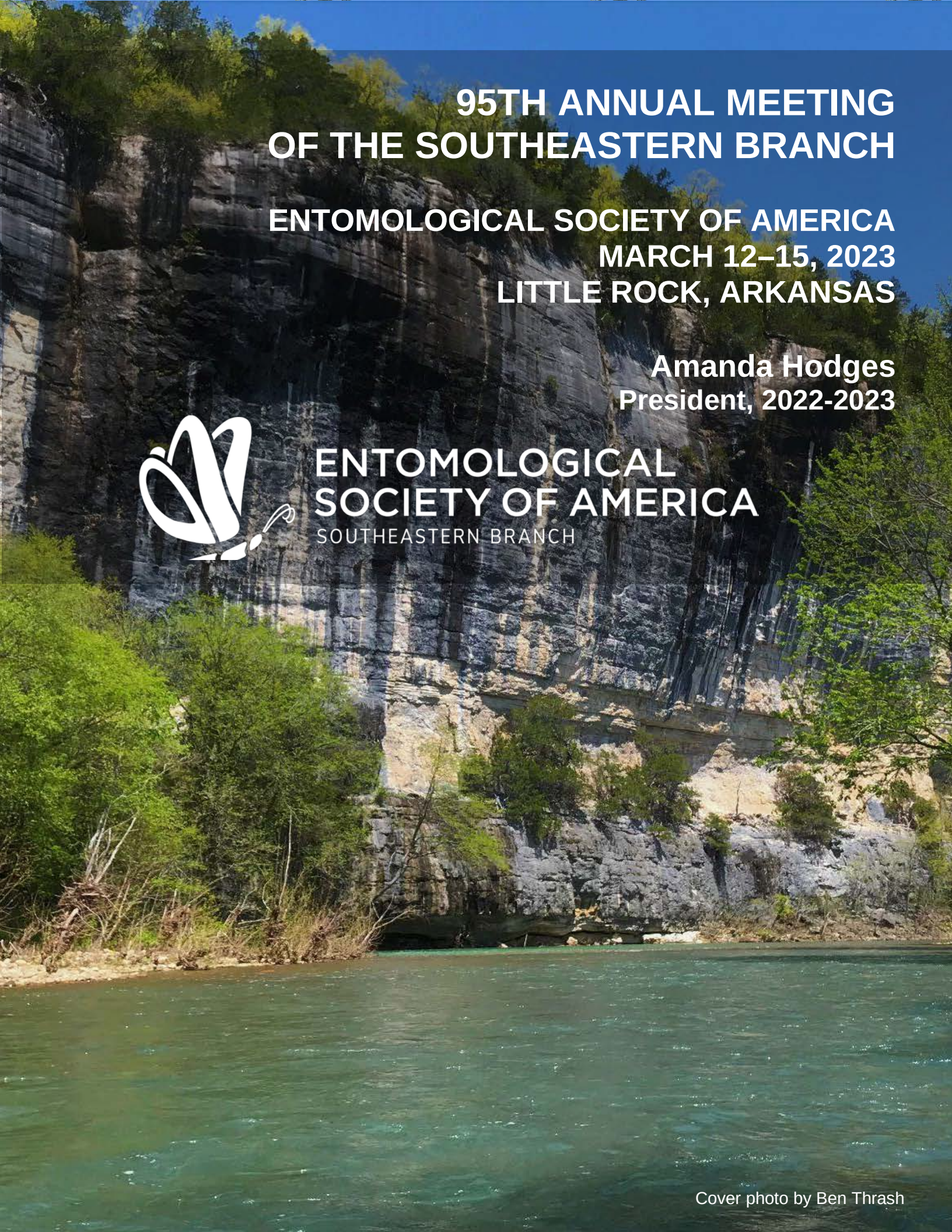

95TH ANNUAL MEETING OF THE SOUTHEASTERN BRANCH

ENTOMOLOGICAL SOCIETY OF AMERICA

MARCH 12–15, 2023
LITTLE ROCK, ARKANSAS

Amanda Hodges
President, 2022-2023

ENTOMOLOGICAL SOCIETY OF AMERICA
SOUTHEASTERN BRANCH

Cover photo by Ben Thrash

SPONSORS OF THE 2023 SEB MEETING

Our sponsors provide support for the mixers, breakfast, and various other functions of the meeting. In so doing, they help reduce the registration costs and provide a much more enjoyable environment for our meeting. Please be sure to express your appreciation to our sponsors:

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ENTOMOLOGICAL SOCIETY OF AMERICA
SOUTHEASTERN BRANCH

22 February 2023
To: Members and Attendees, Annual Meeting of the Southeastern Branch of the ESA
From: Amanda Hodges, President of the Southeastern Branch 2022-23
Re: Welcome to the 95th Annual Meeting of the Southeastern Branch

I am excited to welcome you to our annual meeting "***Building upon a Tradition of Innovation, Collaboration, and Adaption***" in ***Little Rock, Arkansas from March 13-15, 2023***. Nicole Benda, Florida Department of Agriculture and Consumer Services-Division of Plant Industry and Cory Penca, USDA-APHIS-PPQ, have planned an excellent program that includes information on the latest innovations in biological control, integrated pest management, career opportunities in entomology, and much more!

For 2023, we have two outstanding plenary speakers: Ron Smith, Auburn University; and Tom Kuhar, Virginia Tech University. Both of our plenary speakers have a breadth of knowledge in crop-based entomology research and student mentoring.

The Southeastern Branch has always been an outstanding venue for our graduate and undergraduate students to present their research. How many former SEB students are still connected to ESA through the hospitality received at our regional meeting? Student support and mentoring has been the lifeblood of the SEB for decades. For this reason, The SEB-ESA Executive Committee was pleased to introduce a new registration scholarship opportunity that seeks to support first-time and underrepresented student attendees at our conference for 2023. Karla Addesso of Tennessee State University, SEB Governing Board Representative and Executive Committee Member, led development of the guidelines for the scholarship. Extensive feedback was provided by Michelle Samuel-Foo, USDA-NIFA, Past-President; Kevin Chase, Bartlett Tree Experts, President-Elect; Brett Blaauw, University of Georgia, Secretary-Treasurer; JC Chong, Clemson University, Member-at-Large; Kaushalya Amarasekare, Tennessee State University, Member-at-Large; Chuck Klein, BASF.

Ben Thrash, USDA-ARS led our local arrangements efforts and the Little Rock, Arkansas, including the organization of a fly-tying workshop and fly-fishing excursion. In addition, several hiking opportunities are nearby, and the Clinton Presidential Library is always a well-received educational visit.

The Southeastern Branch is dependent upon a strong network of volunteers. I have only mentioned a fraction of the critical leaders and volunteers for the upcoming meeting. The service and commitment that you provide to the Southeastern Branch is important. We are a family-style network and community.

I am humbled and honored to serve as your 2022-2023 President and community leader/facilitator as we return to our second in-person meeting. I look forward to continuing to rebuild a robust southeastern regional network of research, teaching, and extension connections with you.

Amanda C. Hodges

Amanda Hodges
SEB-ESA President, 2022-2023
University of Florida, DPM Director

Meeting Information and Policies

PROGRAM SCHEDULE:
The 2023 SEB-ESA Meeting will be in-person only. All activities will be in the Marriott Hotel, Little Rock, Arkansas.

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.

AUDIOVISUAL PRESENTATIONS:
For All Presenters: Please design your material so that it can be read easily by the audience when it is projected. Presentations should be created in a format compatible with PowerPoint (.pptx) and formatted in a 4:3 aspect ratio. All meeting room computers are PCs, so presenters who create a presentation using a Mac should test the file on a PC prior to the meeting. All meeting rooms will be equipped with an LCD projector, projector screen, computer, and microphone.

Presenters are expected to **upload their presentation(s) *at least* two hours prior to their scheduled session**. Laptops with presentations uploaded will be moved to the respective rooms 30 minutes before the start of the sessions. The Presentation Preview and Upload AV room will have computers for presenters to load and preview presentations located in the **Peck Meeting Room** at the following times:
Sunday, March 12 . . . . . 1:00 PM – 5:00 PM
Monday, March 13. . . . . 7:00 AM – 5:00 PM
Tuesday, March 14 . . . . . 7:00 AM – 5:00 PM
Wednesday, March 15 . 7:00 AM – 12:00 PM

Please upload your talk in the appropriate folder. Your presentation should be named with your presentation number, last name, first name: "PresentationNumber_Last Name_First Name". Presenters who fail to upload more than two hours prior to their session may upload in the session room as long as it does not impact the timing of the session or any other presentations.

For Moderators: 20 minutes before the start of your session, you must come to the Presentation Preview and Upload AV room (**Peck Meeting Room**) to copy your session's folder onto a flash drive. There will be a laptop in each presentation room where you can transfer the session folder containing the presentations.

DISPLAY PRESENTATIONS:
Poster boards measuring 4 ft. x 8 ft. will be provided for each display presentation on the Balcony. So that we can fit 2 posters per board, posters should be no larger than 46 x 46 inches (117 x 117 cm). Displays should be mounted on the boards (assigned by the number of the presentation) using pushpins, and authors are asked to bring their own pins or Velcro strips to secure their display to the poster boards.

For Student Competition Poster Presenters: Displays for Monday, March 13 should be set up on Sunday, March 12 evening from 7:00 PM – 8:00 PM or Monday, March 13 from 7:00 AM – 8:00 AM on the Balcony. Student competitors should be present at their posters on Monday, March 13, between 12:30 PM - 1:00 PM (odd numbers) and 1:00 PM - 1:30 PM (even numbers). Students are encouraged to keep their posters up until 6:00 PM, and posters should be removed by 7:00 PM on Monday.

For Regular Poster Presenters: Displays for Tuesday, March 14 should be set up on Monday, March 13 from 7:00 PM – 8:00 PM or Tuesday morning from 7:00 AM – 8:00 AM on the Balcony. Posters should be available for viewing from 8:00 AM – 5:00 PM. Contributed poster presenters should be present from 4:00 PM - 4:30 PM (odd numbers) and 4:30 PM - 5:00 PM (even numbers) on Tuesday, March 14. Presenters are encouraged to keep their posters up until 6:00 PM, and posters should be

removed by 7:00 PM on Tuesday.

REGISTRATION: Registration is mandatory to attend the meeting. On-site registration fees include a luncheon ticket and are: ESA Active Members – $450; ESA ECP Members – $450; ESA Student Members – $295; ESA Emeritus and Honorary Members – $295; Guests – $100; and Non-members – $650. One-day registration fee is $450.

Registration Desk is located in the Grand Ballroom Foyer, and will be open for check-in (pre-registered attendees) and for on-site registration at the following times:
Sunday, March 12 . . . . . 1:00 PM – 5:00 PM
Monday, March 13. . . . . 7:30 AM – 4:00 PM
Tuesday, March 14 . . . . . 7:30 AM – 4:00 PM
Wednesday, March 15 . 7:30 AM – 9:00 PM

FUNCTIONS/EVENTS:
We have several activities that should be of interest to
participants.
Sunday:
10:00 AM – 11:00 AM Fly Tying Workshop (Hoffman, registration required)
1:00 PM – 6:00 PM Fly FIshing Tour (registration required)
4:00 PM – 7:00 PM Entomology Games, Preliminary Rounds (Salon A)

Monday:
8:00 AM – 10:00 AM Plenary Session (Salon A)
5:00 PM – 7:00 PM Entomology Games, Finals (Salon A)
7:00 PM-9:00 PM Welcome Reception (Salon B and C)

Tuesday:
12:15 PM-1:45 PM Awards Luncheon (Salon B and C)
5:30 PM-7:30 PM Final Business Meeting (Harris Brake)

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

JOB POSTINGS / MESSAGE BOARD:
There will be a Job Postings / Messages Board labeled as such and available on the Marriott Balcony for all interested employers and prospective employees from 7:00 AM to 5:00 PM on Monday and Tuesday. If you have either a job vacancy or are seeking employment, please post an announcement or short résumé here.

CODE OF CONDUCT:
By attending the 2023 Southeastern Branch Meeting, you agree voluntarily to abide by our ethics policy. The full policy may be found online at entsoc.org/conduct. If you need to file a complaint, please contact Stacie East, ESA's Director of Diversity, Equity, and Inclusion at +1 (301) 731-4535 x3030 or seast@entsoc.org.

Wifi: Complimentary internet access is available in all guest rooms as well as conference space.
Network: Marriott Bonvoy Conference
Password: Marriott March

SOCIAL MEDIA:
We are excited you could join us this year and would love for you to share your experiences! Please use #SEB2023
for Twitter and visit our Facebook page SEB_Entsoc to share your pictures, thoughts, and opinions with us! Let's make this an unforgettable event!

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.

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.

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.

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

Southeastern Branch-ESA
2022-2023
Officers and Committees

Executive Committee
President, Amanda Hodges
President-Elect, Kevin Chase
Past President, Michelle Samuel-Foo
Secretary/Treasurer, Brett Blaauw
Member at Large 1, Juang Chong (2023)
Member at Large 2, Clark Klein (2024)
Member at Large 2,
Kaushalya Amarasekare (2025)
Gov. Board Representative, Karla Addesso

Program Committee
Co-chair, Cory Penca
Co-chair, Nicole Benda

Local Arrangements Committee (Little Rock, Arkansas, 2023)
Chair, Ben Thrash
Member, Nick Bateman
Member, John Zawislak
Member, Aaron Cato

Student Awards Committee
Co-Chair, Sriyanka Lahiri
Co-Chair, Estelle Martin
Member, Arun Babu
Member, Ting Li
Member, James Villegas

Early Career Awards Committee
Chair, Sandra Woolfolk
Member, Kelly Carruthers
Member, Matt Bertone

Professional Awards Committee
Chair, Ted Cottrell
Member, Dr. Esmaeil Amiri
Member, Dr. Scott H. Graham
Member, Dr. Sydney Crawley

Entomology Games Committee
Chair, Jerome Grant
Member, Frank Hale
Member, Morgan Pinkerton
Member, Mike Williams

Nominations Committee
Chair, Robert Meagher
Member, Yuzhe (Cathy) Du
Member, Muhammad Haseeb
Member, Victor Mascarenhas
Member, Desiree Straubinger
Member, Blake Wilson

Sponsorship Committee
Chair, Alejandro Arevalo

Student Affairs Committee
Chair, Kelly Tims

Early Career Professional Representative to ESA
Pierre Lau

Education & Outreach Committee
Emily Kraus

Special Thanks To The Following:

- ESA Central Staff: Becky Anthony and Javhana Johnson
- Confex Staff, especially Amy Coli for program assistance
- All of our moderators, Student Competition judges, and student volunteers
- All of our meeting sponsors

Professional Awards

Award for Excellence in Integrated Pest Management

Dr. Michael Stout

Dr. Michael Stout received his B.A. in Biological Sciences from the University of California, Berkeley, and a PhD in Entomology from the University of California, Davis. His dissertation research was an investigation into the mechanisms of induced resistance in tomato. Dr. Stout began his career in the Department of Entomology at Louisiana State University as an Assistant Professor in 1997. His research interests at LSU include the biology and management of insect pests of rice, the use of host-plant resistance in IPM, and the importance of phenotypic plasticity in pest management. In his role as rice entomologist for the LSU AgCenter, Dr. Stout worked closely with rice growers to integrate the use of plant resistance, insecticides, and cultural practices against rice pests. He has taught a course on host-plant resistance at LSU for over 25 years, and has published approximately 130 refereed journal articles and book chapters and over 150 technical and extension articles and reports. In 2016, he assumed the position of Head in the LSU Department of Entomology.

Distinguished Achievement Award in Teaching

Dr. Rebecca Baldwin

Dr. Rebecca Baldwin is an associate professor and undergraduate coordinator for the University of Florida Entomology and Nematology Department. During her career at the University of Florida, she has taught 11 undergraduate and graduate courses reaching 500-840 students each academic year. She has served or chaired 32 graduate committees and advises 60-90 undergraduate entomology majors and minors each semester. Rebecca serves as the faculty advisor for the undergraduate Entomology Club, is one of the coaches for the graduate Entomology Team and, through the Bugs and People course, has developed a mentoring program where more than 20 students have developed into peer leaders. Through the UF Preview orientation, she has had the opportunity to share the importance of communication to nearly 70,000 first-year students. Outside of the classroom, Rebecca uses insects to promote science communication and STEM initiatives through directing the Bug Club Entomology Education and Outreach Program through which she has developed the Entomology Field Camp (Bug Camp) and the Florida 4-H Insectathon. Rebecca is a Board Certified Urban and Industrial Entomologist and serves on the Entomological Society of America Education and Outreach Committee. In her extension capacity, Rebecca has mentored more than one hundred pest management professionals towards becoming Associate Certified Entomologists (ACE). She also developed and maintains an annual workshop, approved in 23 states, for vector management pilots and IPM ground crews. She also serves regionally and nationally to provide CEU credits through the Florida Pest Management Association, the Southeast Pest Management Conference, the Southwest Florida and Northwest Florida Pest Management Conferences, and for the National Pest Management Association.

Branch Recognition Award in Entomology

Dr. Lukasz Stelinski

Lukasz Stelinski is a professor in the UF/IFAS department of entomology and nematology based at the UF/IFAS Citrus Research and Education Center. He specializes in applied chemical ecology, vector-pathogen interactions and insect toxicology. Stelinski has conducted research and Extension programs on pest management in subtropical fruit crops and is a recognized expert on controlling pests by applying insect pheromones that disrupt mating. His work develops management strategies to moderate the impact of arthropod-pathogen interactions limiting citrus production while maintaining established biological controls.

Recognition award in Insect Physiology, Biochemistry, and Toxicology

Dr. Shahid Karim

Shahid Karim is a professor in the School of Biological, Environmental, and Earth Sciences (BEES), and the Center for Molecular and Cellular Biosciences at the University of Southern Mississippi. Dr. Karim received his Ph.D. in Molecular Biology from University of the Punjab (Pakistan) and did further postdoctoral research at Oklahoma State University, and University of Rhode Island. He joined the faculty of the University of Southern Mississippi in 2008 as an Assistant Professor of Molecular and Cellular Biology; he is now a Full Professor in the School of BEES. His research focuses on the investigation of tick-pathogen-host interactions by examining salivary products' role in maintaining a secure attachment and providing a suitable environment for pathogens, resulting in over 90 peer-reviewed research articles, preprints, and numerous additional papers published as proceedings of scientific meetings. He has obtained funding of over $43 million for his research from NIH, USDA, Navy, AHA, USAID, NSF, and University-level grants. He has served as major advisor for 10 undergraduates, and 17 graduate students, mentored 12 postdoctoral fellows and visiting scientists and served on over 25 graduate student committees at the University of Southern Mississippi.

Distinguished Achievement Award in Horticultural Entomology

Dr. Ashfaq A. Sial

Dr. Ash Sial is Associate Professor of Entomology Department at the University of Georgia. He received his B.Sc. Honors Agric. (entomology major) from University of Arid Agriculture Rawalpindi (Pakistan), M.Sc. Honors Agric. Entomology from University of Agriculture Faisalabad (Pakistan), M.Sc. Grain Storage Management from University of Greenwich (United Kingdom), and Ph.D. Entomology from Washington State University (United States of America). Dr. Sial worked as a postdoctoral research associate at University of California Berkeley and Cornell University before accepting a faculty position at the University of Georgia. At UGA, he holds research, extension, and teaching appointment in department of entomology and also serves as IPM Coordinator for the state of Georgia. His research program seeks to investigate biology and ecology of economically important insect pests and utilize that information to develop more sustainable IPM programs in small fruits focused on blueberries. His research program has successfully secured over $32 million in competitive grants through federal and state agencies as well as private industry. He has authored over 200 research and extension publications, over 250 presentations including 39 invited seminars, 11 webinars, and 3 keynote addresses, created several educational materials including blogs, websites, and smartphone apps, and organized 19 symposia at the national and international conferences. His research program has been highlighted multiple times in print and broadcast media including national radio and television. He has extensive record of serving professional organizations in a leadership role at the regional, national and international level. Dr. Sial has served on the Entomological Society of America (ESA) Student Affairs Committee (Chair - 2010) and the ESA Program Committee (2010), ESA Pacific Branch (Program Chair – 2013) and Southeastern Branch (Program Chair – 2017), UGA Department of Entomology Seminar Committee (2015 – 2019), Chair of the Southern Region Technical Committee on IPM (2015-16) and (2021-22), Sponsorship Committee for International Congress of Entomology (2016), and Program Committee for the 9th and 10th International IPM Symposium (2018 and 2022). Dr. Sial has received 37 awards for excellence in research, extension, and teaching, as well as professional leadership and service at regional and national level.

Distinguished Achievement Award in Extension

– no nominations submitted

Distinguished Service to the Certification Program Award

– no nominations submitted

Recognition Award in Urban Entomology

– no nominations submitted

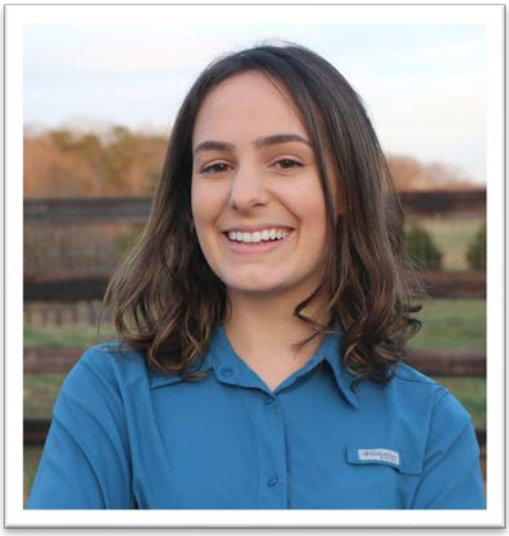
Student awards

John Henry Comstock Award

Alexander B. Orfinger, MS, PhD candidate

Alex (Alexander) Benjamin Orfinger is from Ormond Beach, Florida, growing up adjacent to a state park and intracoastal river through which his passion for nature blossomed early on. Currently, Alex is a PhD Candidate in the University of Florida and Florida A&M University cooperative PhD in Entomology, co-advised by Dr. Raymond Hix and Dr. Andrew Rasmussen. His dissertation is titled “Systematic Studies of the Nearctic *Polycentropus sensu stricto* (Trichoptera: Polycentropodidae)” and seeks to improve the taxonomy of the Nearctic caddisfly genus *Polycentropus*, with an emphasis on the aquatic larval stages. Before his PhD, Alex received his Bachelor of Science in Biology with Honors and his Master of Science in Biology from the University of Central Florida. Alex has authored 30 peer-reviewed publications to date, of which he is sole author or first author of 21. He is active in several professional societies and enjoys serving on the executive board of the Florida Association of Aquatic Biologists. Alex has broad interests and experience in entomology, natural history, taxonomy, systematics, ecology, evolutionary biology, and invasion biology of a wide range of taxa, but especially aquatic insects and fishes, as well as science education. Following his PhD, Alex hopes to earn a faculty position at a college or university through which he can continue his passions of teaching, outreach, and research. Outside of work, Alex enjoys traveling, soccer and football, fishing, kayaking, and hiking with his wife and very good dogs.

Kirby Hays Memorial Award



Taynara Possebom, MS candidate

Taynara Possebom grew up on a farm located in Southern Brazil, Rio Grande do Sul. Growing up on a farm aroused her interest in agriculture but that interest further developed when she finished high school at the Federal Institute of Rio Grande of South – Sertão Campus (IFRS) which is an agriculture technical school. She did several internships at Embrapa Wheat (like the USDA in Brazil), and it motivated her to pursue a BS degree in Agronomy at the University of Passo Fundo (UPF). During her BS. degree, she assisted at Dr. Panizzi's lab developing research on stink bug behavior in agricultural crops, which was a huge motivation for her to continue studying and learning more about entomology in the world. After that, she challenged herself to move to the US and she spent a year at the University of Nebraska -Lincoln (UNL) with Dr. Tom Hunt and Dr. Justin McMechan studying soybean gall midge. Taynara thoroughly enjoyed all the research internship opportunities that evolved entomology combined with agriculture because the continuous challenge posed by insects to growers and the complex set of strategies to control them spurred her interest in a career focused on entomology. Her interests brought her to continue her education and pursue a master's degree focused on entomology at Dr. Dominic Reisig's Lab at North Carolina State University (NCSU). Taynara's MS research focuses on understanding the vertical distribution of Helicoverpa zea (Boddie) (Lepidoptera: Noctuidae) in different soybeans growth habits (determinate and indeterminate), and how it does affect the soybean yield component. Her research provides data to improve Integrated Pest Management in soybeans.

Student Awards – 2022

ROBERT T. GAST AWARDS

Outstanding Ph.D. Oral Presentations

Session I

First Place, Kelly Carruthers

Presentation title: Evaluating emigration of *Pseudophilothrips ichini*, a biological control agent, from herbicide-treated brazilian peppertree

Second Place, James Brown

Presentation title: Comparing the response of *Drosophila suzukii* to scentry® traps baited with yeast and commercial lures

Session II

First Place, Jinlong Han

Presentation title: A RNAi-based functional genomics tool for first instar larvae of *Frankliniella occidentalis*

Second Place, Marice Lopez

Presentation title: Comparing the effectiveness of reduced-risk and conventional insecticides on blueberry gall midges and their key parasitoids

Session III

First Place, Sudeep Pandey

Presentation title: Effect of cotton leafroll dwarf virus (CLRDV) infection on biology and preference of its vector *Aphis gossypii* (Hemiptera: Aphididae)

Second Place, Chelsea Smith

Presentation title: Parasitoid detection and parental care of the American cockroach in response to the presence of the oothecal parasitoid, *Aprostocetus hagenowi*

Session IV

First Place, Paige Caine

Presentation title: Rescue behavior in *Solenopsis invicta* fire ants

Second Place, Ethan Doherty

Presentation title: The effects of varietal mixes on stored rice pest resistance

Outstanding Ph.D. Poster Presentations

Session I

First Place, Sanower Wasi

Presentation title: Intrinsic and extrinsic competitive interactions between *Ooencyrtus nezarae* and *Paratelenomus saccharalis* in the Central Alabama

Second Place, Galen Cobb

Presentation title: Searching for a bee-gone era: A re-survey approach to assessing biodiversity in North-Central Florida bee communities

Outstanding Ph.D. Oral Presentations (Virtual)

Session I

First Place, Matthew Longmire

Presentation title: Ecological impact of laurel wilt on insect diversity and community composition of northern spicebush

Second Place, Maria González-Morales

Presentation title: Biting us and taking bites from our food? Xenointoxication to control bed bug infestations in poultry farms

Outstanding Ph.D. Poster Presentations (Virtual)

Session I

First Place, Julian Cosner

Presentation title: Variety of hemp and floral preservation influences corn earworm, *Helicoverpa zea*, development and survival

Second Place, Olivia Kline

Presentation title: Feeding preference and mortality of blue orchard bees (*Osmia lignaria*) exposed to the novel insecticides, Flupyradifurone and Sulfoxaflor

Outstanding M.S. Oral Presentations

Session I

First Place, George Bohannon

Presentation title: Bark attack: Optimizing biocontrol releases for emerald ash borer in North Carolina

Second Place, Lucas Brendel

Presentation title: Impacts of weather and habitat on mosquito diversity and culex flavivirus prevalence in North-Central Florida

Session II

First Place, Joseph Gonsiorek

Presentation title: Efficacy of a push-pull system on whitefly populations and marketable yield in organic squash

Second Place, Walker Brett Farmer

Presentation title: Influence of imidacloprid seed treatment rate on thryvon cotton

Session III

First Place, Judge Fortenberry

Presentation title: Residual of NPV and feeding habits of *Helicoverpa zea* after ingestion

Second Place, Amanda Furuya

Presentation title: Evaluation of effects of diatomaceous earth on diamondback moth (*Plutella xylostella*) (Lepidoptera:Plutellidae) feeding and survival on cabbage

Session IV

First Place, Julia Berliner

Presentation title: Diet breadth mediates arthropod responses to surplus fertility in organic agroecosystems

Second Place, Xiomara L Flores-Rivera

Presentation title: Helicoverpa (Lepidoptera: Noctuidae) in field crops in Puerto Rico: Occurrence, species prevalence, and insecticide susceptibility

Outstanding M.S Poster Presentations

First Place, Abigail Yeboah

Presentation title: Comparing thermal limits of *Lilioceris cheni* biotypes: Implications for biological control of air potato in Louisiana

Second Place, Nina Rudin

Presentation Title: Effects of temperature on the development of the Nearctic Cereal Aphid parasitoid *Aphelinus nigritus* (Howard)

Outstanding M.S Poster Presentations (Virtual)

First Place, April Skipper

Presentation title: Effects of Proximity to Corn and Insecticide Applications on Seasonal Abundance of Two Rootworm Pests, *Diabrotica undecimpunctata* and *Diabrotica balteata*, in Georgia Peanut Fields

Second Place, Courtney Wynn

Presentation Title: A glucose-conjugating enzyme is highly expressed in the silk glands of moths

Outstanding M.S Oral Presentations (Virtual)

First Place, Yasmin Tavares

Presentation title: Leveraging archived sentinel chicken surveillance records to investigate west nile virus transmission in Florida

Second Place, Joshua Botti-Anderson

Presentation Title: Pollination ecology of the invasive brazilian peppertree and impacts on wild plant-pollinator communities

Outstanding Undergraduate Poster Presentations

First Place,Ashley Gamble

Presentation title: *Solenopsis invicta* predation on *Helicoverpa zea* eggs and pupae in different row crops in Southeastern US

Second Place, Veronica Selden

Presentation Title: Functional diversity in the North-Central Florida bee communities

Outstanding Extension, Outreach and Teaching Presentations

First Place, Kristin Peters

Presentation title: Give the people what they want! landowner needs drive forest health extension

Second Place, Paola Agosto

Presentation Title: Molecular characterization of palm species, phytoplasma and associated auchenorrhyncha occurrence in Puerto Rico

2022 Entomology Games

1st place - Auburn University

Seun Olaitan Oladipupo (Captain)
Chelsea Smith
Festus Ajibefun
Alan Jeon
Coach: Nannan Liu

2nd place - University of Florida

Kelly Carruthers
Nicholas Johnston
Lucas Brendel
John Ternest
Sara Salgado (as alternate)
Coaches: Rebecca Baldwin, Estelle Martin, Jason Williams

Note: Auburn went on to place 2nd at the National Entomology Games in Vancouver, B.C.

1983 Entomology Games (40 years ago)

The Inaugural Southeastern Branch Entomology Games (formerly known as the Linnean games) was held in Little Rock during the 1983 meeting. The 2023 meeting marks the 40th anniversary of the games and a return to its southeastern branch birthplace! Clemson won the inaugural games while Auburn was the runner up, with LSU and Arkansas participating.

Pictured above: The winning Clemson team in 1983, from left to right: Gerald Carner (team advisor), Lisa Lemke, Barry Dover, Peggy Sieburth and Jerome Grant. Former SEB President Nancy Hinkle was a member of the 2nd place Auburn team. *Photo provided by Jerome Grant.*

2023 Entomology Games

Catch this year's Entomology Games in Salon A:
Preliminary Rounds: Sunday, March 12, 4:00 PM – 7:00 PM
Final Rounds: Monday, March 13, 5:00 PM – 7:00 PM

Program Summary By Date

SUNDAY, MARCH 12		
Session/Function	**Time**	**Location**
Local Arrangements Committee Meeting	8:00 AM - 9:00 AM	Peck, Little Rock Marriott
Executive Committee Meeting	8:00 AM - 10:00 AM	Marion, Little Rock Marriott
S-1080 Soybean Arthropod Working Group Meeting	9:00 AM - 4:30 PM	White Oak, Little Rock Marriott
Fly Tying Workshop	10:00 AM - 11:00 AM	Hoffman, Little Rock Marriott
Presentation Uploads	1:00 PM - 5:00 PM	Peck, Little Rock Marriott
Registration	1:00 PM - 5:00 PM	Grand Ballroom Foyer, Little Rock Marriott
Fly Fishing Tour	1:00 PM - 6:00 PM	John F. Kennedy Park Campground
Entomology Games, Preliminary Rounds	4:00 PM - 7:00 PM	Salon A, Little Rock Marriott
Student Poster Setup	7:00 PM - 8:00 PM	Balcony, Little Rock Marriott

MONDAY, MARCH 13		
Session/Function	**Time**	**Location**
Plenary Session	8:00 AM - 10:00 AM	Salon A, Little Rock Marriott
Masters Student Poster Session 1	8:00 AM - 6:00 PM	Balcony, Little Rock Marriott
Masters Student Poster Session 2	8:00 AM - 6:00 PM	Balcony, Little Rock Marriott
PhD Student Poster Session 1	8:00 AM - 6:00 PM	Balcony, Little Rock Marriott
PhD Student Poster Session 2	8:00 AM - 6:00 PM	Balcony, Little Rock Marriott
Undergraduate Student Poster Session	8:00 AM - 6:00 PM	Balcony, Little Rock Marriott
Break	10:00 AM - 10:30 AM	Balcony, Little Rock Marriott
Masters Student 10-min Competition 1	10:30 AM - 12:30 PM	Hoffman, Little Rock Marriott
Masters Student 10-min Competition 2	10:30 AM - 12:30 PM	Harris Brake, Little Rock Marriott
Masters Student 10-min Competition 3	10:30 AM - 12:30 PM	White Oak, Little Rock Marriott
Masters Student 10-min Competition 4	10:30 AM - 12:30 PM	Conway, Little Rock Marriott
PHEFA: Advancing Public Health Entomology through Education and Networking (Invitation Only)	12:15 PM - 1:45 PM	Arkansas Ballroom, Little Rock Marriott
Q&A with Student Poster Presenters	12:30 PM - 1:30 PM	Balcony, Little Rock Marriott
Student 10-min Extension, Outreach, and Teaching Competition	1:30 PM - 2:15 PM	Hoffman, Little Rock Marriott
PhD Student 10-min Competition 1	1:30 PM - 3:30 PM	Conway, Little Rock Marriott
PhD Student 10-min Competition 2	1:30 PM - 3:30 PM	Harris Brake, Little Rock Marriott
PhD Student 10-min Competition 3	1:30 PM - 3:30 PM	White Oak, Little Rock Marriott
Undergraduate Student 10-min Competition	2:30 PM - 3:15 PM	Hoffman, Little Rock Marriott
PhD Student 10-min Competition 4	3:45 PM - 5:30 PM	Conway, Little Rock Marriott
PhD Student 10-min Competition 5	3:45 PM - 5:30 PM	Harris Brake, Little Rock Marriott
PhD Student 10-min Competition 6	3:45 PM - 5:30 PM	White Oak, Little Rock Marriott
Entomology Games, Finals	5:00 PM - 7:00 PM	Salon A, Little Rock Marriott
Student Poster Removal	6:00 PM - 7:00 PM	Balcony, Little Rock Marriott
Welcome Reception	7:00 PM - 9:00 PM	Salon B & C, Little Rock Marriott
TUESDAY, MARCH 14		

Session/Function	Time	Location
Past Presidents Breakfast	7:00 AM - 8:00 AM	Heritage Grille, Little Rock Marriott
Regular Poster Setup	7:00 AM - 8:00 AM	Balcony, Little Rock Marriott
Current Medical Entomology Research in the Southeastern Branch	8:00 AM - 10:00 AM	Conway, Little Rock Marriott
Ten-Minute Paper Oral 2	8:00 AM - 11:30 AM	White Oak, Little Rock Marriott
Ten-Minute Paper Oral 1	8:00 AM - 11:45 AM	Harris Brake, Little Rock Marriott
Compounding Whitefly-Virus Issues in Vegetable Production in Southeastern United States	8:00 AM - 12:00 PM	Salon A, Little Rock Marriott
Grant Writing Essentials Workshop: A Step By Step Approach	8:00 AM - 12:00 PM	Arkansas Ballroom, Little Rock Marriott
MUVE Poster Session	8:00 AM - 6:00 PM	Balcony, Little Rock Marriott
P-IE Poster Session	8:00 AM - 6:00 PM	Balcony, Little Rock Marriott
SysEB and PBT Poster Session	8:00 AM - 6:00 PM	Balcony, Little Rock Marriott
ESA Leadership Development Opportunities	10:00 AM - 10:30 AM	Grand Ballroom Foyer, Little Rock Marriott
Recent Advancements Toward Developing Sustainable IPM for Spotted-Wing Drosophila	10:15 AM - 12:15 PM	Conway, Little Rock Marriott
Awards Luncheon	12:15 PM - 1:45 PM	Salon B & C, Little Rock Marriott
Biological Control in Natural Areas	2:00 PM - 5:00 PM	Conway, Little Rock Marriott
Integrated Pest Management in Southern Cropping Systems: New Strategies and Solutions	2:00 PM - 5:00 PM	Salon A, Little Rock Marriott
Making Entomology Diverse: Overcoming Challenges	2:00 PM - 5:00 PM	Arkansas Ballroom, Little Rock Marriott
Management of Invasive Mealybugs of the Southeastern US: Challenges and Opportunities	2:00 PM - 5:00 PM	White Oak, Little Rock Marriott
Ten-Minute Paper Oral 3	2:00 PM - 5:00 PM	Harris Brake, Little Rock Marriott
Q&A with Contributed Poster Presenters	5:00 PM - 6:00 PM	Balcony, Little Rock Marriott
Final Business Meeting	5:30 PM - 7:30 PM	Harris Brake, Little Rock Marriott
Regular Poster Removal	6:00 PM - 7:00 PM	Balcony, Little Rock Marriott

WEDNESDAY, MARCH 15

Session/Function	Time	Location
Entomologists' Careers and Roles in Pesticide Safety Education	8:00 AM - 10:00 AM	Hoffman, Little Rock Marriott
Innovation, Collaboration and Adaptation in Perennial Crop Entomology Research and Extension	8:00 AM - 12:00 PM	White Oak, Little Rock Marriott
Biological Control Under Global Change: S1073 Project Highlights	8:30 AM - 11:30 AM	Harris Brake, Little Rock Marriott
Building a Career While Helping Others Build Theirs	10:15 AM - 12:30 PM	Hoffman, Little Rock Marriott

Monday, March 13, 2023, Posters

Undergraduate Student Poster Competition / 8:00 AM-6:00 PM

Balcony (Little Rock Marriott)

P-1 **Morphological and functional classification of the *Amblyomma americanum* immune cells.** ***Julia Hanson*** *(julia.hanson@usm.edu)[1], Abdulsalam Adegoke[1] and Shahid Karim[2], [1]The Univ. of Southern Mississippi, Hattiesburg, MS, [2]Principle Investigator, Hattiesburg, MS*

P-2 **Developing a rapid habitat assessment for bee communities.** ***Jacqueline Bowling*** *(jbowling3@cub.uca.edu)[1] and Coleman Little[1,2], [1]Univ. of Central Arkansas, Conway, AR, [2]Univ. of Arkansas, Fayetteville, AR*

P-3 **Mining-contaminated sediments have detrimental effects on macroinvertebrate abundance in Missouri streams.** ***Malachai Frisby*** *(maf283s@login.missouristate.edu), Daphne Miles, Anna Faust and La Toya Kissoon-Charles, Missouri State Univ., Springfield, MO*

P-4 **Immersion method on cockroaches and ants using 25B Insecticidal Soap.** ***Kimberly Lastra*** *(kimberlylastra@ufl.edu), Univ. of Florida, Gainesville, FL*

Masters Student Poster Competition I/ 8:00 AM-6:00 PM

Balcony (Little Rock Marriott)

P-5 **Larvae of North American *Dixa* Meigen and *Meringodixa* Nowell (Diptera: Dixidae): Association and identification using morphological and nucleic acid data.** ***Jackson Turner*** *(jturne88@vols.utk.edu) and John Moulton, Univ. of Tennessee, Knoxville, TN*

P-6 **The effect of symbioses between the Mold Mite *Tyrophagus putrescentiae* and fungus *Aspergillus flavus* on their respective populations in stored maize.** ***Paige Cummins*** *(ppcummin@uark.edu), Univ. Of Arkansas, Fayetteville, AR*

P-7 **Multi stressor impacts on honey bee physiology and gut microbiome.** ***Urita Agana*** *(ua57@msstate.edu), Hunter Walt, Angus Catchot and Priyadarshini Chakrabarti Basu, Mississippi State Univ., Starkville, MS*

P-8 **Residual activity of insecticides against adult *Systena frontalis* (F.) (Coleoptera: Chrysomelidae) under laboratory conditions.** ***Rehan Arshad*** *(Rehan.Arshad@uga.edu) and Shimat Joseph, Univ. of Georgia, Griffin, GA*

P-9 **Introduction of the *Dixella indiana* species group: Evaluation of *Dixella indiana*, resolved identity and transfer of *Dixa pseudindiana*, and descriptions of three new species.** ***Noah Parker*** *(nparke15@vols.utk.edu), John Moulton, Jackson Turner and Greg Curler, Univ. of Tennessee, Knoxville, TN*

P-10 **Effects of leaf diversity on stream invertebrate (Chironomidae, Hyalellidae) abundance and diversity.** ***Joseph Aubert*** *(jfa019@email.latech.edu) and Julia Earl, Louisiana Tech Univ., Ruston, LA*

P-11 **Control of rice stink bugs with botanical, fungal, and bacterial insecticides.** ***Carolina Tieppo Camarozano*** *(carolina.tieppoc@ufl.edu)[1], Julien Beuzelin[1], Matthew VanWeelden[1] and Hugh Smith[2], [1]Univ. of Florida, Belle Glade, FL, [2]Univ. of Florida, Wimauma, FL*

Masters Student Poster Competition II/ 8:00 AM-6:00 PM

Balcony (Little Rock Marriott)

P-12 **Effects of vegetation damage treatments and their timings on Buprestidae attraction to traps.** ***Aubree Morrison*** *(amorri45@tnstate.edu)[1], Jason Oliver[1], Karla Addesso[1], Cynthia Perkovich[1], William Klingeman[2], Nadeer Youssef[1], Chastity King[1] and Garrett Roper[1], [1]Tennessee State Univ., McMinnville, TN, [2]Univ. of Tennesse, Knoxville, TN*

P-13 **Field-level optimization of adult *Melanotus communis* (Coleoptera: Elateridae) sex pheromone, 13-tetradecenyl acetate.** ***Emma Schoeppner*** *(eschoep@ncsu.edu)[1], Anders Huseth[1], Livy Williams[2], Jocelyn Millar[3], Helene Doughty[4], Thomas Kuhar[5] and Ronald H. Cherry[6], [1]North Carolina State Univ., Raleigh, NC, [2]USDA - ARS, Montpellier, France, [3]Univ. of California, Riverside, Riverside, CA, [4]Virginia Polytechnic Institute and State Univ., Painter, VA, [5]Virginia*

Polytechnic Institute and State Univ., Blacksburg, VA, [6]Univ. of Florida, Belle Glade, FL

P-14 **Toxicity of Pirimiphos-methyl and Deltamethrin to *Sitophilus oryzae* infesting stored corn. *Amina Twaibu*** *(aatwaibu@uark.edu)[1], Ngoc Phan[2], Glenn Studebaker[3], Benjamin Thrash[4,5], Nick Bateman[6] and Neelendra Joshi[7], [1]Student, Fayeteville, AR, [2]Post Doctoral Fellow, Fayeteville, AR, [3]Univ. of Arkansas System Division of Agriculture Cooperative Extension Service, Keiser, AR, [4]Univ. of Arkansas Cooperative Extension Service, Lonoke, AR, [5]Univ. of Arkansas, Lonoke, AR, [6]Univ. of Arkansas, Stuttgart, AR, [7]Univ. of Arkansas, Fayetteville, AR*

P-15 **Geographical susceptibility of fall armyworm populations in the southern region of the United States to eight common chemical insecticides. *Bhavana Patla*** *(bhavanapatla1243@gmail.com), Louisiana State Univ., baton rouge, LA*

P-16 **Corn silk fly species are differentially distributed across the landscapes of sweet corn farms in Florida. *Larissa Pereira Lima*** *(lpereiralima@ufl.edu)[1], Julien Beuzelin[1], Dakshina Seal[2] and Sandra Allan[3], [1]Univ. of Florida, Belle Glade, FL, [2]Univ. of Florida, Homestead, FL, [3]USDA - ARS, Gainesville, FL*

P-17 **Cockroach oviposition bioassays utilizing common indoor and outdoor household substrates. *Madeline Griffin*** *(mpg0025@auburn.edu)[1], Ana Chicas-Mosier[2], Xing Ping Hu[1] and Arthur Appel[1], [1]Auburn Univ., Auburn, AL, [2]Univ. of Kansas, Lawrence, KS*

PhD Student Poster Competition I/ 8:00 AM-6:00 PM

Balcony (Little Rock Marriott)

P-18 **Shenanigans of specialists in biological control of invasive plant air potato (*Dioscorea bulbifera* L.). *Jasleen Kaur*** *(jasleenkaur@ufl.edu)[1], Emily Kraus[1], Diego Salazar[2] and Philip Hahn[3], [1]Univ. of Florida, Gainesville, FL, [2]Florida International Univ., Miami, FL, [3]Univ. of Montana, Missoula, MT*

P-19 **Species diversity of thrips of the coastal plains of South Carolina. *Dawn Sikora*** *(Dsikora@g.clemson.edu), Clemson Univ., Clemson, SC*

P-20 **Assessment of adult ovipositional preferences of periodical cicada (Brood X 2021) (Hemiptera: Cicadidae: *Magicicada* spp.) among commercial nursery tree species. *Martine Bowombe Toko*** *(mbowombet42@tntech.edu)[1], Jason Oliver[2], Michael Allen[1] and Douglas Airhart[1], [1]Tennessee Technological Univ., Cookeville, TN, [2]Tennessee State Univ., McMinnville, TN*

P-21 **Exciting solutions for boring pests: Establishing fungal entomopathogens as endophytes in *Prunus persica*. *Sabrina Barbosa*** *(sab99204@uga.edu)[1], David Shapiro-Ilan[2], Dario Chavez[3] and Brett Blaauw[1], [1]Univ. of Georgia, Athens, GA, [2]USDA - ARS, Byron, GA, [3]Univ. of Georgia, Griffin, GA*

P-22 **Relating insecticide efficacy to honey bee toxicity. *Angus Catchot III*** *(alc607@msstate.edu)[1], Jeff Gore[2], Whitney Crow[2], Angus Catchot[1], Don Cook[2], Priyadarshini Chakrabarti Basu[1] and Jacob Smith[2], [1]Mississippi State Univ., Starkville, MS, [2]Mississippi State Univ., Stoneville, MS*

P-23 **Early progress in establishing phylogenetic relationships between *Chrysobothris* species (Coleoptera: Buprestidae) using next generation and reduced-representation sequencing. *Axel Gonzalez Murillo*** *(adgonzal24@gmail.com)[1], John Moulton[1], Bode Olukolu[1], Robert de Moya[2], Kurt Lamour[1], Karla Addesso[3], Joshua P. Basham[3], Jhalendra Rijal[4] and William Klingeman[5], [1]Univ. of Tennessee, Knoxville, TN, [2]Univ. of Illinois, Champaign, IL, [3]Tennessee State Univ., McMinnville, TN, [4]Univ. of California Agriculture and Natural Resources, Modesto, CA, [5]Univ. of Tennesse, Knoxville, TN*

P-24 **Screening newly-developed Squash (*Cucurbita* spp.) germplasm lines for resistance against whitefly-transmitted Begomovirus and Crinivirus mixed infection. *Gurjit Singh*** *(fg69001@uga.edu)[1], Cecilia McGregor[2] and Rajagopalbabu Srinivasan[1], [1]Univ. of Georgia, Griffin, GA, [2]Univ. of Georgia, Athens, Athens, GA*

PhD Student Poster Competition II/ 8:00 AM-6:00 PM

Balcony (Little Rock Marriott)

P-25 **Ten years of field-based data reveal stable trends in species diversity and proportional nesting guilds of bees in native wildflower plantings established in orchard ecosystems. *Lilia Stemet*** *(stemet@uark.edu), Univ. of Arkansas System Division of Agriculture, Fayetteville, AR*

P-26 **Host preferences of *Sitophilus oryzae* in stored rice. *Ethan Doherty*** *(edoher6@lsu.edu)[1], Qian Sun[1] and Blake Wilson[2], [1]Louisiana State Univ., Baton Rouge, LA, [2]Louisiana State Univ., St.Gabriel, LA*

P-27 **Identifying the presence and distributions of native bees in Arkansas. *Coleman Little*** *(colemanslab@gmail.com)[1], Roshani Acharya[2], Leslie Cooper[3], Allison Fowler[4], Laurie Scott[5], Theo Witsell[6] and Neelendra Joshi[2], [1]Univ. of Central Arkansas, Conway, AR, [2]Univ. of Arkansas, Fayetteville, AR, [3]Quail Forever Arkansas, Gravette, AR, [4]Arkansas Game and Fish Commission, Little Rock, AR, [5]NorthWest Arkansas Community College, Bentonville, AR, [6]Arkansas Natural Heritage Commission, Little Rock, AR*

P-28 **Establishing a plant-pollinator network in northwest Arkansas over 100 years. *Joshua Chavana*** *(jchavelite14@gmail.com) and Coleman Little, Univ. of Arkansas, Fayetteville, AR*

P-29 **Chemical antagonistic effects on the human odor-evoked responses of yellow fever mosquito, *Aedes aegypti*. *Xin WANG*** *(xzw0083@auburn.edu)[1] and Nannan Liu[2], [1]Auburn Univeristy, Auburn, AL, [2]Auburn Univ., Auburn, AL*

P-30 **The imported mason bee, *Osmia cornifrons,* is more resistant to insecticides, sulfoxaflor and flupyradifurone, than two native North American mason bee species. *Olivia Kline*** *(okline@uark.edu) and Neelendra Joshi, Univ. of Arkansas, Fayetteville, AR*

P-31 **A metanalysis of *Apis mellifera* pathogen prevalence documentation in comparison to wild and native bee species. *Leah Cuthill*** *(lrcuthil@uark.edu) and Neelendra Joshi, Univ. of Arkansas, Fayetteville, AR*

Monday, March 13, 2023, Morning

Masters Student Oral Presentation Competition I

Hoffman (Little Rock Marriott)

Moderator(s): Whitney Crow, Mississippi State University, Stoneville, MS; Sebe Brown, Louisiana State University Agricultural Center, Baton Rouge, LA

10:30 AM **1** **Yield impact of simulated tarnished plant bug (*Lygus lineolaris*) injury during late bloom on ThryvOn cotton. *Seth Permenter*** *(stp132@msstate.edu)[1], Whitney Crow[1], Jeff Gore[1], Don Cook[1] and Angus Catchot[2], [1]Mississippi State Univ., Stoneville, MS, [2]Mississippi State Univ., Mississippi State, MS*

10:42 AM **2** **Insecticide application efficacy of sUAS as compared to traditional delivery systems. *Hunter Blalock*** *(hjb206@msstate.edu)[1], Whitney Crow[2], Angus Catchot[1], Darrin Dodds[1] and Bryan Whittenton[1], [1]Mississippi State Univ., Mississippi State, MS, [2]Mississippi State Univ., Stoneville, MS*

10:54 AM **3** **Management of the Asian needle ant, *Brachyponera (=Pachycondyla) chinensis* (Emery). *Karen Corsetti*** *(corsettikaren@gmail.com), Univ. of Georgia, Stockbridge, GA*

11:06 AM **4** **Soybean management for Lepidopteran pest using insect growth regulators. *Sawyer Hopkins*** *(sch420@msstate.edu)[1], Whitney Crow[2], Don Cook[2], Jeff Gore[2] and Angus Catchot[3], [1]Mississippi State University, Starkville, MS, [2]Mississippi State Univ., Stoneville, MS, [3]Mississippi State Univ., Mississippi State, MS*

11:18 AM **5** **Evaluating broad mite, *Polyphagotarsonemus latus*, sampling techniques in blackberry. *Jared Linn*** *(linn@uark.edu)[1], Aaron Cato[2] and Ryan Keiffer[2], [1]Univ. of Arkansas, Fayetteville, AR, [2]Univ. of Arkansas, Little Rock, AR*

11:30 AM **6** **Field testing commercial entomopathogens for control of sweetpotato weevil, *Cylas formicarius elegantulus*. *Schyler Lee*** *(SLee@agcenter.lsu.edu)[1], Michael J. Stout[2] and Jeffrey Davis[2], [1]Louisiana State Univ., Prairieville, LA, [2]Louisiana State Univ., Baton Rouge, LA*

11:42 AM **7** **Balancing soil nutrition for sustainable weed and insect-pest management.** ***Carly Sharp*** *(carly.sharp@uga.edu), William Snyder, Carmen Blubaugh, Kate Cassity-Duffey and Anny Chung, Univ. of Georgia, Athens, GA*

11:54 AM **8** **Evaluation of arthropod natural enemies attracted to various insectary plants.** ***Yuna Gaire*** *(ygaire@my.tnstate.edu), Kaushalya Amarasekare, Firuz Yuldashev and Sarah Kilcoyne, Tennessee State Univ., Nashville, TN*

12:06 PM **9** **Impacts of brown marmorated stink bugs on ear rots in Tennessee field corn.** ***Alexandra Crowder*** *(acrowd12@vols.utk.edu), Heather Kelly and Sebe Brown, Univ. of Tennessee, Jackson, TN*

Masters Student Oral Presentation Competition II

Harris Brake (Little Rock Marriott)

Moderator(s): Paulo Cremonez, Londrina State University, Londrina, Brazil; Seung-Joon Ahn, Mississippi State University, Mississippi State, MS

10:30 AM **10** **Within-plant distribution of *Helicoverpa zea* (Boddie) (Lepidoptera:Noctuidae) eggs on soybeans.** ***Taynara Possebom*** *(tposseb@ncsu.edu)[1], Dominic Reisig[2] and Igor Schardong[1], [1]North Carolina State Univ., Raleigh, NC, [2]North Carolina State Univ., Plymouth, NC*

10:42 AM **11** **Effects of permethrin residues on ambrosia beetles in ornamental nurseries.** ***Zia Williamson*** *(zvw40648@uga.edu)[1], Brett Blaauw[2] and Shimat Joseph[3], [1]Univ. of Georgia, Griffin Campus, Griffin, GA, [2]Univ. of Georgia, Athens, GA, [3]Univ. of Georgia, Griffin, GA*

10:54 AM **12** **Examining Pyrethroid resistance in Arkansas rice stink bug, *Oebalus pugnax*, populations.** ***Trevor Newkirk*** *(tbnewkir@uark.edu)[1], Nick Bateman[1], Benjamin Thrash[2], Stephen Felts[1], Andrew Plummer[3], Taylor Ibbotson[4], Adam Whitfield[3], Zack Murray[3], Chase Floyd[3] and Taylor Harris[3], [1]Univ. of Arkansas, Stuttgart, AR, [2]Univ. of Arkansas Cooperative Extension Service, Lonoke, AR, [3]Univ. of Arkansas, Lonoke, AR, [4]Technican, Lonoke, AR*

11:06 AM **13** **performance of management tools for soybean loopers in Mississippi soybeans.** ***Reece Butler*** *(rsb323@msstate.edu)[1], Whitney Crow[2] and Don Cook[2], [1]Mississippi State Univ., Starkville, MS, [2]Mississippi State Univ., Stoneville, MS*

11:18 AM **14** **Survey of entomopathogenic nematodes for virulence towards the small hive beetle.** ***Kaitlyn Garland*** *(kaitlyn.Garland@fvsu.edu)[1], David Shapiro-Ilan[2] and George N. Mbata[3], [1]Fort Valley State Univ., Fort Valley, GA, [2]USDA-ARS, Byron, GA, [3]Agricultural Research Station, Fort Valley State Univ., Fort Valley, GA*

11:30 AM **15** **On-farm comparison of Bt and non-Bt refuge corn hybrids for yield and feeding by *Helicoverpa zea*.** ***Alexis Middleton Asldorf*** *(amiddle@ncsu.edu), North Carolina State Univ., Raleigh, NC*

11:42 AM **16** **Evaluation of ThryvOn technology for control of tarnished plant bugs in cotton.** ***Adam Whitfield*** *(aywhitfi@email.uark.edu)[1], Benjamin Thrash[2], Nick Bateman[3], Andrew Plummer[1], Taylor Ibbotson[4], Stephen Felts[3], Trevor Newkirk[3], Zack Murray[1] and Taylor Harris[1], [1]Univ. of Arkansas, Lonoke, AR, [2]Univ. of Arkansas Cooperative Extension Service, Lonoke, AR, [3]Univ. of Arkansas, Stuttgart, AR, [4]Technican, Lonoke, AR*

11:54 AM **17** **More than detoxification: A glucose-conjugating enzyme is highly expressed in the silk glands of moths.** ***Courtney Wynn*** *(cnw226@msstate.edu) and Seung-Joon Ahn, Mississippi State Univ., Mississippi State, MS*

12:06 PM **18** **The role of perennial hayfields as habitat for grassland arthropod predators.** ***Amelia Grider*** *(acg0036@auburn.edu) and Bill Wills, Auburn Univ., Auburn, AL*

12:18 PM **19** **Sublethal effects of pyriproxyfen and cyantraniliprole on *Bemisia tabaci* immature development.** ***Mirela Nagaoka*** *(mmn28787@uga.edu), Paulo Cremonez and David Riley, Univ. of Georgia, Tifton, GA*

Masters Student Oral Presentation Competition III

White Oak (Little Rock Marriott)

Moderator(s): Dominic Reisig, North Carolina State University, Plymouth, NC; Brett Blaauw, University of Georgia, Athens, GA

10:30 AM **20 Enhancing hedgerow systems in fruit tree production to improve beneficial insect diversity and abundance.** ***Tristen Dittman*** *(thd89174@uga.edu) and Brett Blaauw, Univ. of Georgia, Athens, GA*

10:42 AM **21 Control of mealybugs on ornamentals in greenhouses.** ***Zachary Everson*** *(zacharyeverson720@gmail.com)[1], Sophia Copeman[1], Sujan Dawadi[2] and Steven Frank[1], [1]North Carolina State Univ., Raleigh, NC, [2]Purdue Univ., West Lafayette, IN*

10:54 AM **22 Potential hosts and plant damage caused by the European pepper moth.** ***Sophia Copeman*** *(smcopema@ncsu.edu), North Carolina State Univ., Raleigh, NC*

11:06 AM **23 Host preference of *Trichopoda pennipes* (Diptera: Tachinidae) on *Nezara viridula* (Hemiptera: Pentatomidae), *Anasa tristis* (Hemiptera: Coreidae), and *Leptoglossus phyllopus* (Hemiptera: Coreidae) in north central Florida.** ***Lillie Rooney*** *(rooney.lillie@ufl.edu), Lorrie Konopasek, Norman Leppla and Kendall Stacey, Univ. of Florida, Gainesville, FL*

11:18 AM **24 The effect of fire ant-produced compounds on microbes.** ***Ashley Morris*** *(ammorris1@ufl.edu), Univ. of Florida, Gainesville, FL*

11:30 AM **25 Comparison of transgenic *Bacillus thuringiensis* technologies in Arkansas cotton systems for control of bollworm, *Helicoverpa zea*. *Zack Murray*** *(zmurray@uark.edu)[1], Benjamin Thrash[2], Nick Bateman[3], Andrew Plummer[1], Matthew Mann[4], Taylor Murray[5], Stephen Felts[3], Chase Floyd[1], Trevor Newkirk[3], Adam Whitfield[1] and Taylor Harris[1], [1]Univ. of Arkansas, Lonoke, AR, [2]Univ. of Arkansas Cooperative Extension Service, Lonoke, AR, [3]Univ. of Arkansas, Stuttgart, AR, [4]Univ. of Arkansas System Division of Agriculture Cooperative Extension Service, Jonesboro, AR, [5]Univ. of Arkansas Extension and Research, Lonoke, AR*

11:42 AM **26 The colonization of mesocosms by aquatic insects (Coleoptera: Dytiscidae & Hydrophilidae) in response to leaf litter mixtures.** ***Daniel Edwards*** *(dje014@email.latech.edu)[1] and Julia Earl[2], [1]Louisiana Tech, Ruston, LA, [2]Louisiana Tech Univ., Ruston, LA*

11:54 AM **27 Evaluating the influence of winter cover crops and biological insecticides on the performance of organic sweetpotatoes.** ***Claire Schloemer*** *(czs0171@auburn.edu)[1], Scott Graham[1], Kathy Lawrence[1], Brent Sipes[2] and Koon-Hui Wang[2], [1]Auburn Univ., Auburn, AL, [2]Univ. of Hawai'i at Manoa, Honolulu, HI*

12:06 PM **28 Impact of soil moisture and type on *Helicoverpa zea* (Boddie) behavior and emergence.** ***Igor Schardong*** *(isulzba@ncsu.edu)[1], Dominic Reisig[2] and Taynara Possebom[1], [1]North Carolina State Univ., Raleigh, NC, [2]North Carolina State Univ., Plymouth, NC*

Masters Student Oral Presentation Competition IV

Conway (Little Rock Marriott)

Moderator(s): Sriyanka Lahiri, University of Florida, Wimauma, FL; Oscar Liburd, University of Florida, Gainesville, FL

10:30 AM **29 Evaluation of low-cost ethanol detectors for assessing flood stress in dogwood (*Cornus florida*) to facilitate field detection of ambrosia beetle susceptible trees.** ***Anju Poudel*** *(apoudel1@my.tnstate.edu)[1], Jason Oliver[1], Cynthia Perkovich[2], Paul O'Neal[1] and Karla Addesso[1], [1]Tennessee State Univ., McMinnville, TN, [2]Ashland Univ., Ashland, OH*

10:42 AM **30 Effects of simulating terminal and pre-floral bud injury by the tarnished plant bug, *Lygus lineolaris*, on cotton growth and yield across the southeastern United States.** ***Shelby Durden*** *(srdurde@clemson.edu)[1], Francis Reay-Jones[2] and Jeremy Greene[3], [1]Clemson Univ., Greenville, SC, SC, [2]Clemson Univ., Florence, SC, [3]Clemson Univ., Blackville, SC*

10:54 AM **31 Herbicide stress and flatheaded borer attacks: Does differential response to stress by maple cultivars explain susceptibility to flatheaded borers?** ***Asmita Gautam*** *(agautam1@my.tnstate.edu)[1], Cynthia Perkovich[2], Jason Oliver[1], Anthony Witcher[1] and Karla Addesso[1], [1]Tennessee State Univ., McMinnville, TN, [2]Ashland Univ., Ashland, OH*

11:06 AM **32 How bugs can save our bats - an interdisciplinary approach to understanding insect and bat interactions.** ***Carmen Black*** *(mqb852@vols.utk.edu)[1], Jerome Grant[1], Rebecca Trout Fryxell[1], Ernest Bernard[1], Joy O'Keefe[2] and Elizabeth Beilke[2], [1]Univ. of*

Tennessee, Knoxville, TN, [2]Univ. of Illinois, Urbana, IL

11:18 AM **33 Impact of commonly used insecticides in strawberries on three predatory mites.** ***Allan Busuulwa*** *(abusuulwa@ufl.edu)[1], Alexandra Revynthi[2], Oscar Liburd[3] and Sriyanka Lahiri[1], [1]Univ. of Florida, Wimauma, FL, [2]Univ. of Florida—Tropical Research and Education Center, Homestead, FL, [3]Univ. of Florida, Gainesville, FL*

11:30 AM **34 Effects of turfgrass cover on abundance of beneficial arthropods in sod farms.** ***Mahesh Ghimire*** *(mg66283@uga.edu)[1] and Shimat Joseph[2], [1]Univ. of Georgia, Griffin Campus, Griffin, GA, [2]Univ. of Georgia, Griffin, GA*

11:42 AM **35 Phylogeography, speciation, and cryptic diversity in *Pseudosinella* cave springtails (Entomobryomorpha: Entomobryidae) of the Interior Low Plateau and Appalachian Valley & Ridge Karst regions.** ***Brendan Cramphorn*** *(btc0011@uah.edu), Univ. of Alabama in Huntsville, Huntsville, AL*

11:54 AM **36 The influence of tarnished plant bug induced damage on cotton yield.** ***Michael Huoni*** *(jmh974@msstate.edu)[1], Whitney Crow[1], Jeff Gore[1], Don Cook[1] and Angus Catchot[2], [1]Mississippi State Univ., Stoneville, MS, [2]Mississippi State Univ., Mississippi State, MS*

12:06 PM **37 3D-printed Asian citrus psyllid trap: A potential monitoring tool of parasitoid wasps.** ***Md Tafsir Nur Nabi Rashed*** *(rashed.md@ufl.edu)[1], Elijah Talamas[2] and Amanda Hodges[1], [1]Univ. of Florida, Gainesville, FL, [2]Florida Dept. of Agriculture and Consumer Services, Gainesville, FL*

Monday, March 13, 2023, Afternoon

Undergraduate Student Oral Presentation Competition

Hoffman (Little Rock Marriott)

Moderator(s): Cory Penca, USDA APHIS PPQ, Miami, FL; Kaydie McCormick, University of Florida, Sanford, FL

2:30 PM **66 Who eats the yellow-margined leaf beetle? Field observations and genetic surveillance to identify predators of a novel invasive pest** ***Jon Golan*** *(jeg89007@uga.edu), Carmen Blubaugh and Christiana Huss, Univ. of Georgia, Athens, GA*

2:42 PM **67 Aquatic plants affect insect diversity in frequently disturbed Ozark streams.** ***Alexis Reifsteck*** *(jtc2018@live.missouristate.edu), La Toya Kissoon-Charles and Deb Finn, Missouri State Univ., Springfield, MO*

2:54 PM **68 *Ophiocordyceps unilateralis*: Temperate forest zombies.** ***Kathleen Coffman*** *(kcoffma6@vols.utk.edu), Matthew Longmire and Jerome Grant, Univ. of Tennessee, Knoxville, TN*

Student Oral Presentation Extension, Outreach, and Teaching Competition

Hoffman (Little Rock Marriott)

Moderator(s): Cory Penca, USDA APHIS PPQ, Miami, FL; Kaydie McCormick, University of Florida, Sanford, FL

1:30 PM **38 Completeness of resistance to Bt crops.** ***Fangneng Huang*** *(fhuang@agcenter.lsu.edu), Louisiana State Univ. Agricultural Center, Baton Rouge, LA*

1:42 PM **39 Multiagency Florida first detector program engages audiences to increase invasive species detection.** ***Sarah Tafel*** *(tafels@ufl.edu)[1], Amanda Hodges[1], Shannon McAmis[1], Morgan Pinkerton[2] and Julia Rycyna[1], [1]Univ. of Florida, Gainesville, FL, [2]Univ. of Florida/IFAS, Sanford, FL*

1:54 PM **40 Science Saturday: Utilizing weekend fun to spark interest in insects and arthropods.** ***Latoyia Downs*** *(latoyia.downs@usm.edu)[1] and Shahid Karim[2], [1]The Univ. of Southern Mississippi,*

Hattiesburg, MS, [2]Principle Investigator, Hattiesburg, MS

PhD Student Oral Presentation Competition I

Conway (Little Rock Marriott)

Moderator(s): G. David Buntin, Univ. of Georgia, Griffin, GA and Tom Bilbo, Clemson Univ., Charleston, SC

1:30 PM **41** **Development of bumblebees on centipedegrass pollen.** ***Oluwatomi Ibiyemi*** *(odi91955@uga.edu)[1], David Jespersen[1], Karen Harris-Shultz[2] and Shimat Joseph[1], [1]Univ. of Georgia, Griffin, GA, [2]USDA, Tifton, GA*

1:42 PM **42** **Incorporating sweet alyssum flowers (*Lobularia maritima*) to optimize biological control of Diamondback moth (*Plutella xylostella*) in the Brassica fields of South Carolina.** ***Amna Ghani*** *(aghani@clemson.edu) and Tom Bilbo, Clemson Univ., Charleston, SC*

1:54 PM **43** **An inexpensive device to assess the temporal flight activity of mosquitoes, biting midges and other insects.** ***Vilma Montenegro*** *(vilma.montenegro@ufl.edu) and Nathan Burkett-Cadena, Univ. of Florida, Vero Beach, FL*

2:06 PM **44** **Seasonal abundance of blueberry flower thrips in Georgia.** ***Rosan Adhikari*** *(ra84320@uga.edu) and Ashfaq Sial, Univ. of Georgia, Athens, GA*

2:18 PM **45** **Genetic resistance to Hessian fly in soft red winter wheat in the southeastern US.** ***John Bagwell*** *(jbagwell@uga.edu)[1], Madhav Subedi[1], Suraj Sapkota[2], Benjamin Lopez[1], Zhenbang Chen[1], G. David Buntin[1], Bochra Bahri[1] and Mohamed Mergoum[1], [1]Univ. of Georgia, Griffin, GA, [2]USDA-ARS, Tifton, GA*

2:30 PM **46** **Combining scalping, reduced fertilization, and a miticide to manage bermudagrass mite infestations.** ***Matthew Brown*** *(msb5@clemson.edu)[1] and Juang Horng Chong[2], [1]Clemson Univ., Clemson, SC, [2]Clemson Univ., Florence, SC*

2:42 PM **47** **Potential of the oothecal parasitoid *Aprostocetus hagenowii* (Hymenoptera: Eulophidae) as a biological control agent for the Turkestan cockroach *Blatta lateralis* (Blattodea: Blattidae).** ***Chelsea Smith*** *(cms0187@auburn.edu)[1], Ana Chicas-Mosier[2], Henry Fadamiro[3] and Arthur Appel[1], [1]Auburn Univ., Auburn, AL, [2]Univ. of Kansas, Lawrence, KS, [3]Texas A&M Univ., College Station, TX*

2:54 PM **48** **Population dynamics of two major Lepidopteran pests and their larval endoparasitoids on hemp in Tennessee.** ***Julian Cosner*** *(jcosner@vols.utk.edu), Jerome Grant and Mitchell Richmond, Univ. of Tennessee, Knoxville, TN*

PhD Student Oral Presentation Competition II

Harris Brake (Little Rock Marriott)

Moderator(s): Fangneng Huang, Louisiana State Univ. Agricultural Center, Baton Rouge, LA and Don Cook, Mississippi State Univ., Stoneville, MS

1:30 PM **49** **Testing Vip3Aa binding in susceptible and resistant *Spodoptera frugiperda* (Lepidoptera: Noctuidae) strains.** ***Rajeev Roy*** *(rroy7@vols.utk.edu)[1], Dawson Kerns[2], David Kerns[3], Fei Yang[4], Fangneng Huang[5] and Juan-Luis Jurat-Fuentes[2], [1]Univ. of Tennessee, knoxville, TN, [2]Univ. of Tennessee, Knoxville, TN, [3]Texas A&M AgriLife Extension Service, College Station, TX, [4]Texas A&M Univ., College Station, TX, [5]Louisiana State Univ. Agricultural Center, Baton Rouge, LA*

1:42 PM **50** **Updates to the taxonomy of Nearctic *Polycentropus* Curtis, 1835 (Trichoptera: Polycentropodidae).** ***Alexander Orfinger*** *(a.orfinger@ufl.edu), Univ. of Florida, Tallahassee, FL; Florida A&M Univ., Tallahassee, FL*

1:54 PM **51** **Evaluating *Dermacentor variabilis* and *Amblyomma americanum* (Ixodidae: Acari) population trends across time in the United States using systematic review data..** ***Dayvion Adams*** *(dradams4@ncsu.edu) and Michael Reiskind, North Carolina State Univ., Raleigh, NC*

2:06 PM **52** **Factors affecting the developmental biology of kudzu bug (*Megacopta cribraria*) egg parasitoids.** ***Sanower Warsi*** *(szw0132@auburn.edu), Auburn Univ., Auburn, AL*

2:18 PM **53** **Pollinator facilitation: A mechanism for better blueberry production?** ***John Ternest*** *(jternest@ufl.edu), Patricio Muñoz and Rachel Mallinger, Univ. of Florida, Gainesville, FL*

2:30 PM **54 Manipulating plant-based resources can maximize pest management and pollination in citrus groves.** ***Romain Exilien*** *(romainexilien@ufl.edu)[1], Xavier Martini[1], Lauren Diepenbrock[2], Kathi Malfa[1] and Angela Chuang[2], [1]Univ. of Florida, Quincy, FL, [2]Univ. of Florida, Lake Alfred, FL*

2:42 PM **55 Monitoring for Pyrethroid resistance in Mississippi rice stink bug populations.** ***Mary Jane Lytle*** *(mjl449@msstate.edu)[1], Jeff Gore[1], Whitney Crow[1], Don Cook[1], Angus Catchot[2] and Jason Bond[1], [1]Mississippi State Univ., Stoneville, MS, [2]Mississippi State Univ., Mississippi State, MS*

2:54 PM **56 Host plants influence differential gene expression in *Aphis gossypii* upon virus acquisition from cotton leafroll dwarf virus (CLRDV) infected plants.** ***Sudeep Pandey*** *(sp36142@uga.edu)[1], Michael Catto[2], Phillip Roberts[3], Sudeep Bag[4], Alana Jacobson[5] and Rajagopalbabu Srinivasan[1], [1]Univ. of Georgia, Griffin, GA, [2]Univ. of Georgia, Athens, GA, [3]Univ. of Georgia, Tifton, GA, [4]Univ. of Georgia, Tifton Campus, Tifton, GA, [5]Auburn Univ., Auburn, AL*

3:06 PM **57 Natural versus commercial biological control: Are field-collected and commercial entomopathogenic strains of *Beauveria bassiana* effective in causing mortality of kudzu bug, *Megacopta cribraria*?** ***Kassie Hollabaugh*** *(khollaba@vols.utk.edu)[1], Jerome Grant[1], Bonnie Ownley[1] and Scott Stewart[2], [1]Univ. of Tennessee, Knoxville, TN, [2]Univ. of Tennessee, Jackson, TN*

PhD Student Oral Presentation Competition III

White Oak (Little Rock Marriott)

Moderator(s): Xavier Martini, Univ. of Florida, Quincy, FL and Lauren Diepenbrock, Univ. of Florida, Lake Alfred, FL

1:30 PM **58 Insecticide resistance and metabolic detoxification in the mosquito *Aedes aegypti* (Diptera: Culicidae).** ***Dylan Brown*** *(djb0094@auburn.edu) and Nannan Liu, Auburn Univ., Auburn, AL*

1:42 PM **59 Stink bug community composition and abundance in North Carolina soybeans.** ***Sujan Panta*** *(spanta@ncsu.edu), Rachel Vann and Anders Huseth, North Carolina State Univ., Raleigh, NC*

1:54 PM **60 Monitoring tolerance to Dinotefuran, Flupyradifurone, Cyantraniliprole, and Afidopyropen in *Bemisia Tabaci* MEAM1 field populations from south Florida.** ***Marcelo Dimase*** *(marcelodimase@ufl.edu) and Hugh Smith, Univ. of Florida, Wimauma, FL*

2:06 PM **61 Hibiscus mealybugs (Hemiptera: Pseudococcidae) congregate near points of injury on citrus trees via attractive herbivore-induced volatiles.** ***David Olabiyi*** *(davidolabiyi@ufl.edu), Lukasz Stelinski and Lauren Diepenbrock, Univ. of Florida, Lake Alfred, FL*

2:18 PM **62 Spatiotemporal population dynamics of *Helicoverpa zea* at fine spatial scales.** ***Lindsey Christianson*** *(ldchrist@ncsu.edu)[1], Seth Dorman[2] and Anders Huseth[1], [1]North Carolina State Univ., Raleigh, NC, [2]National Forage Seed Production Research Center-USDA-ARS, Corvallis,, OR*

2:30 PM **63 Evaluation of semiochemical and visual based push-pull strategy for managing redbay ambrosia beetle on redbay.** ***Derrick Conover*** *(dconover13@ufl.edu)[1] and Xavier Martini[2], [1]UF/IFAS, Tallahassee, FL, [2]Univ. of Florida, Quincy, FL*

2:42 PM **64 A spicy situation: Insect diversity and community composition of northern spicebush.** ***Matthew Longmire*** *(mlongmir@vols.utk.edu)[1], Jerome Grant[1] and Albert Mayfield[2], [1]Univ. of Tennessee, Knoxville, TN, [2]USDA - Forest Service, Asheville, NC*

2:54 PM **65 Machine learning of *Aedes* mosquito population dynamics through the factors in the environmental ecosystems.** ***Yifan Wang*** *(yzw0093@auburn.edu) and Nannan Liu, Auburn Univ., Auburn, AL*

PhD Student Oral Presentation Competition IV

Conway (Little Rock Marriott)

Moderator(s): Silvana V. Paula-Moraes, Univ. of Florida, Jay, FL and Pierre Lau, United States Dept. of Agriculture, Stoneville, MS

3:45 PM **69 Antibiosis resistance of fall armyworm rice strain in commercial turfgrass cultivars.** ***Julia Nogueira Duarte Campos*** *(jnogueiraduartec@ufl.edu)[1], Silvana V. Paula-Moraes[1], J. Bryan Unruh[2],*

Adam Dale[3] and Kevin Kenworthy[3], [1]Univ. of Florida, Jay, FL, [2]Horticultural Dept., West Florida Research and Education Center, Jay, FL, [3]Univ. of Florida, Gainesville, FL

3:57 PM **70 Developing a pollen nutrition database for North America: Healthy food for healthy bees. *Lauren Jennings*** *(lnj113@msstate.edu)[1], Max Simon[2], Ramesh Sagili[2] and Priyadarshini Chakrabarti Basu[1], [1]Mississippi State Univ., Starkville, MS, [2]Oregon State Univ., Corvallis, OR*

4:09 PM **71 Mutation frequency analysis and expression profiling of insect ryanodine receptor in soybean looper, *Chrysodeixis includens*. *Sena Isbilir*** *(si240@msstate.edu), Lauren Catchot, Fred Musser and Seung-Joon Ahn, Mississippi State Univ., Mississippi State, MS*

4:21 PM **72 To Bt, or not to Bt? Evaluating insecticidal protein and mycotoxigenic fungi interactions *Autumn McLaughlin*** *(aam0044@utk.edu), Sebe Brown and Heather Kelly, Univ. of Tennessee, Jackson, TN*

4:33 PM **73 Alternative hosts and overwintering survival of *Helicoverpa zea* (Boddie) (Lepidoptera: Noctuidae) southeast USA. *Izailda Barbosa dos Santos*** *(barbosad.izailda@ufl.edu)[1], Silvana V. Paula-Moraes[1], Dan Hahn[2], Clyde Fraisse[2], Julien Beuzelin[3] and Omaththage Perera[4], [1]Univ. of Florida, Jay, FL, [2]Univ. of Florida, Gainesville, FL, [3]Univ. of Florida, Belle Glade, FL, [4]USDA-ARS, Southern Insect Management Research Unit, Stoneville, MS*

4:45 PM **74 Identification of cytochrome P450s potentially involved in resistance to imidacloprid and cyantraniliprole in *Bemisia tabaci* (Hemiptera: Aleyrodidae) in Georgia, USA. *Md Abdullah Al Baki*** *(ma82718@uga.edu)[1], Jermaine Perier[2], Donald Champagne[1] and David Riley[2], [1]Univ. of Georgia, Athens, GA, [2]Univ. of Georgia, Tifton, GA*

4:57 PM **75 Effect of conventional and organic pesticides for the management of diamondback moth, and impact on natural enemies. *Kendi Muthomi*** *(pmuthomi@ufl.edu)[1], Oscar Liburd[1], Dakshina Seal[2], Julien Beuzelin[3] and Tolulope Morawo[4], [1]Univ. of Florida, Gainesville, FL, [2]Univ. of Florida, Homestead, FL, [3]Univ. of Florida, Belle Glade, FL, [4]Univ. of Florida, Fort Pierce, FL*

5:09 PM **76 *Rickettsia parkeri* hijacks tick hemocytes to manipulate cellular and humoral transcriptional responses. *Abdulsalam Adegoke*** *(abdulsalam.adegoke@usm.edu)[1], Jose Ribeiro[2], Sidney Brown[1], Ryan Smith[3] and Shahid Karim[4], [1]The Univ. of Southern Mississippi, Hattiesburg, MS, [2]National Institute of Allergy and Infectious Diseases, Rockville, MD, [3]Iowa State Univ., Ames, IA, [4]Principle Investigator, Hattiesburg, MS*

5:21 PM **77 Effect of lab-adaption and cannibalism on calling, mating, andreproduction of *Helicoverpa zea*. *Shucong Lin*** *(slin9@lsu.edu)[1], Tiago Silva[2], Graham P. Head[3], Bhavana Plata[2], Ying Niu[2], Anderson Cerutti[4] and Fangneng Huang[2], [1]Louisiana State Univ. Agricultural Center, Banton Rouge, LA, [2]Louisiana State Univ. Agricultural Center, Baton Rouge, LA, [3]Bayer Crop Science, Chesterfield, MO, [4]Louisiana State Univ., Dept. of entomology, Baton Rouge, LA*

PhD Student Oral Presentation Competition V

Harris Brake (Little Rock Marriott)

Moderator(s): Jeremy Greene, Clemson Univ., Blackville, SC and Jeffrey Davis, Louisiana State Univ., Baton Rouge, LA

3:45 PM **78 Effects of planting date and rice cultivar on rice water weevil density and stem borer injury. *Tyler Musgrove*** *(tmusgr1@lsu.edu)[1], James Villegas[2], Blake Wilson[3], Kim Landry[4] and Michael Stout[1], [1]Louisiana State Univ., Baton Rouge, LA, [2]Dean Lee Research & Extension Center, Alexandria, LA, [3]Louisiana State Univ., St.Gabriel, LA, [4]H. Rouse Caffey Rice Research Station, Rayne, LA*

3:57 PM **79 Assessment of commercial strawberry cultivars for host plant resistance to manage chilli thrips. *Lovely Adhikary*** *(l.adhikary@ufl.edu) and Sriyanka Lahiri, Univ. of Florida, Wimauma, FL*

4:09 PM **80 Interspecific competition between two major pests of field corn in South Carolina. *Tim Bryant*** *(timb@clemson.edu)[1], Jeremy Greene[2] and Francis Reay-Jones[1], [1]Clemson Univ., Florence, SC, [2]Clemson Univ., Blackville, SC*

4:21 PM **81 Season and management mediate pastured chickens' contribution to biological control. *Sofia Varriano***

(svarriano@uga.edu), Karen Solis and William Snyder, Univ. of Georgia, Athens, GA

4:33 PM **82 Parasitoids of soybean looper, *Chrysodeixis includens* (Walker), in soybean agroecosystems. *Scott Lee*** *(slee168@lsu.edu)[1], Jeremy Greene[2], David Owens[3], Dominic Reisig[4], Sally Taylor[5] and Jeffrey Davis[1], [1]Louisiana State Univ., Baton Rouge, LA, [2]Clemson Univ., Blackville, SC, [3]Univ. of Delaware Cooperative Extension, Newark, DE, [4]North Carolina State Univ., Plymouth, NC, [5]Virginia Polytechnic Institute and State Univ., Suffolk, VA*

4:45 PM **83 Linking potential wooded overwintering habitats and presence of stink bugs in corn in two North Carolina ecoregions. *Kevin Orta*** *(korta@ncsu.edu)[1] and Dominic Reisig[2], [1]North Carolina State Univ., Raleigh, NC, [2]North Carolina State Univ., Plymouth, NC*

4:57 PM **84 Lethal and sub-lethal effects of conventional and organic insecticides on the exotic and resident parasitoids of spotted-wing drosophila. *Subin Neupane*** *(Sbn88190@uga.edu)[1], Ashfaq Sial[1] and Jason Schmidt[2], [1]Univ. of Georgia, Athens, GA, [2]Univ. of Georgia, Tifton, GA*

5:09 PM **85 Seasonal abundance and spatial distribution of thrips pests and natural enemies in strawberry in Florida. *Gagandeep Kaur*** *(gkaur2@ufl.edu)[1] and Sriyanka Lahiri[2], [1]PhD Student, Wimauma, FL, [2]Univ. of Florida, Wimauma, FL*

PhD Student Oral Presentation Competition VI

White Oak (Little Rock Marriott)

Moderator(s): Carey Minteer-Killian, Univ. of Florida, Fort Pierce, FL and Nick Bateman, Univ. of Arkansas, Stuttgart, AR

3:45 PM **86 Engineered microalgae feed to bolster honey bee disease resistance. *Allyson Martin*** *(amar365@lsu.edu)[1,2], Alexander McMenamin[2] and Vincent Ricigliano[2], [1]Louisiana State Univ., Baton Rouge, LA, [2]USDA - ARS, Baton Rouge, LA*

3:57 PM **87 ABC transporter mutagenesis using a CRISPR/Cas9 genome editing tool in the soybean looper, *Chrysodeixis includens*. *Sujin Lee*** *(sl2106@msstate.edu) and Seung-Joon Ahn, Mississippi State Univ., Mississippi State, MS*

4:09 PM **88 Deciphering the interplay between selenoproteins and the unfolded protein response in pathogen infection using an *Ixodes scapularis* cell line. *Latoyia Downs*** *(latoyia.downs@usm.edu)[1] and Shahid Karim[2], [1]The Univ. of Southern Mississippi, Hattiesburg, MS, [2]Principle Investigator, Hattiesburg, MS*

4:21 PM **89 First record of earleaf acacia as a new plant host for the native seed beetle *Stator limbatus* in Florida. *Sara Salgado*** *(sara.salgadoast@ufl.edu) and Carey Minteer-Killian, Univ. of Florida, Fort Pierce, FL*

4:33 PM **90 Evaluation of at-plant insecticides and nematicides to preserve cotton seedling plant health and yield in Alabama. *Thomas Douglas*** *(tjd0053@auburn.edu), Scott Graham and Kathy Lawrence, Auburn Univ., Auburn, AL*

4:45 PM **91 Comparison of chrysogen formulations for control of soybean looper, *Chrysodeixis includens*, in Arkansas soybean production. *Caleb Rice*** *(caleb.rice2012@gmail.com)[1], Gus Lorenz[2], Benjamin Thrash[3], Nick Bateman[4], Chase Floyd[2], Stephen Felts[4], Andrew Plummer[2], Trevor Newkirk[4], Adam Whitfield[2], Zack Murray[2] and Taylor Harris[2], [1]Division of Agriculture, Cooperative Extension Service, Dept. of Entomology, Lonoke, AR, [2]Univ. of Arkansas, Lonoke, AR, [3]Univ. of Arkansas Cooperative Extension Service, Lonoke, AR, [4]Univ. of Arkansas, Stuttgart, AR*

4:57 PM **92 Longitudinal monitoring of honey bee colonies along an agricultural intensification gradient in Mississippi. *Angus Catchot III*** *(alc607@msstate.edu)[1], Urita Agana[1], Audrey Sheridan[2], Priyadarshini Chakrabarti Basu[1] and Jeff Gore[3], [1]Mississippi State Univ., Starkville, MS, [2]Mississippi State Univ., Mississippi State, MS, [3]Mississippi State Univ., Stoneville, MS*

Tuesday, March 14, 2023, Posters

CONTRIBUTED POSTERS: Medical, Urban and Veterinary / 8:00 AM-6:00 PM

Balcony (Little Rock Marriott)

P-32 **Disinfestation of red imported fire ants from balled-and-burlapped nursery stock using non-repellent insecticides. *Lex Nielsen*** *(lexnielsen01@gmail.com), Rachel Atchison and David Oi, USDA - ARS, Gainesville, FL*

P-33 **Influences of larval environmental conditions on *Dirofilarial immitis* (Onchocercidae: Rhabditida) transmission in *Aedes albopictus* and *Ae. triseriatus*. *Kaylin Lewandowski*** *(kslewand@ncsu.edu), North Carolina State Univ., Raleigh, NC*

P-34 **Succession of forensically important Diptera in North Florida.** *Lee Bushong[1],* ***Maya Mancle*** *(maya1.mancle@famu.edu)[2] and Shemiah Lee[2], [1]Member, Tallahassee, FL, [2]Student, Tallahassee, FL*

CONTRIBUTED POSTERS: Plant-Insect Ecosystems / 8:00 AM-6:00 PM

Balcony (Little Rock Marriott)

P-35 **Effects of land-use change on the pollen load composition of a purported specialist bee (*Habropoda laboriosa*). *Sarah Anderson*** *(andersonsarah@ufl.edu) and Rachel Mallinger, Univ. of Florida, Gainesville, FL*

P-36 **Genetic variation of rice stink bug, *Oebalus* species. *A. L. Szalanski*** *(aszalan@uark.edu)[1], Raymond L. Hix[2], Dylan Cleary[1], Ronald H. Cherry[3] and Nick Bateman[4], [1]Univ. of Arkansas, Fayetteville, AR, [2]Florida A&M Univ., Tallahassee, FL, [3]Univ. of Florida, Belle Glade, FL, [4]Univ. of Arkansas, Stuttgart, AR*

P-37 **MyIPM for row crops - a smartphone application to increase adoption of IPM. *Francis Reay-Jones*** *(freayjo@clemson.edu)[1], Tim Bryant[1] and Guido Schnabel[2], [1]Clemson Univ., Florence, SC, [2]Clemson Univ., Clemson, SC*

P-38 **Monitoring population trends in southwestern corn borer (*Diatraea grandiosella*) utilizing pheromone traps in Arkansas: A five-year summary. *Glenn Studebaker*** *(gstudebaker@uada.edu)[1] and Matthew Mann[2], [1]Univ. of Arkansas System Division of Agriculture Cooperative Extension Service, Keiser, AR, [2]Univ. of Arkansas System Division of Agriculture Cooperative Extension Service, Jonesboro, AR*

P-39 **Empowering ag professionals in pest management decisions by delivering extension information in a mobile-friendly website: "Cotton Pests in Florida App". *Ethan Carter*** *(ethancarter@ufl.edu)[1], Isaac Esquivel[2] and Silvana V. Paula-Moraes[3], [1]Univ. of Florida, Marianna, FL, [2]Univ. of Florida, Quincy, FL, [3]Univ. of Florida, Jay, FL*

P-40 **Susceptibility of *Bemisia tabaci* MEAM1 (Hemiptera: Aleyrodidae) to Spirotetramat in south Florida. *Marcelo Dimase*** *(marcelodimase@ufl.edu) and Hugh Smith, Univ. of Florida, Wimauma, FL*

P-41 **Using population genomics to characterize whitefly predator dispersal. *Garrison Piel*** *(gwp01241@uga.edu)[1], William Snyder[1], Michael Crossley[2] and Pedro Rodrigues[1], [1]Univ. of Georgia, Athens, GA, [2]Univ. of Delaware, Newark, DE*

P-42 **Laboratory virulence of entomopathogenic fungus, *Beauveria bassiana*, to the maize weevil, *Sitophilus zeamais*. *Anurag Singh*** *(Anurag.singh@fvsu.edu)[1], Yinping Li[1] and George N. Mbata[2], [1]Fort Valley State Univ., Fort Valley, GA, [2]Agricultural Research Station, Fort Valley State Univ., Fort Valley, GA*

P-43 **Prey and macronutrient selectivity in a common insectivorous predator, *Sceloporus consobrinus*. *Tanner Senti*** *(tsenti@cub.uca.edu), Univ. of Central Arkansas, Conway, AR*

P-44 **Ongoing classical biological control activities in Tennessee. *Jerome Grant*** *(jgrant@utk.edu) and David Bechtel, Univ. of Tennessee, Knoxville, TN*

P-45 **Flowering plants for biological control of arthropod pests. *Kaushalya Amarasekare*** *(kamarase@tnstate.edu), Firuz Yuldashev and Yuna Gaire, Tennessee State Univ., Nashville, TN*

P-46 **Influences of Varroa mite and viral infections on insecticide susceptibility in honey bee. *Yu-CHENG Zhu*** *(yc.zhu@usda.gov), USDA-ARS, STONEVILLE, MS*

P-47 **Sunflowers managed for doves as pollinator habitat.** *Katherine Parys[1], Ebony Jenkins[2],* ***Kimberly Huntzinger*** *(kim.huntzinger@usda.gov)[3] and Terry Griswold[4], [1]USDA - ARS, Stoneville, MS, [2]Univ. of Maryland, Princess Anne, MD, [3]USDA ARS, STONEVILLE, MS, [4]USDA - ARS, Logan, UT*

P-48 **Does habitat matter?: Dung beetle communities in forests and cattle pastures in northeast Arkansas *Becca Lett*** *(rebecca.lett@smail.astate.edu)[1] and Tanja McKay[1,2], [1]Arkansas State Univ., Jonesboro, AR, [2]Univ. of Arkansas Division of Agriculture, Fayetteville, AR*

P-49 **What limits gene flow between host-associated populations of the indigenous gall midge *Asphondylia borrichiae* (Diptera: Cecidomyiidae)? *Anthony Rossi*** *(arossi@unf.edu) and Keith Stokes, Univ. of North Florida, Jacksonville, FL*

P-50 **A long-term comparison of seasonality in gall density among host species of the gall forming midge *Asphondylia borrichiae* (Diptera: Cecidomyiidae). *Keith Stokes*** *(kstokesbiologist@gmail.com) and Anthony Rossi, Univ. of North Florida, Jacksonville, FL*

CONTRIBUTED POSTERS: Systematics, Evolution, and Biodiversity; Physiology, Biochemistry, and Toxicology / 8:00 AM-6:00 PM

Balcony (Little Rock Marriott)

P-51 **First records of *Agapostemon poeyi* (Lucas 1856) (Hymenoptera: Halictidae), a new bee species to the Southeastern US. *Katherine Parys*** *(katherine.parys@usda.gov)[1] and John S. Ascher[2], [1]USDA - ARS, Stoneville, MS, [2]National Univ. of Singapore, Singapore, Singapore*

P-52 **Toxicity of the neem oil on the peanut burrower bug. *Feng Li*** *(Feng.li@fvsu.edu)[1], Yinping Li[1] and George N. Mbata[2], [1]Fort Valley State Univ., Fort Valley, GA, [2]Agricultural Research Station, Fort Valley State Univ., Fort Valley, GA*

P-53 **Fall armyworm susceptibilities to four proteins commonly used proteins in pyramid Bt corn in the southern United States. *Tiago Silva*** *(TSilva@AgCenter.Lsu.edu)[1], Gregory Sword[2], Andie Miller[2], Jawwad Qureshi[3], Graham P. Head[4], Dawson Kerns[5], Juan-Luis Jurat-Fuentes[5], James Villegas[6], Tyler Towles[7], Xinzhi Ni[8], Daniel Carrillo[9], Don Cook[10], Chris Davis[11], Francis Reay-Jones[12], Michael Stout[1], Benjamin Thrash[13], Silvana Vieira de Paula-Moraes[14], Shucong Lin[1], Bhavana Plata[1], Ying Niu[1], Caroline Sakuno[1,15] and Fangneng Huang[1], [1]Louisiana State Univ. Agricultural Center, Baton Rouge, LA, [2]Texas A&M Univ., College Station, TX, [3]Univ. of Florida, Immokalee, FL, [4]Bayer Crop Science, Chesterfield, MO, [5]Univ. of Tennessee, Knoxville, TN, [6]Dean Lee Research & Extension Center, Alexandria, LA, [7]Louisiana State Univ. Agricultural Center, Winnsboro, LA, [8]USDA - ARS, Tifton, GA, [9]Univ. of Florida, Homestead, FL, [10]Mississippi State Univ., Stoneville, MS, [11]Bayer U.S. Crop Science, Stoneville, MS, [12]Clemson Univ., Florence, SC, [13]Univ. of Arkansas Cooperative Extension Service, Lonoke, AR, [14]Univ. of Florida, Jay, FL, [15]Centro de Tecnologia Canavieira, Piracicaba, Brazil*

Tuesday, March 14, 2023, Morning

SYMPOSIUM: Compounding Whitefly-Virus Issues in Vegetable Production in Southeastern United States

Salon A (Little Rock Marriott)

Moderators and Organizers: Rajagopalbabu Shrinivasan, Univ. of Georgia, Griffin, GA; Alvin Simmons, USDA - ARS, Charleston, SC and Allen J. Moore, Univ. of Georgia, Athens, GA

8:00 AM **93** **Source of Plant Resistance against Whiteflies in Pepper.** ***Alvin Simmons*** *(alvin.simmons@usda.gov)[1] and William Rutter[2], [1]USDA, Charleston, SC, [2]USDA, ARS, U.S. Vegetable Laboratory, Charleston, SC*

8:20 AM **94** **Direct and indirect effects of insecticides on generalist predators and their contribution to whitefly control.** ***Arash Kheirodin*** *(arash.kheirodin@uga.edu), Albertha Parkins and Jason Schmidt, Univ. of Georgia, Tifton, GA*

8:40 AM **95** **Could predation risks in adult *Bemisia tabaci* affect oviposition and offspring development.** ***Oscar Liburd*** *(oeliburd@ufl.edu)[1] and Rosangela Marucci[2], [1]Univ. of Florida, Gainesville, FL, [2]Departamento de Entomologia da Universidade Federal de Lavras - UFLA, Lavras, FL*

9:00 AM **96** **Resistance against whiteflies and viruses in squash germplasm.** ***Gurjit Singh*** *(fnu.gurjitsingh@uga.edu)[1], Cecilia McGregor[2], Alexander Luckew[3], Bhabesh Dutta[4], Sudeep Bag[5] and Rajagopalbabu Shrinivasan[1], [1]Univ. of Georgia, Griffin, GA, [2]Univ. of Georgia, Athens, Athens, GA, [3]Dept. of Horticulture, Athens, GA, [4]The Univ. of Georgia, Tifton, GA, [5]Univ. of Georgia, Tifton Campus, Tifton, GA*

9:20 AM **97** ***Cordyceps javanica* as a biocontrol agent in whitefly management.** ***Katherine Anderson*** *(*klanderson97@ferrum.edu*)[1], Shaohui Wu[1], Michael Toews[1], Robert Behle[2], Christopher Dunlap[4], and David Shapiro-Ilan[3] [1]Univ. of Georgia, Tifton, GA, [2]Bioactive Agents Research, National Center for Agricultural Utilization Research, USDA-ARS,, Peoria, IL, [3]USDA-ARS, SE Fruit and Tree Nut Research Unit, Byron, GA, [4]USDA ARS NCAUR, Peoria, IL*

9:40 AM **98** **Field evaluation of squash cultivars for susceptibility to the sweetpotato whitefly, *Bemisia tabaci*, infestations.** ***Yinping Li*** *(yinping.li@fvsu.edu)[1], George Mbata[1] and Alvin Simmons[2], [1]Fort Valley State Univ., Fort Valley, GA, [2]USDA, Charleston, SC*

SYMPOSIUM: Current Medical Entomology Research in the Southeastern Branch

Conway (Little Rock Marriott)

Moderators and Organizers: Dayvion Adams, North Carolina State Univ., Raleigh, NC and Estelle Martin, Univ. of Florida, Gainesville, FL

8:00 AM **99** **Efficacy of low density In2Care traps as a component of integrated mosquito management..** ***Estelle Martin*** *(estellemartin@ufl.edu), Univ. of Florida, Gainesville, FL*

8:15 AM **100** **Range Expansions, Population Variations, and Pathogen Dynamics.** ***Holly Gaff*** *(hgaff@odu.edu), Old Dominion Univ., Norfolk, VA*

8:30 AM **101** **Native Wolbachia infection and larval competition stress shape fitness and West Nile virus infection in Culex quinquefasciatus mosquitoes..** ***Eric Caragata*** *(e.caragata@ufl.edu)[1], Abdullah Alomar[2], Dongmin Kim[2], Natalie Kendziorski[2], Bradley Eastmond[2] and Barry Alto[2], [1]Univ. of Florida, FMEL, Vero Beach, FL, [2]Univ. of Florida: Florida Medical Entomology Laboratory, Vero Beach, FL*

8:45 AM **102** **A citizen science approach to conducting tick surveillance in North Carolina.** ***Dayvion Adams*** *(dradams4@ncsu.edu) and Michael Reiskind, North Carolina State Univ., Raleigh, NC*

9:00 AM **Break**

9:15 AM **103** **Characterization of human-mosquito contact rate as a new paradigm linking socio-environment and mosquito-borne disease transmission.** ***Panpim Thongsripong*** *(thongsripong.p@ufl.edu), Univ. of Florida, Vero Beach, FL*

9:30 AM **104** **Using human tick encounters to understand when and where a tick is likely to quest (or bite you).** ***Rebecca Trout Fryxell*** *(rfryxell@utk.edu)[1], R. Butler[1], Jennifer G. Chandler[1] and James T. Vogt[1,2], [1]Univ. of*

Tennessee, Knoxville, TN, [2]USDA - Forest Service, Knoxville, TN

9:45 AM **105 Leveraging routine surveillance and control data to investigate mosquito phenology over a 20 year period. *Lindsay Campbell*** *(lcampbell2@ufl.edu)[1], Mohamed Sallam[2], Amely Bauer[1], Yasmin Tavares[1] and Robert Guralnick[3], [1]Univ. of Florida, Vero Beach, FL, [2]Navy Entomology Center of Excellence, Jacksonville, FL, [3]Univ. of Florida, Gainesville, FL*

SYMPOSIUM: Grant Writing Essentials Workshop: A Step By Step Approach

Arkansas Ballroom (Little Rock Marriott)

Moderator and Organizers: Michelle Samuel-Foo, USDA-NIFA, Kansas City, MO; Rizana Mahroof, USDA-NIFA, Kansas City, MO and C. Teri Allen, USDA-NIFA, Kansas City, MO

8:00 AM **106 Introduction: Welcome, instructions and expectations. *Michelle Samuel-Foo*** *(michelle.samuel-foo@usda.gov), Rizana Mahroof and C. Teri Allen, USDA-NIFA, Kansas City, MO*

8:20 AM **107 Tips for Successful Grant Writing. *Rizana Mahroof*** *(rizana.mahroof1@usda.gov), USDA-NIFA, Kansas City, MO*

8:40 AM **108 Keep Calm and Read the RFA!. *Michelle Samuel-Foo*** *(michelle.samuel-foo@usda.gov), USDA-NIFA, Kansas City, MO*

9:00 AM **109 Ordering Chaos: Tips and tricks on forming and managing muti-state, multi-industry, and interdisciplinary teams. *Karla Addesso*** *(kaddesso@tnstate.edu), Tennessee State Univ., McMinnville, TN*

SYMPOSIUM: Recent Advancements Toward Developing Sustainable IPM for Spotted-Wing Drosophila

Conway (Little Rock Marriott)

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

10:15 AM **140 Improvements in spotted-wing drosophila monitoring and management in berry crops. *Hannah Levenson*** *(hklevens@ncsu.edu)[1], Hannah Burrack[2], Rufus Isaacs[2], Vaughn Walton[3] and Steven Van Timmeren[2], [1]North Carolina State Univ., Raleigh, NC, [2]Michigan State Univ., East Lansing, MI, [3]Oregon State Univ., Corvallis, OR*

10:27 AM **141 Optimizing vacuum extraction as an effective larval sampling technique for spotted-wing drosophila in small fruit crops. *Arun Babu*** *(ArunBabu@uga.edu), Rosan Adhikari and Ashfaq Sial, Univ. of Georgia, Athens, GA*

10:39 AM **142 Male-only and gene drive strains for genetic biocontrol of *Drosophila suzukii*. *Maxwell Scott*** *(mjscott3@ncsu.edu), North Carolina State Univ., Raleigh, NC*

10:51 AM **143 Recent advancements in behavioral management of spotted-wing drosophila. *Ashfaq Sial*** *(ashsial@uga.edu) and Arun Babu, Univ. of Georgia, Athens, GA*

11:03 AM **144 Spotted-wing Drosophila, *Drosophila suzukii*, movement and management utilizing attract-and-kill technology.. *Elena Rhodes*** *(erhodes@ufl.edu)[1], Gabrielle LaTora[1], Carlene Chase[1], Pablo Urbaneja[2], Cesar Rodriguez-Saona[2], Arun Babu[3], Ashfaq Sial[3] and Oscar Liburd[1], [1]Univ. of Florida, Gainesville, FL, [2]Rutgers, The State Univ. of New Jersey, New Brunswick, NJ, [3]Univ. of Georgia, Athens, GA*

11:15 AM **145 Aspects of spotted-wing drosophila biological control efforts in Georgia. *Subin Neupane*** *(Sbn88190@uga.edu) and Ashfaq Sial, Univ. of Georgia, Athens, GA*

11:27 AM **146 Advancements towards the biocontrol of *Drosophila suzukii* in North Central Florida natural areas using *Ganaspis brasiliensis*. *James Brown*** *(jamestbrown5@ufl.edu) and Oscar Liburd, Univ. of Florida, Gainesville, FL*

11:39 AM **147 Biological control potential of entomopathogenic nematodes for the management of *Drosophila suzukii*. *Arden Lambert*** *(ardenrain@ufl.edu) and Oscar Liburd, Univ. of Florida, Gainesville, FL*

11:51 AM **148 Establishing and optimizing a mass-rearing system and quality standards for SIT of spotted wing *Drosophila*. *Allen Cohen*** *(accohen@ncsu.edu), North Carolina State Univ., Raleigh, NC*

CONTRIBUTED ORAL PRESENTATIONS I: General; Plant-Insect Ecosystems

Harris Brake (Little Rock Marriott)

Moderator(s): Morgan Pinkerton, University of Florida/IFAS, Sanford, FL; Simon Yeboah, University of Florida, Gainesville, FL

8:00 AM **110 Recruitment and retention of entomologists of color. *Ana Chicas-Mosier*** *(ana.chicasmosier@ku.edu)[1] and Charles Abramson[2], [1]Univ. of Kansas, Lawrence, KS, [2]Oklahoma State Univ., Stillwater, OK*

8:12 AM **111 First Friday Invasive Species Webinars to train Florida first detectors. *Morgan Pinkerton*** *(morgan0402@ufl.edu)[1] and Amanda Hodges[2], [1]Univ. of Florida/IFAS, Sanford, FL, [2]Univ. of Florida, Gainesville, FL*

8:24 AM **112 Surveys for insect biodiversity in the Upper Ozark Plateau, Fort Leonard Wood, Missouri. *Sage Wood*** *(mewd8c@mst.edu)[1], Theodore Sumnicht[2] and Robin Verble[3], [1]Missouri Univ. of Science & Technology, Rolla, MO, [2]Missouri Univ. of Science and Technology, Newburg, MO, [3]Missouri Univ. of Science and Technology, Rolla, MO*

8:36 AM **113 Comparison of fruit fly baits for the management of the oriental fruit fly, *Bactrocera dorsalis* (Hendel) (Diptera: Tephritidae), in mango orchards in southern Ghana. *Simon Yeboah*** *(syeboah678@ufl.edu)[1], Paul E. Kendra[2] and Oscar Liburd[1], [1]Univ. of Florida, Gainesville, FL, [2]USDA-ARS, Miami, FL*

8:48 AM **114 Monitoring and management of the pickleworm/melonworm complex in the southeastern United States. *Tom Bilbo*** *(tbilbo@clemson.edu)[1], Helene Doughty[2] and Thomas Kuhar[3], [1]Clemson Univ., Charleston, SC, [2]Virginia Polytechnic Institute and State Univ., Painter, VA, [3]Virginia Polytechnic Institute and State Univ., Blacksburg, VA*

9:00 AM **115 Seasonal survey of chilli thrips in nurseries. *Aerianna Littler*** *(azl0117@auburn.edu) and David Held, Auburn Univ., Auburn, AL*

9:12 AM **116 Evaluation of commercial lures under field conditions for longevity for western flower thrips, *Frankliniella occidentalis* Pergande (Thysanoptera: Thripidae). *Dawn Sikora*** *(Dsikora@g.clemson.edu), Clemson Univ., Clemson, SC*

9:24 AM **Break**

9:39 AM **117 Harnessing behavioral psychology to encourage individuals' adoption of pollinator conservation behaviors. *Conor Fair*** *(cfair13@uga.edu) and S. Braman, Univ. of Georgia, Athens, GA*

9:51 AM **118 The impacts of poor nutrition and pesticides exposure on honey bee physiology and gut microbiome. *Urita Agana*** *(ua57@msstate.edu), Hunter Walt, Angus Catchot and Priyadarshini Chakrabarti Basu, Mississippi State Univ., Starkville, MS*

10:03 AM **119 Lethal and sublethal effects of pesticide-contaminated pollen food stores on solitary bee larvae. *Ngoc Phan*** *(ngocpata@gmail.com)[1], Neelendra Joshi[1], Edwin Rajotte[2], Fang Zhu[2], Kari Peter[3], Margarita López-Uribe[2] and David Biddinger[3], [1]Univ. of Arkansas, Fayetteville, AR, [2]Pennsylvania State Univ., Univ. Park, PA, [3]Penn State Fruit Research and Extension Center, Biglerville, PA*

10:15 AM **120 Interactive effects of pesticide and nutrition on honey bee (*Apis mellifera*) health. *Giovanni Tundo*** *(Giovanni.Tundo@usda.gov) and Pierre Lau, United States Dept. of Agriculture, Stoneville, MS*

10:27 AM **121 Two novel systemic insecticides affect the mortality and enzyme expression of the mason bee, *Osmia lignaria*. *Olivia Kline*** *(okline@uark.edu) and Neelendra Joshi, Univ. of Arkansas, Fayetteville, AR*

10:39 AM **122 Intertegular Distance (ITD) measurements of 191 North American bee species are used as a proxy to estimate foraging ranges and tongue lengths to better understand pollinator ecology. *Lilia Stemet*** *(stemet@uark.edu), Univ. of Arkansas System Division of Agriculture, Fayetteville, AR*

10:51 AM **123 Is there gene flow? Population genetics using RADseq data from migratory and non-migratory hover flies (Diptera: Syrphidae) *C. Scott Clem*** *(Carl.Clem@uga.edu) and William Snyder, Univ. of Georgia, Athens, GA*

11:03 AM **124 Building diversity data on native bees in Arkansas. *Coleman Little***

(colemanslab@gmail.com)[1,2], Roshani Acharya[1], Leslie Cooper[3], Allison Fowler[4], Laurie Scott[5], Theo Witsell[6] and Neelendra Joshi[1], [1]Univ. of Arkansas, Fayetteville, AR, [2]Univ. of Central Arkansas, Conway, AR, [3]Quail Forever Arkansas, Gravette, AR, [4]Arkansas Game and Fish Commission, Little Rock, AR, [5]NorthWest Arkansas Community College, Bentonville, AR, [6]Arkansas Natural Heritage Commission, Little Rock, AR

CONTRIBUTED ORAL PRESENTATIONS II: Plant-Insect Ecosystems; Medical, Urban and Veterinary

White Oak (Little Rock Marriott)

Moderator(s): Colin Wong, USDA ARS, Byron, GA; Rachel Atchison, USDA - ARS, Gainesville, FL

8:00 AM **125 Why is host animal resistance a generation behind host plant resistance?** ***Nancy Hinkle*** *(nhinkle@uga.edu)[1] and Raymond Fitzpatrick[2], [1]Univ. of Georgia, Athens, GA, [2]Univ. of Georgia Cooperative Extension, Carnesville, GA*

8:12 AM **126 Susceptibility of commonly grown bean varieties to Asian bean thrips, *Megalurothrips usitatus* Bagnall (Thysanoptera: Thripidae).** ***Dakshina Seal*** *(dseal3@ufl.edu), Univ. of Florida, Homestead, FL*

8:24 AM **127 Cannabidiol (CBD) hemp triggers the expression of detoxification genes for cannabis aphids (*Phorodon cannabis*).** ***Junhuan Xu*** *(jxu@alasu.edu), Joseph Ayariga, Ting Li and Olufemi Ajayi, Alabama State Univ., Montgomery, AL*

8:36 AM **128 The role of propagule pressure in experimental bark beetle invasions.** ***Kevin Chase*** *(kchase@bartlett.com)[1], Dave Kelly[2], Andrew Liebhold[3] and Eckehard Brockerhoff[4], [1]Bartlett Tree Research Laboratory, Charlotte, NC, [2]Univ. of Canterbury, Christchurch, New Zealand, [3]USDA Forest Service Northern Research Station, Morgantown, WV, [4]Swiss Federal Institute for Forest, Snow and Landscape Research, Birmensdorf, Switzerland*

8:48 AM **129 Effects of leaf litter species and water quality on aquatic beetle (Dytiscidae and Hydrophilidae) habitat selection.** ***Julia Earl*** *(jearl@latech.edu), Rebecca Cram and Rebekah Magee-Christian, Louisiana Tech Univ., Ruston, LA*

9:00 AM **130 Tree-feeding caterpillars anoint petioles with saliva after clipping leaves.** ***David Dussourd*** *(dussourd@uca.edu), Univ. of Central Arkansas, Conway, AR*

9:12 AM **131 Nematode competition in the soil: Making use of natural antagonism.** ***Colin Wong*** *(colin.wong@usda.gov)[1], Ganpati Jagdale[2], Abolfazl Hajihassani[3] and David Shapiro-Ilan[4], [1]USDA ARS, Byron, GA, [2]Univ. of Georgia, Athens, GA, [3]Univ. of Florida, Gainsville, FL, [4]USDA-ARS, Byron, GA*

9:24 AM **132 Assessment of entomopathogenic nematodes as a management tool for ambrosia beetle in Georgia.** ***Eddie Slusher*** *(eddie.slusher@usda.gov)[1], Christopher Ranger[2] and David Shapiro-Ilan[1], [1]USDA-Agricultural Research Service, Byron, GA, [2]USDA - ARS, Wooster, OH*

9:36 AM **Break**

9:48 AM **133 Impact of natural enemies on the management of Asian citrus psyllid (*Diaphorina citri*) in Florida.** ***Jawwad Qureshi*** *(jawwadq@ufl.edu), Univ. of Florida, Immokalee, FL*

10:00 AM **134 Prey preference and density-dependent prey consumption rate of *Chrysoperla rufilabris* (Burmeister) (Neuroptera: Chrysopidae) for common pest species of greenhouse crops.** ***Caitlin Silva*** *(silva4@clemson.edu), Clemson university, clemson, SC*

10:12 AM **135 Egg and adult parasitoids of rice stink bugs, *Oebalus insularis* and *Oebalus pugnax*, in Florida rice.** ***Carolina Tieppo Camarozano*** *(carolina.tieppoc@ufl.edu)[1], Julien Beuzelin[1], Matthew VanWeelden[1] and Hugh Smith[2], [1]Univ. of Florida, Belle Glade, FL, [2]Univ. of Florida, Wimauma, FL*

10:24 AM **136 Larval competition stress and *Wolbachia* infection shape fitness and West Nile virus infection in *Culex quinquefasciatus* mosquitoes.** *Abdullah Alomar[1], Dongmin Kim[1], Daniel Pérez Ramos[1], Bradley Eastmond[2], Natalie Kendziorski[1], Barry Alto[1] and* ***Eric Caragata*** *(e.caragata@gmail.com)[1], [1]Univ. of Florida: Florida Medical Entomology Laboratory, Vero Beach, FL, [2]Univ. of Florida, Vero Beach, FL*

10:36 AM **137 Asian longhorned ticks in southern cattle herds.** ***Raymond Fitzpatrick*** *(rg@uga.edu)[1] and Nancy Hinkle[2], [1]Univ. of*

Georgia Cooperative Extension, Carnesville, GA, [2]Univ. of Georgia, Athens, GA

10:48 AM **138 ActiveSense® Remote Monitoring System for cockroach detection.** ***Joe DeMark*** *(joe.demark@corteva.com)[1] and Mary Rushton[2], [1]Corteva Agriscience, Fayetteville, AR, [2]Corteva Agriscience, Indianapolis, IN*

11:00 AM **139 Tawny crazy ant liquid bait field foraging patterns and colony response.** ***Rachel Atchison*** *(Rachel.Atchison@usda.gov)[1], Quentin Read[2] and David Oi[1], [1]USDA - ARS, Gainesville, FL, [2]USDA-ARS, Raleigh, NC*

Tuesday, March 14, 2023, Afternoon

SYMPOSIUM: Biological Control in Natural Areas

Conway (Little Rock Marriott)

Moderators and Organizers: Nicole Benda, Florida Dept. of Agriculture, Division of Plant Industry, Gainesville, FL and Alex Gaffke, United States Dept. of Agriculture, Agricultural Research Service, Tallahassee, FL, FL

2:00 PM **149 Distribution, population dynamics, and biological control of the roseau cane scale in Louisiana.** ***Tanner Sparks*** *(Tspark3@lsu.edu)[1], Rodrigo Diaz[1] and Hannah Broadley[2], [1]Louisiana State Univ., Baton Rouge, LA, [2]USDA APHIS PPQ S&T, Buzzards Bay, MA*

2:25 PM **150 Improved laboratory rearing of *Apanteles opuntiarum* (Hymenoptera: Braconidae), a parasitoid of the Cactus moth, *Cactoblastis cactorum* (Lepidoptera: Pyralidae).** ***Nicole Benda*** *(nicole.benda@fdacs.gov)[1], Kate Fairbanks[2], Ashley Pappas[3] and Donald Bracey[3], [1]Florida Dept. of Agriculture, Division of Plant Industry, Gainesville, FL, [2]Florida Dept. of Agriculture and Consumer Services: Division of Plant Industry, Gainesville, FL, [3]FDACS-DPI, Gainesville, FL*

2:50 PM **151 Spread and establishment of natural enemies of *Solenopsis invicta* in Florida, USA.** ***Anamika Sharma*** *(Anamika.sharma@famu.edu), Florida A & M Univ., Tallahassee, FL*

3:15 PM **152 Chinese tallow biological control and pollinators.** ***Alex Gaffke*** *(Alexander.Gaffke@usda.gov)[1], Greg Wheeler[2], Daijiang Li[3] and Rodrigo Diaz[3], [1]United States Dept. of Agriculture, Agricultural Research Service, Tallahassee, FL, FL, [2]USDA - ARS, Fort Lauderdale, FL, [3]Louisiana State Univ., Baton Rouge, LA*

3:40 PM **153 With a Little Help From Our Friends: Integrating Classical Biocontrol with Other Control Methods (Natural Areas Edition).** ***Carey Minteer*** *(cminteer@uark.edu)[1], Kelly Carruthers[2] and Emily Le Falchier[1], [1]Univ. of Florida, Fort Pierce, FL, [2]Univ. of Georgia, Athens, GA*

4:05 PM **154 Biology of *Lilioceris egena* (Weise) (Coleoptera: Chrysomelidae): New Biological Control Agent of Air Potato.** ***Octavio Menocal Sandoval*** *(Octavio.MenocalSandoval@fdacs.gov), FDACS-DPI, Gainesville, FL*

4:30 PM **155 Addressing climatic mismatches in biological control: *Alternanthera philoxeroides* as a case study.** ***Ian Knight*** *(iknight@agcenter.lsu.edu)[1], Nathan Harms[2], Paul Pratt[3] and Angelica Reddy[4], [1]US Army Engineer Research and Development Center, Vicksburg, MS, [2]US Army Engineer Research and Development Center, Lewisville, TX, [3]USDA - ARS, Albany, CA, [4]USDA-ARS, Albany, CA*

SYMPOSIUM: Integrated Pest Management in Southern Cropping Systems: New Strategies and Solutions

Salon A (Little Rock Marriott)

Organizers: Justin George, USDA-ARS, Stoneville, MS and James Glover, USDA-ARS, Stoneville, MS

2:00 PM **156 The use of current and future trait technologies for insect management in midsouth cropping systems..** ***Whitney Crow*** *(wdc165@msstate.edu) and Don Cook, Mississippi State Univ., Stoneville, MS*

2:15 PM **157 Cotton leafroll dwarf virus is an emerging virus in the cotton belt transmitted by *Aphis gossypii*.** ***Kathleen Martin*** *(kmm0173@auburn.edu), Alana Jacobson, Amanda Strayer-Scherer and Kathy Lawrence, Auburn Univ., Auburn, AL*

2:30 PM **158 Impact of cover crops on arthropod community dynamics.** ***Rupesh Kariyat*** *(rkariyat@uark.edu)[1], Adegboyega Fajemisin[2], Satunderpal Kaur[2], Alejandro Vasquez[2] and Alexis Racelis[2], [1]Univ. of Arkansas, Fayetteville, AR, [2]The Univ. of Texas Rio Grande Valley, Edinburg, TX*

2:45 PM **159 Research on pollinators in agroecosystems and strategies toward sustainable management and finding a common ground with multiple stakeholders.** ***Pierre Lau*** *(pierre.lau@usda.gov)[1], Partson Mubvumba[2] and Heather Tyler[2], [1]United States Dept. of Agriculture, Stoneville, MS, [2]USDA-ARS, Stoneville, MS*

3:00 PM **160 Integrating semiochemicals and trap cropping practices for *Lygus lineolaris* management in cotton..** ***Justin George*** *(Justin.George@usda.gov)[1], Gadi Reddy[2] and David Hall[3], [1]USDA-ARS, Stoneville, MS, [2]USDA-ARS SIMRU, Stoneville, MS, [3]Univ. of Greenwich, Chatham, United Kingdom*

3:15 PM **Break**

3:30 PM **161 Biocontrol agents for management of crop pests: new strategies & applications.** ***James Glover*** *(james.glover@usda.gov)[1] and Maribel Portilla[2], [1]USDA-ARS, Stoneville, MS, [2]USDA - ARS, Stoneville, MS*

3:45 PM **162 Insect management in soybeans.** ***Don Cook*** *(dcook@drec.msstate.edu), Whitney Crow and Jeff Gore, Mississippi State Univ., Stoneville, MS*

4:00 PM **163 Aphid pest management in sorghum: Effects of host plant resistance on insect natural enemies of *Melanaphis sorghi* in Mississippi.** ***Blake Elkins*** *(blake.elkins@usda.gov) and Nathan Little, USDA - ARS, Stoneville, MS*

4:15 PM **164 Use of kaolin, semiochemicals and visual cues to develop control strategies against *Bemisia tabaci* in vegetable crops..** ***Xavier Martini*** *(xmartini@ufl.edu)[1] and Thomson Paris[2], [1]Univ. of Florida, Quincy, FL, [2]Univ. of Florida, Gainesville, FL*

4:30 PM **165 Integrated pest management in rice production.** ***Blake Wilson*** *(bwilson@agcenter.lsu.edu), Louisiana State Univ., St.Gabriel, LA*

4:45 PM **Discussion**

SYMPOSIUM: Making Entomology Diverse: Overcoming Challenges

Arkansas Ballroom (Little Rock Marriott)

Organizers: Vilma Montenegro, Univ. of Florida, Vero Beach, FL and Sara Salgado, Univ. of Florida, Fort Pierce, FL

2:00 PM **166 Loosing fears: Beginning to advocate.** ***Vilma Montenegro*** *(vilma.montenegro@ufl.edu), Univ. of Florida, Vero Beach, FL*

2:10 PM **167 Taking the long way around: My journey through academia as a first-generation college student.** ***Carey Minteer-Killian*** *(c.minteerkillian@ufl.edu), Univ. of Florida, Fort Pierce, FL*

2:25 PM **168 *From Europe to America: How I became a STEMinist*. *Emilie Demard*** *(edemard@ufl.edu), Univ. of Florida, Lake Alfred, FL*

2:40 PM **169 Piled higher and deeper: When mental health challenges pile up during graduate school. *Kelly Carruthers*** *(kellyacarruthers@gmail.com), Univ. of Florida, Fort Pierce, FL*

2:55 PM **170 Following mosquitoes across continents. *Eric Caragata*** *(e.caragata@gmail.com), Univ. of Florida: Florida Medical Entomology Laboratory, Vero Beach, FL*

3:10 PM **10-minute break**

3:20 PM **171 Personal insights into forging a diversified and fulfilling career in Entomology. *Yasmin Cardoza*** *(ycardoza@invaio.com), Invaio Sciences Inc, Durham, NC*

3:35 PM **172 Dare to thrive: Strategies for navigating your early career years. *Nicole Quinn*** *(nicole.quinn@ufl.edu), USDA-ARS, Newark, DE*

3:50 PM **173 A mom's journey to becoming an entomologist: a unique recipe for success. *Sarah McInnis*** *(s.mcinnis@irmosquito2.org), Indian River Mosquito Control Distric, Vero Beach, FL*

4:05 PM **174 The importance of advocacy. *Sara Salgado*** *(sara.salgadoast@ufl.edu), Univ. of Florida, Fort Pierce, FL*

SYMPOSIUM: Management of Invasive Mealybugs of the Southeastern US: Challenges and Opportunities

White Oak (Little Rock Marriott)

Organizers: Nicole Quinn, Univ. of Florida, Fort Pierce, FL; Lauren Diepenbrock, Univ. of Florida, Lake Alfred, FL and Muhammad Ahmed, United States Dept. of Agriculture, Fort Pierce, FL

2:00 PM **Welcoming Remarks**

2:05 PM **175 Developing species-level diagnostic kit for *Nipaecoccus viridis*. *Muhammad Ahmed*** *(muhammad.ahmed@usda.gov), United States Dept. of Agriculture, Fort Pierce, FL*

2:25 PM **176 Feasibility of classical biological control of *Nipaecoccus viridis* in Florida. *Nicole Quinn*** *(nicole.quinn@ufl.edu), Univ. of Florida, Fort Pierce, FL*

2:45 PM **177 Incorporating phenology into the management of Hibiscus mealybug (*Nipaecoccus viridis)* in Florida citrus. *Lauren Diepenbrock*** *(ldiepenbrock@ufl.edu) and David Olabiyi, Univ. of Florida, Lake Alfred, FL*

3:05 PM **Break**

3:20 PM **178 Biocontrol and impact of Invasive *Hypogeococcus* mealybugs in native cacti species. *Jose Carlos Verle Rodrigues*** *(JoseCarlos.VerleRodrigues@usda.gov), USDA-APHIS-PPQ-S&T, Edinburg, TX*

3:40 PM **179 Striped mealybug: A native mealybug made "invasive" through ornamental plant trade. *Juang Horng Chong*** *(juanghc@clemson.edu), Clemson Univ., Florence, SC*

4:00 PM **180 Developing EPG waveforms library for the hibiscus mealybug, *Nipaecoccus viridis* (Hemiptera: Pseudococcidae): Characterization of EPG waveforms at different input resistance, gain range, and voltage levels. *Emilie Demard*** *(edemard@ufl.edu) and Lauren Diepenbrock, Univ. of Florida, Lake Alfred, FL*

4:20 PM **Discussion**

4:50 PM **Concluding Remarks**

CONTRIBUTED ORAL PRESENTATIONS III: Plant-Insect Ecosystems

Harris Brake (Little Rock Marriott)

Moderator(s): Fred Musser, Mississippi State Univ., Mississippi State, MS and Krishna Patel, Univ. of Georgia, Athens, GA

2:00 PM **181 Longitudinal trends in mid-southern soybean insect losses. *Fred Musser*** *(fm61@msstate.edu)[1], Angus Catchot[1], Whitney Crow[2], Gus Lorenz[3], Benjamin Thrash[4], Scott Stewart[5], Sebe Brown[5] and Jeffrey Davis[6], [1]Mississippi State Univ., Mississippi State, MS, [2]Mississippi State Univ., Stoneville, MS, [3]Univ. of Arkansas, Lonoke, AR, [4]Univ. of Arkansas Cooperative Extension Service, Lonoke, AR, [5]Univ. of Tennessee, Jackson, TN, [6]LSU AgCenter, Baton Rouge, LA*

2:12 PM **182 The effects of water availability on arthropod food webs and the consequences for pest control in cotton agroecosystems. *Jordan Croy*** *(croy.jordan@uga.edu)[1], Krishna Patel[1], Jason Schmidt[2], Pedro Rodrigues[1] and William Snyder[1], [1]Univ. of Georgia, Athens, GA, [2]Univ. of Georgia, Tifton, GA*

2:24 PM **183 PLINAZOLIN® technology: A broad-spectrum active ingredient for insect control in development by Syngenta Crop Protection AG. *Victor Mascarenhas*** *(victor.mascarenhas@syngenta.com)[1] and Elijah Meck[2], [1]Syngenta Crop Protection, Nashville, NC, [2]Syngenta Crop Protection, Greensboro, NC*

2:36 PM **184 Influence of Imidacloprid Seed Treatment Rate on ThryvOn Cotton. *Brett Farmer*** *(wbf44@msstate.edu)[1], Jeff Gore[2], Angus Catchot[1], Whitney Crow[2], Don Cook[2] and Brian Pieralisi[3], [1]Mississippi State Univ., Mississippi State, MS, [2]Mississippi State Univ., Stoneville, MS, [3]Mississippi State Univ., Starkville, MS*

2:48 PM **185 Tobacco thrips resistance to organophosphate insecticides in the midsouth and southeast. *Sebe Brown*** *(sbrow175@utk.edu)[1], Tyler Towles[2], Whitney Crow[3], Don Cook[3], Benjamin Thrash[4], Nick Bateman[5], Anders Huseth[6], Dominic Resig[6] and David Kerns[7], [1]Univ. of Tennessee, Jackson, TN, [2]Louisiana State Univ. Agricultural Center, Winnsboro, LA, [3]Mississippi State Univ., Stoneville, MS, [4]Univ. of Arkansas Cooperative Extension Service, Lonoke, AR, [5]Univ. of Arkansas, Stuttgart, AR, [6]North Carolina State Univ., Raleigh, NC, [7]Texas A&M Univ., College Station, TX*

3:00 PM **186 Evaluation of preventative control methods for tomato spotted wilt virus in peanuts. *Claire Cooke*** *(cac0243@auburn.edu), Auburn Univ., Auburn, AL*

3:12 PM **187 Pyrethroid resistance in fall armyworm, *Spodoptera frugiperda*, field populations. *Rob Meagher*** *(rob.meagher@usda.gov), USDA - ARS, Gainesville, FL*

3:24 PM **Break**

3:36 PM **188 Preharvest insect pests of peanuts in selected regions in Georgia, USA. *James Danso*** *(james.danso@fvsu.edu)[1], Raegan Holton[2], Mark Abney[3], David Shapiro-Ilan[4], Yasmine Moffett[2], Feng Li[1] and George Mbata[1], [1]Fort Valley State Univ., Fort Valley, GA, [2]Premium Peanut, Douglas, GA, [3]Univ. of Georgia, Tifton, GA, [4]USDA-Agricultural Research Service, Byron, GA*

3:48 PM **189 Assessing pest management strategies in blackberries produced on a rotating cross arm trellis. *Aaron Cato*** *(acato@uada.edu), Amanda McWhirt and Ryan Keiffer, Univ. of Arkansas, Little Rock, AR*

4:00 PM **190 Potential of UV-C for management of twospotted spider mites in Florida strawberry. *Sriyanka Lahiri*** *(lahiris@ufl.edu), Joseph Montemayor, Hugh Smith and Natalia Peres, Univ. of Florida, Wimauma, FL*

4:12 PM **191 Effects of fence barrier on incidence and damage of *Systena frontalis* (Coleoptera: Chrysomelidae) adults in container nurseries. *Rehan Arshad*** *(Rehan.Arshad@uga.edu) and Shimat Joseph, Univ. of Georgia, Griffin, GA*

4:24 PM **192 Traditional versus bioassay evaluations of immature *Bemisia tabaci* control: Which is the true measure of efficacy? *Paulo Cremonez*** *(paulogimz@uga.edu) and David Riley, Univ. of Georgia, Tifton, GA*

4:36 PM **193 Life table parameter comparisons of *Nezara viridula* (Hemiptera: Pentatomidae) on five okra varieties. *Jeffrey Davis*** *(jeffdavis@agcenter.lsu.edu)[1] and Nupur Sarkar[2], [1]Louisiana State Univ., Baton Rouge, LA, [2]Univ. of Florida, Gainesville, FL*

4:48 PM **194 Management of chilli thrips in Florida strawberry using reflective mulch. *Midhula Gireesh*** *(mgireesh@ufl.edu) and Sriyanka Lahiri, Univ. of Florida, Wimauma, FL*

Wednesday, March 15, 2023, Morning

SYMPOSIUM: Entomologists' Careers and Roles in Pesticide Safety Education

Hoffman (Little Rock Marriott)

Organizer: Emily Kraus, Univ. of Florida, Gainesville, FL

8:00 AM **Introductory Remarks**

8:04 AM **195 Pesticide Safety Education: The Hidden Gem of Entomology Careers.** ***Emily Kraus*** *(emilyckraus@ufl.edu), Univ. of Florida, Gainesville, FL*

8:24 AM **196 Educating Pest Management Professionals.** ***Daniel Suiter*** *(dsuiter@uga.edu), Univ. of Georgia, Griffin, GA*

8:48 AM **197 Pesticide Safety Education Coordinator: An Atypical and Exciting Position in the Land-grant System.** ***Wayne Buhler*** *(wayne_buhler@ncsu.edu), North Carolina State Univ., Raleigh, NC*

9:12 AM **198 An Entomologist's Vital Role in Communicating Public Health, Pesticide Safety and Pollinator Protection.** ***Caitlin Gill*** *(caitlin.gill@fdacs.gov), Florida Dept. of Agriculture and Consumer Services, Alachua, FL*

9:36 AM **199 Developing Extension Programs for Pesticide Safety in Agriculture.** ***Matthew VanWeelden*** *(mvanweel1@ufl.edu), Univ. of Florida, Belle Glade, FL*

SYMPOSIUM: Innovation, Collaboration and Adaptation in Perennial Crop Entomology Research and Extension

White Oak (Little Rock Marriott)

Moderators and Organizers: Apurba Barman, Univ. of Georgia, Tifton, GA and Ted Cottrell, USDA-ARS, Byron, GA

8:00 AM **Welcoming Remarks**

8:05 AM **200 Mating Disruption for San Jose Scale: A New IPM Tool for Southeastern Peach Production?** ***Brett Blaauw*** *(bblaauw@uga.edu), Univ. of Georgia, Athens, GA*

8:25 AM **201 Field Evaluations of Beetle Guard Semiochemical for Reducing Ambrosia Beetle Attacks on Ethanol-infused Bolts or Captures in Ethanol-baited Traps.** ***Jason Oliver*** *(joliver@tnstate.edu)[1], Karla Addesso[1], Jesse Saroli[2], Agenor Mafra-Neto[2], Christopher Ranger[3], Nadeer Youssef[1] and Paul O'Neal[1], [1]Tennessee State Univ., McMinnville, TN, [2]ISCA Technologies, Inc, Riverside, CA, [3]USDA - ARS, Wooster, OH*

8:45 AM **202 From Insecticide Resistance to Invasive Pests, Challenges and Innovation in Southeastern Apple Pest Management.** ***Jim Walgenbach*** *(jwalgenb@ncsu.edu) and Emily Ogburn, North Carolina State Univ., Mills River, NC*

9:05 AM **203 Pest Management Challenges in a Tall Orchard Crop.** ***Ted Cottrell*** *(ted.cottrell@usda.gov)[1], Glynn Tillman[2], Erin Grabarczyk[2], Michael Toews[3], Ashfaq Sial[4] and Sriyanka Lahiri[5], [1]USDA-ARS, Byron, GA, [2]USDA - ARS, Tifton, GA, [3]Univ. of Georgia, Tifton, GA, [4]Univ. of Georgia, Athens, GA, [5]Univ. of Florida, Wimauma, FL*

9:25 AM **Break**

9:35 AM **204 Biology and Management of the Southern Red Mite (Acari: Tetranychidae) in Southern Highbush Blueberries.** ***Oscar Liburd*** *(oeliburd@ufl.edu)[1], Rosangela Marucci[2] and Lorena Lopez[3], [1]Univ. of Florida, Gainesville, FL, [2]Federal Univ. of Lavras, MG, Brazil, [3]Virginia Tech, Painter, VA*

9:55 AM **205 Challenges in Soil-dwelling Insect Pest Management: Prionus Root Borer in Southeastern Pecan Production.** ***Apurba Barman*** *(abarman@uga.edu)[1], Eddie Slusher[2] and Angelita Acebes[3], [1]Univ. of Georgia, Tifton, GA, [2]USDA-Agricultural Research Service, Byron, GA, [3]USDA ARS, Hilo, HI*

10:15 AM **206 The Modes of Transmission of Bacterial Pathogen, *Xylella fastidiosa* in Pecan (*Carya illinoinensis*).** ***Angelyn Hilton*** *(angelyn.hilton@usda.gov)[1], Kimberly Cervantes[2], Rio Stamler[3], Richard Heerema[3], Clive Bock[4], Xinwang Wang[5], Young-Ki Jo[6], Larry Grauke[7] and Jennifer Randall[3], [1]USDA-ARS, COLLEGE STATION,, TX, [2]New Mexico State Univ., Las Crices, NM, [3]New Mexico State Univ., Las Cruces, NM, [4]USDA - ARS, Byron, GA, [5]USDA - ARS, College Station, TX, [6]Texas A&M Univ., , College Station, TX, [7]USDA-ARS, College Station, TX*

10:35 AM **207 Pollinator Conservation and Management in Perennial Fruit Crops.** ***Neelendra Joshi*** *(nkjoshi@uark.edu)[1] and David Biddinger[2], [1]Univ. of Arkansas, Fayetteville, AR, [2]Penn State Fruit Research and Extension Center, Biglerville, PA*

10:55 AM **Concluding Remarks**

SYMPOSIUM: Biological Control Under Global Change: S1073 Project Highlights

Harris Brake (Little Rock Marriott)

Organizers: Steven Frank, North Carolina State Univ., Raleigh, NC and Adam Dale, Univ. of Florida, Gainesville, FL

8:30 AM **208 The state of commercial and non-commercial biological control in the United States.** ***Norman Leppla*** *(ncleppla@ufl.edu)[1], Lynn M. LeBeck[2] and Marshall Johnson[3], [1]Univ. of Florida, Gainesville, FL, [2]Association of Natural Biocontrol Producers, Clovis, CA, [3]Univ. of California, Riverside, Parlier, CA*

8:50 AM **209 Effect of plant defense traits on the effectiveness of biocontrol of the invasive plant air potato.** ***Jasleen Kaur*** *(jasleenkaur@ufl.edu)[1], Emily Kraus[1], Diego Salazar[2], Erin Clifton[1] and Philip Hahn[1], [1]Univ. of Florida, Gainesville, FL, [2]Florida International Univ., Miami, FL*

9:10 AM **210 Compatibility of acylsugar tomato lines with four predators of twospotted spider mite.** ***Matthew Brown*** *(msb5@clemson.edu)[1], Gunbharpur Gill[2], Jason Schmidt[3], Martha Mutschler-Chu[4] and Juang Horng Chong[5], [1]Clemson Univ., Clemson, SC, [2]Utah State Univ., Logan, UT, [3]Univ. of Georgia, Tifton, GA, [4]Cornell Univ., Ithaca, NY, [5]Clemson Univ., Florence, SC*

9:30 AM **211 Conservation biological control in urban landscapes.** ***Steven Frank*** *(sdfrank@ncsu.edu) and Caleb Wilson, North Carolina State Univ., Raleigh, NC*

9:50 AM **212 Updates on biological control of insects and weeds from Louisiana: Opportunities for cooperation.** ***Rodrigo Diaz*** *(rdiaz@agcenter.lsu.edu)[1], Tanner Sparks[2], Korey Pham[1], Ilgoo Kang[3], Veronica Manrique[4] and Amy Roda[5], [1]Louisiana State Univ., Baton Rouge, LA, [2]Univ. of Georgia, Tifton, GA, [3]Louisiana State Univ. Agricultural Center, Baton Rouge, LA, [4]Southern Univ. and A&M College, Baton Rouge, LA, [5]USDA - APHIS, Miami, FL*

10:10 AM **213 Co-existence of cereal aphid parasitoids in the Southern Plains: the role of spatial-temporal dynamics and competition..** ***Kristopher Giles*** *(kris.giles@okstate.edu), Haley Butler and Nina Rudin, Oklahoma State Univ., Stillwater, OK*

10:30 AM **214 Illuminating the parasitoid communities of peanut landscapes with metabarcodes.** ***Jason Schmidt*** *(jschmid2@uga.edu)[1], Erin Grabarczyk[2], Mark Abney[1] and Melissa D. Thompson[1], [1]Univ. of Georgia, Tifton, GA, [2]Valdosta State Univ., Valdosta, GA*

SYMPOSIUM: Building a Career While Helping Others Build Theirs

Hoffman (Little Rock Marriott)

Moderators and Organizers: Nicole Benda, Florida Dept. of Agriculture, Division of Plant Industry, Gainesville, FL and Karla Addesso, Tennessee State Univ., McMinnville, TN

10:15 AM **215 Moving through the ranks at LSU: Lessons learned.** ***Michael Stout*** *(Mstout@agcenter.lsu.edu), Louisiana State Univ. Agricultural Center, Baton Rouge, LA*

10:40 AM **218 Mentoring within USDA-ARS for You and Me.** ***Alvin Simmons*** *(alvin.simmons@usda.gov), USDA, Charleston, SC*

11:05 AM **217 Knowledge and Experience Gained as a Mentor of Younger Scientists.** ***Norman Leppla*** *(ncleppla@ufl.edu), Univ. of Florida, Gainesville, FL*

11:30 AM **216 Widening the path to a more diverse and inclusive Entomology field through representation and mentoring.** ***Yasmin Cardoza*** *(ycardoza@invaio.com), Invaio Sciences Inc, Durham, NC*

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Little Rock Marriott
Floor Map