - 11:25 AM	Magnolia I
Contributed Poster Presentations: Medical, Urban and Veterinary; Physiology, Biochemistry and Toxicology; Systematics, Evolution and Biodiversity	8:00 AM - 5:00 PM	Nashville
Contributed Poster Presentations: Plant-Insect Ecosystems	8:00 AM - 5:00 PM	Nashville
Symposium: Ecological Pest Management	8:30 AM - 11:25 AM	Magnolia II
Awards Luncheon and Photo Salon	12:00 PM - 1:30 PM	Heritage Ballroom
Regular Poster Presenters at the Posters	1:45 PM - 2:45 PM	Nashville
Symposium: Emerging Vector-Borne Pathogens of Human and Animal Disease	1:45 PM - 4:50 PM	Magnolia I
Symposium: Advances in Insect Pest Management in Specialty Crop Systems	1:50 PM - 4:00 PM	Magnolia II
Contributed Papers II: Plant-Insect Ecosystems	2:05 PM - 4:05 PM	Natchez
Final Business Meeting	4:30 PM - 6:00 PM	Heritage Ballroom
Regular Poster Removal	5:00 PM - 7:00 PM	Nashville

WEDNESDAY, MARCH 15, 2017		
Program	Time	Location
Registration	7:00 AM - 12:00 PM	Lobby
Contributed Papers III: Medical, Urban and Veterinary; Physiology, Biochemistry and Toxicology; Systematics, Evolution and Biodiversity	8:00 AM - 10:40 AM	Natchez
Symposium: Vegetable Symposium	8:00 AM - 11:05 AM	Heritage 3 & 4 Combined
Symposium: Turf and Ornamental Symposium	8:00 AM - 11:25 AM	Nashville
Symposium: Biological Control of Arthropod and Weed Pests in the Southern United States	8:00 AM - 11:30 AM	Memphis
Symposium: Tackling IPM Busters - Invasive Species Panic	8:00 AM - 12:00 PM	Heritage 1 & 2 Combined
Graceland Platinum Tour + Airplanes Tour	9:00 AM - 5:00 PM	Lobby
SERA 003: Southern Region Information Exchange Group for IPM-Annual Meeting	11:30 AM - 5:00 PM	Heritage 3 & 4 Combined
S1058: Biological Control of Arthropod Pests and Weeds Multistate Working Group Meeting	11:30 AM - 5:00 PM	Memphis

Program Schedule

MONDAY, MARCH 13, 2017, PRELIMINARY

Preliminary Business Meeting and Plenary Address

Heritage Ballroom (Sheraton Memphis Downtown)

Presiding: David Riley, President,

Southeastern Branch, ESA

8:00 AM Call to Order, David Riley, SEB President

8:05 AM Welcome

Jeff Homad, Vice President of Sales, Memphis

Convention and Visitors Bureau

8:15 AM General Announcements and Reports

David Riley, SEB President

Local Arrangements - Scott Stewart

Program - Ash Sial

Public Relations – Frank Hale Nominations – Babu Srinivasan Resolutions – Jason Schmidt

2018 Meeting Time and Location - Steve

Lapointe, SEB President-Elect

Ad hoc SEB Reception at ICE 2016 – Alvin

Simmons

Other committee reports ESA Section Reports

Entomological Foundation Report

8:50 AM Message from ESA President

Susan Weller

9:00 AM Message from ESA Executive Director

David Gammel

9:10 AM Message from SEB Representative to the

Governing Board Tim Schowalter

9:17 AM Message from SEB Representative to the

Certification Board Dennis Ring

9:22 AM Message from ESA PIE Section

Representatives, Fred Musser/Melissa Siebert

9:30 AM Plenary Address: "The Zika outbreak: A public

health crisis and a public health entomology

call to action"

Dr. Audrey Lenhart, Centers for Disease Control

and Prevention

10:10 AM Closing Remark

David Riley, SEB President

10:15 AM Break

MONDAY, MARCH 13, 2017, POSTERS

Undergraduate Student Poster Competition Nashville (Sheraton Memphis Downtown)

- P-1 Effects of host plant on carotenoid sequestration by *Trichoplusia ni*.

 Kieu Oanh Nguyen (KNGUY4166@ung.edu), Sayma Al-Rashid, Clarke Miller and Evan Lampert, Univ. of North Georgia, Oakwood, GA
- P-2 Description of the last larval instar of Ellychnia corrusca (Linnaeus, 1767) (Coleoptera: Lampyridae). Evan Waite (waitesevan@gmail.com)¹, Oliver Keller¹, Riley Risteen², Kathareeya Tonyai², Scott R. Smedley² and Marc Branham¹, ¹Univ. of Florida, Gainesville, FL, ²Trinity College, Hartford, CT
- P-3 Findings of undergraduate students conducting ecological surveys in the Bibb county "botanical lost WORLD".

 Joshua Fuller (jbfull0575@ung.edu), Evan Lampert and James Diggs, Univ. of North Georgia, Oakwood, GA
- P-4 Can a caterpillar disarm a biochemical hand grenade? Catalpol metabolism by Trichoplusia ni.
 Fatima Ndiaye (fzndia4084@ung.edu), Clarke Miller and Evan Lampert, Univ. of North Georgia, Oakwood, GA
- P-5 Use of entomopathogens in postharvest management of the maize weevil.

 Cleveland Ivey (Civey7@wildcat.fvsu.edu) and George Mbata, Fort Valley State Univ., Fort Valley, GA

M.S. Student Poster Competition I

Nashville (Sheraton Memphis Downtown)

- P-6 Effect of emerald ash borer Agrilus planipennis (Coleoptera: Buprestidae) invasion on biodiversity of wood inhabiting arthropods of ash trees in Louisiana.

 Balwinder Kaur (bkaur2@lsu.edu), Wood Johnson and Rodrigo Diaz, Louisiana State Univ., Baton Rouge, LA
- P-7 Fitness costs and inheritance of Bacillus thuringiensis Cry2Ab2 resistance in Spodoptera frugiperda (J.E. Smith).
 Binod Acharya (BAcharya@agcenter.lsu. edu)¹, Graham P. Head², Paula A. Price² and

Fangneng Huang³, ¹Louisiana State Univ., Baton Rouge, LA, ²Monsanto Company, St. Louis, MO, ³Louisiana State Univ. AgCenter, Baton Rouge, LA

P-8 Effect of sorghum planting date on sugarcane aphid populations and associated natural enemies.

Anne Miskelley (admiskel@email.uark. edu)¹, Nicholas Seiter², Gus Lorenz³, Glenn Studebaker⁴ and Neelendra Joshi², ¹Univ. of Arkansas, Fayetteville, AR, ²Univ. of Arkansas, Monticello, AR, ³Univ. of Arkansas, Lonoke, AR, ⁴Univ. of Arkansas Cooperative Extension Service, Keiser, AR

P-9 Efficacy of dermacor-x-100® seed treatment on *Diatraea saccharalis* (Lepidoptera: Crambidae) at vegetative and reproductive stages of irrigated rice.

James Michael Villegas (jamesvillegas12@ gmail.com)¹ and Michael Stout², ¹Louisiana State Univ., Baton Rouge, LA, ²Louisiana State Univ. AgCenter, Baton Rouge, LA

P-10 Susceptibility of diamondback moth (Lepidoptera: Plutellidae) populations to insecticides in Georgia.

Philip Torrance (ptorran7@uga.edu) and David Riley, Univ. of Georgia, Tifton, GA

P-11 The reckoning: Kudzu bug population responses to a natural enemy and drought conditions.

Amy Michael (amicha12@vols.utk.edu)¹, Kadie Britt¹, Jerome F. Grant¹, Scott Stewart² and Gregory J. Wiggins¹, ¹Univ. of Tennessee, Knoxville, TN, ²Univ. of Tennessee, Jackson, TN

P-12 Relative humidity: Assessment of Halyomorpha halys (Stål) (Hemiptera: Pentatomidae).

Arjun Khadka (akhadka@ufl.edu) and Amanda Hodges, Univ. of Florida, IFAS, Gainesville, FL

P-13 Where's the walnut? Dispersal of walnut twig beetle in a forest system
Philip Hensley (phensle2@vols.utk.edu),
Jerome F. Grant, Gregory J. Wiggins, Paris

Jerome F. Grant, Gregory J. Wiggins, Paris L. Lambdin and Mark T. Windham, Univ. of Tennessee, Knoxville, TN

P-13A Relationship between field environmental conditions, tree growth and incidence of flatheaded appletree borer attack.

Sujan Dawadi (dawadisujan01@gmail.com)¹, Karla Addesso², Jason B. Oliver² and Paul O'Neal², ¹Tennessee State Univ., Nashville, TN, ²Tennessee State Univ., McMinnville, TN

M.S. Student Poster Competition II

Nashville (Sheraton Memphis Downtown)

P-14 Can you identify spores of fungal species on Coleoptera with hyperspectral interferometry?

Jessica Ahl (jba0022@auburn.edu)¹, Lori Eckhardt¹ and Jim Beach², ¹Auburn Univ., Auburn, AL, ²CytoViva, Inc., Auburn, AL

P-15 A survey for *Sirex noctilio* and native wood wasps in Alabama.

Andrea Wahl (abc0036@auburn.edu)¹, Ryan Nadel¹, Bernard Slippers² and Lori Eckhardt¹, ¹Auburn Univ., Auburn, AL, ²Univ. of Pretoria, Pretoria, South Africa

P-16 Molecular survey for the honeybee
Trypanosome parasites crithidia mellificae
and Lotmaria passim.

Mary-Kate Williams (mfwillia@email.uark. edu) and Allen Szalanski, Univ. of Arkansas, Fayetteville, AR

P-17 Investigating the co-acquisition of pesticide resistance in the hive.

Xavier Price (xavier_price08@yahoo.com)¹, Lambert Kanga¹, Anthony Ananga¹ and Paul Shirk², ¹Florida A&M Univ., Tallahassee, FL, ²USDA - ARS, Gainesville, FL

- P-18 Investigating the vector(s) of epizootic hemorrhagic disease virus in Alabama.

 Xinmi Zhang (xzz0049@auburn.edu)¹ and Derrick Mathias², ¹Auburn Univ., Auburn, AL, ²Univ. of Florida, Vero Beach, FL
- P-19 The contact toxicity of essential oils to the house fly (Musca domestica).

 Yuexun Tian (yzt034@auburn.edu)¹, Xing
 Ping Hu¹ and Jerome A. Hogsette², ¹Auburn
 Univ., Auburn, AL, ²USDA ARS, Gainesville, FL
- P-20 Infrared radiation for the purpose of controlling stored product insects and its effect on rice germination.

 Rachel Hampton (rachel.hampton@smail.

Rachel Hampton (rachel.hampton@smail. astate.edu)¹, Griffiths Atungulu² and Tanja McKay^{1,3}, ¹Arkansas State Univ., Jonesboro, AR, ²Univ. of Arkansas, Fayetteville, AR, ³Arkansas Agricultural Experiment Station, Jonesboro, AR

P-20A Relationship of imported fire ant (Solenopsis spp.) integument coloration to cuticular hydrocarbon and venom alkaloid indices.

Manoj Pandey (pandeymanoz@gmail.com)¹, Jason B. Oliver², Karla Addesso², Steven Valles³ and Reginald Archer¹, ¹Tennessee State Univ., Nashville, TN, ²Tennessee State Univ., McMinnville, TN, ³USDA - ARS, Gainesville, FL

Ph.D. Student Poster Competition

Nashville (Sheraton Memphis Downtown)

- P-20B Evaluation of sorghum Plant Introduction genotypes resistant to greenbug to detect cross-resistance to sugarcane aphid.

 Monique de Souza (monique.mfs@hotmail. com)¹ and Jeffrey Davis², ¹Louisiana State Univ., Baton Rouge, LA, ²Louisiana State Univ. AgCenter, Baton Rouge, LA
- P-21 Monitoring susceptibility to insecticides in Culex nigripalpus (Theobald) using a glass vial technique.

 Whitley Stewart (stewartwhitley@yahoo.

com)^{1,2} and Lambert Kanga¹, ¹Florida A&M Univ., Tallahassee, FL, ²Univ. of Florida, Gainesville, FL

- P-22 Identification of volatiles from virus infected and virus-tested sweet-potatoes by GC/MS.

 John Dryburgh (jdrybu1@tigers.lsu.edu)¹ and Jeffrey Davis², ¹Louisiana State Univ., Baton Rouge, LA, ²Louisiana State Univ. AgCenter, Baton Rouge, LA
- P-23 Do neonicotinoid seed treatments benefit corn yield? A multivariate analysis using decision trees

Alejandro Del Pozo (aidelpoz@ncsu.edu)¹, Dominic Reisig², Consuelo Arellano¹ and Ronnie Heiniger², ¹North Carolina State Univ., Raleigh, NC, ²North Carolina State Univ., Plymouth, NC

- P-24 Characterizing effects of two neonicotinoid cotton-seed treatments on tobacco thrips (Frankliniella fusca) feeding behavior with electrical penetration graphing.

 Damon D'Ambrosio (dadambro@ncsu.edu) and George G. Kennedy, North Carolina State Univ., Raleigh, NC
- P-25 Effects of Bell pepper endornavirus (BPEV) on the green peach aphids host selection and population dynamics.

 Sunil Paudel (spaude2@lsu.edu), Rodrigo Valverde and Jeffrey Davis, Louisiana State Univ. AgCenter, Baton Rouge, LA
- P-26 Winter survival and lethal exposure time of adult redbanded stink bug, Piezodorus guildinii Westwood at subzero temperatures.

Anup Bastola (bastola.anup@gmail.com) and Jeffrey Davis, Louisiana State Univ. AgCenter, Baton Rouge, LA

MONDAY, MARCH 13, 2017, MORNING

Undergraduate Student Oral Presentation Competition

St. Louis (Sheraton Memphis Downtown)

Moderators: Norman Leppla¹ and Catharine M. Mannion², ¹Univ. of Florida, Gainesville, FL, ²Univ. of Florida, Homestead, FL

10:30 AM Welcoming Remarks

10:35 AM 1 Life history and description of Arvelius albopunctatus in laboratory conditions.

Mason Russo (masonharry13@ufl.edu)¹,

Amanda Hodges², Sage Thompson¹ and

Nicholas Goltz¹, ¹Univ. of Florida, Gainesville, FL,

²Univ. of Florida, IFAS, Gainesville, FL

10:47 AM 2 Quantifying the impact of an invading shrub (Berberis thunbergii) on arthropod assemblages in forests of the northeastern

Alison Molnar (alison.molnar@chatham.edu)¹, Ryan Utz¹ and Robert Davidson², ¹Chatham Univ., Pittsburgh, PA, ²Carnegie Museum of Natural History, Pittsburgh, PA

10:59 AM 3 Putative sensory structures associated with the food canal of *Hybomitra difficilis* (Diptera: Tabanidae).

Emily Setser (setser2@marshall.edu), Marshall Univ., Huntington, WV

11:11 AM 4 Ongoing studies of RHS-family proteins in Arthropods.

Lily Brooks (Imb622@msstate.edu)¹, Jerome Goddard² and Jonas G. King², ¹Undergraduate, Laboratory of Dr. Jonas King, Mississippi State Univ. Honors College, Mississippi State, MS, ²Mississippi State Univ., Mississippi State, MS

11:23 AM Concluding Remarks

Extension, Outreach and Teaching Student Oral Presentation Competition

Natchez (Sheraton Memphis Downtown)

Moderators: Greg Hodges¹ and Amanda Hodges², ¹Florida Dept. of Agriculture and Consumer Services, Division of Plant Industry, Gainesville, FL, ²Univ. of Florida, IFAS, Gainesville, FL

10:30 AM Welcoming Remarks

10:35 AM 5 Encouraging the state-wide creation of pollinator habitat through the pollinator

spaces project.

Becky Griffin (beckygri@uga.edu), Univ. of Georgia Extension, Griffin, GA

10:47 AM 6 Hemp's revival in Tennessee: An a-'maze'-ing blast from the past!

Cody Seals (wseals@utk.edu)¹, Jerome F. Grant¹, Frank Hale², Darrell Hensley¹ and Clint Palmer³, ¹Univ. of Tennessee, Knoxville, TN, ²Univ. of Tennessee, Nashville, TN, ³Middle Tennessee State Univ., Murfreesboro, TN

10:59 AM 7 Developing insect management recommendations with limited data: An extension challenge.

Brian Hayes (hayesbw@uga.edu)¹ and Mark R. Abney², ¹Univ. of Georgia, Cairo, GA, ²Univ. of Georgia, Tifton, GA

11:11 AM Break

11:26 AM 8 Ufplantprotection.org: A free online diagnostics resource.

Ariane McCorquodale (amccorquodale@ ufl.edu)¹ and Amanda Hodges², ¹Univ. of Florida, Gainesville, FL, ²Univ. of Florida, IFAS, Gainesville, FL

11:38 AM 9 Plant biosecurity outreach in Florida's youth.

Morgan Pinkerton (morgan0402@ufl.edu)¹, Nicole Casuso¹, Sage Thompson¹ and Amanda Hodges², ¹Univ. of Florida, Gainesville, FL, ²Univ. of Florida, IFAS, Gainesville, FL

11:50 AM 10 Scouting and surveying in crucifers of Florida for common pest species and *Bagrada hilaris* (Hemiptera: Pentatomidae).

Sage Thompson (sagemthompson@ufl.edu)¹, Morgan Pinkerton¹, James DeValerio² and Amanda Hodges³, ¹Univ. of Florida, Gainesville, FL, ²Univ. of Florida, Starke, FL, ³Univ. of Florida, IFAS, Gainesville, FL

12:02 PM Concluding Remarks

M.S. Student Oral Presentation Competition I Memphis (Sheraton Memphis Downtown)

Moderators: Fred Musser¹ and G. David Buntin², ¹Mississippi State Univ., Mississippi State, MS, ²Univ. of Georgia, Griffin, GA

10:30 AM Welcoming Remarks

10:35 AM 11 Managing sugarcane aphids (*Melanaphis sacchari*) in MS grain sorghum (*Sorghum bicolor*).

Brittany Lipsey (bse37@msstate.edu)¹, Angus Catchot¹, Jeff Gore², Don Cook², Fred Musser¹ and Erick Larson¹, ¹Mississippi State Univ., Mississippi State, MS, ²Mississippi State Univ., Stoneville, MS

10:47 AM 12 Management of sugarcane aphid in grain sorghum utilizing planting date, plant

tolerance, seed treatment, and foliar insecticides.

Phillip Haar (ph103191@uga.edu)¹ and G. David Buntin², ¹Univ. of Georgia, Athens, GA, ²Univ. of Georgia, Griffin, GA

10:59 AM 13 Evaluating fall armyworm thresholds in whorl stage corn.

Keiton Croom (klc409@msstate.edu)¹, Don Cook², Angus Catchot¹, Jeff Gore² and William Henry¹, ¹Mississippi State Univ., Mississippi State, MS, ²Mississippi State Univ., Stoneville, MS

11:11 AM 14 Effect of planting date and variety on thrips in southeastern cotton.

Cody Kerns (codker92@gmail.com)¹, Jeremy Greene¹, Francis Reay-Jones², Hehe Wang¹, James Smoak¹, Anthony Greene¹ and Dan Robison¹, ¹Clemson Univ., Blackville, SC, ²Clemson Univ., Florence, SC

11:23 AM Break

11:38 AM 15 The impact of tobacco thrips and tarnished plant bug injury on the maturity and yield of Mississippi cotton.

Joel Moor (jcm563@msstate.edu)¹, Jeff Gore¹, Angus Catchot², Don Cook¹, Darrin Dodds² and Read Kelly³, ¹Mississippi State Univ., Stoneville, MS, ²Mississippi State Univ., Mississippi State, MS, ³Mississippi State Univ., Leland, MS

11:50 AM 16 Horizontal transmission of Helicoverpa armigera nucleopolyhedrosis virus (HearNPV) in souhean fields infested with corn earworm

in soybean fields infested with corn earworm, Helicoverpa zea.

Joseph Black (jblack@uaex.edu)¹ and Gus Lorenz², ¹Univ. of Arkansas CES, Lonoke, AR, ²Univ. of Arkansas, Lonoke, AR

12:02 PM 17 Evaluating the impact of canopy defoliation levels at two critical timings in peanut.

Chad Abbott (cca169@msstate.edu)¹, Jason Sarver¹, Jeff Gore², Alan Henn¹ and Jason Krutz², ¹Mississippi State Univ., Mississippi State, MS, ²Mississippi State Univ., Stoneville, MS

12:14 PM 18 The value of aphid management in Tennessee wheat.

Scott Stewart and Clay Perkins (clamperk@vols. utk.edu), Univ. of Tennessee, Jackson, TN

12:26 PM Concluding Remarks

M.S. Student Oral Presentation Competition II

Knoxville (Sheraton Memphis Downtown)

Moderators: Oscar Liburd¹ and Rajagopalbabu Srinivasan², ¹Univ. of Florida, Gainesville, FL, ²Univ. of Georgia, Tifton, GA

10:30 AM Welcoming Remarks

10:35 AM 19 Occurrence of select parasites and pathogens in Arkansas honey bees.

Dylan Cleary (dacleary@uark.edu), Allen Szalanski and Donald C. Steinkraus, Univ. of Arkansas, Fayetteville, AR

10:47 AM	20	Occurrence and phenology of Polistine wasps in southern Louisiana. Scott Nacko (snacko1@lsu.edu) and Gregg Henderson, Louisiana State Univ., Baton Rouge, LA	10:47 AM 28				Kudzu bug: A new pest in Mississippi soybeans? Bill McRight (wmm150@msstate.edu)¹, Angus Catchot¹, Fred Musser², Jeff Gore², Don Cook² and Nicholas Bateman³, ¹Mississippi State Univ.,
10:59 AM	21	Ant assemblages associated with sea turtle nests on Georgia barrier islands: A preliminary study. Charlie Braman (cabraman@uga.edu) and			Mississippi State, MS, ² Mississippi State Univ., Stoneville, MS, ³ Univ. of Arkansas, Division of Agriculture - Cooperative Extension Service, Monticello, AR		
11:11 AM	22	Brian T. Forschler, Univ. of Georgia, Athens, GA Disentangling the effects of microclimate on vertical stratification of wood-boring beetles. Thomas Sheehan (thomas.sheehan@uga.edu), Univ. of Georgia, Athens, GA	10:59 AM	29	On the case: Learning kudzu bug habits in east Tennessee. Kadie Britt (kbritt5@vols.utk.edu)¹, Jerome F. Grant¹, Scott Stewart², Gregory J. Wiggins¹, Steve D. Powell³ and Juan Luis Jurat-Fuentes¹, ¹Univ. of Tennessee, Knoxville, TN, ²Univ. of		
11:23 AM		Break			Tennessee, Jackson, TN, ³ Tennessee Dept. of Agriculture, Nashville, TN		
11:38 AM	23	From without and within: Phenology of the emerald ash borer and its introduced parasitoids in a southern climate. James Palmer (jpalme22@vol.utk.edu), Jerome F. Grant and Gregory J. Wiggins, Univ. of Tennessee, Knoxville, TN	11:11 AM	30	Controlling tarnished plant bug (Lygus lineolaris) in cotton (Gossypium hirsutum) through a transgenic approach. John Corbin (jc971@msstate.edu)¹, Angus Catchot¹, Jeff Gore², Don Cook² and Darrin Dodds¹, ¹Mississippi State Univ., Mississippi		
11:50 AM	24	Determining bioindicators for coastal tidal marsh health using the food web of larvae of the greenhead horse fly (<i>Tabanus</i>			State, MS, ² Mississippi State Univ., Stoneville, MS		
		nigrovittatus).	11:23 AM		Break		
		Devika Bhalerao (dbhale1@Isu.edu), Daniel R. Swale, Lane Foil and Claudia Husseneder, Louisiana State Univ., Baton Rouge, LA	11:38 AM	31	Assessment of rice varieties grown in Louisiana for resistance to the rice water weevil, Lissorhoptrus oryzophilus Kuschel (Coleoptera:		
12:02 PM	25	Feeding responses of wireworms (Coleoptera: Elateridae) in Florida sugarcane. Mike Karounos (karounos@gmail.com) and Ronald Cherry, Univ. of Florida, Belle Glade, FL			Curculionidae). Maisarah Mohamad Saad (mmoha26@lsu. edu)¹ and Michael Stout², ¹Louisiana State Univ., Baton Rouge, LA, ²Louisiana State Univ.		
12:14 PM	26	Influence of cultural practices on soybean nectar production. Ty Smith (tms377@msstate.edu)¹, Angus Catchot¹, Jeffrey Harris², Jeff Gore³, Don Cook³ and Natraj Krishnan¹, ¹Mississippi State Univ., Mississippi State, MS, ²USDA - ARS, Baton Rouge, LA, ³Mississippi State Univ., Stoneville,	11:50 AM	32	AgCenter, Baton Rouge, LA Determination of pupation and emergence times for cowpea curculio under varying temperature regimes. Sydni Barwick (scb64780@uga.edu), Alton Sparks and David Riley, Univ. of Georgia, Tifton, GA		
		MS	12:02 PM	33	The evolution of fitness modifiers and their		
12:26 PM		Concluding Remarks			impact on insecticide resistance. Gabriel Zilnik (glzilnik@ncsu.edu), Christian Gunning and Fred Gould, North Carolina State		
M.S. Student Oral Presentation Competition III				Univ., Raleigh, NC			
Chattanooga (Sheraton Memphis Downtown) Moderators: Nick Seiter¹ and Eric Blinka², ¹Univ. of Arkansas, Fayetteville, AR, ²Monsanto, Dyersburg, TN		12:14 PM	34	Determining the relationship of vial bioassays to field efficacy for the control of bollworms			
				Helicoverpa zea (Boddie) with cypermethrin. Ryan Gilreath (rgilreath@agcenter.lsu.edu) ¹ and			
10:30 AM	27	Welcoming Remarks			David Kerns², ¹Louisiana State Univ., Winnsboro, LA, ²Texas AgriLife Extension Service, College		
10:35 AM	21	Brown marmorated stink bug, a new member of the stink bug complex in Alabama field crops.			Station, TX		
		Savannah Duke (sld0017@auburn.edu), Ronald	12:26 PM		Concluding Remarks		

Savannah Duke (sld0017@auburn.edu), Ronald Smith, Kathy Flanders, Xing Ping Hu and Alana

Jacobson, Auburn Univ., Auburn, AL

MONDAY, MARCH 13, 2017, LUNCH AND LEARN

Lunch and Learn: Navigating Your Way to a Career in Entomology

Magnolia Ballroom (Sheraton Memphis Downtown)

Moderators and Organizers: Ashfaq Sial, Univ. of Georgia, Athens, GA

12:45 PM

Panelists:

Dr. Blair Siegfried

Department Head, Department of Entomology, University of Florida

Dr. Audrey Lenhart

Lead, Integrated Vector Management Team, Center for Global Health/Division of Parasitic Diseases and Malaria/Entomology Branch, U.S. Centers for Disease Control and Prevention (CDC), Atlanta, GA

Dr. David Jenkins

Forest Health Program Coordinator – Entomologist, South Carolina Forestry Commission

Dr. Scott Croxton

Product Development Representative, Nichino America

Dr. Rebecca Ann Schmidt-Jeffris

Assistant Professor, Clemson University

This event is free, however, registration is required to attend. Seating is limited to fifty members only and will be allocated on a first come first served basis. To register, speak with staff members at the meeting Registration Desk in the Lobby

MONDAY, MARCH 13, 2017, AFTERNOON

Ph.D. Student Oral Presentation Competition I

Natchez (Sheraton Memphis Downtown)

Moderators: Adam Dale¹ and Silvana Viera de Paula Moraes², ¹Univ. of Florida, IFAS, Gainesville, FL, ²Univ. of Florida, IFAS, Jay, FL

2:00 PM Welcoming Remarks

2:05 PM 35 Soybean management strategies for insect

pests in Mississippi soybean.

Nicholas Bateman (nbateman@entomology. msstate.edu)¹, Angus Catchot¹, Jeff Gore², Don Cook², Fred Musser¹ and Trent Irby¹, ¹Mississippi State Univ., Mississippi State, MS, ²Mississippi State Univ., Stoneville, MS

2:17 PM 36 Impact of early season management decisions on soybean yield.

John North (jhn39@msstate.edu)¹, Angus Catchot¹, Jeff Gore², Don Cook², Trent Irby¹ and John Orlowski², ¹Mississippi State Univ., Mississippi State, MS, ²Mississippi State Univ., Stoneville, MS

2:29 PM 37 Sugarcane aphid, *Melanaphis sacchari*, and grain sorghum: Implications for honeybees,

apis mellifera.

Whitney Crow (wdc165@msstate.edu)¹, Angus Catchot¹, Jeff Gore², Scott Stewart³ and Sandy Steckel³, ¹Mississippi State Univ., Mississippi State, MS, ²Mississippi State Univ., Stoneville, MS, ³Univ. of Tennessee, Jackson, TN

2:41 PM 38 Winter cover crop-soybean systems: An entomological perspective.

Adam Whalen (daw153@msstate.edu)¹, Angus Catchot¹, Jeff Gore², Don Cook², Trent Irby¹, Richard Brown³ and Brandon Barton¹, ¹Mississippi State Univ., Mississippi State, MS, ²Mississippi State Univ., Stoneville, MS, ³Mississippi Entomological Museum, Mississippi State, MS

2:53 PM Break

3:08 PM 39 Impact of defoliation on Mississippi soybean

Benjamin Thrash (bct157@msstate.edu)¹, Angus Catchot¹, Jeff Gore², Don Cook², Fred Musser¹, Trent Irby¹ and Jason Krutz², ¹Mississippi State Univ., Mississippi State, MS, ²Mississippi State Univ., Stoneville, MS

3:20 PM 40 Conveying non-target effects of pest

management practices by considering insecticide selectivity and residual activity.

Matthew Borden (m.borden@ufl.edu), Univ. of Florida, Gainesville, FL

3:32 PM Evaluation of rice stink bug, Oebalus pugnax, 3:20 PM 40A 46 Rhizobacteria impact preference of damage to maturing rice kernels. Heterorhabditis bacteriophora for Diabrotica Aaron Cato (ajcato@uark.edu)1, Jarrod T. virgifera virgifera larvae-infested corn roots. Hardke² and Gus Lorenz³, ¹Univ. of Arkansas, Joseph Disi (jod0003@auburn.edu), Joseph Fayetteville, AR, 2Univ. of Arkansas, Stuttgart, Kloepper and Henry Fadamiro, Auburn Univ., AR, ³Univ. of Arkansas, Lonoke, AR Auburn, AL 3:44 PM **Concluding Remarks** 3:32 PM **Concluding Remarks**

Ph.D. Student Oral Presentation Competition II **Chattanooga (Sheraton Memphis Downtown)**

Frank Hale¹ and Brett Blaauw², ¹Univ. of Tennes-**Moderators:** see, Nashville, TN, 2Univ. of Georgia, Athens, GA

2:00 PM **Welcoming Remarks** 2:05 PM 41 Distribution and oviposition intensity of Aedes aegypti and Aedes albopictus in the greater New Orleans region. Panpim Thongsripong (pthongsr@tulane. edu)¹, Samuel Jameson¹, Sarah Michaels² and Dawn M. Wesson³, ¹Tulane Univ., New Orleans, LA, ²City of New Orleans Mosquito, Termite and Rodent Control Board, New Orleans, LA, ³Tulane Univ. School of Public Health & Tropical Medicine, New Orleans, LA

2:17 PM 42 Phylogenetic analysis of adult Dermacentor parumapertus neumann (Acari: Ixodidae) from various locations within its geographical range. José Portugal III (jsp281@msstate.edu)1, Jonas G. King¹, Gail Moraru¹, Tom Becker², Travis Smith³, Christopher Paddock⁴ and Jerome Goddard¹, ¹Mississippi State Univ., Mississippi State, MS, ²Utah Division of Wildlife Resources, Tooele, UT, ³Black Gap Wildlife Management Area, Alpine, TX, ⁴Centers for Disease Control and Prevention, Atlanta, GA

2:29 PM 43 Examining the consequences of land use on vector diversity.

Meredith Spence (mrspenc2@ncsu.edu) and Michael Reiskind, North Carolina State Univ., Raleigh, NC

2:41 PM 44 Firefly (Coleoptera: Lampyridae) diversity of Hispaniola.

> Oliver Keller (okeller1977@gmail.com)1, Michael Ivie² and Marc Branham¹, ¹Univ. of Florida, Gainesville, FL, 2Montana State Univ., Bozeman, MT

2:53 PM **Break**

3:08 PM 45 Evidence for the role of subterranean termites (Reticulitermes spp.) in temperate forest soil nutrient cycling.

> Yi-an Chen (nynaeve1@uga.edu) and Brian T. Forschler, Univ. of Georgia, Athens, GA

Ph.D. Student Oral Presentation Competition III **Knoxville (Sheraton Memphis Downtown)**

Moderators: Jeffrey Davis¹ and Juan Luis Jurat-Fuentes², ¹LSU AgCenter, Baton Rouge, LA, 2Univ. of Tennessee, Knoxville, TN

2:00 PM **Welcoming Remarks** 2:05 PM 47 Host preference of Cylas formicarius: An example of Hopkins' host-plant selection principle. Jie Chen (jchen31@lsu.edu)1, Jeffrey Davis1, Julien Beuzelin², Michael Stout¹, Tara P. Smith³, D. R. LaBonte¹ and M. J. Murray¹, ¹Louisiana State Univ. AgCenter, Baton Rouge, LA, ²Univ. of Florida, Belle Glade, FL, 3Louisiana State Univ., Chase, LA

2:17 PM 48 Host range of Calophya terebinthifolii and Calophya lutea: Potential biological control agents of brazilian peppertree in Florida. Patricia Prade (prade@ufl.edu)1, James Cuda2, Carey Minteer¹ and William A. Overholt¹, ¹Univ. of Florida, Ft. Pierce, FL, 2Univ. of Florida,

Gainesville, FL

2:29 PM 49 Dose response to pyriproxyfen in diapausing Halyomorpha halys (Hemiptera: Pentatomidae), Megacopta cribraria (Hemiptera: Plataspidae) and their hymenopteran egg parasitoids (Hymenoptera: Platygastridae).

> Cory Penca (cpenca@ufl.edu)1 and Amanda Hodges², ¹Univ. of Florida, Gainesville, FL, ²Univ. of Florida, IFAS, Gainesville, FL

2:41 PM 50 Comparative analysis of fitness costs and genetic basis of Cry1A.105 resistance in two fall armyworm populations.

> Ying Niu (yniu1@lsu.edu)1, Graham P. Head2, Paula A. Price² and Fangneng Huang³, ¹Louisiana State Univ., Baton Rouge, LA, ²Monsanto Company, St. Louis, MO, ³Louisiana State Univ. AgCenter, Baton Rouge, LA

2:53 PM **Break**

3:08 PM 51 Cry toxin concentration in Bt corn tissues and the effect on larval development, survival, and feeding behavior in the corn earworm, Helicoverpa zea.

Thomas Bilbo (bilbothomas@gmail.com)¹, Francis Reay-Jones², Matthew Turnbull¹, Jeremy Greene³ and Dominic Reisig⁴, ¹Clemson Univ., Clemson, SC, ²Clemson Univ., Florence, SC, ³Clemson Univ., Blackville, SC, ⁴North Carolina State Univ., Plymouth, NC

3:20 PM 52 Beauveria bassiana strain characterization and fungicide resistance screening for use in the management of Megacopta cribraria in sovbean.

Anthony Greene (adg2@clemson.edu)¹, Guido Schnabel², Julia Kerrigan², Francis Reay-Jones³ and Jeremy Greene¹, ¹Clemson Univ., Blackville, SC, ²Clemson Univ., Clemson, SC, ³Clemson Univ., Florence, SC

3:32 PM 53 Uncovering the role of gibberellins in rice defense against insects.

Lina Bernaola (Ibernaola@agcenter.Isu. edu)¹ and Michael Stout², ¹Louisiana State Univ., Baton Rouge, LA, ²Louisiana State Univ. AgCenter, Baton Rouge, LA

3:44 PM Concluding Remarks

M.S. Student Oral Presentation Competition IV

St. Louis (Sheraton Memphis Downtown)

Moderators: David Owens¹ and Jason Schmidt², ¹Univ. of Florida, Belle Glade, FL, ²Univ. of Georgia, Tifton, GA

2:00 PM		Welcoming Remarks
2:05 PM	54	A multi-dimensional a

A multi-dimensional approach to house fly (*Musca domestica*) management: Compatibility studies.

Dana Johnson (dana.johnson@ars.usda. gov)^{1,2}, Emma N. I. Weeks², Chris Geden¹, Eric LoVullo¹ and Nemat O. Keyhani², ¹USDA - ARS, Gainesville, FL, ²Univ. of Florida, Gainesville, FL

2:17 PM 55 Investigating the microbial communities of ticks that threaten beef cattle in the Southeastern United States.

David Theuret (dtheuret@vols.utk.edu), Jennifer DeBruyn, Margaret Staton and Rebecca Trout Fryxell, Univ. of Tennessee, Knoxville, TN

2:29 PM 56 Statewide survey for potential zika virus vectors (Culicidae: Aedes spp.) in Mississippi.
Sarah McInnis (sjmcinnis1217@gmail.com)¹,
Jerome Goddard¹, José Portugal III¹, Wendy
Varnado² and Gail Moraru¹, ¹Mississippi State
Univ., Mississippi State, MS, ²Mississippi Dept.
of Health, Jackson, MS

2:41 PM 57 An exploratory study comparing the bacterial community in the guts of wild and lab-raised Anopheles quadrimaculatus.

Eleanor Moen (emm606@msstate.edu)¹ and Jonas G. King², ¹Mississippi State Univ., Starkville, MS, ²Mississippi State Univ., Mississippi State, MS

2:53 PM Break

3:08 PM 58 Implications of long range eprinomectin injectable as a control measure for

disease vectoring dipterans, Anopheles quadrimaculatus and Culicoides sonorensis.

Annie Rich (aerich@uga.edu)¹, Nancy C. Hinkle¹ and Seth Irish², ¹Univ. of Georgia, Athens, GA,

²CDC, Atlanta, GA

3:20 PM 59 Assessment of *Dicyphus hesperus* (Hemiptera: Miridae) for biological control of *Bemisia*

tabaci (Hemiptera: Aleyrodidea) on greenhouse tomato.

Pritika Pandey (pritikapandey@ufl.edu)¹, Heather McAuslane¹ and Hugh A. Smith², ¹Univ. of Florida, Gainesville, FL, ²Univ. of Florida, Wimauma, FL

3:32 PM 60 Landscape level contributions of corn, cotton, and soybeans in mixed production systems for Helicoverpa zea populations.

> Tyler Towles (tt305@entomology.msstate. edu)¹, Angus Catchot², Jeff Gore³, Don Cook³ and Michael Caprio², ¹Mississippi State Univ., Starkville, MS, ²Mississippi State Univ., Mississippi State, MS, ³Mississippi State Univ., Stoneville, MS

Concluding Remarks

3:44 PM

Value, Integration, and Regional Specificities of Insecticide Use in Soybean Production Systems

Magnolia Ballroom (Sheraton Memphis Downtown)

Moderators and Organizers: Julien Beuzelin¹ and Brian Mc-Cornack², ¹Univ. of Florida, Belle Glade, FL, ²Kansas State Univ., Manhattan, KS

2:00 PM Welcoming Remarks

2:06 PM 61 From the Mid-south to the Southeast: Regional differences in insect pest complexes.

Scott Stewart (sdstewart@utk.edu)¹, Angus Catchot², Gus Lorenz³, Jeffrey Davis⁴, Sebe Brown⁵, Julien Beuzelin⁶, Phillip Roberts² and Dominic Reisig՞, ¹Univ. of Tennessee, Jackson, TN, ²Mississippi State Univ., Mississippi State, MS, ³Univ. of Arkansas, Lonoke, AR, ⁴Louisiana State Univ. AgCenter, Baton Rouge, LA, ⁵Louisiana State Univ. AgCenter, Winnsboro, LA, ⁶Univ. of Florida, Belle Glade, FL, ¬Univ. of Georgia, Tifton, GA, ⁶North Carolina State Univ., Plymouth, NC

2:24 PM 62 Current soybean insect management practices in the southern U.S.

Fred Musser (fm61@msstate.edu)¹, Angus Catchot¹, Scott Stewart², Gus Lorenz³, Jeffrey Davis⁴, Tim Reed⁵, Dominic Reisig⁶ and Ames Herbert⁻, ¹Mississippi State Univ., Mississippi State, MS, ²Univ. of Tennessee, Jackson, TN, ³Univ. of Arkansas, Lonoke, AR, ⁴Louisiana State Univ. AgCenter, Baton Rouge, LA, ⁵Auburn Univ., Madison, AL, ⁶North Carolina State Univ., Plymouth, NC, ¬Virginia Tech, Suffolk, VA

2:42 PM 63 Soybean IPM in the Midwest?

Thomas Hunt (thunt2@unl.edu)¹, Erin Hodgson² and Kelley Tilmon³, ¹Univ. of Nebraska, Concord, NE, ²Iowa State Univ., Ames, IA, ³The Ohio State Univ., Wooster, OH

3:00 PM Break

3:15 PM 64 Human behavior flows from three main sources: What Plato can teach us about grower pesticide choices.

Kelley Tilmon (tilmon.1@osu.edu), The Ohio State Univ., Wooster, OH

3:33 PM 65 From regulation to production: How do bees impact soybean production (and vice-versa)?

Matt O'Neal (oneal@iastate.edu), Amy Toth,

Adam Dolezal, Ge Zhang and Ashley St. Clair.

Adam Dolezal, Ge Zhang and Ashley St. Clair, Iowa State Univ., Ames, IA

3:51 PM 66 An open niche for selective insecticides in soybean aphid management.

Robert Koch (koch0125@umn.edu) and Anh Tran, Univ. of Minnesota, St. Paul, MN

4:09 PM 67 The role of neonicotinoids in Louisiana soybeans: Not one product to rule them all.

Jeffrey Davis (jeffdavis@agcenter.lsu.edu),
Miyanda Moonga, Jeff Murray and Arthur
Richter, Louisiana State Univ. AgCenter, Baton

Rouge, LA

4:27 PM 68 Bt soybeans: The solution?

Nicholas Bateman (nbateman@entomology. msstate.edu)¹, Angus Catchot¹, Don Cook² and Jeff Gore², ¹Mississippi State Univ., Mississippi State, MS, ²Mississippi State Univ., Stoneville, MS

4:45 PM Concluding Remarks

TUESDAY, MARCH 14, 2017, POSTERS

Contributed Poster Presentations: Medical, Urban and Veterinary; Physiology, Biochemistry and Toxicology; Systematics, Evolution and Biodiversity

Nashville (Sheraton Memphis Downtown)

P-27 Identification of host attractants for the brown dog tick, Rhipicephalus sanguinueus:
Electrophysiological studies.
Emma N. I. Weeks (eniweeks@ufl.edu)¹,
Salvador Gezan¹, Phil Kaufman¹ and Sandra
A. Allan², ¹Univ. of Florida, Gainesville, FL,
²USDA - ARS, Gainesville, FL

P-28 Determining the functional role of novel tick metalloproteases in pain suppression.
Faizan Tahir (tahirfaizan93@gmail.com) and Shahid Karim, Univ. of Southern Mississippi, Hattiesburg, MS

P-30 Genetic diversity of Cryptotermes and Procryptotermes termites (Isoptera: Kalotermitidae).

> Allen Szalanski (aszalan@uark.edu)¹, Rudolf Scheffrahn², James Austin³ and Clinton E. Trammel¹, ¹Univ. of Arkansas, Fayetteville, AR, ²Univ. of Florida, Fort Lauderdale, FL, ³BASF Corporation, Raleigh, NC

P-31 Age-dependent food utilization in small groups of Acheta domesticus (Orthoptera: Gryllidae) at two temperatures.

Juan Morales-Ramos (juan.moralesramos@ ars.usda.gov)¹, M. Guadalupe Rojas¹ and Aaron Dossey², ¹USDA - ARS, Stoneville, MS, ²All Things Bugs LLC, Gainesville, GA

P-32 Functional analyses of polydnavirus gap junction homologue.
Peng Zhang (pzhang2@clemson.edu),

Clemson Univ., Clemson, SC

P-33 Potential of *Camellina sativa* as a biopesticide for *Solenopsis invicta* (Hymenoptera: Formicidae).

M. Guadalupe Rojas (guadalupe.rojas@ ars.usda.gov)¹, Juan Morales-Ramos¹, Mark Barhow² and Leon Hicks¹, ¹USDA - ARS, Stoneville, MS, ²USDA-ARS NCAUR, Peoria, IL

P-34 Effects of light and temperature on the efficacy of beta-cyfluthrin for control of *Tribolium castaneum* (Coleoptera: Tenebrionidae) in a rice mill.

Laura Starkus (Istarkus@astate.edu)¹, Tanja McKay², Frank Arthur³ and James Campbell³, ¹Arkansas State Univ., State Univ., AR, ²Arkansas Agricultural Experiment Station, Jonesboro, AR, ³USDA - ARS, Manhattan, KS

P-35 Evaluation of bifenthrin for control of tawny crazy ants (*Nylanderia fulva*) in container substrates.

Jeremy Pickens¹ and **Fudd Graham** (grahalc@ auburn.edu)², ¹Auburn Univ., Mobile, AL, ²Auburn Univ., Auburn, AL

P-36 Toxicity of bifenthrin and mixtures of bifenthrin plus acephate, imidacloprid, or dicrotophos to adults of tarnished plant bug (Hemiptera: Miridae).

Moneen Jones (jonesmon@missouri.edu), Univ. of Missouri, Portageville, MO

P-37 Attracting students to do an entomological research project in a small liberal arts college.

Christof F. Stumpf (cstumpf@lsua.edu), Louisiana State Univ., Alexandria, Alexandria, LA

P-38 Developing a data pipeline (workflow) to digitally record and analyze firefly flash patterns.

Able Chow (ablechow@ufl.edu)¹, Oliver Keller¹, Michael Ivie² and Marc Branham¹, ¹Univ. of Florida, Gainesville, FL, ²Montana State Univ., Bozeman, MT

Contributed Poster Presentations: Plant-Insect Ecosystems

Nashville (Sheraton Memphis Downtown)

P-39 First report of the cotton and soybean pest Euschistus quadrator (Hempitera: Pentatomidae) in Mississippi.
Bryce Blackman (bryce.blackman@ars.usda. gov), K. Clint Allen, Walker A. Jones, Nathan Little, Michael Grodowitz and Randall Luttrell, USDA - ARS, Stoneville, MS

P-40 Infestation levels of tarnished plant bug (*Lygus lineolaris*) in different cotton varieties.

Courtney Jackson (cjackson@uaex.edu) and Glenn Studebaker, Univ. of Arkansas Division of Agriculture Cooperative Extension Service, Keiser, AR P-41 Occurrence and damage of sugarcane aphid on different varieties of grain sorghum in Louisiana.

Fangneng Huang (fhuang@agcenter.lsu. edu)¹, David Kerns², Rick Mascagni³ and Dustin Harrell⁴, ¹Louisiana State Univ. AgCenter, Baton Rouge, LA, ²Louisiana State Univ. AgCenter, Winnsboro, LA, ³Louisiana State Univ. Agricultural Center, St. Joseph, LA, ⁴LSU AgCenter, Rayne, LA

P-43 Host boring preferences of the tea shot-hole borer *Euwallacea fornicatus* (Coleoptera: Curculionidae: Scolytinae).

David Owens (david.owens@ars.usda.gov)¹, Paul E. Kendra¹, Teresa Narvaez², Wayne S. Montgomery¹ and Daniel Carrillo², ¹USDA -ARS, Miami, FL, ²Univ. of Florida, Homestead, FL

- P-45 Analysis of field collected tarnished plant bugs using carbon and nitrogen isotopes.

 Katherine Parys¹, Leslie Price (les.price@ ars.usda.gov)¹, Maribel Portilla¹, Bryce
 Blackman¹, G. Roberts¹, Ryan L. Jackson¹,² and
 Randall Luttrell¹, ¹USDA ARS, Stoneville, MS,
 ²Syngenta, Carrolton, MS
- P-46 Refining the treatment threshold for fall armyworm (Spodoptera frugiperda) in whorl stage non-Bt corn and grain sorghum.

 Glenn Studebaker (gstudebaker@uaex. edu)¹, Gus Lorenz² and Nicholas Seiter³, ¹Univ. of Arkansas Cooperative Extension Service, Keiser, AR, ²Univ. of Arkansas, Lonoke, AR, ³Univ. of Arkansas, Monticello, AR
- P-47 A combination of α-copaene and quercivorol results in improved detection of *Euwallacea* nr. *fornicatus* in Florida.

Paul E. Kendra (paul.kendra@ars.usda. gov)¹, David Owens¹, Wayne S. Montgomery¹, Teresa Narvaez¹ and Daniel Carrillo², ¹USDA -ARS, Miami, FL, ²Univ. of Florida, Homestead, FL

- P-48 Field evaluation of potential pheromone lures for Lygus lineolaris (Hemiptera: Miridae) in the Mid-South.

 Katherine Parys (katherine.parys@ars.usda.
 gov)¹ and David Hall², ¹USDA ARS, Stoneville,
 MS, ²Univ. of Greenwich, Chatham, United
 Kingdom
- P-49 Performance of microbial and synthetic insecticides in Bt cotton for supplemental bollworm control.

Nathan Little (nathan.little@ars.usda.gov), Randall Luttrell, MIchelle Mullen, K. Clint Allen and Omaththage Perera, USDA - ARS, Stoneville, MS P-50 Effects of insecticide residues on Chrysoperla johnsoni (Neuroptera: Chrysopidae).

Kaushalya Amarasekare (kaushalya2641@ yahoo.com)¹, Preston H. Brown² and Peter Shearer², ¹Tennessee State Univ., Nashville, TN, ²Oregon State Univ., Hood River, OR

P-51 Cross-resistance of Cry1A.105 resistance in fall armyworm to five other individual Bt proteins.

Yiwan Zhou (yiwan1021@163.com)¹, Ying Niu², Binod Acharya², Graham P. Head³, Paula A. Price³ and Fangneng Huang⁴, ¹LSU AgCenter, Baton Rouge, LA, ²Louisiana State Univ., Baton Rouge, LA, ³Monsanto Company, St. Louis, MO, ⁴Louisiana State Univ. AgCenter, Baton Rouge, LA

P-52 Examining nozzle effect on insect control in Tennessee cotton.

> Sandy Steckel (ssteckel@utk.edu), Scott Stewart, Matthew Williams, Larry Steckel, Julie Reeves and Garret Montgomery, Univ. of Tennessee, Jackson, TN

- P-53 Laboratory evaluation of selected insecticides on field-collected populations of bollworm (Helicoverpa zea) and tobacco budworm (Heliothis vrescens) 2016 update. Gregory Payne (gpayne@westga.edu), Eric Mashburn and Kody Fennell, Univ. of West Georgia, Carrollton, GA
- P-54 Current susceptibilities of bollworm and tobacco budworm to selected insecticides in diet-incorporated bioassays.

 K. Clint Allen (clint.allen@ars.usda.gov),
 Nathan Little and Randall Luttrell, USDA ARS, Stoneville, MS
- P-55 Survival of Bt and nonBt cotton fruiting structures exposed to extreme densities of bollworm and tobacco budworm in large field cages.

 Randall Luttrell (randy.luttrell@ars.usda.

gov), K. Clint Allen, Omaththage Perera and Nathan Little, USDA - ARS, Stoneville, MS

- P-56 Vial and diet bioassays to determine resistance levels in tarnished plant bug. Maribel Portilla, Bryce Blackman, Randall Luttrell and Tabatha Nelson (tabatha. nelson@ars.usda.gov), USDA ARS, Stoneville, MS
- P-57 Field efficacy of diamides for management of stem borers (Lepidoptera: Crambidae) in sugarcane.

Julien Beuzelin (jbeuzelin@ufl.edu)¹, Blake Wilson², Matthew VanWeelden¹, Thomas Reagan² and Tony Prado³, ¹Univ. of Florida, Belle Glade, FL, ²Louisiana State Univ.

- AgCenter, Baton Rouge, LA, ³Rio Grande Valley Sugar Growers, Inc., Santa Rosa, TX
- P-58 Evaluation of pre-plant insecticides for management of soil pests in sweet potatoes.

 Joshua Dawson (dawsonj01@fvsu.edu)¹
 and Alton Sparks², ¹Fort Valley State Univ.,
 Valdosta, GA, ²Univ. of Georgia, Tifton, GA
- P-59 Effect of five surfactants in increasing efficacy of four commonly used insecticides in managing melon thrips, *Thrips palmi* Karny (Thysanoptera: Thripidae).

 Rafia Khan (rkhan@ufl.edu), Dakshina Seal, Mohammad Razzak and Catherine Sabines, Univ. of Florida, Homestead, FL
- P-60 How "A Bug's Life" enhances human life: Lessons learned.

Jerome F. Grant (jgrant@utk.edu), Univ. of Tennessee, Knoxville, TN

P-61 Thrips management program for horticultural crops.

Vivek Kumar (vivekiari@ufl.edu)¹, Garima Kakkar², Cristi L. Palmer³, Cindy McKenzie⁴ and Lance Osborne¹, ¹Univ. of Florida, Apopka, FL, ²UF/IFAS Multi-County Extension, Fort Pierce, FL, ³Rutgers, The State Univ. of New Jersey, New Brunswick, NJ, ⁴USDA - ARS, Ft. Pierce, FL

P-62 Companion planting: Cultural control of vegetable insect pests.

Jesusa C. Legaspi (Jesusa.Legaspi@ars. usda.gov)¹, Neil Miller¹, Lambert Kanga² and Muhammad Haseeb², ¹USDA - ARS, Tallahassee, FL, ²Florida A&M Univ., Tallahassee, FL

P-63 Ladybird beetles are conditionally effective predators of aphids in protected plant systems.

Eric Riddick (eric.riddick@ars.usda.gov), USDA - ARS, Stoneville, MS

P-64 Native and non-native host plants for spotted wing drosophila (*Drosophila suzukii*) in Arkansas.

Rosalee Knipp (rknipp@uark.edu), Lizabeth Herrera, Donn Johnson and Donald C. Steinkraus, Univ. of Arkansas, Fayetteville, AR

P-65 Comparative studies on the development of *Habrobracon hebetor* on diapausing and non-diapausing larvae of *Plodia interpunctella*.

Sanower Warsi (sanowerw@Yahoo.com) and George Mbata, Fort Valley State Univ., Fort Valley, GA

TUESDAY, MARCH 14, 2017, MORNING

Contributed Papers I: Plant-Insect Ecosystems Natchez (Sheraton Memphis Downtown)

Moderators: Justin Renkema¹ and Sebe Brown², ¹Univ. of Florida, Wimauma, FL, ²Louisiana State Univ. AgCenter, Winnsboro, LA

8:00 AM Welcoming Remarks

8:05 AM 69 Cotton and pest response to in-furrow nematicide-insecticide combinations applied at-planting across different soil textures in a spatially variable field.

Amanda Mann (amann@astate.edu)¹, Brittany Barnes², Travis Faske³ and Tina Teague², ¹Univ. of Arkansas, State Univ., AR, ²Arkansas State Univ., State Univ., AR, ³Univ. of Arkansas, Fayetteville, AR

8:17 AM 70 Re-evaluating tarnished plant bug (*Lygus lineolaris*) thresholds in North Carolina coastal plant cotton.

Mohammad-Amir Aghaee (maghaee@ncsu. edu)¹ and Dominic Reisig², ¹North Carolina State Univ., Raleigh, NC, ²North Carolina State Univ., Plymouth, NC

8:29 AM 71 Susceptibility of field populations of the cotton bollworm in the Southern U.S. to four individual Bt proteins used in the Bt cotton.

Fei Yang (fyang@agcenter.lsu.edu)¹, David Kerns² and Fangneng Huang¹, ¹Louisiana State Univ. AgCenter, Baton Rouge, LA, ²Louisiana State Univ. AgCenter, Winnsboro, LA

8:41 AM 72 Effects of foliar applied jasmonic acid and seed applied imidacloprid on phytohormone expression and twospotted spider mite (Tetranychus urticae) populations in cotton.

Sebe Brown (SBrown@agcenter.lsu.edu)¹,
David Kerns² and Michael Stout³, ¹Louisiana
State Univ. AgCenter, Winnsboro, LA, ²Texas
AgriLife Extension Service, College Station, TX,
³Louisiana State Univ. AgCenter, Baton Rouge,

8:53 AM 74 Evaluating selected insecticide seed treatments in hybrid rice.

Read Kelly (frk12@msstate.edu)¹, Jeff Gore², Fred Musser³, Don Cook², George Awuni³ and Andrew Adams³, ¹Mississippi State Univ., Leland, MS, ²Mississippi State Univ., Stoneville, MS, ³Mississippi State Univ., Mississippi State, MS

9:05 AM 75 Reduced *Drosophila suzukii* infestation in berries using multiple biological control agents.

Justin Renkema (justin.renkema@ufl.edu), Univ. of Florida, Wimauma, FL

9:17 AM 76 Evaluation of attractants for monitoring *Drosophila suzukii* (Diptera: Drosophilidae) in blueberries.

Oscar Liburd (oeliburd@ufl.edu)¹, Elena Rhodes¹, Joshua Grant² and Ashfaq Sial², ¹Univ. of Florida, Gainesville, FL, ²Univ. of Georgia, Athens, GA

9:29 AM 77 Efficacy assessments of leaf galling psyllids (Calophya spp.), potential biological control agents of Brazilian peppertree (Anacardiaceae).

James Cuda (jcuda@ufl.edu)¹, Marcelo Vitorino², Marcus Boeno², Larissa Bini² and Patricia Prade³, ¹Univ. of Florida, Gainesville, FL, ²Universidade Regional de Blumenau, Blumenau, Brazil, ³Univ. of Florida, Ft. Pierce, FL

9:41 AM 78 Feeding response of Reticulitermes Flavipes
(Isoptera: Rhinotermitidae) to wood of the
Chinese tallow tree Triadica sebifera.
Mark E. Mankowski (markemankowski@fs.fed.
us)¹ and Grant Kirker², ¹USDA - Forest Service,
Starkville, MS, ²USDA - Forest Service, Madison,

9:53 AM 78A Neem effects on whiteflies and associated natural enemies in vegetable crops.

Alvin Simmons (alvin.simmons@ars.usda.gov)¹, Shaaban Abd-Rabou² and Merle Shepard³, ¹USDA - ARS, Charleston, SC, ²Ministry of Agriculture, Dokki, Egypt, ³Clemson Univ., Charleston, SC

10:05 AM Break

10:20 AM 78B Protective effect of a fungicide against ambrosia beetle attacks and *Phytopthora*

cinammomi infection post-flooding

Karla Addesso (kaddesso@tnstate.edu)¹, Fulya Baysal-Gurel², Jason B. Oliver¹ and Paul OʻNeal¹, ¹Tennessee State University, McMinnville, TN, ²Tennessee State University, McMinnville, MS

10:32 AM Concluding Remarks

New Challenges and Opportunities for Bt Crops in the Southeast

St. Louis (Sheraton Memphis Downtown)

Moderators and Organizers: Juan Luis Jurat-Fuentes¹ and Dominic Reisig², ¹Univ. of Tennessee, Knoxville, TN, ²North Carolina State Univ., Plymouth, NC

8:00 AM Welcoming Remarks

8:05 AM 79 Experiences with Bt cotton in the Mid-South:
Coping with failing technology and looking toward the future.

David Kerns (dkerns@agcenter.lsu.edu)¹, Fei Yang² and Jeff Gore³, ¹Texas AgriLife Extension Service, College Station, TX, ²Louisiana State Univ. AgCenter, Baton Rouge, LA, ³Mississippi State Univ., Stoneville, MS

8:25 AM	80	Resistance management for Bt corn in the southeast: challenges and prospects? Fangneng Huang (fhunag@agcenter.lsu.edu), Louisiana State Univ. AgCenter, Baton Rouge, LA	8:25 AM	87	Assessment of the vector competence of Aedes aegypti and Ae. albopictus mosquitoes from Bahia, Brazil to Zika virus. Chelsea Smartt (ctsmart@ufl.edu), Univ. of
8:45 AM	81	Use and efficacy of Bt crop technology in Georgia. G. David Buntin (gbuntin@uga.edu)¹, Alton Sparks², Phillip Roberts², Michael Toews² and Xinzhi Ni³, ¹Univ. of Georgia, Griffin, GA, ²Univ. of Georgia, Tifton, GA, ³USDA - ARS, Tifton, GA	8:45 AM	88	Florida, Vero Beach, FL Susceptibility and transmission potential of Florida Aedes aegypti and Ae. albopictus to Zika virus. Rebecca Zimler (razimler@epi.ufl.edu) and Barry Alto, Univ. of Florida, Vero Beach, FL
9:05 AM	82	Recent challenges with Bt corn and cotton for Helicoverpa zea in North Carolina. Alejandro Del Pozo (aidelpoz@ncsu.edu)¹ and Dominic Reisig², ¹North Carolina State Univ., Raleigh, NC, ²North Carolina State Univ., Plymouth, NC	9:05 AM	89	Vector competence of New Orleans Aedes aegypti mosquitoes for Zika virus. Matthew Ward (mward11@tulane.edu), Panpim Thongsripong, Sarah Michaels and Dawn M. Wesson, Tulane Univ. School of Public Health & Tropical Medicine, New Orleans, LA
9:25 AM	83	New Bt technology for control of thrips and hemipteran pests. Scott Graham (sgraha24@vols.utk.edu) and Scott Stewart, Univ. of Tennessee, Jackson, TN	9:25 AM	90	Distribution and insecticide susceptibility status of Florida Zika vector populations, Aedes aegypti and Aedes albopictus. Casey Parker (caseyparker@ufl.edu) and C.
9:45 AM	84	Bt Soybeans: The South American experience and considerations for the US.			Roxanne Connelly, Univ. of Florida, Vero Beach, FL
		Daniel Pitts (daniel.l.pitts@monsanto.com) ¹ , Graham P. Head ² , Samuel Martinelli ² and Renato A. de Carvalho ³ , ¹ Monsanto Company, Lexington, SC, ² Monsanto Company, St. Louis, MO, ³ Monsanto do Brasil Ltda., São Paulo, Brazil	9:45 AM	91	Dead bees and the aftermath of mosquito control for Zika in SC. Jennifer M. Tsuruda (jtsurud@clemson.edu)¹, Mike Weyman² and Ryan Okey², ¹Clemson Univ., Clemson, SC, ²Clemson Univ., Pendleton, SC
10:05 AM		Break	10:05 AM		Break
10:20 AM	85	Dispersal of Spodoptera frugiperda resistance to Bt corn. Rahul Banerjee¹, Rodney N. Nagoshi², Robert L. Meagher², James M. Hasler³, Fangneng Huang⁴, Kenneth Narva³ and Juan Luis Jurat- Fuentes (jurat@utk.edu)¹, ¹Univ. of Tennessee, Knoxville, TN, ²USDA - ARS, Gainesville, FL, ³Dow AgroSciences, Indianapolis, IN, ⁴Louisiana State Univ. AgCenter, Baton Rouge, LA	10:20 AM	92	What does arbovirus surveillance in Aedes aegypti tell us. Roberto Barrera (amz9@cdc.gov), Centers for Disease Control and Prevention, San Juan, PR
			10:40 AM	93	Do self-limiting mosquitoes offer a viable defense against Zika-transmitting Aedes aegypti? Kevin Gorman (kevin.gorman@oxitec.com), Oxitec Ltd, Abingdon, United Kingdom
10:40 AM		Concluding Remarks	11:00 AM	94	Challenges facing <i>Aedes aegypti</i> surveillance
	the Americas: Transmission, sy and Vector Management			and evidence-based control in the Americas. Audrey Lenhart (ajl8@cdc.gov), CDC/CGH/ DPDM, Atlanta, GA	
Magnolia I (Sheraton Memphis Downtown)			11:20 AM		Concluding Remarks

Magnolia I (Sheraton Memphis Downtown)

Moderators and Organizers: Katherine Sayler and Emma N. I. Weeks, Univ. of Florida, Gainesville, FL

8:00 AM **Welcoming Remarks** 8:05 AM 86 Emerging viruses and introduction into the Americas.

> Yan-Jang Huang (yshuang1985@bri.ksu.edu), Stephen Higgs and Dana Vanlandingham, Kansas State Univ., Manhattan, KS

Ecological Pest Management

Magnolia II (Sheraton Memphis Downtown)

Moderators and Organizers: Lauren Diepenbrock¹ and Katie Swoboda², ¹North Carolina State Univ., Raleigh, NC, ²North Carolina State Univ., NC

8:30 AM		Introductory Remarks
8:35 AM	95	Integrated pest and pollinator management: Investigating impacts of pesticide programs on pest and pollinator communities. Neelendra Joshi (nkjoshi@uark.edu)², Timothy W. Leslie². Edwin Rajotte² and David

Biddinger³, ¹Univ. of Arkansas, Fayetteville, AR, ²Pennsylvania State Univ., Univ. Park, PA, ³Pennsylvania State Univ., Biglerville, PA

8:50 AM 96 IPM-CPR: Integrating pest management to protect the beneficials.

Brett Blaauw (brett.r.blaauw@gmail.com) and Anne Nielsen, Rutgers, The State Univ. of New Jersey, Bridgeton, NJ

9:05 AM 97 Intercropping to manage pests and disease incidence in organic squash production.

Janine Spies (jrazze@ufl.edu) and Oscar Liburd, Univ. of Florida, Gainesville, FL

9:20 AM 98 Flower power: Non-crop flowering plantings for conservation biocontrol in organic tobacco.

T. Aurora Toennisson (tatoenni@ncsu.edu)¹ and Hannah Burrack², ¹Univ. of Tennessee, Knoxville, TN, ²North Carolina State Univ., Raleigh, NC

9:35 AM 99 Free lunch can be a good thing: Insect carrion improves biological control.

Peter Nelson (pnnelson@ncsu.edu), Clyde Sorenson and Hannah Burrack, North Carolina State Univ., Raleigh, NC

9:50 AM 100 Role of arbuscular mycorrhizae fungi in rice pest management of Louisiana.

Lina Bernaola¹ and Michael Stout (mstout@ agcenter.lsu.edu)², ¹Louisiana State Univ., Baton Rouge, LA, ²Louisiana State Univ. AgCenter, Baton Rouge, LA

10:05 AM Break

10:20 AM 101 Ecological management tools for spotted wing

drosophila in berry crops.

Ashfaq Sial (ashsial@uga.edu), Univ. of Georgia, Athens, GA

10:35 AM 102 Employing molecular tools and ecology for management of mobile, polyphagous pests.

Lauren Diepenbrock (laurendiepenbrock@ gmail.com)¹, Jonathan Lundgren² and Hannah Burrack¹, ¹North Carolina State Univ., Raleigh, NC, ²Ecdysis Foundation, Estelline, SD

10:50 AM 103 Influence of geospatial parameters on

biocontrol communities and economically relevant trophic interactions.

Jason Schmidt (jschmid2@uga.edu)¹, Dawn Olson² and Alisa Coffin², ¹Univ. of Georgia, Tifton, GA, ²USDA - ARS, Tifton, GA

11:05 AM 104 Exploring the use of remote sensing for thrips sampling in cotton.

Francis Reay-Jones (freayjo@clemson.edu)¹, Jeremy Greene² and Phil Bauer³, ¹Clemson Univ., Florence, SC, ²Clemson Univ., Blackville, SC, ³USDA - ARS, Florence, SC

11:20 AM Concluding Remarks

TUESDAY, MARCH 14, 2017, LUNCHEON

ESA-SEB Awards Luncheon and Photo Salon

Heritage Ballroom (Sheraton Memphis Downtown)

Presiding: David Riley, SEB President

12:00 pm Luncheon and Photo Salon Invocation (Moment of Silence):

Frank Hale

Introduction of Head Table

and Special Guests:

David Riley

Member Awards: David Buntin

Student Awards:
Jason Oliver
Linnaean Games:
Mary Ferguson
Photo Salon Awards:
Whitney Crow

Recognition of SEB President:

Susan Weller

Friends of Southern IPM Awards:

Henry Fadamiro

1:30 pm Adjourn

3:55 PM

TUESDAY, MARCH 14, 2017, AFTERNOON

Emerging Vector-Borne Pathogens of Human and Animal Disease

Magnolia I (Sheraton Memphis Downtown)

Moderators and Organizers: Emma N. I. Weeks and Katherine Sayler, Univ. of Florida, Gainesville, FL

•		
1:45 PM		Welcoming Remarks
1:50 PM	105	Triatomines and Chagas disease risk at the wildlife-dog-human interface. Sarah Hamer (shamer@cvm.tamu.edu), Texas A&M Univ., College Station, TX
2:10 PM	106	Population genetics and blood meal analysis of <i>Triatoma sanguisuga</i> in southeastern Louisiana. Samuel Jameson (sbishp@tulane.edu) ^{1,2} , Claudia Herrera ¹ , Zeynep Ozsoy ³ and Dawn M. Wesson ⁴ , ¹ Tulane Univ., New Orleans, LA, ² Univ. of Mississippi Medical Center, Jackson, MS, ³ Colorado Mesa Univ., Grand Junction, CO, ⁴ Tulane Univ. School of Public Health & Tropical Medicine, New Orleans, LA
2:30 PM	107	Biological invasions and emergence of Everglades virus in Florida. Isaiah Hoyer (ihoyer@ufl.edu) and Nathan Burkett-Cadena, Univ. of Florida, Vero Beach, FL
2:50 PM	108	Rickettiosis in the southeast: emerging, discovering, incriminating, or other? Rebecca Trout Fryxell (RFryxell@utk.edu), Univ. of Tennessee, Knoxville, TN
3:10 PM		Break
3:25 PM	109	Amblyomma maculatum (Koch) as emergent contributors to medical and veterinary tickborne diseases. Andrea Varela-Stokes (stokes@cvm.msstate.edu), Mississippi State Univ., Mississippi State, MS
3:45 PM	110	Blacklegged tick abundance and questing behavior as key determinants of regional variation in Lyme disease risk in the eastern U.S Graham Hickling (ghicklin@utk.edu)¹ and Jean Tsao², ¹Univ. of Tennessee, Institute of Agriculture, Knoxville, TN, ²Michigan State Univ., East Lansing, MI
4:05 PM	111	Tacaribe virus in Lone star ticks: A story of an undiscovered virus/tick association. Katherine Sayler (saylerk@ufl.edu), Univ. of Florida, Gainesville, FL

4:25 PM 112 Tick-borne rickettsial and other emerging diseases; challenges and opportunities.

Roman Ganta (rganta@vet.k-state.edu), Kansas State Univ., Manhattan, KS

4:45 PM Concluding Remarks

Advances in Insect Pest Management in Specialty Crop Systems

Magnolia II (Sheraton Memphis Downtown)

Moderators and Organizers: Wendy G. Marchant¹ and Steven Reyna², ¹Univ. of Georgia, Tifton, GA, ²North Carolina State Univ., Raleigh, NC

1:50 PM		Welcoming Remarks
1:55 PM	113	Advances in Nursery Crop IPM. Frank Hale (fahale@utk.edu), Univ. of Tennessee, Nashville, TN
2:10 PM	114	Management methods of twospotted spider mite, <i>Tetranychus urticae</i> Koch in field-grown strawberry. Omotola Dosunmu (toladosunmu@gmail.com) and Oscar Liburd, Univ. of Florida, Gainesville, FL
2:25 PM	115	Selection pressure of resistant tomato cultivars on whitefly-transmitted <i>Tomato yellow leaf curl virus</i> . Wendy G. Marchant (wmar@uga.edu) and Rajagopalbabu Srinivasan, Univ. of Georgia, Tifton, GA
2:40 PM	116	Distribution of <i>Drosophila suzukii</i> in southern highbush blueberry and adjacent woodlands. Lindsy Iglesias (liglesias@ufl.edu) and Oscar Liburd, Univ. of Florida, Gainesville, FL
2:55 PM	117	Using basic ecology to inform infield <i>Drosophila suzukii</i> management. Hannah Burrack and Johanna Elsensohn (jeelsens@ncsu.edu), North Carolina State Univ., Raleigh, NC
3:10 PM		Break
3:25 PM	118	A new approach to combat pests and diseases to produce high quality peaches in the southeastern U.S Jaine Allran (jainea@clemson.edu), Guido Schnabel and Juan Melgar, Clemson Univ., Clemson, SC
3:40 PM	119	Insecticide residue deposition and efficacy towards the corn-infesting Ulidiidae (Diptera). David Owens (owensd119@ufl.edu), Nicholas Larsen and Gregg Nuessly, Univ. of Florida, Belle Glade, FL

Concluding Remarks

Contributed Papers II: Plant-Insect Ecosystems Natchez (Sheraton Memphis Downtown)

Moderators: Blake Wilson¹ and Daniel Fleming², ¹Louisiana State Univ. AgCenter, Baton Rouge, LA, ²Mississippi State Univ., Mississippi State, MS

2:05 PM **Welcoming Remarks** 2:10 PM 120 Spodoptera species as pests in Florida

> strawberries. Robert L. Meagher (rob.meagher@ars.usda.

gov)¹ and Justin Renkema². ¹USDA - ARS. Gainesville, FL, ²Univ. of Florida, Wimauma, FL

The West Indian canefly, Saccharosydne 2:22 PM 121 saccharivora (Hemiptera: Delphacidae): An emerging threat to Louisiana sugarcane? Blake Wilson (bwils26@lsu.edu)1, Julien Beuzelin², Thomas Reagan¹ and W.H. White³, ¹Louisiana State Univ. AaCenter. Baton Rouae. LA, 2Univ. of Florida, Belle Glade, FL, 3USDA -ARS, Houma, LA

2:34 PM 122 Demonstration of kudzu bug management practices to Arkansas stakeholders.

> Nicholas Seiter (nseiter@uaex.edu)1, Gus Lorenz² and Glenn Studebaker³, ¹Univ. of Arkansas, Monticello, AR, ²Univ. of Arkansas, Lonoke, AR, 3Univ. of Arkansas Cooperative Extension Service, Keiser, AR

2:46 PM 123 Managing sugarcane aphids in sorghum at harvest.

> Brett Stewart (bwstewart@uaex.edu)1 and Nicholas Seiter². ¹Univ. of Arkansas System Division of Agriculture, Monticello, AR, ²Univ. of Arkansas, Monticello, AR

2:58 PM 124 Bt corn performance in the mid-southern U.S..

> Don Cook (dcook@drec.msstate.edu)1, Larry Falconer², Angus Catchot³, Gus Lorenz⁴, Nicholas Seiter⁵, David Kerns⁶, Nathan Little⁷, Julien Beuzelin⁸, Scott Stewart⁹, Glenn Studebaker¹⁰ and Jeff Gore¹, ¹Mississippi State Univ., Stoneville, MS, 2MSU-DREC, Stoneville, MS, ³Mississippi State Univ., Mississippi State, MS, ⁴Univ. of Arkansas, Lonoke, AR, ⁵Univ. of Arkansas, Monticello, AR, ⁶Texas AgriLife Extension Service, College Station, TX, 7USDA - ARS, Stoneville, MS, 8Univ. of Florida, Belle Glade, FL, ⁹Univ. of Tennessee, Jackson, TN, ¹⁰Univ. of Arkansas Cooperative Extension Service, Keiser, AR

3:10 PM Break

3:25 PM Papaya ring spot virus modulates squash 125 biochemistry and vector fitness.

> Kiran Gadhave (krg@uga.edu), Bhabesh Dutta and Rajagopalbabu Srinivasan, Univ. of Georgia, Tifton, GA

3:37 PM 126 Efficacy of transgenic Bt corn events against lepidopteran pests: Preliminary results of a meta-analysis.

> Daniel Fleming (def18@msstate.edu)¹, Fred Musser¹ and Nathan Little², ¹Mississippi State Univ., Mississippi State, MS, ²USDA - ARS, Stoneville, MS

3:49 PM 127 Crapemyrtle bark scale (Acanthococcus lagerstroemiae): Current status in Arkansas.

John Hopkins (jhopkins@uaex.edu) and Jim Robbins, Univ. of Arkansas, Div. of Agriculture, Little Rock, AR

4:01 PM **Concluding Remarks**

WEDNESDAY, MARCH 15, 2017, MORNING

Contributed Papers III: Medical, Urban and Veterinary; Physiology, Biochemistry and Toxicology; Systematics, Evolution and Biodiversity

Natchez (Sheraton Memphis Downtown)

Moderators: Marianne Shockley¹ and Brad Elliott², ¹Univ. of Georgia, Athens, GA, ²USDA - ARS, Stoneville, MS

8:00 AM Welcoming Remarks

8:05 AM 128 The North American edible insect coalition: A trade organization for insects as food and feed.

Marianne Shockley (entomolo@uga.edu) and Shakara Maggitt, Univ. of Georgia, Athens, GA

8:17 AM 129 Application of outreach and education techniques to increase social acceptance of entomophagy at the university and community level.

Donald Sudbrink (sudbrinkd@apsu.edu) and Amy Wright, Austin Peay State Univ., Clarksville, TN

8:29 AM 130 Options for horn fly (*Haematobia* irritans) suppression on pastured beef cattle.

Nancy C. Hinkle (nhinkle@uga.edu)¹, Joel Burnsed², Trey Gafnea³, Greg Pittman⁴, Raymond Fitzpatrick⁵, Bob Waldorf⁶ and William Lovett², ¹Univ. of Georgia, Athens, GA, ²Univ. of Georgia, Monroe, GA, ³Univ. of Georgia, Monticello, GA, ⁴Univ. of Georgia, Jefferson, GA, ⁵Univ. of Georgia, Carnesville, GA, ⁶Univ. of Georgia, Homer, GA, ʾUniv. of Georgia, Alma, GA

8:41 AM 131 Factors associated with pesticide susceptibility in honey bees.

Yu Cheng Zhu (YC.Zhu@ARS.USDA.GOV)¹, Jianxiu Yao², John Adamczyk³ and Randall Luttrell², ¹USDA – ARS Jamie Whitten Delta States Research Center, Stoneville, MS, ²USDA - ARS, Stoneville, MS, ³USDA - ARS, Poplarville, MS

8:53 AM 132 Residual fate of neonicotinoid seed treatments and foliar applications in rice and implications for honeybees (Apis mellifera).

Nicki Taillon (ntaillon@uaex.edu)¹, Gus Lorenz¹, Jarrod T. Hardke², Jeff Gore³, Tara Clayton⁴ and Michael Stout⁵, ¹Univ. of Arkansas, Lonoke, AR, ²Univ. of Arkansas, Stuttgart, AR, ³Mississippi State Univ., Stoneville, MS, ⁴Univ. of Arkansas CES, Stuttgart, AR, ⁵Louisiana State Univ. AqCenter, Baton Rouge, LA 9:05 AM 133 Toxicity of ozone for internal feeders of stored wheat and effect of ozone on seed germination.

Rizana M. Mahroof (rmahroof@scsu.edu), South Carolina State Univ., Orangeburg, SC

9:17 AM 134 Development of a physiological age grading system for the southern green stink bug.

Brad Elliott (Brad.Elliott@ars.usda.gov),

Michael Grodowitz, M. Guadalupe Rojas and

Juan Morales-Ramos, USDA - ARS, Stoneville,

MS

9:29 AM 135 Morphometric analysis of *Dermacentor* parumapertus specimens from throughout its range.

Gail Moraru (gmm105@msstate.edu)¹, José Portugal III¹, Andrea Bednarova², Sarah McInnis¹, Gerald T. Baker¹, Travis Smith³, Tom Becker⁴ and Jerome Goddard¹, ¹Mississippi State Univ., Mississippi State, MS, ²Univ. of South Bohemia, České Budějovice, Czech Republic, ³Black Gap Wildlife Management Area, Alpine, TX, ⁴Utah Division of Wildlife Resources, Tooele, UT

9:41 AM 136 Female reproductive system morphology and the development of a physiological agegrading system for female *Bagrada hilaris* (Hemiptera: Pentatomidae).

Michael Grodowitz (michael.grodowitz@ars. usda.gov)¹, Darcy A. Reed² and Thomas M. Perring², ¹USDA - ARS, Stoneville, MS, ²Univ. of California, Riverside, CA

9:53 AM 137 Distribution of sensory sensilla throughout the foregut of *Chrysops exitans* (Diptera: Tabanidae).

James Joy (joy@marshall.edu) and Mohammed Ranavaya, Marshall Univ., Huntington, WV

10:05 AM Break

10:20 AM 138 Effects of dietary nanoparticles on Chrysodeixis

includens (Walker).

Xuan Chen (XuanChen@agcenter.Isu.edu), Carlos Astete, Cristina Sabliov and Jeffrey Davis, Louisiana State Univ. AqCenter, Baton Rouge, LA

10:32 AM Concluding Remarks

Vegetable Symposium

Heritage 3 & 4 Combined (Sheraton Memphis Downtown)

Moderators and Organizers: Michelle Samuel-Foo¹ and Hugh Smith², ¹Univ. of Florida, Gainesville, FL, ²Univ. of Florida, Wimauma, FL

8:00 AM Welcoming Remarks

8:05 AM 139 Suitability of the predatory mirid, *Dicyphus hesperus*, for control of *Bemisia tabaci* biotype B on greenhouse tomatoes.

Karla Medina-Ortega (karlamedina11@gmail. com)¹, Pritika Pandey² and Hugh A. Smith¹,

		¹ Univ. of Florida, Wimauma, FL, ² Univ. of Florida, Gainesville, FL	8:45 AM	149	Can an intercept trap strategy protect ornamental nursery stock from ambrosia
8:25 AM	140	Diamides as potential components of snap bean IPM. Rebecca Schmidt-Jeffris (schmidt-jeffris@ cornell.edu)¹ and Brian Nault², ¹Clemson Univ., Charleston, SC, ²Cornell Univ., NYSAES, Geneva,			beetle attacks? Christopher Werle (Chris.Werle@ars.usda. gov) ¹ , Michael Reding ² and Blair Sampson ³ , ¹ USDA, Poplarville, MS, ² USDA - ARS, Wooster, OH, ³ USDA - ARS, Poplarville, MS
8:45 AM	141	Management of season-long row covers for cucurbit production in Kentucky. Ric Bessin (rbessin@uky.edu) ¹ , Mark A.	9:05 AM	150	Updates on Mainspring GNL. Nancy Rechcigl (nancy.rechcigl@syngenta. com), Syngenta Professional Products, Bradenton, FL
		Williams¹ and Mark Gleason², ¹Univ. of Kentucky, Lexington, KY, ²Iowa State Univ., Ames, IA	9:25 AM	151	New chemical control tools for thrips IPM programs. Carlos Bogran (cbogran@ohp.com), OHP Inc.,
9:05 AM	142	Field performance of Bt sweet corn in south Georgia, 2016. Alton Sparks (asparks@uga.edu), Univ. of Georgia, Tifton, GA	9:45 AM	152	College Station, TX Influence of chlorantraniliprole and cyantraniliprole in weight gains by the fall armyworm.
9:25 AM	143	The impact of virus resistant cultivars on vector fitness and implications for epidemics in			Juang-Horng Chong (juanghc@clemson.edu), Clemson Univ., Clemson, SC
		a Begomovirus pathosystem.	10:05 AM		Break
		Rajagopalbabu Srinivasan (babusri@uga.edu)¹, Saioa Legarrea², Wendy G. Marchant¹, Stan Diffie¹ and David Riley¹, ¹Univ. of Georgia, Tifton, GA, ²Institute for Biodiversity and Ecosystem Dynamics, Amsterdam, Netherlands	10:20 AM	153	Damage potential of the invasive shoot fly, Athergona reversura (Diptera:Muscidae) in bermudagrass hay fields. William Hudson (wghudson@uga.edu)¹, William Anderson² and Zachary Moore³, ¹Univ.
9:45 AM	144	Diamondback moth insecticide resistance monitoring and management in Georgia.			of Georgia, Athens, GA, ² USDA - ARS, Tifton, GA ³ Univ. of Georgia, Tifton, GA
		David Riley (dgr@uga.edu), Philip Torrance and Jenna Brock, Univ. of Georgia, Tifton, GA	10:40 AM	154	Plant diversity as a warm season turf pest management strategy.
10:05 AM		Break			Adam Dale (agdale@ufl.edu), Univ. of Florida,
10:20 AM	146	Diel and spatial distribution pattern of melon and flower thrips and their transmitted Tomato Chlorotic Spot Virus in tomato. Dakshina Seal (dseal3@ufl.edu), Rafia Khan, Mohammad Razzak and Catherine Sabines,	11:00 AM	155	IFAS, Gainesville, FL Interagency first detector education and ornamental plants - A Florida perspective. Amanda Hodges (achodges@ufl.edu), Univ. of Florida, IFAS, Gainesville, FL
10:40 AM		Univ. of Florida, Homestead, FL Concluding Remarks	11:20 AM		Concluding Remarks
TO'-O WIAI		Concluding nemarks			

Turf and Ornamental Symposium

Nashville (Sheraton Memphis Downtown)

Moderators and Organizers: Catharine Mannion, Univ. of Florida, Homestead, FL

8:00 AM		Welcoming Remarks
8:05 AM	147	The battle with ficus whitefly. Catharine Mannion (cmannion@ufl.edu), Univ. of Florida, Homestead, FL
8:25 AM	148	Bemisia tabaci MED (Q biotype) is on the move in Florida to residential landscapes and threatens open field agriculture. Cindy McKenzie (Cindy.McKenzie@ARS.USDA. GOV) ¹ and Lance Osborne ² , ¹ USDA, Fort Pierce,

FL, ²Univ. of Florida, Apopka, FL

Biological Control of Arthropod and Weed Pests in the Southern United States

Memphis (Sheraton Memphis Downtown)

Moderators and Organizers: Jason Schmidt 1 and Rodrigo Diaz 2 , 1 Univ. of Georgia, Tifton, GA, 2 Louisiana State Univ., Baton Rouge, LA

8:00 AM		Introductory Remarks
8:05 AM	156	Functional response of the mealybug destroyer, <i>Cryptolaemus montrouzieri</i> , on plants of varying leaf and branch numbers. <i>Juang-Horng Chong¹ and Hechu Zhu (hechuz@clemson.edu)², ¹Clemson Univ., Florence, SC, ²Clemson Univ., Clemson, SC</i>

		Potential indirect effects of the biological control of weeds in aquatic systems.	Tackling IPM Busters - Invasive Species Panic			
		Carey Minteer (Carey.Minteer@ars.usda.gov) ¹ ,	Heritage 1 & 2 Combined (Sheraton Memphis Downtown)			
¹ <i>U</i>	Melissa Smith ² , Ellen Lake ³ and Philip Tipping ² , ¹ USDA, Fort Lauderdale, Florida, FL, ² USDA - ARS, Ft. Lauderdale, FL, ³ USDA - ARS, Fort	Moderators and Organizers: David Owens ¹ and Norman Leppla ² , ¹ USDA - ARS, Miami, FL, ² Univ. of Florida, Gainesville, FL				
8:45 AM	158	Lauderdale, FL Revisiting spider roles in biocontrol: what do recent molecular studies untangle?	8:00 AM	165	Introductory remarks. Norman Leppla (ncleppla@ufl.edu), Univ. of Florida, Gainesville, FL	
9:05 AM	159	Jason Schmidt (jschmid2@uga.edu), Univ. of Georgia, Tifton, GA Timing biological control of giant salvinia in southern Louisiana. Rodrigo Diaz (rdiaz@agcenter.lsu.edu), Louisiana State Univ., Baton Rouge, LA	8:15 AM	166	A collaborative effort to tackle the threat posed by the invasive brown marmorated stink bug: The StopBMSB project. Angel Acebes-Doria (aacebes@vt.edu), Virginia Polytechnic Institute and State Univ., Winchester, VA	
9:25 AM	160	The effect of Ephestia kuehniella larval diet	8:40 AM		Discussion	
		on acceptance of their eggs by <i>Trichogramma</i> brassicae. Yasaman Moghaddasi (ymoghaddassi@ut.ac. ir)¹, Norman Leppla², Paul Shirk³ and Alexander Gannon², ¹Univ. of Tehran, Karaj, Iran, ²Univ. of Florida, Gainesville, FL, ³USDA, Gainesville, FL	8:50 AM	167	Zero tolerance IPM: Developing spotted wing drosophila management strategies. Hannah Burrack and Lauren Diepenbrock (laurendiepenbrock@gmail.com), North Carolina State Univ., Raleigh, NC	
9:45 AM	161	Potential of ladybird beetles to suppress aphid	9:15 AM		Discussion	
3.43 AIVI	101	populations in strawberry high tunnels in Mississippi. Eric Riddick (eric.riddick@ars.usda.gov), USDA - ARS, Stoneville, MS	9:25 AM 1	168	Old world bollworm, Helicoverpa armigera - Preparedness and response for a potential threat to the southeastern U.S. Amanda Hodges (achodges@ufl.edu) ¹ , Daniel	
10:05 AM		Break			Borchert ² , Aaron Miller ³ and Evelia Sosa ⁴ , ¹ Univ. of Florida, IFAS, Gainesville, FL, ² USDA - APHIS,	
m Bo	Effect of resource availability on ovary maturation and egg production in <i>Larinus</i>			Raleigh, NC, ³USDA-APHIS-PPQ, Abilene, TX, ⁴USDA-APHIS-PPQ, Riverdale, MD		
	minutus. Beth Ferguson (mef005@email.uark.edu), Timothy Kring and Robert N. Wiedenmann,	9:50 AM		Discussion		
		10:00 AM		Break		
10:40 AM	163	Univ. of Arkansas, Fayetteville, AR Biological control of invasive forest pests in Tennessee. Gregory J. Wiggins (wiggybug@utk.edu), Jerome F. Grant, Pat Parkman and Paris L. Lambdin, Univ. of Tennessee, Knoxville, TN	10:10 AM	169	Eradication of the oriental fruit fly in Florida: A success due to strong collaboration and communication efforts. Greg Hodges (greg.hodges@freshfromflorida. com), Florida Dept. of Agriculture, Gainesville, FL	
11:00 AM	164	Biological control of Brazilian peppertree:	10:35 AM		Discussion	
(Overview. Patricia Prade (prade@ufl.edu)¹, James Cuda², Carey Minteer¹, Rodrigo Diaz³, Veronica Manrique⁴ and William A. Overholt¹, ¹Univ.	10:45 AM	170	Challenges and opportunities in the management of thrips and tospoviruses. Joe Funderburk (jef@ufl.edu), Univ. of Florida, Quincy, FL		
		of Florida, Ft. Pierce, FL, ² Univ. of Florida, Gainesville, FL, ³ Louisiana State Univ., Baton	11:10 AM		Discussion	
Rouge, LA, ⁴ Univ. of Florida, Fo 11:20 AM Concluding Remarks		Rouge, LA, ⁴ Univ. of Florida, Fort Pierce, FL Concluding Remarks	11:20 AM	171	Invasive insect pest management in sugarcane: Proactive and reactive approaches. Julien Beuzelin (jbeuzelin@ufl.edu)¹, Blake Wilson² and Matthew VanWeelden¹, ¹Univ. of Florida, Belle Glade, FL, ²Louisiana State Univ. AgCenter, Baton Rouge, LA	
			11:45 AM		Discussion	
			11:55 AM		Concluding Remarks	

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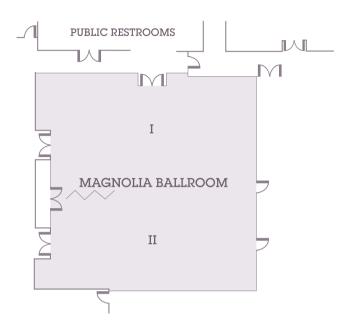
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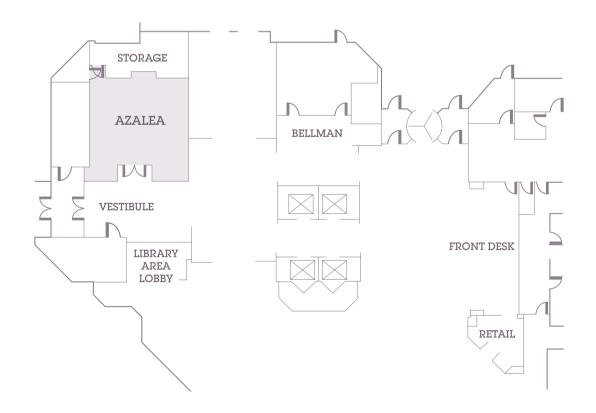
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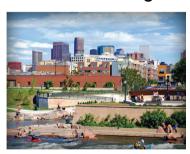
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