87th Annual Meeting of the Southeastern Branch

Entomological Society of America

3-5 March 2013
Baton Rouge, Louisiana

G. David Buntin
President, 2012-2013

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ESA SECTIONS

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

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

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

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

PROGRAM SUMMARY
SATURDAY, 2 MARCH

8:00 AM-5:00 **S-1055 Soybean Multi-State Meeting**
Governor Room

3:00 PM-5:00 **Final Local Arrangements/Program Committee Meeting**
Hunt Room (Mezzanine Floor)

PROGRAM SUMMARY
SUNDAY, 3 MARCH

8:00 AM-5:00 **S-1055 Soybean Multi-State Meeting**
Governor Room

8:00 AM-5:00 **SERA 003 Information Exchange for Southern Region IPM**
King Room

9:00 AM-1:00 **Executive Committee Meeting**
Paramount Room

11:00 AM-1:00 **Student Affairs Committee Meeting**
Academy Room

1:00 PM-5:00 **Registration**
The Gallery

2:00 PM-5:00 **SDC-351 Multi-State Biocontrol Meeting**
Academy Room

3:00 PM-7:00 **Audiovisual and Job Placement**
University Room

5:00 PM-7:00 **Linnaean Games, Preliminary Rounds**
Riverview B

5:00 PM-7:00 **Southern Corn Insect Working Group**
Academy Room

5:00 PM-10:00 **Student Poster Competition Set Up**
Heidelberg Ballroom-10th floor

PROGRAM SUMMARY
MONDAY, 4 MARCH

7:00 AM-5:00	**Audiovisual and Job Placement** University Room
7:00 AM-5:00	**Registration** The Gallery
7:00 AM-8:00	**Student Poster Competition Set Up** Heidelberg Ballroom-10th floor
7:00 AM-8:00	**Breakfast** Foyer
8:00 AM-4:00	**Student Poster Competition Judging** Heidelberg Ballroom-10th floor
8:00 AM-5:00	**Student Poster Exhibits** Heidelberg Ballroom-10th floor
8:00 AM-10:15	**Opening and Plenary Session** Riverview B
10:15 AM-10:30	**Break**
10:30 AM-11:54	**B.S. & M.S. Student Oral Presentations I** Louisiana Room
10:30 AM-11:54	**M.S. Student Oral Presentations II** Governor Room
10:30 AM-11:54	**Ph.D Student Oral Presentations I** Riverview B
10:30 AM-11:54	**Ph.D. Student Oral Presentations II** Capitol Room
12:00 PM-1:40	**Lunch**-on your own
12:00 PM-1:40	**ESA Certification Board Luncheon** Hilton Kingfish Restaurant (Dutch treat)
1:40 PM-2:40	**Poster Presenters at Display Presentation** Heidelberg Ballroom-10th floor
1:40 PM-2:52	**M.S. Student Oral Presentation III** Louisiana Room
1:40 PM-3:51	**Ph.D. Student Oral Presentation III** Riverview B
1:40 PM-5:15	**Invasive Species and Biosecurity Symposium: Opportunities and Challenges** Governor Room
1:40 PM-4:51	**Contributed Papers I** Capitol Room

PROGRAM SUMMARY
MONDAY, 4 MARCH (Cont.)

3:15 PM-4:45 **Vegetable Entomology Symposium**
Louisiana Room

5:00 PM-7:00 **Student Poster Competition Removal**

5:30 PM-7:00 **Linnaean Games, Final Round**
Riverview B

7:00 PM-10:00 **General Poster Set Up**
Heidelberg Ballroom-10th floor.

7:00 PM-9:30 **Mixer (Crawfish Boil)**
Pool Deck-3rd floor

PROGRAM SUMMARY
TUESDAY, 5 MARCH

7:00 AM-3:30 **Audiovisual and Job Placement**
University Room

7:00 AM-12:00 **Registration**
The Gallery

7:00 AM-8:00 **Past Presidents Breakfast**
Hilton Kingfish Restaurant
(Dutch treat)

7:00 AM-8:00 **Breakfast-**on your own

7:00 AM-8:00 **General Poster Set Up**
Heidelberg Ballroom-10th floor

8:00 AM-5:00 **General Poster Presentations**
Heidelberg Ballroom-10th floor

8:00 AM-11:45 **Student Symposium-Invasive Species and Novel Methods of Identification, Monitoring and Control**
Capitol Room

8:30 AM-11:54 **Contributed Papers II**
Governor Room

8:30 AM - 11:50 **Multi-Disciplinary Graduate Program Symposium: Doctor of Plant Medicine and Master of Plant Protection and Pest Management Degrees**
Louisiana Room

8:30 AM-11:10 **Urban Entomology Symposium: Trade Globalization is Not New-500 Years of Introducing Urban Pests In North America**
Riverview B

PROGRAM SUMMARY
TUESDAY, 5 MARCH (Cont.)

12:00 PM-1:30	**Awards Luncheon** Riverview A
1:40 PM-2:40	**Contributed Papers III** Capitol
1:40 PM-2:40	**Contributed Papers IV** Governor
1:40 PM-2:40	**Contributed Papers V** Louisiana
2:30 PM-3:30	**Poster Presenters at Display Presentation** Heidelberg Ballroom-10th floor
2:40 PM-3:30	**Break**
3:30 PM-5:00	**Final Business Meeting** Riverview B
3:30PM-6:00	**Submitted Poster Removal**
5:00 PM-5:30	**Shuttle transport to mixer at LaHouse** Shuttle loads in front of Hilton
5:30 PM	**Mixer at LaHouse / LSU Baseball game** Shuttle transport back to Hilton will be provided following the mixer and following the baseball game

MEETING NOTICES AND POLICIES

REGISTRATION: Everyone attending the SEB-ESA meeting is expected to register. On-site registration fees include a luncheon ticket, and are: Active Members-$190; Student Members-$90; Guests-$65; and Non-members-$215. One-day registration-$190. Honorary Members, Emeritus Members, and Non-members giving invitational papers must register, but will not pay registration fees (but must pay for Awards Luncheon ticket- $50). Registration Desk is located in The Gallery, and will be open on Sunday (1:00 PM-5:00 PM), Monday (7:00 AM-5:00 PM) and Tuesday (7:00 AM-12:00 PM).

GUEST & SPOUSE ACTIVITIES / FUNCTIONS:

We will have several activities that should be of interest to guests and spouses, some of which are included in the guest registration fee.

Sunday: Tour of the Audubon Insectarium in New Orleans (free to registered members and guests; limit 30 attendees)

Monday morning: Viking Cooking Class at the Baton Rouge Hilton (additional fee required; contact Hilton for details)

Monday evening: Crawfish boil and Cajun dancing (free; 7-9:30 PM), Hilton Pool Deck, 3rd floor.

Tuesday: 12:00-1:30 pm Awards Luncheon, Riverview A.

Tuesday evening: 5:30 PM Mixer at the LSU AgCenter "LA House" (free).

LSU Baseball game (ticket to game not included).

By registering as a guest at the meeting, you will be eligible for all of the above.

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

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

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

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

JOB PLACEMENT CENTER: The Student Affairs Committee will sponsor a job placement center (in the University Room) for all interested employers and prospective employees from 7:00 AM to 5:00 PM on Monday and from 7:00 AM to 3:30 PM on Tuesday. If you have either a job vacancy or are seeking employment, please bring an announcement or résumé to the University 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.

SOUTHEASTERN BRANCH-ESA
2012-2013
OFFICERS AND COMMITTEES

Executive Committee
David Buntin, *President*
David Hall, *President-Elect*
Norm Leppla, *Past President*
Juang-Horng 'JC' Chong (2015), *Secretary-Treasurer*
Nancy Hinkle (2013), *Gov. Board Representative*
Eileen Buss (2013), *Member-at-Large*
Melissa Seibert (2014), *Member-at-Large*
Natalie Hummel (2015), *Member-at-Large*

Program Committee
Ted Cottrell, GA, *Co-Chair*
Greg Hodges, FL, *Co-Chair*
David Held, AL
Catharine Mannion, FL
John Ruberson, GA, *Ex Officio*

Membership Committee
John Hopkins, AR (2013), *Chair*
Paul Guillebeau, GA (2013)
Amit Sethi, LA (2013)
Eric Benson, SC (2013)
Henry Fadamiro, AL (2013)
Moses T.K. Kario, FL (2014)
Fred Musser, MS (2014)
Jack S. Bacheler, NC (2014)
Alex Segarra, PR (2014)
Sarah Page Lawson, TN (2014)

Member Award Committee
Greg Wiggins, TN (2013), *Chair*
Nannan Liu, AL (2013)
Mary Cornelius, LA (2014)
David Jenkins, PR (2014)
Marianne Shockley Cruz, GA (2015)
Francis Reay-Jones, SC (2015)
Kathy Kidd, NC, *Ex Officio*

Student Awards Committee
Gregg Nuessly, FL, (2013), *Chair*
Melissa Siebert, MS (2013)
Glen Studebaker, AR (2013)
Juan Jurat-Fuentes, TN (2013)
Xing Ping Hu, AL (2013)
Mark Abney, NC (2013)
Karen Nix, LA (2013)
Babu Srinivasan, GA (2014)
Paula Mitchell, SC (2014)

Student Affairs Committee
Matt VanWeelden, LA (2013), *Chair*
Diane Silcox, NC (2013
Loren Goltz, MS (2013)
Katheryne Nix, TN (2013)
William Reid, AL (2013)
Erika Machtinger, FL (2013)
Eutychus Kariuki, FL, (2013)
Margie Lehnert, SC (2013)
Stephanie Weldon, GA (2013)
Vacancy for AR and PR

Nominating Committee
Wayne Gardner, GA, Chair
Seth Johnson, LA-University
Gary Mullen, AL-University
Randy Luttrell, MS-USDA
Greg Hodges, FL-State
Joe Eger, FL-Industry
Walt Mullins, NC-Industry

Education Committee
James Ottea, LA (2013)
Oscar Liburd, FL (2013)
Marianne Shockley Cruz, GA (2015)
Aaron Dossey, FL (2015)

Resolutions Committee
Nancy Epsky, FL, *Chair*
Kris Braman, GA

Archives Committee
Vacant

Public Relations Committee
L. Fudd Graham, AL, *Chair*
Two vacancies

ESA Central Finance Committee
Faith Oi, (Nov. 2014), *Representative*

Audit Committee
Catharine Mannion, FL
Raymond Hix, FL
JC Chong, Secretary/Treasurer

Local Arrangements Committee
Greenville, SC Meeting (2014)
Alvin Simmons, SC, Chair
Jeremy Greene, SC
Rizana Mahroof, SC
Paula Mitchell, SC
Francis Reay-Jones, SC

Meeting Location/Time: Mississippi (2015)
Fred Musser, MS
Don Cook, MS
Jeff Gore, MS

International Congress of Entomology Meeting 2016 Organizing Committee
Alvin Simmons, SC, *Co-Chair and SEB Liaison*

Board Certification Committee
Dennis Ring, LA, Chair

***Ad hoc* Officer and Committee Guidelines**
Norm Leppla, FL, Chair
David Hall, FL

***Ad hoc* Linnaean Games Enhancement Committee**
Mike Williams, AL, *Chair*
Jerome Grant, TN
Raymond Hix, FL

Insect Photo Salon Committee
Diane Silcox, NC, *Chair*

***Ad hoc* Job Placement Committee**
Student Affairs Committee

SEB AWARDS-2013
ESA DISTINGUISHED ACHIEVEMENT AWARD IN EXTENSION

DR. ANGUS CATCHOT of the Department of Biochemistry, Molecular Biology, Entomology and Plant Pathology, Mississippi State University, has been selected for the 2012 Distinguished Achievement Award in Extension. Dr. Catchot received a B.S. in Agricultural Pest Management, M.S. in Entomology, and PhD in Entomology from Mississippi State University. After completion of graduate school, Dr. Catchot was employed as a technical development representative for Monsanto Company for six years where he worked to introduce BollGard II cotton and YieldGard Corn prior to joining the faculty at Mississippi State in 2004 as an Extension Entomologist. His responsibilities include: cotton, corn, soybean, wheat, grain sorghum, and recently stored grain. Over the last nine years Dr. Catchot has been heavily involved in demonstrating and implementing IPM strategies in production agriculture. Dr. Catchot has also been very involved with trying to find faster and more efficient ways to deliver information to producers and is part of a team that was one of the first in the country to transition from traditional newsletters to a "blog", mississippi-crops.com, which received the SRIPMC Friends of IPM Team Award in 2011. Dr. Catchot has published 16 refereed papers, 30 extension publications, 37 abstracts, over 250 newsletters, 326 popular press articles, 31 posters, 62 in-service trainings, presented at over 150 producer meeting, given over 175 invited talks, generated nearly $3,000,000.00 in funding, and has conducted over 350 research and demonstration trials in agronomic crops. Catchot is also part of the Mid-South Entomology Working Group, a team of entomologists across the mid-southern region that meets numerous times per year and plans coordinated research projects with research and extension entomologists to solve regional pest problems that producers are facing. The MSEWG also received the SRIPMC Friends of IPM Team Award for their research efforts in 2010. In 2007 Catchot received the Wesley Farmer Outstanding Extension Specialist Award, from the Mississippi Association of County Agricultural Agents and then again 2010. In recent years Dr. Catchot has become committed to help instruct students in applied entomology and has served/serving as major advisor for 13 graduate students who have won over 40 awards and scholarships. Catchot hopes to continue to provide information to improve profitability for producers through better integrated pest management decisions and timely information delivery.

SEB AWARDS-2013

ESA DISTINGUISHED ACHIEVEMENT AWARD IN HORTICULTURAL ENTOMOLOGY

DR. OSCAR LIBURD, Professor of Entomology and Nematology Department at the University of Florida, is the 2013 recipient of the Southeastern Branch ESA Distinguished Achievement Award in Horticultural Entomology. He received his BS and MS in Entomology in 1991 and 1993 respectively from Florida A&M University and his Ph.D. in Entomology from the University of Rhode Island in 1997. Dr. Liburd did his Post-Doctoral work at Michigan State University and then served on the faculty for approximately 2 years. He has spent the last 12 years at the University of Florida where he does research, teaching and extension in the area of small fruits and vegetable pest management. He is recognized nationally and internationally as a leader for his expertise in ecological management of insect pests of blueberries, strawberries and grapes including midges, mites, thrips, grape root borer, whiteflies, aphids and fruit flies. Dr. Liburd has authored or co-authored more than 144 papers including 5 book chapters, 70 refereed journal articles and 69 extension publications. He has been the major Professor for 30 graduate students including 6 Ph.D., 4 D.P.M. and 20 MS students. Dr. Liburd has also served on 23 graduate students' committees, and has advised and co-advised international graduate students from Wageningen University (The Netherlands) and University of Agriculture, Faisalabad, Pakistan. His former graduate students are now employed in academia, industry and government. Dr. Liburd has received approximately 3.7 million dollars in grant support either as principal investigator or as co-principal investigator to fund his research and extension activities. He is a member of the Educational committee, SEB, ESA and the Associate Editor for the Florida Entomologist and the International Journal of Fruit Science. Dr. Liburd's administrative and leadership experiences include Panel Manager for USDA-NIFA Pest Management Alternative program during 2010 and 2011 and former Vice President and past- President of the Florida Entomological Society. He has received numerous awards for his work including Excellence in Integrated Pest Management (IPM) from SEB, ESA in 2008, Entomologist of the Year in 2008 and the Achievement Award for Research in 2007 by the Florida Entomological Society.

SEB AWARDS-2013

DISTINGUISHED ACHIEVEMENT AWARD IN TEACHING

DR. DAROLD P. BATZER, Professor of Entomology at the University of Georgia (UGA), is the 2013 recipient of the Southeastern Branch, ESA Distinguished Achievement in Teaching award. He received his BS in Entomology in 1979 from the University of Minnesota, his MS in Entomology in 1984 from the same institution, and his Ph.D. in Entomology in 1991 from the University of California, Berkeley. After a post-doctoral position at Cornell University and an Assistant Professor in Biology position at Canisius College, Buffalo, he moved to the Department of Entomology at UGA in 1996 as Assistant Professor. Over the past 16 years, he has taught or co-taught undergraduate courses in medical entomology and insect natural history, and graduate courses in aquatic entomology, insect ecology, and wetland ecology. He has served as major advisor to 20 UGA graduate students. The medical entomology course routinely attracts 130-160 students, every semester, making it among the largest courses of its kind. Because of his research interest in the community ecology of insects in wetlands, he has been especially active in teaching wetland ecology. In 2006, he published a co-edited text book, titled *Ecology of Freshwater and Estuarine Wetlands* (University of California Press), and a second edition is currently being prepared. In 2012, he also published a co-edited reference text, *Wetlands Habitats of North America: Ecology and Conservation Concerns* (UC Press), designed to complement his wetland ecology text book, and also provide information to the general public. Earlier, he published two other co-edited texts specifically focusing on wetland invertebrates: *Invertebrates in Freshwater Wetlands of North America: Ecology and Management* (1999) and *Bioassessment and Management of North American Freshwater Wetlands* (2001), both by John Wiley and Sons, New York. His 1996 *Annual Review of Entomology* article, Ecology of insect communities in non-tidal wetlands, is among the most cited papers on the topic, and widely used by students. From 2006 through 2012, he served as Editor-in-Chief of *Wetlands*, the world's pre-eminent journal for freshwater wetland research. He remains active in research, publishing over 60 journal articles and book chapters.

SEB AWARDS-2013

ESA RECOGNITION AWARD IN INSECT PHYSIOLOGY, BIOCHEMISTRY, AND TOXICOLOGY

DR. PETER E. A. TEAL, Research Physiologist and Research Leader of the Chemistry Research Unit at the Center for Medical, Agricultural and Veterinary Entomology, Agricultural Research Service, USDA, Gainesville, FL, has been conducting research on chemical ecology and insect physiology more than 30 years. He obtained his B.Sc, Honors and MSc. at the University of Ottawa and conducted his research on sex pheromones in reproductive isolation of moth species at Agriculture Canada. He conducted his PhD. research at the Chemistry Research Unit, Insect Attractants, Behavior and Basic Biology Research Laboratory, USDA under the direction of Jim Tumlinson and graduated from the Department of Entomology and Nematology, University of Florida in 1981. After a 1-year post Doctoral appointment with the Chemistry Research Unit he served as Associate Professor of Insect Physiology in the Department of Environmental Biology at the University of Guelph in Ontario Canada. He returned to the Chemistry Research Unit in 1996. He served as acting Center Director for a 2 year period (2003-2004) and was appointed Research Leader of the Chemistry Research Unit in 2004.

His research is involved in development of semiochemicals for control of agricultural pests including pests of honeybees, tephritid fruit flies, and most recently nematodes. He also conducts research on the endogenous regulation of communication in insects. During his career he has authored more than 200 scientific papers, holds 15 US and International patents and has received numerous awards for his research including the Award of Excellence for Graduate Research (PhD.) (Institute of Food and Agricultural Sciences, University of Florida), Member of Chemistry Group that received USDA Superior Service Award ("For outstanding public service in the isolation, identification and synthesis of pheromones of a number of major pest insects, providing science and industry with chemicals for insect research and control"), USDA National Outstanding Early Career Scientist Award, ("For highly innovative basic research that has significantly advanced our knowledge of the chemistry, biochemistry and physiology of insect pheromones"), Arthur S. Flemming Award for Science ("For pioneering work and many

significant studies that continue to have an important impact on pest insect control, entomology, physiology and natural product chemistry and pioneering research on methods to improve the reproductive potential of sterile male fruit flies, which are used to control outbreaks of serious pest species"), Researcher of the Year Award from the Florida Beekeeping Association, Certificate of Appreciation, International Center for Insect Ecology and Physiology, Nairobi, Kenya ("For Training Students from Across Africa in Techniques of Insect Chemical Ecology"), and inducted in 2012 as Professor in the Department of Entomology, Pennsylvania State University.

He currently has collaborative research projects with the IAEA/FAO, MoscaFruit, Mexico, INTA Argentina, and International Center for Insect Physiology and Ecology (ICIPE), Kenya on pheromones of Tephritid Fruit flies; with ICIPE on honeybee pests, potentially invasive pests, development of control programs for plant parasitic nematodes, physiology of gregarious behavior of Locusts and on identification of attractants for vectors of malaria and west Nile virus. He also collaborates with EMBRAPA Brazil on effects of climate change on plant defense against nematode attack.

SEB AWARDS-2013
ESA AWARD FOR EXCELLENCE IN INTEGRATED PEST MANAGEMENT

DR. FANGNENG HUANG, Associate Professor of Entomology, Louisiana State University Agricultural Center, is the 2013 recipient of the Award for Excellence in Integrated Pest Management. He received his BS in Plant Protection in 1983 and MS in Entomology in 1986 at Southwest Agricultural University, China, and his PhD in Entomology at Kansas State University in 1998. Dr. Huang's research efforts have focused on IPM of a wide range of crops including citrus, rice, corn, small grains, stored-products, and urban environments. He has directed >40 research projects and acquired >$1,700,000 in external support for his research programs. He has published >150 peer reviewed and other papers, 6 book chapters, and one book, and delivered >170 formal oral presentations and poster displays at local, regional, national, and international meetings. Most of these papers were published in top national/international journals. He selected the first Bt resistance strain of European corn borer and identified the first major resistance allele to commercial Bt corn in sugarcane borer. He developed an effective program that can detect early changes in Bt resistance frequency in field populations for several species targeted by Bt corn. His laboratory at LSU AgCenter is one of the most active research laboratories in the US in evaluation of Bt crop technologies and resistance management. Because of his outstanding research work, he was selected for the 2011 G & H Seed Company Research Excellence Award. This award is given to "the scientist who during the past five years has made the most significant contributions to the research programs of the Louisiana Agricultural Experiment Station". Dr. Huang teaches IPM and has advised >100 undergraduate and 6 graduate students. He is also active in professional services. He has attended and presented research data every year at the annual meetings of ESA since 1994 and ESA-SEB since 2005. He is the Louisiana representative for the USDA NC-205 committee, served as a chair/member on many committees at LSU AgCenter, as a student paper judge at ESA and ESA-SEB meetings for many times, and a regular reviewer for numerous scientific journals. He currently serves as an editor or subject editor for four scientific journals.

SEB AWARDS-2013
ESA RECOGNITION AWARD IN URBAN ENTOMOLOGY

DR. JULES SILVERMAN, the Charles G. Wright Distinguished Professor of Structural Pest Management at North Carolina State University, has been selected to receive the 2013 Recognition Award in Urban Entomology. He received his Ph.D. in Entomology from the University of California at Riverside in 1981, specializing in the biology and management of insect pests of urban importance with a focus on the cat flea, *Ctenocephalides felis*. Dr. Silverman was an R & D Scientist at American Cyanamid Co. and the Clorox Company from 1981-1999. As an industry scientist, Dr. Silverman made key contributions, including bioassay design, to the development of the first effective consumer and professional bait products for cockroach and ant control (COMBAT® and MAXFORCE®). He is co-discoverer of the first example of behavioral resistance in the German cockroach, glucose-aversion.

Dr. Silverman joined the faculty at North Carolina State University in 1999. His research has focused on the behavior, ecology and management of invasive ants, particularly the Argentine ant and Asian needle ant. His notable accomplishments (with graduate students, postdoctoral associates and colleagues) include; discovering the role of prey-based cues in modifying Argentine ant nestmate recognition, determining the importance of hemipteran honeydew for Argentine ant colony founding success and identifying trap mulching as an Argentine ant management strategy. Currently, he is the subject editor for the household and structural insects section of the Journal of Economic Entomology. He has authored/co-authored over 70 publications (including an invited review), been granted five patents, given numerous invited presentations and received several awards.

SEB AWARDS-2013
JOHN HENRY COMSTOCK AWARD
Outstanding Ph.D. Student

DUSTIN A. SWANSON was raised in Illinois. He developed an interest in biology from watching the various animals around and on his family farm and decided early in high school that biology was his career path. He attended Illinois College, majoring in Biology and Chemistry. He did not become interested in entomology until his senior year when he took the first entomology course offered at Illinois College and fell in love with the diversity of insects. He went on to study entomology at Clemson University with Dr. Peter Adler, initially working with biting flies. He earned his M.S. in entomology from Clemson and elected to stay in Clemson for his PhD working in Dr. Adler's lab. While working with biting flies, he became familiar with ceratopogonids. The challenge of ceratopogonid taxonomy and the relatively open niche in the group lead to Dustin's focus on this family. His dissertation work was on the ecology and phylogenetics of the biting-midge genus *Culicoides* (Diptera: Ceratopogonidae). He successfully defended his dissertation in July, graduated from Clemson in August, and currently resides in northern Kentucky with his wife and son. This fall he started a position as an assistant professor of biology at Thomas More College.

SEB AWARDS-2012
KIRBY L. HAYS AWARD
Outstanding M.S. Student

KEVIN LANGDON is the recipient of the 2013 Kirby L. Hays Outstanding M.S. Student Award. Kevin was raised in Knightdale, North Carolina located in the once rural outskirts of eastern Wake County where his lifelong enthusiasm for agriculture began through his work on a local tobacco farm and at his family swine farm in Benson, NC. Kevin attended North Carolina State University where he earned a B.S. degree in Agricultural and Environmental Technology with a minor in Soil Science in 2010. Kevin worked in the lab of Dr. George Kennedy from 2006-2008 as a research assistant studying the spatiotemporal patterns of tomato spotted wilt virus and the biology and ecology of vector thrips species in commercial tomatoes and peppers in North Carolina. In the summer of 2009, Kevin accepted an internship position with Syngenta Crop Protection working in the Insect Control Lab at the Vero Beach Research Center. In the Fall of 2009, Kevin joined the lab of Dr. Mark R. Abney as a research assistant studying the invasive white grub, *Plectris aliena*, in sweetpotato. With his newfound interest in soil inhabiting insects, Kevin was accepted into the graduate program of the Department of Entomology at North Carolina State University in 2010 where he began his Masters research studying wireworms under the direction of Dr. Mark R. Abney. The overarching goal of his research was to develop management strategies for wireworm in potato based on implementation of reduced risk practices in North Carolina potato production systems. Kevin has published 5 Arthropod Management Test reports, has 1 accepted peer-reviewed article, received an Honorable Mention for the NSF Graduate Research Fellowship, was the recipient of the 2012 Outstanding M.S. Poster Presentation Award, and was awarded the ESA President's Prize for his poster presentation at the 2012 national ESA meeting.

SEB STUDENT AWARDS: 2012

ROBERT T. GAST AWARDS
OUTSTANDING PH.D. ORAL PRESENTATIONS

Session I

TING LI is a Ph. D. student under the direction of Dr. Nannan Liu in Dept. of Entomology and Plant Pathology, Auburn Univ. Ting combined traditional toxicological methods with advanced molecular techniques in investigating resistance mechanisms in mosquito vectors. She has, for the first time, identified that the rhodopsin-like G protein-coupled receptor was the molecular basis for the regulation of insecticide resistance through modulating the expression of cytochrome P450 genes involved in detoxification of insecticides. Her research has gained the recognition by receiving "1st place" for the President's Prize in the Student Competition during the 2011 ESA annual meeting.

Session II

Carey Minter received a B.S. in biology (Univ. of Central Arkansas) and a M.S. in biology (Univ. of Arkansas). Her M.S. research with Dr. Johnnie L. Gentry investigated effects of spotted knapweed on native plants of the southeastern U.S. Carey completed a Ph.D. in entomology at the Univ. of Arkansas (with a minor in Geographic Information Systems) under Dr. Timothy J. Kring focusing on biocontrol of spotted knapweed in the southeastern U.S. using *Larinus minutus* and multispectral remote sensing to detect infestations. She has presented at > 15 professional meetings and is active with community outreach. She received the Dwight Isely Outstanding Ph.D. Student Award for the Univ. of Arkansas Dept. of Entomology in 2011, the President's Prize for the ESA in 2011, and the C. C. Burkhardt Memorial Graduate Student Award for Best Paper for the Rocky Mountain Conference of Entomologists in 2011 and 2012.

SEB STUDENT AWARDS: 2012
OUTSTANDING M.S. ORAL PRESENTATIONS

Session II

J. ERIC HOWARD was employed for 7 years with the University of Arkansas, 2 as a county agent and 5 as an entomology research technician. While in the county agent position, Eric began his coursework and conducted his research when he switched to the research technician role. In December 2012, Eric received his M.S. from the University of Arkansas, and subsequently began a career with Dulaney Seed Incorporated as an AgVenture Yield Specialist.

Session III

ERIKA MACHTINGER, a Univ. of Florida grad student, was born and raised in Blue Hill, ME where the natural areas of the coast fostered her love of the environment and wildlife. Erika graduated with a B.S. in Wildlife Conservation and Ecology from the Univ. of Delaware. During this time, she worked with the Asian longhorned beetle at the USDA-BIIRL lab, Newark, DE. Erika then worked as a Wildlife Biologist for the Wildlife Habitat Council in Silver Springs, MD and as an Environmental Consultant for LPG Environmental & Permitting Services, Inc. in Jacksonville, FL. Her goal was to return to graduate school and do biocontrol research to reduce chemicals in the environment. With Drs. Norm Leppla and Chris Geden, as co-advisors, she began her PhD in 2012. With her equestrian background, she continues pioneering work from her thesis to improve release strategies of pupal parasitoids of filth flies on equine farms.

SEB STUDENT AWARDS: 2012
OUTSTANDING M.S. ORAL PRESENTATIONS (cont.)

Session IV

SANDY STECKEL is a native of Richview, IL where she grew up on a small livestock and grain farm. She interrupted her collegiate career and worked on the family farm for 17 years and also farmed some land on her own for 12 of those years before returning to school. She received a B.S. in Agronomy from the Univ. of Illinois in 2002. She has been a research technician in the Dept. of Entomology and Plant Pathology at the Univ. of Tennessee for the past 7 years. She is currently pursuing her M.S. degree at UT under the direction of Dr. Scott Stewart. Her research focuses on intra- and inter-ear compensation for insect injury in field corn.

SEB STUDENT AWARDS: 2012
OUTSTANDING UNDERGRADUATE ORAL PRESENTATION

KYLE HURLEY is from Little Rock, Arkansas. He obtained a B.S. in Biology from the Univ. of Central Arkansas in 2011, where he worked in an insect behavior lab under the guidance of Dr. David Dussourd. He studied sexual cannibalism in mantids, attempting to compare fertilization success of intact males and cannibalized males that had their heads consumed by the female. He is now working on a M.S. at the Univ. of Central Arkansas, under Dr. Dussourd, focusing on understanding caterpillar feeding adaptations to geranium chemical defenses and documenting what plant chemicals trigger adaptive behaviors in the caterpillars.

SEB AWARDS-2012
OUTSTANDING PH.D. DISPLAYS

Session I

THOMAS MCELRATH, was born and raised in Phoenix, AZ. He received his BA in Biology from Covenant College in 2010, and began work on his PhD at the University of Georgia the following fall, studying under Dr. Joseph McHugh. His research involves systematics of the superfamily Cucujoidea (Coleoptera), especially the family Monotomidae. He is a member of the UGA Linnaean Team, 2012 National Champions. Currently, Tommy is working on phylogenetics of the "Basal Cucujoidea," a revision of *Bactridium* LeConte, and an on-line interactive key to the New World genera of Monotomidae.

Session II

ISHAKH PULAKKATU THODI received a B.S. in Agriculture from Kerala Agricultural University, India in 2004. He served as an agricultural officer at the State Bank of Travancore, Kerala, India from 2005-07, before beginning his MS degree in agriculture and life sciences at Mississippi State Univ. in 2007 where he investigated the effects of threecornered alfalfa hopper injury on yield and quality of group IV soybean. For his Ph.D., under Dr. Michael Toews at UGA, he is studying the feasibility of strip application of insecticides to manage pest stink bugs in commercial cotton. He is interested in insect ecology, population dynamics and mapping of spatial and temporal patterns of insect movement at farmscape level. He represented UGA in ESA Linnaean games and student debate. He was the secretary of Lund Entomology Club at UGA during 2010-2011.

SEB AWARDS-2012
OUTSTANDING M.S. DISPLAY

KEVIN LANGDON received the 2012 Outstanding M.S. Poster Presentation Award for the poster, "Relative Susceptibility of Selected Potato Cultivars to Two Wireworm Species." He was raised in Knightdale, NC located in the once rural outskirts of eastern Wake County where his lifelong enthusiasm for agriculture began on a local tobacco farm and the family swine farm in Benson, NC. Kevin attended NC State Univ. and earned a B.S. in Agricultural and Environmental Technology minoring in Soil Science in 2010. Kevin began his Masters research at NCSU in 2010 studying wireworms under the direction of Dr. Mark R. Abney. The overarching goal of his research was to develop management strategies for wireworm in potato based on implementation of reduced risk practices in North Carolina potato production systems.

SEB AWARDS-2012
OUTSTANDING UNDERGRADUATE DISPLAY

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

Saturday, 2 March

8:00 AM-5:00 **S-1055 Soybean Multi-State Meeting**
Governor Room

3:00 PM-5:00 **Final Local Arrangements/Program Committee Meeting**
Hunt Room (Mezzanine floor)

Sunday, 3 March

8:00 AM-5:00 **S-1055 Soybean Multi-State Meeting**
Governor Room

8:00 AM-5:00 **SERA 003 Information Exchange for Southern Region IPM**
King Room

9:00 AM-1:00 **Executive Committee Meeting**
Paramount Room

11:00 AM-1:00 **Student Affairs Committee Meeting**
Academy Room

1:00 PM-5:00 **Registration**
The Gallery

2:00 PM-5:00 **SDC-351 Multi-State Biocontrol Meeting**
Academy Room

3:00 PM-7:00 **Audiovisual and Job Placement**
University Room

5:00 PM-7:00 **Linnaean Games, Preliminary Rounds**
Riverview B

5:00 PM-7:00 **Southern Corn Insect Working Group**
Academy Room

5:00 PM-10:00 **Student Poster Competition Set Up** Heidelberg Ballroom-10th floor

Monday, 4 March

7:00 AM-5:00 **Audiovisual and Job Placement**
University Room

7:00 AM-5:00 **Registration**
The Gallery

7:00 AM-8:00 **Student Poster Competition Set Up**
Heidelberg Ballroom-10th floor

7:00 AM-8:00 **Breakfast**
Foyer

8:00 AM-4:00 **Student Poster Competition Judging**
Heidelberg Ballroom-10th floor

Monday, 4 March (cont.)

8:00 AM-5:00 **Student Poster Exhibits**
Heidelberg Ballroom-10th floor

8:00 AM-10:15 **Opening and Plenary Session**
Riverview B

10:15 AM-10:30 **Break**

10:30 AM-11:54 **B.S. & M.S. Student Oral Presentations I**
Louisiana Room

10:30 AM-11:54 **M.S. Student Oral Presentations II**
Governor Room

10:30 AM-11:54 **Ph.D Student Oral Presentations I**
Riverview B

10:30 AM-11:54 **Ph.D. Student Oral Presentations II**
Capitol Room

12:00 PM-1:40 **Lunch**-on your own

12:00 PM-1:40 **ESA Certification Board Luncheon**
Hilton Kingfish Restaurant
(Dutch treat)

1:40 PM-2:40 **Poster Presenters at Display Presentation**
Heidelberg Ballroom-10th floor

1:40 PM-2:52 **M.S. Student Oral Presentation III**
Louisiana Room

1:40 PM-3:51 **Ph.D. Student Oral Presentation III**
Riverview B

1:40 PM-5:15 **Invasive Species and Biosecurity Symposium: Opportunities and Challenges**
Governor Room

1:40 PM-4:51 **Contributed Papers I**
Capitol Room

3:15 PM-4:45 **Vegetable Entomology Symposium**
Louisiana Room

5:00 PM-7:00 **Student Poster Competition Removal**

5:30 PM-7:00 **Linnaean Games, Final Round**
Riverview B

7:00 PM-10:00 **General Poster Set Up**
Heidelberg Ballroom-10th floor.

7:00 PM-9:30 **Mixer (Crawfish Boil/Cajun Dancing)**
Pool Deck-3rd floor

Monday, 4 March

BUSINESS MEETING AND PLENARY SESSION

8:00 AM – 10:15
Riverview B

Presiding: G. David Buntin, President, Southeastern Branch, Entomological Society of America

8:00 **Call to Order,** G. David Buntin, President

8:05 **"Welcome to Baton Rouge"**

8:15 **Preliminary Business Meeting**
Announcements
Committee Reports
Local Arrangements-Mike Stout
Program-Greg Hodges
Nominations-Wayne Gardner
Resolutions-Nancy Epsky
2014 Meeting Time/Location-Alvin Simmons

8:40 **Address by ESA President-Elect-**Frank Zalom

8:50 **Message from ESA Executive Director**
C. David Gammel

9:00 **SEB Representative to the ESA Governing Board Report**
Nancy Hinkle

9:05 **Announcements from ESA Section Representatives**
Stormy Sparks

9:10 **Entomological Foundation Report**
Alvin Simmons

9:15 **International Congress of Entomology Report**
Alvin Simmons

9:25 **SEB Representative to the ESA Certification Board Report-**Dennis Ring

9:35 **Remarks from SEB President-**G. David Buntin

9:40 **2013 SEB Plenary Address: "What will the next generation of entomologists look like?"**
Dr. B. Rogers Leonard, Assoc. Vice Chancellor and Assoc. Director, Louisiana State University

10:15-10:30 **Break**

Monday, 4 March

B.S. & M.S. STUDENT ORAL PRESENTATION COMPETITION I

10:30 – 11:54
Louisiana Room

Moderators:
Fudd Graham & Scott Stewart

10:30 001 Effects of imidacloprid on feeding and osmoregulation in the aphid *Myzus persicae*. **Nicholas Allen**, nlallen@ncsu.edu, North Carolina State Univ., Raleigh, NC

10:42 002 Efficacy of seed treatments against rice water weevil (*Lissorhoptrus oryzophilus* Kuschel) under multiple water management strategies. **Andrew Adams**, aadams@entomology.msstate.edu[1], Jeffrey Gore[2], Donald Cook[2], Fred R. Musser[3] and George Awuni[3], [1]Mississippi State Univ., Mississippi State, MS, [2]Mississippi State Univ., Stoneville, MS, [3]Mississippi State Univ., Starkville, MS

10:54 003 Climate change and *Bemisia tabaci* (Hemiptera: Aleyrodidae): Impacts of increased temperature and carbon dioxide on life history. **Levi Curnutte**, curnuttelb@g.cofc.edu, College of Charleston, Charleston, SC, Alvin M. Simmons, USDA-ARS, Charleston, SC and Shaaban Abd-Rabou, Ministry of Agriculture, ARC, Dokki, Egypt

11:06 004 Impact of foliar herbicide application on cotton with selected insecticide seed treatments. **Derek Clarkson**, dclarkso@uark.edu, Univ. of Arkansas, Paron, AR

11:18 005 Evaluation of Thiamethoxam and Imidacloprid applied in-furrow and as a seed treatment as an alternative to aldicarb for early-season cotton insect pest management. **Shelby Williams**, Twilliams@Agcenter.lsu.edu, Louisiana State Univ. AgCenter, Winnsboro, LA

11:30 006 Larval development of the knapweed biological control agent *Larinus minutus* (Coleoptera: Curculionidae). **Adam M. Alford**, axa036@uark.edu, Y. J. Shen and Timothy J. Kring, Univ. of Arkansas, Fayetteville, AR

11:42 007 Impact of insecticidal efficacy on cotton aphid (*Aphis gossypii*) distribution in Louisiana cotton. **Jenna Lindsay**, jennalindsay3@aol.com, Louisiana State Univ. AgCenter, Winnsboro, LA

Monday, 4 March

M.S. STUDENT ORAL PRESENTATION COMPETITION II

10:30 – 11:54
Governor Room

Moderators:
Melissa Willrich Siebert & David Held

10:30 008 Developing a flowering threshold with corn earworm in soybeans. **Rachel Suits**, rsuits@ncsu.edu[1], Dominic R. Reisig[2] and Hannah J. Burrack[1], [1]North Carolina State Univ., Raleigh, NC, [2]North Carolina State Univ., Plymouth, NC

10:42 009 Damage and inter-plant compensation for southwestern corn borer (Lepidoptera: Crambidae) injury. **Sandy Steckel**, ssteckel@utk.edu and Scott D. Stewart, Univ. of Tennessee, Jackson, TN

10:54 010 Host selection and partitioning of non-biting midges (Diptera: Chironomidae) by aquatic mites (Hydrachnidia). **Travis Edwards**, tdedward@uark.edu, Univ. of Arkansas, Fayetteville, AR

11:06 011 Monitoring seasonal variations in foraging of the Argentine ant (*Linepithema humile*) in Central Georgia. **Jacob Holloway**, jbh301@gmail.com, Athens, GA and Daniel R. Suiter, Univ. of Georgia, Griffin, GA

11:18 012 Host preference of *Megacopta cribraria* (Hemiptera: Plataspidae) on selected edible bean crops and soybean. **Joni L. Blount**, jonilb@uga.edu, Univ. of Georgia, Athens, GA, G. David Buntin, Univ. of Georgia, Griffin, GA and Alton N. Sparks, Univ. of Georgia, Tifton, GA

11:30 013 Early detection of the palmetto weevil, *Rhynchophorus cruentatus* F. (Coleoptera: Dryophthoridae). **Omotola Dosunmu**, toladosunmu@gmail.com[1], Richard Wendell Mankin[2], Nathan J. Herrick[1], Muhammad Haseeb[1] and Raymond L. Hix[1], [1]Florida A&M Univ., Tallahassee, FL, [2]USDA-ARS-CMAVE, Gainesville, FL

11:42 014 A faunistic survey of mealybugs (Hemiptera: Pseudococcidae) occurring on coffee (*Coffea arabica* L.) and cacao (*Theobroma cacao* L.) agroecosystems in the Dominican Republic. **Enger German-Ramirez**, ENGER_GERMAN@hotmail.com[1], Moses, T. K. Kairo[1], Amy L. Roda[2], Ian Stocks[3] and Muhammad Haseeb[1], [1]Florida A&M Univ., Tallahassee, FL, [2]USDA-APHIS-PPQ, Miami, FL, [3]Florida Dept. of Agriculture and Consumer Services, Gainesville, FL

Monday, 4 March

PH.D. STUDENT ORAL PRESENTATION COMPETITION I

10:30 – 11:42
Riverview B

Moderators:
Amanda Hodges & Eric Leveen

10:30 015 Polygalacturonase gene expression in the tarnished plant bug (*Lygus lineolaris*). **Daniel Fleming**, def18@msstate.edu, Natraj Krishnan and Fred Musser, Mississippi State Univ., Mississippi State, MS

10:42 016 Homogeneity of phage toxin in a tripartite defensive symbiosis. Kerry M. Oliver and **Stephanie Weldon**, srweldon@uga.edu, Univ. of Georgia, Athens, GA

10:54 017 Cytochrome P450s: Their expression and function in insecticide resistant mosquitoes, *Culex quinquefasciatus*. **Ting Yang**, zhenxinzaoyi@yahoo.com.cn and Nannan Liu, Auburn Univ., Auburn, AL

11:06 018 Induction of vitellogenesis-related genes in *Cx. quinquefasciatus* by non-steroidal ecdysone agonists. **William R. Reid**, wzr0005@auburn.edu and Nannan Liu, Auburn Univ., Auburn, AL

11:18 019 Function of G-protein-coupled receptor signaling-pathway-related genes in insecticide resistance of mosquitoes, *Culex quinquefasciatus*. **Ting Li**, litingwinner@gmail.com and Nannan Liu, Auburn Univ., Auburn, AL

11:30 020 Coinfection and population dynamics of *Borrelia bissettii* and *Borrelia burgdorferi* in a tick-murine borreliosis model. **Brian Leydet**, bleyde1@tigers.lsu.edu, Louisiana State Univ., Baton Rouge, LA

Monday, 4 March

PH.D. STUDENT ORAL PRESENTATION COMPETITION II

10:30 – 11:54
Capitol Room

Moderators:
Catharine Mannion & Norm Leppla

10:30 021 Effect of simulated corn earworm, *Helicoverpa zea*, feeding in soybean. **Brian P. Adams**, bpa31@msstate.edu[1], Donald Cook[2], Angus L. Catchot[1], Jeffrey Gore[2] and Fred Musser[1], [1]Mississippi State Univ., Mississippi State, MS, [2]Mississippi State Univ., Stoneville, MS

10:42 022 Determining yield loss from Mexican rice borer (Lepidoptera: Crambidae) injury in conventional and bioenergy crops. **M.T. VanWeelden**, mvanwe2@lsu.edu[1], B.E. Wilson[1], J.M. Beuzelin[2], T.E. Reagan[1] and MO. Way[3], [1]LSU AgCenter, Baton Rouge, LA, [2]LSU AgCenter, Alexandria, LA, [3]Texas A&M Univ., Beaumont, TX

10:54 023 Management and within-field spatial distribution of *Megacopta cribraria* (Hemiptera: Plataspidae) in soybeans. **Nicholas J. Seiter**, nseiter@clemson.edu[1], Jeremy K. Greene[1], Francis P. F. Reay-Jones[2] and Phillip M. Roberts[3], [1]Clemson Univ., Blackville, SC, [2]Clemson Univ., Florence, SC, [3]Univ. of Georgia, Tifton, GA

11:06 024 Influence of Bt corn on bollworm, *Helicoverpa zea*, survivorship in dual-gene cotton. **Ben Von Kanel**, mbv7@entomology.msstate.edu[1], Angus L. Catchot[2], Fred R. Musser[1], J. Gore[2] and Ryan Jackson[3], [1]Mississippi State Univ., Starkville, MS, [2]Mississippi State Univ., Mississippi State, MS, [3]USDA, Stoneville, MS

11:18 025 Duration of rice stink bug (*Oebalus pugnax* F.) infestation impact milk stage of panicle development. **George Awuni**, gaa48@msstate.edu[1], Jeff Gore[2], Don Cook[2], Fred Musser[1] and Andrew Adams[1], [1]Mississippi State Univ., Mississippi State, MS, [2]Mississippi State Univ., Stoneville, MS

11:30 026 Evaluating the density-damage relationship of rice stink bug (*Oebalus pugnax)* on long grain rice. **Bryce Blackman**, bblackman@agcenter.lsu.edu, Louisiana State Univ. AgCenter, Baton Rouge, LA and Michael J Stout, Louisiana State Univ. Agcenter, Baton Rouge, LA

11:42 027 Impact of soybean planting date, maturity group, and insecticide use on *Megacopta cribraria*. **Alejandro Del Pozo**, aidelpoz@ncsu.edu[1], Jack S. Bacheler[1] and Dominic R. Reisig[2], [1]North Carolina State Univ., Raleigh, NC, [2]North Carolina State Univ., Plymouth, NC

Monday, 4 March

LUNCH - on your own

11:54 AM – 1:40 PM

M.S. STUDENT ORAL PRESENTATION COMPETITION III

1:40 PM – 2:52
Louisiana Room

Moderators:
Angus Catchot & Art Appel

1:40 028 Effects of starvation on the metabolic rate of the common bed bug, *Cimex lectularius*. **Zachary C. DeVries**, devrizc@auburn.edu[1], Stephen A. Kells[2] and Arthur G. Appel[1], [1]Auburn Univ., Auburn, AL, [2]Univ. of Minnesota, St. Paul, MN

1:52 029 Behavioral response of parous black flies (*Simulium vittatum*) to potential attractants in a dual-choice olfactometer. **Tommy W. McGaha**, tmcgaha@uga.edu[1], Raymond Noblet[1] and Thomas R. Unnasch[2], [1]Univ. of Georgia, Athens, GA, [2]Univ. of South Florida, Tampa, FL

2:04 030 Influence of nitrogen rates on tarnished plant bug (*Lygus lineolaris*) populations in cotton. **Chase Samples**, CSamples@pss.msstate.edu[1], Darrin Dodds[1], J. Gore[1], Angus Catchot[1], Tyler Dixon[1], D. Reynolds[1] and Bobby Golden[2], [1]Mississippi State Univ., Mississippi State, MS, [2]Mississippi State Univ., Stoneville, MS

2:16 031 AmSNARES expression in *Amblyomma maculatum* feeding and pathogen transmission. **Rebecca Browning**, rebecca.browning@eagles.usm.edu, Khem Raj B c, Steven Adamson and Shahid Karim, Univ. of Southern Mississippi, Hattiesburg, MS

2:28 032 Characterizing population and genetic structure of *Aleurodicus rugioperculatus* Martin (Hemiptera: Aleyrodidae) in Florida. **Megan Wilkerson**, megan.wilkerson2@yahoo.com[1], Raymond L. Hix[1] and Cindy L. McKenzie[2], [1]Florida A&M Univ., Tallahassee, FL, [2]USDA-ARS, Fort Pierce, FL

2:40 033 From greenhouse to field: effects of elicitor-mediated induction of plant defense on fall armyworm (*Spodoptera frugiperda*) and two-spotted spider mite (*Tetranychus urticae*). **John Gordy**, jgordy@agcenter.lsu.edu, Louisiana State Univ. AgCenter, Baton Rouge, LA, Michael J. Stout, Louisiana State Univ., Baton Rouge, LA and B. Rogers Leonard, Louisiana State Univ. Agricultural Center, Baton Rouge, LA

Monday, 4 March

PH.D. STUDENT ORAL PRESENTATION COMPETITION III

1:40 – 3:51
Riverview B

Moderators:
Michelle Samuel-Foo & Greg Wiggins

1:40 034 Evaluating the host preference of the parasitoids *Trichopoda pennipes* and *Cylindromyia euchenor* (Diptera: Tachinidae) with *Euschistus servus* and *Nezara viridula* (Hemiptera: Pentatomidae). **Grant Pilkay**, gpilkay@clemson.edu[1], F.P.F. Reay-Jones[2] and Jeremy K. Greene[1], [1]Clemson Univ., Blackville, SC, [2]Clemson Univ., Florence, SC

1:52 035 Oviposition behavior of rugose spiraling whitefly (*Aleurodicus rugioperculatus*). **Siavash Taravati**, siavashtaravati@ufl.edu and Catharine M. Mannion, Univ. of Florida, Homestead, FL

2:04 036 Long-term persistence of imidacloprid and olefin in eastern hemlock: Implications for hemlock woolly adelgid suppression in Great Smoky Mountains National Park. **Elizabeth P. Benton**, ebenton3@utk.edu[1], R. Jesse Webster[2], Carla I. Coots[1], Richard Cowles[3], Anthony Lagalante[4] and Jerome F. Grant[1], [1]Univ. of Tennessee, Knoxville, TN, [2]National Park Service, Gatlinburg, TN, [3]Connecticut Agricultural Experiment Station, Windsor, CT, [4]Villanova Univ., Villanova, PA

2:16 037 Do I eat or do I walk? Determining the exposure route of imidacloprid to green peach aphids in cultivated tobacco. **H. Alejandro Merchán**, hamercha@ncsu.edu[1], Nicholas Allen[2] and Hannah J. Burrack[2], [1]NC State Univ., Raleigh, NC, [2]North Carolina State Univ., Raleigh, NC

2:28 038 Latitudinal gradients in plant-herbivore interactions in an invasive grass *Phragmites australis* in North America. **Ganesh P. Bhattarai**, gbhatt2@tigers.lsu.edu[1], Warwick Allen[1], Laura A. Meyerson[2] and James T. Cronin[1], [1]Louisiana State Univ., Baton Rouge, LA, [2]Univ. of Rhode Island, Kingston, RI

2:40 039 Oviposition preference and larval performance of sugarcane borer, *Diatraea saccharalis* on rice. **Jaspreet K. Sidhu**, jsidhu1@tigers.lsu.edu, Louisiana State Univ. AgCenter, Baton Rouge, LA and Michael J Stout, Louisiana State Univ. Agcenter, Baton Rouge, LA

2:52 PM- 3:15 Break

3:15 040 Comparing the efficacy of morphological characteristics in the identification of *Monochamus titillator* and *M. carolinensis* (Coleoptera: Cerambycidae). **Jessica Hartshorn**, jhartsho@uark.edu, Univ. of Arkansas, Fayetteville, AR

Monday, 4 March

3:27 041 Flowering plant effects on adults of the stink bug parasitoid *Aridelus rufotestaceus* (Hymenoptera: Braconidae). **Obinna Aduba**, obinna.aduba@gmail.com[1], John Ruberson[2], Peter Hartel[3], Michael Strand[3], Dawn Olson[4] and Henry Fadamiro[5], [1]Univ. of Georgia, Tifton, GA, [2]Kansas State Univ., Manhattan, KS, [3]Univ. of Georgia, Athens, GA, [4]USDA-ARS, Tifton, GA, [5]Auburn Univ., Auburn, AL

3:39 042 A preliminary phylogenetic analysis of the basal Cucujoidea. **Thomas McElrath**, tmcelrat@uga.edu, Univ. of Georgia, Athens, GA

CONTRIBUTED PAPERS I

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

1:40 – 4:51
Capitol Room

Moderators:
Nancy Hinkle & Tracie Jenkins

1:40 043 Aphid feeding behavior and virus resistance in somatic fusions and crosses of *Solanum bulbocastanum* and *Solanum tuberosum*. **Jeffrey A. Davis**, jeffdavis@agcenter.lsu.edu, Louisiana State Univ. Agricultural Center, Baton Rouge, LA

1:52 044 Genetic and fitness costs of raising wild pollinators in captivity: interaction among species, subspecies and populations of orchard bees. **Blair Sampson**, blair.sampson@ars.usda.gov, USDA, Agricultural Research Service, Poplarville, MS, Timothy Rinehart, USDA-ARS Thad Cochran Southern Horticultural Research Laboratory, Poplarville, MS, Grant Kirker, USDA-FS Forest Products Laboratory, Madison, WI and Chris Werle, USDA-ARS, Poplarville, MS

2:04 045 The effects of temperature and strain on bed bug egg standard metabolic rates. **Brittany Elise Delong**, edbritt@vt.edu, Virginia Polytechnic Institute and State Univ., Blacksburg, VA

2:16 046 *Amblyomma maculatum* selenoproteins contribute to blood feeding and antioxidant activity. **Steven Adamson**, steven.adamson@usm.edu and Shahid Karim, Univ. of Southern Mississippi, Hattiesburg, MS

2:28 047 Metabolic fuel utilization by glucose-averse *Blattella germanica*. **Jules Silverman**, jules_silverman@ncsu.edu, Jonathan Shik and Coby Schal, North Carolina State Univ., Raleigh, NC

Monday, 4 March

2:40 048 Sanitation by removal of diseased trees to reduce insect vectors of laurel wilt. **Daniel Carrillo**, dancar@ufl.edu, Jonathan Crane, Rita Duncan, Randy Ploetz and Jorge Peña, Univ. of Florida, Tropical Research and Education Center, Homestead, FL

2:52 049 Laboratory observations on the reproductive success of *Varroa destructor*. **Lilia I. de Guzman**, lilia.deguzman@ars.usda.gov[1], Kitiphong Khongphinitbunjong[2], Thomas E. Rinderer[3], Matthew R. Tarver[3] and Amanda M. Frake[3], [1]USDA/ARS, Baton Rouge, LA, [2]Chiang Mai Univ., Chiang Mai, Thailand, [3]USDA-ARS, Baton Rouge, LA

3:04 PM-3:15 Break

3:15 050 Population genetic structure of *Megacopta cribraria* (Hemiptera: Plataspidae) discovered October 2009 in the Western Hemisphere. **Tracie M. Jenkins**, jenkinst@uga.edu[1], Joe E. Eger[2], Tyler D. Eaton[3], Daniel R. Suiter[3], Wayne A. Gardner[3], G. David Buntin[3], Phillip M. Roberts[4], Michael D. Toews[4], Alton N. Sparks[4], Jeremy K. Greene[5] and John R. Ruberson[4], [1]Univ. of Georgia, Athens, GA, [2]Dow AgroSciences, Tampa, FL, [3]Univ. of Georgia, Griffin, GA, [4]Univ. of Georgia, Tifton, GA, [5]Clemson Univ., Blackville, SC

3:27 051 Temporal and spatial genetic structure of the black carpenter ant, *Camponotus pennsylvanicus* (Hymenoptera: Formicidae). **Tyler D. Eaton**, eaton@uga.edu[1], Daniel R. Suiter[1] and Tracie M. Jenkins[2], [1]Univ. of Georgia, Griffin, GA, [2]Univ. of Georgia, Athens, GA

3:39 052 Cuticular protein of the common bed bugs *Cimex lectularius* L. **Reina Koganemaru**, reinak7@vt.edu[1], Dini M. Miller[2] and Zach N. Adelman[1], [1]Virginia Tech, Blacksburg, VA, [2]Virginia Polytechnic Institute and State Univ., Blacksburg, VA

3:51 053 Over-wintering biology of invasive *M. cribraria*. **Xing Ping Hu**, huxingp@auburn.edu, Auburn Univ., Auburn, AL

4:03 054 Crop pollen effects on the ovipositional rate of western flower thrips, *Frankliniella occidentalis* on tropical soda apple, *Solanum viarum*. **Angela Hutcherson**, auburnvettech@hotmail.com, Florida A & M Univ., Tallahassee, FL and Stephen Hight, USDA-ARS, Tallahassee, FL

4:15 055 A decade of beef pest management in Georgia. **Nancy C. Hinkle**, nhinkle@uga.edu, Univ. of Georgia, Athens, GA

4:27 056 Carcass utilization and dispersal patterns of native Louisiana Calliphoridae and the invasive hairy maggot blow fly (Diptera: Calliphoridae). **Erin J. Watson-Horzelski**, erin.watson-2@selu.edu, Southeastern Louisiana Univ., Hammond, LA and James Geaghan, Louisiana State Univ., Baton Rouge, LA

4:39 057 Forensically important insects and microbial communities associated with decomposition of above ground cadavers in Southeastern Louisiana. **Danielle Levron**, danielle.levron@selu.edu and Dr. Erin Watson-Horzelski, PhD., Southeastern Louisiana Univ., Hammond, LA

Monday, 4 March

INVASIVE SPECIES AND BIOSECURITY SYMPOSIUM

Opportunities and Challenges

1:40 – 5:15
Governor Room

Organizers:
Muhammad Haseeb & Daniel Collins

1:40 058 Invasive weevil species: A taxonomic challenge. **Charles O'Brien**, cobrien6@cox.net, Univ. of Arizona, Tucson, AZ

1:55 059 Status of the invasive aquatic weed, *Hydrilla* and its biological control agents in Wacissa Springs. **Raymond L. Hix**, raymond.hix@famu.edu[1], Eutychus M. Kariuki[1] and James P. Cuda[2], [1]Florida A&M Univ., Tallahassee, FL, [2]Univ. of Florida, Gainesville, FL

2:10 060 Citrus greening disease in Texas: steps to mitigate this deadly disease. **Mamoudou Setamou**, KUMS2006@tamuk.edu, Texas A&M Univ.-Kingsville, Weslaco, TX

2:25 061 Evaluation of monitoring methods for the redbay ambrosia beetle (Coleoptera: Curculionidae: Scolytinae). **Latasha D. Tanner**, latasha.tanner27@gmail.com, Florida Agricultural and Mechanical Univ., Tallahassee, FL and Dr. Lambert H. B. Kanga, Florida A&M Univ., Tallahassee, FL

2:40 062 Avian migration-tick-borne infections without borders. **Shahid Karim**, shahid.karim@usm.edu, The Univ. of Southern Mississippi, Hattiesburg, MS

2:55 PM-3:15 Break

3:15 063 Graduate education and training in global food security and plant biosecurity. **Daniel Collins**, dcollins1643@cox.net, Alcorn State Univ., Alcorn State, MS

3:30 064 Screening Gulf Coast forest species for reaction to *Phytophthora ramorum*.. **Jason Preuett**, jasonpreuett1@gmail.com[1], Daniel Collins[2], Timothy Widmer[3] and Douglas Luster[3], [1]Southern Univ. and A&M College, Baton Rouge, LA, [2]Alcorn State Univ., Alcorn State, MS, [3]USDA-ARS, Ft. Detrick, MD

3:45 065 Impact of Sudden Oak Death on forest ecosystems. **Tim Widmer**, tim.widmer@ars.usda.gov, USDA-ARS, Ft. Dietrick, MD

4:00 066 Safeguarding America's agriculture at ports of entry. **Stanley Pirtle**, stanley.l.pirtle@dhs.gov, U.S Customs and Border Protection, New Orleans, LA

4:15 067 Regulatory response to exotic pests in Louisiana. **William Spitzer**, William.e.spitzer@aphis.usda.gov, USDA-APHIS, Baton Rouge, LA

4:30 068 *Cactoblastis cactorum*: an invasive species of prickly pear steadily moves west. **Angela Galette**, angela.galette@ars.usda.gov and Stephen Hight, USDA-ARS, Tallahassee, FL

4:45 069 *Exophthalmus* species potential threat to *Citrus* and other economical crops in Florida. **Muhammad Haseeb**, Muhammad.Haseeb@FAMU.EDU, Florida A&M Univ., Tallahassee, FL

5:00 070 Training, capacity building, plant biosecurity-risk analysis workshops and mentoring programs offered by the Center for Plant Health Science and Technology (USDA-APHIS-PPQ). **Stephanie Bloem**, Stephanie.Bloem@aphis.usda.gov, USDA-APHIS-PPQ, CPHST, PERAL, Raleigh, NC

VEGETABLE ENTOMOLOGY SYMPOSIUM

3:15 – 4:45
Louisiana Room

Organizers:
David Riley and Stormy Sparks

3:15 071 Integrated management strategies for pepper weevil, *Anthonomus eugenii* (Coleoptera: Curculionidae). **Philip A. Stansly**, pstansly@ufl.edu, Univ. of Florida, Immokalee, FL

3:30 072 Management of silverleaf whitefly (*Bemisia argentifolii*) and *Frankliniella* thrips (*F. occidentalis* and *F. schultzei*), vectors of two viral diseases, in tomatoes using DPX HGW 86. **Dakshina R. Seal**, dseal3@ufl.edu, Univ. of Florida, Homestead, FL

3:45 073 Irrigation methods in vegetables: Incidences of whitefly and whitefly-transmitted viruses. **Alvin M. Simmons**, alvin.simmons@ars.usda.gov, USDA-ARS, Charleston, SC and Shaaban Abd-Rabou, Ministry of Agriculture, ARC, Dokki, Egypt

4:00 074 Efficacy of Sivanto against silverleaf whitefly (*Bemisia tabaci*) and potential phytotoxicity in cucurbit crops. **Alton N. Sparks**, asparks@uga.edu, Univ. of Georgia, Tifton, GA

4:15 075 Co[illegible]tions. **Paul J. McLeod**, pjm[illegible]ayetteville, AR and Tahir Ras[illegible]MS

CANCELED
Paper 076 moved to 4:15

4:15 076 Where have all the cowpeas gone? The legacy of the cowpea curculio in the South. **David G. Riley**, dgr@uga.edu, Univ. of Georgia, Tifton, GA

Monday, 4 March

STUDENT POSTER PRESENTATION COMPETITION

8:00 AM to 5:00 PM
Heidelberg Ballroom – 10th floor

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

UNDERGRADUATE STUDENT POSTER PRESENTATION COMPETITION

DSP1 Assessing resistance to southern green stink bug in five okra varieties. **Kristie Stein**, kranst4@gmail.com, Louisiana State Univ., Baton Rouge, LA, M. J. Murray, Louisiana State Univ. AgCenter, Baton Rouge, LA and Jeffrey A. Davis, Louisiana State Univ. Agricultural Center, Baton Rouge, LA

DSP2 Canopy Coleoptera of two Louisiana ecoregions. **Brian Reily**, Brianhreily@gmail.com[1], Michael L. Ferro[1], Patricia Newell[2] and Christopher E. Carlton[3], [1]Louisiana State Univ., Baton Rouge, LA, [2]Univ. of Georgia, Athens, GA, [3]Louisiana State Univ. Agricultural Center, Baton Rouge, LA

DSP3 Impact of cold temperature of the development of Drosophila suzkii. **Dylan Kraus**, dakraus@ncsu.edu, North Carolina State Univ., Raleigh, NC and Hannah J. Burrack, Univ. of California, Davis, Davis, CA

DSP4 Genetic diversity of the ant genus *Aphaenogaster* (Mayr) in Northwest Arkansas. **Clinton E. Trammel**, cetrammel@uark.edu, Allen L. Szalanski and Amber D. Tripodi, Univ. of Arkansas, Fayetteville, AR

M.S. STUDENT POSTER PRESENTATION COMPETITION I

DSP5 Oviposition response of black flies (*Simulium vittatum)* to potential oviposition stimulants in the laboratory. **Tommy W. McGaha**, tmcgaha@uga.edu[1], Raymond Noblet[1], Thomas R. Unnasch[2] and Sayed Hassan[1], [1]Univ. of Georgia, Athens, GA, [2]Univ. of South Florida, Tampa, FL

DSP6 An insight into the bacterial communities associated with ticks from Pakistan. **Nabanita Mukherjee**, nabanita.mukherjee@eagles.usm.edu[1], Zafar Iqbal[2], Steven W. Adamson[1], Scot E. Dowd[3], Zia-ud-Din Sindhu[2], Abdullah Arijo[4], Dmitry Apanaskevich[5] and Shahid Karim[1], [1]Univ. of Southern Mississippi, Hattiesburg, MS, [2]Univ. of Agriculture, Faisalabad, Pakistan, [3]MR DNA, Shallowater, TX, [4]Sindh Agriculture Univ., Tandojam, Pakistan, [5]Georgia Southern Univ., Statesboro, GA

Monday, 4 March

DSP7 Berlese vs Winkler: Assessing the relative effectiveness of two methods used to extract arthropods from organic litter samples. **Brittany Owens**, brittanyeownes@gmail.com, Louisiana State Univ., Baton Rouge, LA, Christopher E. Carlton, Louisiana State Univ. Agricultural Center, Baton Rouge, LA and M.L. Ferro, LSU AgCenter, Baton Rouge, LA

DSP8 Defining the pathogen induced regulation of sialostatins in the gulf-coast tick, *Amblyomma maculatum*. **Khem Raj B.C.**, khem.bc@eagles.usm.edu and Shahid Karim, The Univ. of Southern Mississippi, Hattiesburg, MS

DSP9 Under the bark: The life history of *Pityophthorus juglandis* in East Tennessee. **Katheryne Nix**, kavery3@utk.edu[1], Paris L. Lambdin[1], Jerome F. Grant[1], Mark T. Windham[1], Albert Mayfield[2] and Paul Merten[2], [1]Univ. of Tennessee, Knoxville, TN, [2]USDA, Forest Service, Asheville, NC

DSP10 Survey of *Liriomyza trifolii* (Diptera: Agromyzidae) and *Liriomyza sativae* (Diptera: Agromyzidae) parasitoids from vegetables in Leon County, Florida. **Jordan Williamson**, jwilliamson43@gmail.com, Florida A&M Univ., Tallahassee, FL, Raymond L. Hix, Florida A&M Univ., Tallahassee, FL and Jesusa C. Legaspi, United States Dept. of Agriculture-Agricultural Research Service, CMAVE, Center for Biological Control, Florida A&M Univ., Tallahassee, FL

M.S. STUDENT POSTER PRESENTATION COMPETITION II

DSP11 Efficacy of insecticide seed treatments on hybrid rice. **Andrew Adams**, aadams@entomology.msstate.edu[1], Jeffrey Gore[2], D. Cook[3], George Awuni[3] and Fred R. Musser[3], [1]Mississippi State Univ., Mississippi State, MS, [2]Mississippi State Univ., Stoneville, MS, [3]Mississippi State Univ., Starkville, MS

DSP12 Effect of induced plant resistance on soybean looper *(Chrysodeixis includens)* in soybean. **Xuan Chen**, xchen52@lsu.edu, Arthur R. Richter and Jeffrey A. Davis, Louisiana State Univ. AgCenter, Baton Rouge, LA

DSP13 Effects of refuge contamination by Bt transgenes on survivorship and growth of corn earworm. **Arun Babu**, ab1835@msstate.edu[1], Michael A. Caprio[2], Donald Cook[3], Clint Allen[4] and Fred R. Musser[1], [1]Mississippi State Univ., Starkville, MS, [2]Mississippi State Univ., Mississippi State, MS, [3]Mississippi State Univ., Verona, MS, [4]USDA, Agricultural Research Service, Stoneville, MS

DSP14 St. Augustinegrass resistance against the southern chinch bug, *Blissus insularis* Barber. **Katharine Youngs**, kmyoungs@ncsu.edu, NCSU, Raleigh, NC and Yasmin Cardoza, North Carolina State Univ., Raleigh, NC

Monday, 4 March

DSP15 The effects of nitrogen on population dynamics of the chilli thrips, *Scirtothrips dorsalis (Thysanoptera: Thripidae)*, on hydroponically grown jalapeño pepper. **Daniel Diaz**, ddiaz18@ufl.edu, Univ. of Florida, Homestead, FL

DSP16 Biological control of Chinese privet (*Ligustrum sinense*) using native lace bug (*Leptoypha mutica*). **Jessica Kalina**, jakalina@uga.edu, Univ. of Georgia, Athens, GA

PH.D. STUDENT POSTER PRESENTATION COMPETITION I

DSP17 Supercooling capacity of redbanded stink bug, *Piezodorus guildinii* (Westwood). **Anup Bastola**, bastola.anup@gmail.com and Jeffrey A. Davis, Louisiana State Univ. AgCenter, Baton Rouge, LA

DSP18 Permethrin induction of multiple cytochrome P450 genes in insecticide resistant mosquitoes, *Culex quinquefasciatus.* **Youhui Gong**, yzg0016@tigermail.auburn.edu, Dept. of Entomology and Plant Pathology, Auburn, AL and Nannan Liu, Auburn Univ., Auburn, AL

DSP19 Sublethal effects of insecticides on the predators, *Podisus nigrispinus* and *Supputius cincticeps*: Implications for IPM. **Ancidériton Castro**, anciagro@gmail.com[1], Alberto Corrêa[2], Jesusa C. Legaspi[1], Raul Narciso Carvalho Guedes[2], José Eduardo Serrão[3] and José Zanuncio[2], [1]United States Dept. of Agriculture-Agricultural Research Service, CMAVE, Center for Biological Control, Florida A&M Univ., Tallahassee, FL, [2]Dept. of Entomology, Federal Univ. of Viçosa, Viçosa, Brazil, [3]Universidade Federal de Viçosa, Viçosa, Brazil

DSP20 Olfactory response of the antennal trichoid sensilla to human emanation and chemical repellents in the common bed bug, *Cimex lectularius*. **Feng Liu**, fzl0009@auburn.edu and Nannan Liu, Auburn Univ., Auburn, AL

DSP21 Permethrin induction of multiple cytochrome P450 genes in insecticide resistant mosquitoes, *Culex quinquefasciatus.* **Youhui Gong**, yzg0016@tigermail.auburn.edu, Dept. of Entomology and Plant Pathology, Auburn, AL and Nannan Liu, Auburn Univ., Auburn, AL

DSP22 Autosomal linkage, expression profiles, and the functional study of cytochrome P450 genes in insecticide resistant house flies, *Musca domestica*. **Ming Li**, mzl0025@auburn.edu and Nannan Liu, Auburn Univ., Auburn, AL

DSP23 Investigating the role of neurohormone corazonin and its receptor in ticks. **Deepak Kumar**, Deepak.Kumar@eagles.usm.edu, Univ. of Southern Mississippi, Hattiesburg, MS and Shahid Karim, The Univ. of Southern Mississippi, Hattiesburg, MS

DSP24 Genetic engineering of gut bacteria from the Formosan subterranean termite, *Coptotermes formosanus* Shiraki, to serve as "Trojan Horses" for termite control. **Chinmay Tikhe**, cvtikhe@gmail.com, Claudia Husseneder and Jennifer Donaldson, Louisiana State Univ., Baton Rouge, LA

Monday, 4 March

PH.D STUDENT POSTER PRESENTATION COMPETITION II

DSP25 Thrips of vegetables in Biskra (Algeria). **Sabah Razi**, sabah74@hotmail.fr, University of Biskra, Biskra, Algeria

DSP26 Lufenuron-suppressed disease resistance of Formosan subterranean termites (Isoptera: Rhinotermitidae) to bacterial pathogens. **Cai Wang**, howangcai@gmail.com, Gregg Henderson and Bal K. Gautam, Louisiana State Univ., Baton Rouge, LA

DSP27 Alternative method in identification of spotted wing drosophila, *Drosophila suzukii*. **Soo-Hoon Kim**, sskim@email.uark.edu, Amber D. Tripodi, Donn T. Johnson and Allen L. Szalanski, Univ. of Arkansas, Fayetteville, AR

DSP28 Parasitism of house and stable fly pupae in different microhabitats by *Spalangia cameroni* (Hymenoptera: Pteromalidae). **Erika T. Machtinger**, irishtangerine@ufl.edu[1], Christopher J. Geden[2] and Norman C. Leppla[1], [1]Univ. of Florida, Gainesville, FL, [2]USDA-ARS-CMAVE, Gainesville, FL

DSP29 Microsatellite analysis of *Xylocopa virginica*. **Amber D. Tripodi**, atripodi@uark.edu and Allen L. Szalanski, Univ. of Arkansas, Fayetteville, AR

DSP30 A new genus of pselaphine staphylinid beetles from New Zealand (Coleoptera: Staphylinidae: Pselaphinae). **Jong-Seok Park**, jpark16@tigers.lsu.edu, Louisiana State Univ., Baton Rouge, LA and Christopher E. Carlton, Louisiana State Univ. Agricultural Center, Baton Rouge, LA

DSP31 At the edge of traditional phylogenetics: recovering the phylogeny of Orthorrhapha (Diptera) using an extremely large matrix. **Keith M. Bayless**, kmbayles@ncsu.edu[1], Michelle D. Trautwein[2] and Brian M. Wiegmann[1], [1]North Carolina State Univ., Raleigh, NC, [2]North Carolina Museum of Natural Sciences, Raleigh, NC

Monday, 4 March

PH.D. STUDENT POSTER PRESENTATION COMPETITION III

DSP32 Current status of egg parasitoids of stink bug (Hemiptera: Pentatomidae) eggs in soybean in Louisiana. **Miyanda N. Moonga**, MMoonga@agcenter.lsu.edu[1], Katherine L. Kamminga[2], Steve Micinski[3], Arthur R. Richter[1] and Jeffrey A. Davis[1], [1]Louisiana State Univ. AgCenter, Baton Rouge, LA, [2]Virginia Polytechnic Institute and State Univ., Blacksburg, VA, [3]Louisiana State Univ. Agricultural Center, Bossier City, LA

DSP33 Optimizing ambrosia beetle (Coleoptera: Curculionidae: Scolytinae) monitoring using colored traps. **Chris Werle**, chris.werle@ars.usda.gov[1], Alicia Bray[2], Jason Oliver[2] and Blair Sampson[1], [1]USDA, Agricultural Research Service, Poplarville, MS, [2]Tenn. State Univ., McMinnville, TN

DSP34 Effects of harsh climate on wild Japanese beetle populations. **B. M. Petty**, bmpetty@uark.edu, D. C. Steinkraus and D. T. Johnson, Univ. of Arkansas, Fayetteville, AR

DSP35 Effect of soil silicon amendment on performance of sugarcane borer, *Diatraea saccharalis*, (Lepidoptera: Crambidae) on rice in Louisiana. **Jaspreet K. Sidhu**, jsidhu1@tigers.lsu.edu[1], Michael J Stout[2] and Lawrence E Datnoff[2], [1]Louisiana State Univ. AgCenter, Baton Rouge, LA, [2]Louisiana State Univ. Agcenter, Baton Rouge, LA

DSP36 A novel approach using spatial analysis to assess impacts of biological control on hemlock woolly adelgid, *Adelges tsugae*, in Eastern forests. **Abdul Hakeem**, ahakeem@utk.edu[1], Jerome Grant[1], Paris Lambdin[1], Greg Wiggins[1], Frank A. Hale[2], David Buckley[1] and Rusty Rhea[3], [1]Univ. of Tennessee, Knoxville, TN, [2]Univ. of Tennessee, Nashville, TN, [3]USDA-Forest Service, Asheville, NC

DSP37 Effect of pollen movement in mixed plantings of Bt and non-Bt corn on survival and damage of corn earworm. **Fei Yang**, fyang@agcenter.lsu.edu[1], David Kerns[1], B. Rogers Leonard[1], Graham P. Head[2], Ying Niu[1] and Fangneng Huang[1], [1]Louisiana State Univ. Agricultural Center, Baton Rouge, LA, [2]Monsanto LLC, Saint Louis, MO

DSP38 Assessing the efficacy of *Cricotopus lebetis* Sublette (Diptera: Chironomidae) for controlling *Hydrilla verticillata* (L.f.) Royle in the Wacissa river. **Eutychus M. Kariuki**, eutychus1.kariuki@famu.edu[1], Raymond L. Hix[1] and James P. Cuda[2], [1]Florida A&M Univ., Tallahassee, FL, [2]Univ. of Florida, Gainesville, FL

Monday, 4 March

TAKE DOWN STUDENT POSTERS
5:00 – 7:00

LINNAEAN GAMES, FINAL ROUND

5:30 – 7:00
Riverview B

Monday, 4 March

SUBMITTED POSTER SET UP
7:00 – 10:00
Heidelberg Ballroom – 10th floor

MIXER:

CRAWFISH BOIL
&
CAJUN DANCING

7:00 – 9:30
Pool Deck – 3rd floor

TUESDAY, 5 MARCH

7:00 AM-3:30 **Audiovisual and Job Placement**
University Room

7:00 AM-12:00 **Registration**-The Gallery

7:00 AM-8:00 **Past Presidents Breakfast**
Hilton Kingfish Restaurant (Dutch treat)

7:00 AM-8:00 **Breakfast**-on your own

7:00 AM-8:00 **General Poster Set Up**
Heidelberg Ballroom-10th floor

8:00 AM-5:00 **General Poster Presentations**
Heidelberg Ballroom-10th floor

8:00 AM-11:45 **Student Symposium-Invasive Species and Novel Methods of Identification, Monitoring and Control**
Capitol Room

8:30 AM-11:54 **Contributed Papers II**-Governor Room

8:30 AM-11:50 **Multi-Disciplinary Graduate Program Symposium: Doctor of Plant Medicine and Master of Plant Protection and Pest Management Degrees**
Louisiana Room

8:30 AM-11:10 **Urban Entomology Symposium: Trade Globalization is Not New-500 Years of Introducing Urban Pests In North America**
Riverview B

12:00 PM-1:30 **Awards Luncheon**-Riverview A

1:40 PM-2:40 **Contributed Papers III**-Capitol Room

1:40 PM-2:40 **Contributed Papers IV**-Governor Room

1:40 PM-2:40 **Contributed Papers V**-Louisiana Room

2:30 PM-3:30 **Poster Presenters at Display Presentation**
Heidelberg Ballroom-10th floor

2:40 PM-3:30 **Break**

3:30 PM-5:00 **Final Business Meeting**-Riverview B

5:00 PM-9:00 **Submitted Poster Removal**
Heidelberg Ballroom-10th floor

5:00 PM-5:30 **Shuttle transport to mixer at LaHouse**
Shuttle loads in front of Hilton

5:30 PM-7:30 **Mixer at LaHouse**
6:30 PM **LSU baseball game**-walk from LaHouse
(Shuttle runs to Hilton after each event)

TUESDAY, 5 MARCH

STUDENT SYMPOSIUM

Invasive Species and Novel Methods of Identification, Monitoring and Control

8:00 – 11:45
Capitol Room

Organizers and Moderators:
Stephanie Weldon & Erika Machtinger

8:00 077 Invasive species data sharing, apps & maps via Bugwood Services. **Joseph LaForest**, laforest@uga.edu, The Univ. of Georgia, Tifton, GA

8:25 078 Management of hemlock wooly adelgid: Traditional techniques yield novel technologies. **Gregory J. Wiggins**, wiggybug@utk.edu, Jerome F. Grant and Abdul Hakeem, Univ. of Tennessee, Knoxville, TN

8:50 079 Progress on developing a novel IPM research and demonstration project for the aquatic weed Hydrilla in Florida. **James P. Cuda**, jcuda@ufl.edu[1], Jennifer Gillett-Kaufman[2], William Overholt[3], Karen N. Stratman[3], Raymond L. Hix[4], Eutychus Kariuki[5], Judy Shearer[6], Emma N. I. Weeks[1], Joan Bradshaw[7], Ken Gioeli[3] and Verena-Ulrike Lietze[1], [1]Univ. of Florida, Gainesville, FL, [2]UF/IFAS, Gainesville, FL, [3]Univ. of Florida, Fort Pierce, FL, [4]Florida A&M Univ., Tallahassee, FL, [5]Florida A & M Univ., Tallahassee, FL, [6]US Army, Vicksburg, MS, [7]Univ. of Florida, Lecanto, FL

9:15 080 Exploiting previously unknown interactions between subterranean termites and blue-stain fungi. **John Riggins**, jriggins@entomology.msstate.edu and Nathan S. Little, Mississippi State Univ., Mississippi State, MS

9:40 081 Monitoring, distribution and control of spotted wing drosophila, a new invasive species in Florida. **Oscar E. Liburd**, oeliburd@ufl.edu, Univ. of Florida, Gainesville, FL

10:05 AM-10:30 Break

10:30 082 When 'maggot' is a dirty word: The biology and management of *Drosophila suzukii* in the southeastern United States. **Hannah J. Burrack**, hjburrac@ncsu.edu, Univ. of California, Davis, Davis, CA

10:55 083 Non-native forest insects in eastern North America alter native flora and fauna communities. **David R. Coyle**, dcoyle@warnell.uga.edu and Kamal JK. Gandhi, Univ. of Georgia, Athens, GA

11:20 084 Thanks neighbor: Benefits of biological control efforts to adjacent states. **David Held**, dwh0008@auburn.edu, Auburn Univ., Auburn, AL

TUESDAY, 5 MARCH

CONTRIBUTED PAPERS II

P-IE: Field Crop IPM

8:30 – 11:54
Governor Room

Moderators:
Jeremy Greene & Kris Braman

8:30 085 Navigating the regulatory realm: How IR-4 procures pest management tools for specialty crops and minor uses. **Michelle Samuel-Foo**, mfoo@ufl.edu, Univ. of Florida, Gainesville, FL

8:42 086 DuPont™ Exirel™ and Verimark™ insect control: Novel insecticides for crop protection and optimizing yield in Florida citrus. **Joshua Temple**, joshua.h.temple@dupont.com[1], Stanley S. Royal[2], James E. Taylor[3], Rachel Cameron[4], Philip A. Stansly[5], Barry C. Kostyk[6], Hector Portillo[4], I. Billy Annan[4] and Juan M. Alvarez[4], [1]DuPont Crop Protection, Bradenton, FL, [2]DuPont Crop Protection, Girard, GA, [3]DuPont Crop Protection, St. Petersburg, FL, [4]DuPont Crop Protection, Newark, DE, [5]Univ. of Florida, IFAS, Immokalee, FL, [6]Southwest Florida Research and Education Center, Immokalee, FL

8:54 087 Transform™: An insecticide for managing tarnished plant bugs (*Lygus lineolaris*) and cotton aphids (Aphis gossypii) in Mid-South U.S. cotton. **Melissa Willrich Siebert**, mwillrichsiebert@dow.com[1], Larry Walton[2], Ralph B. Lassiter[3], Andrew T. Ellis[1], Robert Haygood[2] and James D. Thomas[4], [1]Dow AgroSciences, LLC, Greenville, MS, [2]Dow AgroSciences, Indianapolis, IN, [3]Dow AgroSciences, Little Rock, AR, [4]Dow AgroSciences, LLC, Indianapolis, IN

9:06 088 Performance of Dow AgroSciences next-generation insect protection traits for cotton. **Bo Braxton**, lbraxton@dow.com, Melissa Siebert, Andrew Ellis, Larry Walton, John Richburg, Ralph Lassiter and Robert Haygood, Dow AgroSciences, Indianapolis, IN

9:18 089 Evaluation of new options for thrips control on cotton in North Carolina. **Jack S. Bacheler**, jack_bacheler@ncsu.edu[1], Todd Spivey[1] and Dominic R. Reisig[2], [1]North Carolina State Univ., Raleigh, NC, [2]North Carolina State Univ., Plymouth, NC

9:30 090 Insect management in Midsouth grain sorghum. **Adam Whalen**, daw153@msstate.edu[1], Angus L. Catchot[1], Jeff Gore[2], Scott D. Stewart[3] and Donald Cook[4], [1]Mississippi State Univ., Mississippi State, MS, [2]Mississippi State Univ., Starkville, MS, [3]Univ. of Tennessee, Jackson, TN, [4]Mississippi State Univ., Stoneville, MS

9:42 091 Efficacy of rice insecticide seed treatments at selected nitrogen rates. **Mallory Everett**, mallorye@uark.edu, Univ. of Arkansas, Fayetteville, AR

9:54 092 Management of bollworm, *Helicoverpa zea* (Boddie), in Mid-South Soybeans. **Don Cook**, DCook@drec.msstate.edu[1], Angus Catchot[2], Brian Adams[2], Jeff Gore[1], Gus Lorenz[3] and Fred Musser[2], [1]Mississippi State Univ., Stoneville, MS, [2]Mississippi State Univ., Mississippi State, MS, [3]Univ. of Arkansas, Lonoke, AR

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10:06 AM-10:30 Break

10:30 093 Compatibility of flooding depth and plant resistance with chlorantraniliprole seed treatment in the management of rice water weevil (*Lissorhoptrus oryzophilus*) in rice. **Srinivas Lanka**, slanka@agcenter.lsu.edu, Louisiana State Univ. Agcenter, Baton Rouge, LA and Michael Stout, Louisiana State Univ. Agric. Center, Baton Rouge, LA

10:42 094 Tarnished plant bug (*Lygus lineolaris)* control in Mississippi. **Clinton Wood**, woodwilks@gmail.com[1], Don Cook[2] and Jeff Gore[2], [1]Mississippi State Univ., Cleveland, MS, [2]Mississippi State Univ., Stoneville, MS

10:54 095 Stink bug management in cotton using strip spray applications. **Ishakh Pulakkatu-Thodi**, ishakpt@gmail.com[1], Jeremy K. Greene[2], Francis Reay-Jones[3], Michael D. Toews[1] and Dominic R. Reisig[4], [1]Univ. of Georgia, Tifton, GA, [2]Clemson Univ., Blackville, SC, [3]Clemson Univ., Florence, SC, [4]North Carolina State Univ., Plymouth, NC

11:06 096 DuPont™ Exirel™ and Verimark™ insect control: Novel insecticides for crop protection and optimizing yield on vegetables in the Southeast. **James E. Taylor**, james.e.taylor-1@dupont.com[1], Stanley S. Royal[2], Glenn G. Hammes[3], Robert W. Williams[4], Hector E. Portillo[5], I. Billy Annan[5] and Juan M. Alvarez[5], [1]DuPont Crop Protection, St. Petersburg, FL, [2]DuPont Crop Protection, Girard, GA, [3]DuPont Crop Protection, Blairsville, GA, [4]DuPont Crop Protection, Raleigh, ND, [5]DuPont Crop Protection, Newark, DE

11:18 097 Red headed flea beetle management. **S. Kris Braman**, kbraman@griffin.uga.edu, Univ. of Georgia, Griffin, GA and Michelle Samuel-Foo, Univ. of Florida, Gainesville, FL

11:30 098 Summary of kudzu bug, *Megacopta cribraria*, small plot insecticide efficacy trials in southeastern soybeans. **Phillip M. Roberts**, proberts@uga.edu[1], John All[2], Michael D. Toews[1], Jeremy K. Greene[3], Dominic R. Reisig[4] and Jack S. Bacheler[5], [1]Univ. of Georgia, Tifton, GA, [2]Univ. of Georgia, Athens, GA, [3]Clemson Univ., Blackville, SC, [4]North Carolina State Univ., Plymouth, NC, [5]North Carolina State Univ., Raleigh, NC

11:42 099 Effects of planting date, maturity group, and insecticide on *Megacopta cribraria* (the "Kudzu bug") in soybeans in the lower Southeastern USA. **Jeremy K. Greene**, greene4@clemson.edu[1], Nicholas J. Seiter[1], Phillip M. Roberts[2] and Francis Reay-Jones[3], [1]Clemson Univ., Blackville, SC, [2]Univ. of Georgia, Tifton

TUESDAY, 5 MARCH

MULTI-DISCIPLINARY GRADUATE PROGRAMS SYMPOSIUM

Doctor of Plant Medicine & Master of Plant Protection and Pest Management Degrees

8:30 – 11:50
Louisiana Room

Organizers and Moderators:
Amanda Hodges & Greg Hodges

8:30 100 Multidisciplinary degree programs and regulatory sciences. **Greg S. Hodges**, greg.hodges@freshfromflorida.com, Florida Dept. of Agriculture, Gainesville, FL

8:50 101 The benefits of multidisciplinary training for industry. **Joe E. Eger**, jeeger@dow.com, Dow AgroSciences, Tampa, FL

9:10 102 The University of Georgia's Master of Plant Protection and Pest Management (MPPPM) program-Lessons learned in training plant health professionals. **Dan L. Horton**, dlhorton@uga.edu, Univ. of Georgia, Athens, GA

9:30 103 The University of Florida's Doctor of Plant Medicine (DPM) program-Accomplishments and future plans. **Amanda C. Hodges**, achodges@ufl.edu, Univ. of Florida, Gainesville, FL

9:50 104 The University of Nebraska's Doctor of Plant Health program: Start-up challenges and future opportunities. **Gary L. Hein**, GHEIN1@unl.edu, Univ. of Nebraska-Lincoln, Lincoln, NE

10:10 AM-10:30 Break

10:30 105 Plant doctors as diagnosticians: Challenges and successes. **Raghuwinder Singh**, Louisiana State Univ., Baton Rouge, LA

10:50 106 The value of internships and multidisciplinary plant health programs: A student's perspective. **Eric LeVeen**, Univ. of Florida, Gainesville, FL

11:10 107 Doctor of plant medicine program: Paving the way to safe, sustainable crop production. **Bonnie Wells**, Univ. of Florida, Gainesville, FL

11:30 108 The future of multidisciplinary plant health programs: A facilitated discussion. **Amanda C. Hodges**, achodges@ufl.edu, Univ. of Florida, Gainesville, FL

TUESDAY, 5 MARCH

URBAN ENTOMOLOGY SYMPOSIUM

Trade Globalization is Not New – 500 years of Introducing Urban Pests in North America

8:30 – 11:10
Riverview B

Organizers and Moderators:
Ellen Thoms & Daniel Suiter

8:30 109 The legacy of trade globalization from the perspective of urban insect pests-"I've always wanted to have a neighbor just like you". **Ellen Thoms**, emthoms@dow.com, Dow AgroSciences, LLC, Gainesville, FL

8:50 110 Introduced wood-boring beetles are not boring. **Thomas H. Atkinson**, thatkinson.austin@gmail.com, Univ. of Texas, Austin, TX

9:10 111 Anthropogenic transport of pestiferous termites. **Rudolph H. Scheffrahn**, rhsc@ufl.edu, Univ. of Florida, Ft. Lauderdale, FL

9:30 112 Introduced cockroaches in North America, the closer you look the more you see! **Arthur G. Appel**, appelag@auburn.edu, Auburn Univ., Auburn, AL

9:50 113 Unwelcomed house guests: Introduced Heteroptera as urban pests in North America. **Joe E. Eger**, jeeger@dow.com, Dow AgroSciences, Tampa, FL

10:10 AM-10:30 Break

10:30 114 Good invaders come in small packages: Introduced ants of the Southeast United States. **Daniel R. Suiter**, dsuiter@uga.edu, Univ. of Georgia, Griffin, GA

10:50 115 Introduced stinging Hymenoptera: Deliberate and accidental from *Aphis* to *Zeta***. Bill Kern**, whk@ufl.edu, Univ. of Florida, Davie, FL , GA

TUESDAY, 5 MARCH

AWARDS CEREMONY, LUNCHEON AND PHOTO SALON

12:00 – 1:40 PM
Riverview A

CONTRIBUTED PAPERS III

P-IE: Biocontrol and Host-Plant Resistance

1:40 – 2:40
Capitol Room

Moderators:
Oulimathe Paraiso & Don Steinkraus

1:40 116 Survival of adult *Tamarixia radiata* subjected to different short-term storage methods prior to field releases for biological control of Asian citrus psyllid. **David Hall**, David.hall@ars.usda.gov, USDA, Agricultural Research Service, Fort Pierce, FL and Ethan Klein, Dartmouth College, Hanover, NH

1:52 117 Biological control of the small hive beetle (*Aethina tumida*), a pest of the honey bee. **Donald C. Steinkraus**, steinkr@uark.edu and Natasha A. Wright, Univ. of Arkansas, Fayetteville, AR

2:04 118 Effect of Eastern Gamagrass on fall armyworm and corn earworm development. **Xinzhi Ni**, xinzhi.ni@ars.usda.gov[1], Ashuli Patel[2], David Buntin[3] and Michael D. Toews[2], [1]USDA, Agricultural Research Service, Tifton, GA, [2]Univ. of Georgia, Tifton, GA, [3]Univ. of Georgia, Griffin, GA

2:16 119 Influence of temperature on establishment of introduced predators of hemlock woolly adelgid. **Abdul Hakeem**, ahakeem@utk.edu[1], Jerome Grant[1], Paris Lambdin[1], Greg Wiggins[1], Frank Hale[2], David Buckley[1] and Rusty Rhea[3], [1]Univ. of Tennessee, Knoxville, TN, [2]Univ. of Tennessee, Nashville, TN, [3]USDA-Forest Service, Asheville, NC

2:28 120 Prospects and challenges for classical biological control of *Cactoblastis cactorum* (Berg) (Lepidoptera: Pyralidae) in the US. **Oulimathe Paraiso**, oulimathe.paraiso@freshfromflorida.com and Trevor R. Smith, Florida Dept. of Agriculture and Consumer Services (FDACS), Gainesville, FL

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CONTRIBUTED PAPERS IV

P-IE: Migration, Ecology, Exotics

1:40 – 2:40
Governor Room

Moderators:
Rob Meagher & Frank Hale

1:40 121 Does fall armyworm migrate to Florida from the Caribbean?. **Robert L. Meagher**, rob.meagher@ars.usda.gov[1], Rodney Nagoshi[1] and John K. Westbrook[2], [1]USDA, Agricultural Research Service, Center for Medical, Agricultural & Veterinary Entomology (CMAVE), Gainesville, FL, [2]USDA ARS APMRU, College Station, TX

1:52 122 Overview of tarnished plant bug (*Lygus lineolaris*) ecology in the mid-south. **Katherine Parys**, katherine.parys@ars.usda.gov, Gordon Snodgrass, Clint Allen and Randall Luttrell, USDA-ARS, Stoneville, MS

2:04 123 Diversity of wood boring beetles in three habitats. **Juang-Horng Chong**, juanghc@CLEMSON.EDU, Clemson Univ., Florence, SC

2:16 124 Invasive pests impact Tennessee. **Frank Hale**, fahale@utk.edu, Univ. of Tennessee, Nashville, TN

2:28 125 Monitoring and biology of an introduced weevil, *Myllocerus undecimpustulatus undatus.* **Catharine M. Mannion**, cmannion@ufl.edu, Univ. of Florida, Homestead, FL

CONTRIBUTED PAPERS V

P-IE: Biology, Ecology, IPM

1:40 – 2:40
Louisiana Room

Moderators:
Jeffrey Gore and Dominic Reisig

1:40 126 Insect pests of peanut in Mississippi and their management. **Jeffrey Gore**, jgore@drec.msstate.edu and Don Cook, Mississippi State Univ., Stoneville, MS

1:52 127 Sugarcane borer pest potential in bioenergy sorghum and energycane. **J.M. Beuzelin**, jbeuzelin@agcenter.lsu.edu[1], M.T. VanWeelden[2], B.E. Wilson[2] and T.E. Reagan[2], [1]LSU AgCenter, Alexandria, LA, [2]LSU AgCenter, Baton Rouge, LA

2:04 128 Impact of sugarcane beetle (*Euetheola humilis)* feeding in field corn. **Kevin Lanford**, rkl49@msstate.edu[1], Angus L. Catchot[1], Fred R. Musser[2], D. Cook[2] and Erick Larson[1], [1]Mississippi State Univ., Mississippi State, MS, [2]Mississippi State Univ., Starkville, MS

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2:16 129 Prevalence of late season volunteer corn in Mississippi and its implications on corn earworm Bt resistance development. **Arun Babu**, ab1835@msstate.edu[1], Don Cook[2], Michael A. Caprio[3], Clint Allen[4] and Fred R. Musser[1], [1]Mississippi State Univ., Starkville, MS, [2]Mississippi State Univ., Stoneville, MS, [3]Mississippi State Univ., Mississippi State, MS, [4]USDA-ARS, Stoneville, MS

2:28 130 *Euschistus servus* movement within and between wheat and corn. **Dominic R. Reisig**, dominic_reisig@ncsu.edu, North Carolina State Univ., Plymouth, NC

POSTER PRESENTATIONS

8:00 AM to 5:00 PM
Riverview Meeting Room

Presenters at Posters from 2:30 to 3:30

Systematics, Evolution and Biodiversity

DSP39 Several new species of *Sonoma* Casey and a phylogenetic analysis of the genus (Coleoptera: Staphylinidae: Pselaphinae). **Michael L. Ferro**, spongymesophyll@gmail.com, Louisiana State Univ., Baton Rouge, LA and Christopher E. Carlton, Louisiana State Univ. Agricultural Center, Baton Rouge, LA

DSP40 Organization for Tropical Studies specialty course on Coleoptera in Costa Rica and resulting new discoveries. **Christopher E. Carlton**, ccarlt@lsu.edu, Louisiana State Univ. Agricultural Center, Baton Rouge, LA and Victoria Bayless, Louisiana State Univ., Baton Rouge, LA

DSP41 Population genetic analyses of chewing lice (*Geomydoecus ewingi*) parasitizing pocket gophers (*Geomys breviceps*). **Caitlin Nessner**, ness87c@tamu.edu and Jessica E. Light, Texas A&M Univ., College Station, TX

DSP42 Identification of *Odontomachus* species in the southeastern United States. **Joe A. MacGown**, jmacgown@entomology.msstate.edu, Mississippi Entomological Museum, Mississippi State, MS and Mark A. Deyrup, Archbold Biological Station, Lake Placid, FL

Medical, Urban and Veterinary Entomology

DSP43 Phenology of *Pseudacteon* (Diptera: Phoridae) in Alabama. **Kelly Palmer**, ridleka@auburn.edu, Auburn Univ., Auburn, AL

DSP44 Localized treatments using commercial dust and liquid formulations of fipronil against *Coptotermes formosanus* Shiraki (Isoptera: Rhinotermitidae) in the laboratory. **Bal K. Gautam**, bgauta3@tigers.lsu.edu, Gregg Henderson and Cai Wang, Louisiana State Univ., Baton Rouge, LA

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DSP45 Comparison on the reproduction of *Tropilaelaps mercedesae* in natural and mite-inoculated *Apis mellifera* brood in Thailand. **Kitiphong Khongphinitbunjong**, khongphinit@gmail.com[1], Lilia I. de Guzman[2], Ninat Buawangpong[1], Thomas E. Rinderer[3], Amanda M. Frake[3] and Panuwan Chantawanakul[1], [1]Chiang Mai Univ., Chiang Mai, Thailand, [2]USDA/ARS, Baton Rouge, LA, [3]USDA-ARS, Baton Rouge, LA

DSP46 *In vivo* gene knockdown of thioredoxin reductase in the gulf coast tick (*Amblyomma maculatum*). **Ieshia Hubbard**, ieshiamed@gmail.com[1], Rebecca Browning[2], Steven Adamson[2] and Shahid Karim[3], [1]Jackson State Univ., Jackson, MS, [2]Univ. of Southern Mississippi, Hattiesburg, MS, [3]The Univ. of Southern Mississippi, Hattiesburg, MS

DSP47 Edible insects and backpacking: Skills for the trail. **Marianne Shockley**, entomolo@uga.edu, Univ. of Georgia, Athens, GA

Physiology, Biochemistry and Toxicology

DSP48 Chemical control of the redbay ambrosia beetle. **Daniel Carrillo**, dancar@ufl.edu, Rita Duncan, Jorge Peña and Jonathan Crane, Univ. of Florida, Tropical Research and Education Center, Homestead, FL 33031, Homestead, FL

DSP49 Laboratory comparison of soil treatments for the control of the small hive beetle (*Aethina tumida)*. **Matthew R. Tarver**, matt.tarver@ars.usda.gov, Sharon O'Brien, Lilia DeGuzman, Beth Holloway and Thomas E. Rinderer, USDA-ARS, Baton Rouge, LA

Plant–Insect Ecosystems: Biocontrol

DSP50 Effect of different ornamental pepper pollens on the development and reproduction of *Amblyseius swirskii* (Acari: Phytoseiidae). **Vivek Kumar**, vivekiari@ufl.edu, Mid-Florida Research and Education Center, Univ. of Florida, Apopka, FL, Vitalis Wekesa, Kenya Polytechnic Univ. College, Nairobi, Kenya, Pasco B. Avery, Univ. of Florida, Ft. Pierce, FL, Charles A. Powell, Univ. of Florida, Institute of Food and Agricultural Sciences, Fort Pierce, FL, Cindy L. McKenzie, USDA, Agricultural Research Service, Fort Pierce, FL and Lance S. Osborne, Univ. of Florida, Apopka, FL

DSP51 Impact of decapitating flies (Diptera: Phoridae) on red imported fire ant populations in Louisiana . **Anna Mészáros**, ameszaros.pme@aol.com[1], S.J. Johnson[2], M.L. Ferro[2] and J.M. Beuzelin[3], [1]Pest Management Enterprises, LLC, Cheneyville, LA, [2]LSU AgCenter, Baton Rouge, LA, [3]LSU AgCenter, Alexandria, LA

DSP52 Biological control of emerald ash borer in Tennessee: The race is on!. **Jerome F. Grant**, jgrant@utk.edu[1], Steve D. Powell[2], Gregory J. Wiggins[1] and Kenneth J. Copley[3], [1]Univ. of Tennessee, Knoxville, TN, [2]Tennessee Dept. of Agriculture, Nashville, TN, [3]USDA APHIS, Murfreesboro, TN

DSP53 Molecular determination of parasitoid (Encyrtidae: Hymenoptera) populations of the Harrisia cactus mealybug (HCM), *Hypogeococcus pungens* (Granara de Willink) (Hemiptera:Pseudococcidae) in the Caribbean. **Alberto Galindo-Cardona**, coleopterino@gmail.com[1], Jose Carlos V. Rodrigues[1], Amy L. Roda[2] and Matthew Ciomperlik[3], [1]Univ. of Puerto Rico, San Juan, PR, [2]USDA-APHIS-PPQ, Miami, FL, [3]USDA, APHIS, Plant Protection & Quarantine,, Edinburg, TX

DSP54 Bioassays of cotton leaf tissue to measure residual contact of *Lygus lineolaris with Beauveria bassiana*. **Kenya Dixon**, Kenya.Dixon@ARS.USDA.GOV, Maribel Portilla, Gordon Snodgrass, Katherine Parys and Randall Luttrell, USDA-ARS, Stoneville, MS

DSP55 Efficacy of *Beauveria bassiana* isolate Ni8 on the control of both reproductive and reproductive-diapaused *Lygus lineolaris* adults at low temperatures. **Gerald Gipson**, gerald.gipson@ars.usda.gov and Gordon Snodgrass, USDA-ARS, Stoneville, MS

DSP56 Evaluation on the lethal effect of *Beauveria bassiana* strains delta native NI8 and commercial GHA against the tarnished plant bug in cotton. **Maribel Portilla**, maribel.portilla@ars.usda.gov[1], Gordon Snodgrass[2] and Randall Luttrell[2], [1]ARS-USDA National Biological Control Laboratory, Stoneville, MS, [2]USDA-ARS, Stoneville, MS

Plant–Insect Ecosystems: Ecology, Invasive Species, Migration

DSP57 Predictive modeling and mitigation of the effects of climate change on the infestation patterns of a migratory crop pest insect. **Rodney Nagoshi**, rodney.nagoshi@ars.usda.gov, USDA-ARS, Gainesville, FL, John K. Westbrook, USDA ARS APMRU, College Station, TX, Shelby J. Fleischer, Pennsylvania State Univ., State College, PA and Robert L. Meagher, USDA, Agricultural Research Service, Center for Medical, Agricultural & Veterinary Entomology (CMAVE), Gainesville, FL

DSP58 Pheromone trap monitoring of the Mexican rice borer. **B.E. Wilson**, bwils26@lsu.edu[1], J.M. Beuzelin[2], M.T. VanWeelden[1], T.E. Reagan[1] and T. Hardy[3], [1]LSU AgCenter, Baton Rouge, LA, [2]LSU AgCenter, Alexandria, LA, [3]Louisiana Department of Agriculture & Forestry, Baton Rouge, LA

DSP59 Effect of lures and color on trap capture of lady beetles. Emily Kemp, USDA, ARS, Byron, GA and **Ted E. Cottrell**, ted.cottrell@ars.usda.gov, USDA-ARS, Byron, GA

DSP60 Arthropod abundance and diversity in longleaf pine (*Pinus palustris*) savannas. **Cara Nighohossian**, cbnighoh@uno.edu, Univ. of New Orleans, New Orleans, LA

DSP61 Tritrophic interactions involving fall armyworm, parasitoid wasp and grasses releasing cyanide. **Mirian M. Hay-Roe**, Mirian.Hay-Roe@ars.usda.gov[1], Robert L. Meagher[2] and Rodney N. Nagoshi[1], [1]USDA-ARS, Gainesville, FL, [2]USDA-ARS, Gainesville, FL

DSP62 Survey of the invasive rice stem stink bug *Tibraca limbativentris* (Hemiptera: Pentatomidae) and *Oebalus spp.* (Hemiptera: Pentatomidae) in rice fields in the Dominican Republic. **Raymond L. Hix**, raymond.hix@famu.edu, Moses, T. K. Kairo and Enger German-Ramirez, Florida A&M Univ., Tallahassee, FL

DSP63 Evaluation of 7 plant essential oils as attractants for redbay ambrosia beetle, *Xyleborus glabratus* (Coleoptera: Curculionidae: Scolytinae). **Paul E. Kendra**, paul.kendra@ars.usda.gov, Wayne S. Montgomery, Jerome Niogret and Nancy D. Epsky, USDA-ARS, Miami, FL

Plant–Insect Ecosystems: IPM

DSP64 Managing the 2012 West Indian canefly (Hemiptera: Delphacidae) outbreak. **J.M. Beuzelin**, jbeuzelin@agcenter.lsu.edu[1], W.H. White[2], C.D. Dalley[2], B.E. Wilson[3], A. Mészáros[4] and M.T. VanWeelden[3], [1]LSU AgCenter, Alexandria, LA, [2]USDA-ARS, Houma, LA, [3]LSU AgCenter, Baton Rouge, LA, [4]Pest Management Enterprises, LLC, Cheneyville, LA

DSP65 Occurrence of cereal leaf beetle in relation to wheat tiller density. **Francis Reay-Jones**, freayjo@clemson.edu, Clemson Univ., Florence, SC and Dominic R. Reisig, North Carolina State Univ., Plymouth, NC

DSP66 Control of various insect pests of subtropical and vegetable soybeans using IPM strategies. **John J. Adamczyk**, John.Adamczyk@ars.usda.gov[1], Gus Lorenz[2], J. Scott Armstrong[3], Robert Pfannenstiel[4], Andy Scott[5], Benjamin Thrash[2], Ned Edwards[6], Donna Marshall[7] and Christine Coker[8], [1]USDA-ARS, Poplarville, MS, [2]Univ. of Arkansas, Lonoke, AR, [3]USDA, Agricultural Research Service, Stillwater, OK, [4]USDA-ARS, Weslaco, TX, [5]RioFarms, Inc, Monte Alto, TX, [6]USDA, ARS Thad Cochran Southern Horticultural Laboratory, Poplarville, MS, [7]USDA, ARS, Thad Cochran Southern Horticultural Laboratory, Poplarville, MS, [8]Mississippi State Univ., Biloxi, MS

DSP67 Management of pepper weevil (*Anthonomus eugenii*) using biological and chemical insecticides. **Dakshina Seal**, dseal@Ifas.ufl.edu, Catherine Sabines, Univ. of Florida, Dept. of Entomology and Nematology, Homestead, FL

DSP68 Impact of rice stink bug (*Oebalus pugnax*) infestation timing on rice yields. **George Awuni**, gaa48@msstate.edu[1], Jeff Gore[2], Don Cook[2], Fred Musser[1] and Andrew Adams[1], [1]Mississippi State Univ., Mississippi State, MS, [2]Mississippi State Univ., Stoneville, MS

DSP69 Insecticide efficacy for control of redbanded stink bug, *Piezodorus guildinii* (Westwood), in Louisiana soybean, 2012. **Jessica L. Parker**, jparker@agcenter.lsu.edu[1], T. Shelby Williams[2], Jarrod Chapman[2], Karla D. Emfinger[2] and David L. Kerns[2], [1]Louisiana State Univ. Agricultural Center, Baton Rouge, LA, [2]Louisiana State Univ. Agricultural Center, Winnsboro, LA

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DSP70 Survival of *Helicoverpa zea*, *Heliothis virescens*, and *Spodoptera fruigiperda* neonates fed upper cotton leaves from conventional and Bt cottons. **Chad Roberts**, gregory.roberts@ars.usda.gov, Kenya Dixon, Katherine Parys and Randall Luttrell, USDA-ARS, Stoneville, MS

DSP71 Insect and mite pests of the pecan tree vascular system. **James D. Dutcher**, jimdutcher@lycos.com, Univ. of Georgia, Tifton, GA

DSP72 Temporal occurrence of Plusiinae in soybean in the Mississippi Delta. **Clint Allen**, clint.allen@ars.usda.gov, USDA-ARS, Stoneville, MS

DSP73 Effect of variety selection on tarnished plant bug (*Lygus lineolaris*) levels in cotton. **Glenn Studebaker** and F.M. Bourland, Division of Agriculture, Cooperative Extension Service, Dept of Entomology, University of Arkansas, Kesier, AR

Plant–Insect Ecosystems: Resistance Management, Transgenic Crops

DSP74 Establishing baseline insecticide susceptibility for soybean looper. **Arthur R. Richter**, M. J. Murray and Jeffrey A. Davis, Louisiana State Univ. AgCenter, Baton Rouge, LA

DSP75 Characterization of genetic basis of Cry1F resistance in fall armyworm. **Vikash Dangal**, fhuang1@lsu.edu[1], Jawwad A. Qureshi[2], Robert Meagher[3], Ying Niu[1], Fei Yang[1] and Fangneng Huang[1], [1]Louisiana State Univ. Agricultural Center, Baton Rouge, LA, [2]Southwest Florida Research and Education Center, Immokalee, FL, [3]USDA-ARS, Gainesville, FL

DSP76 Monitoring fall armyworm resistance to Cry1F corn in Louisiana, Georgia, and Florida. **Fangneng Huang**, fhunag@agcenter.lsu.edu[1], B. Rogers Leonard[1], Robert Meagher[2], Jawwad A. Qureshi[3], David Kerns[1], Xinzhi Ni[4], David Buntin[5], Ronnie Levy[6], Ying Niu[1], Fei Yang[1] and Vikash Dangal[1], [1]Louisiana State Univ. Agricultural Center, Baton Rouge, LA, [2]USDA-ARS, Gainesville, FL, [3]Southwest Florida Research and Education Center, Immokalee, FL, [4]USDA, Agricultural Research Service, Tifton, GA, [5]Univ. of Georgia, Griffin, GA, [6]Louisiana State Univ. Agricultural Center, Alexandria, LA

DSP77 Evaluation of transgenic corn containing single or pyramided Bt genes against Cry1F-susceptible and -resistant fall armyworm. **Ying Niu**, yniu@agcenter.lsu.edu[1], Robert Meagher[2], Fei Yang[1], Vikash Dangal[1] and Fangneng Huang[1], [1]Louisiana State Univ. Agricultural Center, Baton Rouge, LA, [2]USDA-ARS, Gainesville, FL

DSP78 Laboratory evaluation of selected insecticides on field-collected populations of tobacco budworm (*Heliothis virescens*) and bollworm (*Helicoverpa zea*) in Georgia-2012 update. **Gregory Payne**, gpayne@westga.edu, Jordan Sadler and Stephanie Piper, Univ. of West Georgia, Carrollton, GA

TUESDAY, 5 MARCH

FINAL BUSINESS MEETING

3:30 – 5:00
Riverview B

MIXER AND LSU BASEBALL GAME

5:30 – 7:30
LA House

5:00 – 5:30 **Shuttle leaves for LA House:**
Shuttle leaves from front of Hilton

The LSU baseball field is near the LA House. The game will begin at 7:00 PM.

Shuttle transport back to the Hilton will be provided following the mixer and following the baseball game

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R. W. Harned	3-4 Feb. 1932	Birmingham, AL
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R. C. Gaines	11-16 Jan. 1947	Biloxi, MS
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J. T. Creighton	31 Jan.-2 Feb. 1949	Baton Rouge, LA
E. W. Dunnam	13-16 Dec. 1949	Tampa, FL
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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
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L. D. Newsom	25-26 Jan. 1965	Little Rock, AR
J. C. Alden	29 Nov.-2 Dec. 1965	New Orleans, LA
M. E. Merkl	30 Jan.-2 Feb. 1967	Atlanta, GA
J. S. Roussel	29 Jan.-1 Feb. 1968	Charleston, SC
C. M. Beckham	27-30 Jan. 1969	Biloxi, MS
S. R. Morris	26-29 Jan. 1970	Hot Springs, AR
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C. R. Jordan	1-3 Feb. 1972	Mobile, AL
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T. R. Pfrimmer	9-31 Jan. 1974	Memphis, TN
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T. D. Canerday	30 Nov.-3 Dec. 1975	New Orleans, LA
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S. G. Turnipseed	29-31 Jan. 1980	Biloxi, MS
D. F. Martin	30 Nov.-4 Dec. 1980	Atlanta, GA
J. E. Paine, Sr.	25-28 Jan. 1982	Mobile, AL
R. L. Rabb	24-27 Jan. 1983	Little Rock, AR
K. L. Hays	23-26 Jan. 1984	New Orleans, LA
G. J. Musick	28-31 Jan. 1985	Greenville, SC
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B. R. Wiseman	25-28 Jan. 1988	Raleigh, NC
T. E. Skelton	30 Jan.-2 Feb. 1989	Nashville, TN
J. W. Todd	4-8 Feb. 1990	Orlando, FL
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D. J. Boethel	8-11 Mar. 1992	Savannah, GA
G. A. Herzog	7-10 Mar. 1993	Little Rock, AR
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D. C. Herzog	3-6 Mar. 1996	Biloxi, MS
D. F. Williams	2-5 Mar. 1997	Asheville, NC
J. D. Culin	1-4 Mar. 1998	Chattanooga, TN
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R. G. Luttrell	27 Feb.-1 Mar. 2000	Mobile, AL
F. S. Guillot	4-7 Mar. 2001	Augusta, GA
G. L. Lentz	3-6 Mar. 2002	Little Rock, AR
B. L. Sparks	9-12 Mar. 2003	Baton Rouge, LA
M. L. Williams	16-18 Feb. 2004	Charleston, SC
G. R. Mullen	7-9 Mar. 2005	Tunica, MS
W. A. Gardner	5-8 Mar. 2006	Wilmington, NC
R. K. Sprenkel	2-5 Mar. 2007	Knoxville, TN
J. D. Harper	2-5 Mar. 2008	Jacksonville, FL
A. M. Simmons	8-11 Mar. 2009	Montgomery, AL
S. K. Braman	7-10 Mar 2010	Atlanta, GA
F. A. Hale	19-22 Mar. 2011	San Juan, Puerto Rico
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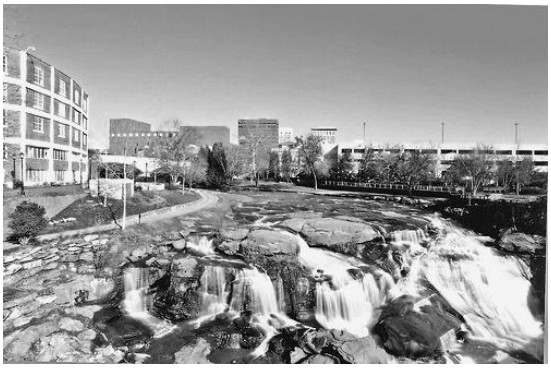

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DAY/TIME	PAPER NO.	AUTHOR	PAGE

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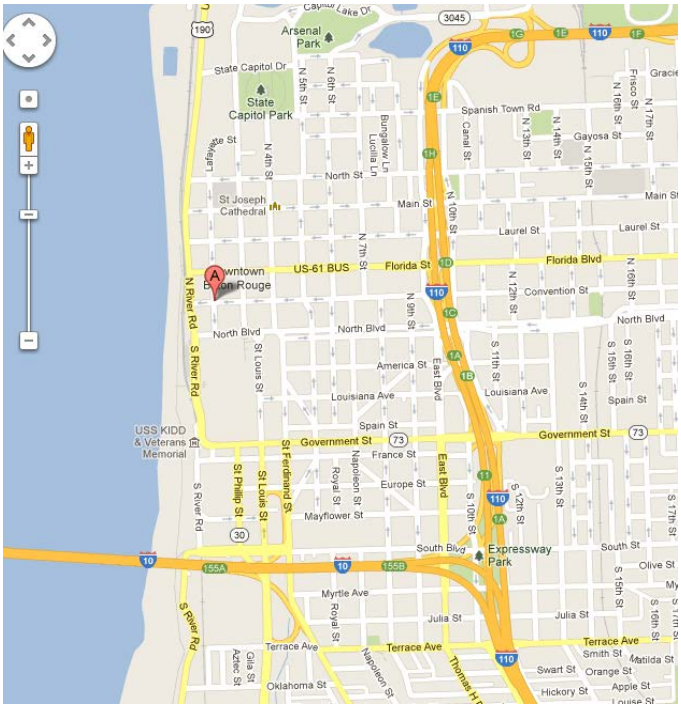

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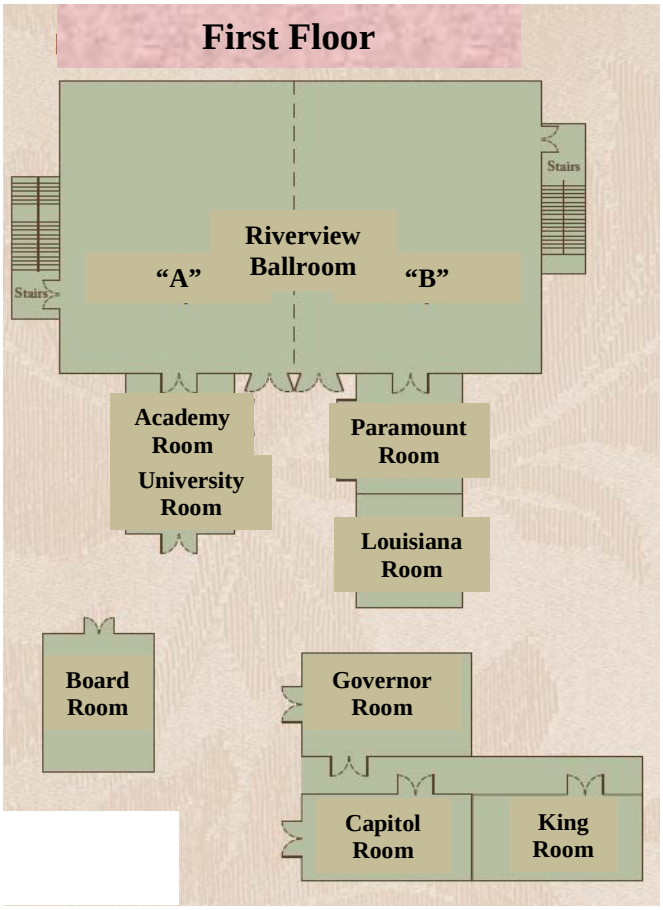

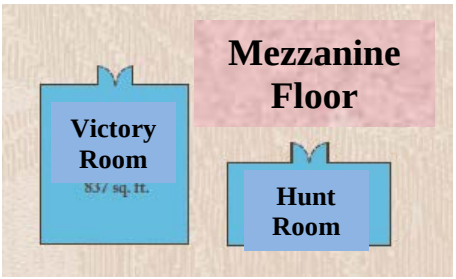

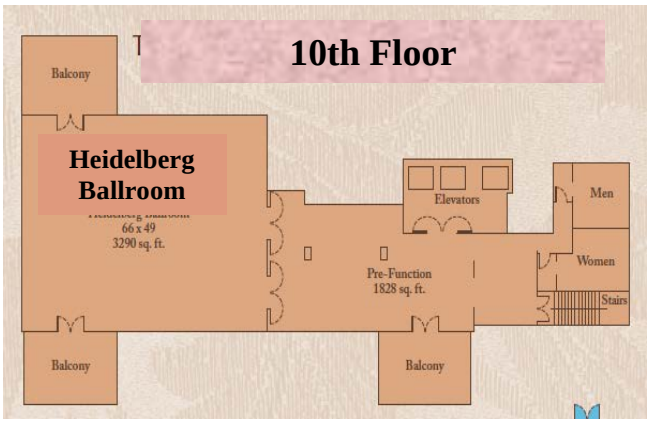

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