**FLORIDA ENTOMOLOGICAL SOCIETY ANNUAL MEETING,**

**July 16-20, 2017– Verdanza Hotel, Isla Verde (San Juan) Puerto Rico**

**DAILY SCHEDULE OF MEETINGS AND FUNCTIONS**

Version 7/14/17a

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| **SUNDAY, 16 July** |  |  |
| **Meeting/Function** | **Time** | **Room / Location** |
| Registration | 3:00 – 6:00  | Opera Foyer |
| Presentation Collection – Slide Preview  | 3:00 – 5:00  |  |
| P | 5:00 – 6:30  | Roof Top Terrace |
| Joint Mixer Social | 7:00 – 9:00  | Outside Gardens |
| **MONDAY, 17 July** |  |  |
| **Meeting/Function** | **Time** | **Room / Location** |
| Registration Continued | 8:00 – 5:00  | Registration Desk |
| Presentation Collection – Slide Preview | 8:00 – 5:00  |  |
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|  **CFCS, FES, CAEPNet, and CACHE Opening Ceremony**  |

 | 8:00 – 10:00  | Grand Ballroom |
| **Dr. Esbal Jiménez,** President CFCS 2016-17 and Associate Dean and Deputy Director of the Agricultural Experiment Station, University of Puerto Rico, Mayagüez Campus, Puerto Rico | 8:00 - 8:10 | Grand Ballroom |
| **Dr. Norma Samuel**, Chair CAEPNet and Senior Extension Director, 4-H and Family Life, South Carolina State University, South Carolina, USA  | 8:10 - 8:15  | Grand Ballroom |
| **Dr. Wayne Ganpat**, Chair CACHE and Dean of the Faculty of Food and Agriculture, University of the West Indies, St Augustine Campus, Trinidad and Tobago  | 8:15 – 8:20  | Grand Ballroom |
| **Dr. Rui-De Xue**, President FES, Executive Director Anastasia Mosquito Control District and Adjunct Professor, University of Miami Miller School of Medicine, Miami, USA  | 8:20 - 9:25  | Grand Ballroom |
| **Honorable Luis Berdiel Rivera**, President, Agricultural Commission, Puerto Rico Senate  | 9:25 – 9:30  | Grand Ballroom |
| **Honorable Yawo Nuyiadzi,** Vice President of the Collectivité D'outre Mer De Saint Martin | 9:30 - 9:35 | Grand Ballroom |
| **Dr. Wilfredo Colón**, Chair and CEO, CFCS, and Vice Chancellor, Universidad Ana G. Méndez, Puerto Rico  | 9:35 – 10:00  | Grand Ballroom |
| **Keynote Speaker:** Hon. Carlos Flores, Secretary of the Puerto Rico Department of Agriculture | 10:00 - 10:30 | Grand Ballroom |
| **Coffee Break** | 10:30 - 11:00 | Ballroom foyer |
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| **FES Pioneer Lecture**: **Dr. William Buren, Ant Taxonomist Extraordinaire: from Ants of Iowa to the Invincible Fire Ant.** Presented by Dr. Robert Vander Meer, Research Leader, USDA-ARS, Center for Medical, Agricultural, and Veterinary Entomology, Gainesville, Florida, USA.  |

 | 11:00- 12:00  | Grand Ballroom |
| Student Competition: Ph.D. | 1:30 - 3:00  | Grand Opera |
| **Evaluation of Vapor Active Insecticides Against Multiple Mosquito Vectors** Christopher S. Bibbs1, Maia Tsikolia, Uli Bernier, Jeff Bloomquist, Phil Kaufman, Rui-de Xue. 1Department of Entomology and Nematology, UF-IFAS Gainesville FL | 1:30-1:45 | Grand Opera |
| **Efficacy of Selected OMRI Approved Miticides on Twospotted Spider Mite, *Tetranychus urticae* Koch on Strawberry** Omotola Dosunmu and Oscar Liburd, Department of Entomology and Nematology, UF-IFAS Gainesville FL | 1:45-2:00 | Grand Opera |
| **Chilli thrips (*Scirtothrips dorsalis*): how far and fast do they move in strawberry?** Babu Panthi, Justin Renkema, UF-IFAS, Gulf Coast Research and Education Center, Wimauma FL. | 2:00-2:15 | Grand Opera |
| **Pest Status of Cat-Facing Heteroptera in Subtropical Peach Production**. Cory Penca & Amanda C. Hodges. Department of Entomology and Nematology, UF-IFAS Gainesville FL.  | 2:15-2:30 | Grand Opera |
| **Monitoring and application of reduced-risk pesticides for managing *Anastrepha suspensa* (Diptera: Tephritidae)** Simon Yeboah1, Nancy D. Epsky, Norman C. Leppla, Daniel Carrillo, and Oscar E. Liburd. 1Department of Entomology and Nematology, UF-IFAS Gainesville FL | 2:30-2:45 | Grand Opera |
| **Firefly (Coleoptera: Lampyridae) Diversity of Hispaniola** Oliver Keller1, Michael A. Ivie, and Marc A. Branham1Department of Entomology and Nematology, UF-IFAS Gainesville FL | 2:45-3:00 | Grand Opera |
| **Coffee break** | 3:00 - 3:15  | Opera Foyer |
| **Student Competition: M.Sc.** | 3:15 - 4:45  | Grand Opera |
| **The Native Bees (Hymenoptera: Apoidea: Anthophila) of Coastal Dune Environments of Florida.** Anthony Abbate, UF-IFAS, Ft. Lauderdale Research and Education Center, Ft. Lauderdale, FL. | 3:15-3:30 | Grand Opera |
| **Response of the Subterranean Termite *Coptotermes formosanus* Shiraki to Neighboring Con-specific Populations after Baiting with Noviflumuron.** Sarah Bernard1, Weste Osbrink, Nan-Yao Su, 1UF-IFAS, Ft. Lauderdale Research and Education Center, Ft. Lauderdale, FL | 3:30-3:45 | Grand Opera |
| **Developing an Integrated Approach to Manage Diamondback moth (*Plutella xylostella*) using Companion Planting and Reduced-risk Pesticides in Cabbage**. Zulaikha Mazlan, Oscar E. Liburd, Department of Entomology and Nematology, UF-IFAS Gainesville FL. | 3:45-4:00 | Grand Opera |
| **Dispersal Behavior of the Asian Citrus Psyllid and Non-Host Interactions**. Nicholas Johnston, UF-IFAS SWFREC Immokalee FL | 4:00-4:15 | Grand Opera |
| **Maternal contribution of *Candidatus* Liberibacter asiaticus to *Diaphorina citri* nymphs through inoculation of oviposition site and transovarial transmission.** Alicia Kelley, Kirsten Stelinski, UF-IFAS, CREC, Lake Alfred, FL. | 4:15-4:30 | Grand Opera |
| **Size Disparities in Laboratory Reared Generations of *Piezodorus guildinii* (Westwood)**. Morgan Pinkerton, Amanda Hodges, Department of Entomology and Nematology, UF-IFAS Gainesville FL | 4:30-4:45 | Grand Opera |
| ***Xyleborus bispinatus* (Coleoptera: Curculionidae) reared on artificial media using sawdust from avocado or silkbay in presence or absence of the laurel wilt pathogen (*Raffaelea lauricola*)**. Octavio Menocal1, Luisa F. Cruz, Paul E. Kendra, Jonathan H. Crane, and Daniel Carrillo, UF-IFAS-TREC Homestead FL | 4:45-5:00 | Grand Opera |
| **Submitted Papers**  | 1:30 – 5:15  | Opera |
| **Is the Giant African Snail Eradication Program in South Florida Working?** Amy L. Roda1, Gösta Nachman, Scott Weihman, Mary Yong Cong, Fredrick Zimmerman. 1USDA-APHIS PPQ Center for Plant Health Science and Technology, Plant Protection and Quarantine, Miami, FL | 1:30-1:45 | Opera |
| **Giant African Snail Biology and Eradication Update in Florida** Shweta Sharma1, Katrina Dickens, Amy Howe, 1Florida Department of Agriculture, Division of Plant Industry, Gainesville, FL | 1:45-2:00 | Opera |
| ***Fulmekiola serrata* (sugarcane thrips) and *Anaphothrips sudanensis* (maize thrips), two pest Thysanoptera new to continental USA**Felipe N. Soto-Adames1, Eric LeVeen, Susan Halbert and Julien Beuzelin 1Florida Department of Agriculture, Division of Plant Industry, Gainesville, FL | 2:00-2:15 | Opera |
| **Biological Control of the kudzu Bug, *Megacopta cribraria* using *Euthyrhynchus floridanus* and *Podisus maculiventris*** J. Medal1, M. Srivastava, S. Sharma and D. Wolaver, 1Florida Department of Agriculture, Division of Plant Industry, Gainesville, FL | 2:15-2:30 | Opera |
| **Fortuitous parasitism of the invasive ficus whitefly, *Singhiella simplex*, by *Baeoentedon balios*, in ornamental landscapes of Florida** Muhammad Z Ahmed, Antonio Francis, Yisell Velazquez Hernandez, Eric Rohrig, Gregory Evans, Lance Osborne, Catharine Mannion, 1Florida Department of Agriculture, Division of Plant Industry, Gainesville, FL | 2:30-2:45 | Opera |
| **Management of Staining Associated with Black Olive (Oxhorn Bucida), *Bucida buceras*, Trees in Florida**. A. D. Ali and D. L. Caldwell, Davey Institute, The Davey Tree Expert Company | 2:45-3:00 | Opera |
| **Coffee Break** | 3:00-3:15 | Opera Foyer |
| **Monitoring and Management of the Spotted Wing Drosophila, *Drosophila suzukii* (Diptera: Drosophilidae) on Berry Crops in Florida**. Muhammad Haseeb, Dasia Harmon, Albertha Parkins and Lambert Kanga, Center for Biological Control, College of Agriculture and Food Sciences, Florida A&M University, Tallahassee, FL | 3:15-3:30 | Opera |
| **Fungal associates of *Xyleborus bispinatus*: a potential vector of the laurel wilt disease**. Luisa F. Cruz, Sonia Rocio, Lizeth Duran, Clemente de Jesus Garcia, and Daniel Carrillo, Tropical Research and Education Center, UF-IFAS, Homestead, FL | 3:30-3:45 | Opera |
| **Acoustic detection of *Mallodon dasystomus* (Say) in *Persea americana* Miller (avocado) trees.** Richard Mankin USDA-ARS-CMAVE, Gainesville, FL, Daniel Carrillo, Harry Burman, and Octavio Menocal, Tropical Research and Education Center, UF-IFAS, Homestead, FL | 3:45-4:00 | Opera |
| **Vertical Distribution and Daily Flight Periodicity of Ambrosia Beetles Associated with Laurel Wilt Affected Avocado Orchards**. Octavio Menocal, Paul E. Kendra, Jonathan H. Crane, and Daniel Carrillo, Tropical Research and Education Center, UF-IFAS, Homestead, FL | 4:00-4:15 | Opera |
| **Field Trials of Baits and Attractant-Based Control Methods for the Caribbean Fruit Fly (Diptera: Tephritidae) in Florida**. Nancy D. Epsky, USDA-ARS, Subtropical Horticulture Research Station, Miami, FL  | 4:15-4:30 | Opera |
| **Nichino America product overview**. Scott Croxton, Nichino AmericaLaBelle, FL  | 4:30-4:45 | Opera |
| **Developing a biological control based strategy for solanum/pepper whitefly, an emerging pest in Florida.** Antonio Francis1, Muhammad Ahmed, Vivek Kumar, Lance Osborne, and Catharine Mannion. 1UF IFAS Mid-Florida REC. Apopka, FL | 4:45-5:00 | Opera |
| **In preparation for a potential incursion of citrus leprosis: host plant range and distribution of *Brevipalpus* mites in South Florida citrus groves.** Marielle Berto1, Amy Roda, and Daniel Carrillo1. 1Tropical Research and Education Center, UF-IFAS, Homestead, FL. | 5:00-5:15 | Opera |
| **TUESDAY, 18 JULY**  |  |  |
| **Meeting/Function** | **Time** | **Room / Location** |
| **Past President’s Breakfast** | 7:00-8:00  | Restaurant  |
| **Registration Continued** | 8:00– 5:00  | Registration Desk |
| Presentation Collection – **Slide Preview**  | 8:00 – 5:00  |  |
| SYMPOSIUM: **Zika and other disease vector management.** Dr. Rui-De Xue, Organizer, Anastasia Mosquito Control District, St. Augustine, FL | 9:00-4:10 | Opera |
| **Introduction** Dr. Rui-De Xue | 9:00-9:05 | Opera |
| **Vector-borne Disease Control: New solutions to old questions.** Dr. Douglas E. Norris, Professor, Johns Hopkins University, Baltimore, MD. | 9:05-9:25 | Opera |
| **Surveillance techniques of Zika vector control efforts.** Dr. Dan Kline, Research Entomologist, USDA/CMAVE, Gainesville, FL | 9:25-945 | Opera |
| **Bromeliads as habitat and potential sugar resources for *Aedes* mosquitoes.**  Christopher Bibbs, Anastasia Mosquito Control District, St. Augustine, FL | 9:45-10:05 | Opera |
| **Coffee Break** | 10:05-10:25 | Opera Foyer |
| **Florida Mosquito Control association Response to Zika.** Dr. Rui-De Xue, FMCA President, AMCD, St. Augustine, FL. | 10:25-1045 | Opera |
| **Florida's 2016 Zika vector control response, from a state perspective.** Mrs. Adriane Rogers, Medical Entomologist, DACS, Tallahassee, FL. | 10:45-11:05 | Opera |
| **Impact of mass trapping on Zika and Chikungunya virus prevalence in *Aedes aegypti* in Puerto Rico.** Dr. Roberto Barrera, Research Entomologist, CDC, San Juan, Puerto Rico | 11:05-11:35 | Opera |
| **Graduate Student Luncheon** – with Pioneer Lecturer (Sponsored by Scott Croxton, Nichino America).  | 11:35 -1:30  | Yees |
| **Lunch Break** | 11:35-1:30 | On your own |
| **USDA/CMAVE research to control *Aedes aegypti* to mitigate Zika and other Stegomyia transmitted arboviruses.** Dr. Kenneth Linthicum, Center Director, USDA/CMAVE, Gainesville, FL. | 1:30-1:50 | Opera |
| **Thermal fog technology to control larval *Aedes aegypti* in subtropical/tropical environments.** Dr. James E. Cilek, Medical Entomologist, Navy Entomology Center of Excellence, Jacksonville, FL | 1:50-2:10 | Opera |
| **Next Generation green technology and its role in Zika vector control program.** Mr. Tom Trenblay, GreenCor. Florida. | 2:10-2:30 | Opera |
| **American Mosquito Control Association's response to Zika.** Mr. T. Wayne Gale. President of the American Mosquito Control Association. | 2:30-2:50 | Opera |
| **Coffee Break** | 2:50-3:10 | Opera Foyer |
| **Beach Mosquito Control District's Zika control strategy.** Mr. James Clauson. Director, Beach Mosquito Control District, Panama City, FL. | 3:10-3:30 | Opera |
| **Lee County Mosquito Control District's response to Zika.** Mr. T. Wayne Gale. Executive Director, Lee County Mosquito Control District, Lehigh, FL**.** | 3:30-3:50 | Opera |
| ***Aedes aegypt*i eradication efforts in downtown St. Augustine, FL.** Dr. Rui-De Xue, Executive Director, Anastasia Mosquito control District, St. Augustine, FL. | 3:50-4:10 | Opera |
| **Application of lethal ovitraps against Zika vector mosquitoes.** Dr. Michael Banfield, CEO, SpringStar Inc. Seattle, WA | 4:10-4:30 | Opera |
| SYMPOSIUM: **Sustainable options for insect pest management in the tropical-subtropical zone I**  Phil Stansly and Amy Roda, Organizers | 9:00 – 4:10 | Grand Opera |
| **Introduction**. Phil Stansly, University of Florida, IFAS – Southwest Florida Research and Education Center Immokalee, FL | 9:00-9:05 | Grand Opera |
| **USDA APHIS Plant Protection and Quarantine’s wide scale application of biological control and sterile insect technique management strategies in the Great Caribbean Region**. Ronald Weeks1, Amy Roda, Kenneth Bloem 1USDA-APHIS-PPQ Science and Technology, 1730 Varsity Dr, Raleigh, NC  | 9:05-9:25 | Grand Opera |
| **Strengthening of pest management through plant ground cover in citrus. Alberto Urbaneja1**, Francesc Gómez-Marco, Josep A. Jaques, Alice Mockford, César Monzó, Duncan Westbury, Alejandro Tena 1Instituto Valenciano de Investigaciones Agrarias (IVIA). Moncada, Valencia, Spain | 9:25-945 | Grand Opera |
| **Organic insecticides and biological control for sustainable management of Asian citrus psyllid (*Diaphorina citri*) vector of Huanglongbing pathogens.** Jawwad Qureshi1 and Phil Stansly. University of Florida/IFAS, Indian River Research & Education Center, Fort Pierce, FL 34945 USA | 9:45-10:05 | Grand Opera |
| **Reflective mulch for Asian citrus psyllid (*Diaphorina citri*) control in new citrus plantings.** Scott Croxton1, Robert Adair and Phil Stansly. 1 Nichino America, 5006 Wild Goose Circle, LaBelle FL | 10:05-10:25 | Grand Opera |
| **Coffee Break** | 10:25-1045 | Opera Foyer |
| **Biological control of ambrosia beetle in avocado.** Daniel Carrillo1, Pasco B. Avery, Rita H. Duncan, Alison Lukowsky and Ronald D. Cave. 1UF-IFAS-TREC, Homestead FL.  | 10:45-11:05 | Grand Opera |
| **Use of semiochemical repellents for redbay ambrosia beetle management**. Xavier Martini1, Lanette Sobel, Marc Hughes, Lukasz Stelinski, Jason Smith. 1UF-IFAS-NFREC, Road, Quincy FL  | 11:05-11:35 | Grand Opera |
| **Alternative Pest Management in the Landscape**: a Practical Perspective. A. D. Ali. Davey Institute, The Davey Tree Expert Company, Ft. Myers FL | 11:35-11:55 | Grand Opera |
| **Lunch Break** | 11:55-1:30 | On your own |
| **Effect of cultural practices in managing soil insect pests of tuber crops**. Dakshina R. Seal, UF-IFAS-Tropical Research and Education Center, Homestead, FL  | 1:30-1:50 | Grand Opera |
| **Use of Reflective Mulch to Manage Insect Pests in Peppers**. Barry Kostyk, Xulin Chen, Monica Triana and Phil Stansly, University of Florida, IFAS – Southwest Florida Research and Education Center Immokalee Fl | 1:50-2:10 | Grand Opera |
| **Integration of OMRI (organic) approved pesticides and *Delphastus catalinae* for management of *Bemisia tabaci* in organic squash**. Oscar E. Liburd1, Janine M. Spies1 and Gregg S. Nuessly. 1Entomology and Nematology Department: 1881 Natural Area Drive, University of Florida, Gainesville, FL | 2:10-2:30 | Grand Opera |
| **Adopting Integrated Pest Management Strategies Against Major Pests of Squash**. Marice Lopez, Oscar E. Liburd. Entomology and Nematology Department: 1881 Natural Area Drive, University of Florida, Gainesville, FL | 2:30-2:50 | Grand Opera |
| **Coffee Break** | 2:50-3:10 | Opera Foyer |
| **Biological control in vegetable crops with predaceous mites**. Jose A. Castillo and Phil Stansly University of Florida, IFAS – Southwest Florida Research and Education Center Immokalee Fl | 3:10-3:30 | Grand Opera |
| **Zoophytophagous-induced plant volatiles: an added benefit to biological control.** Meritxell Pérez-Hedo, Jose Luis Rambla, Antonio Granell, Alberto Urbaneja, 1Instituto Valenciano de Investigaciones Agrarias (IVIA). Moncada, Valencia, Spain | 3:30-3:50 | Grand Opera |
| **Whitefly Control on Tomato with Exotic and Indigenous Plant Bugs**. Philip Stansly1, Jose Castillo, Amy Roda. 1Southwest Florida Research and Education Center Immokalee Fl | 3:50-4:10 | Grand Opera |
| **Discussion: Sustainable pest management** | 4:10-4:30 | Grand Opera |
| **CFCS, FES, and CAEPNet Poster Session & Cocktail** | 7:00 - 9:00 PM | Aria |
| **FES Posters:** |
| 1 | ***Banisia argutula* (Lepidoptera: Thyrididae) is the dominant sapodilla borer in South Florida**. Jose I. Martinez1, James E. Hayden, John B. Heppner, Jorge E. Peña, Lei Xiao and Daniel Carrillo, 1UF-IFAS-TREC, Homestead FL |
| 2 | **Distribution, pest status and fungal associates of *Euwallacea nr. fornicatus* in Florida avocado groves**. Daniel Carrillo, Luisa F. Cruz, Paul E. Kendra, Teresa I. Narvaez, Wayne S. Montgomery, Armando Monterroso, Charlotte De Grave and Miriam F. Cooperband, UF-IFAS-TREC Homestead FL |
| 3 | **Impact of Oriental Fruit Fly Postharvest Treatments on Avocado**. Daniel Carrillo1, Amy Roda, Clara Sarmiento, Armando Monterroso, Xiqui Wei, Teresa I. Narvaez, Jeff Crawford, William Guyton, Alan Flinn, Don Pybas, Woodard D. Bailey, 1UF-IFAS-TREC Homestead FL |
| 4 | **Better detection of pest *Euwallacea* nr *fornicatus* in Florida avocado groves using a two-component lure containing α-copaene and quercivorol**. Paul E. Kendra1, David Owens, Wayne S. Montgomery, Teresa I Narvaez, Elena Q. Schnell, Nurhayat Tabanca, and Daniel Carrillo, 1USDA-ARS, Miami, FL |
| 5 | **Behavioral assays for evaluating host preferences of *Euwallacea* nr. *fornicatus* (Coleoptera: Curculionidae: Scolytinae).** David Owens, Paul E. Kendra1, Wayne S. Montgomery, Teresa I. Narvaez, Nurhayat Tabanca, and Daniel Carrillo, 1USDA-ARS, Miami, FL |
| 6 | **Comparative cold tolerance of geographically distinct populations of *Cyrtobagous salviniae,* a biological control agent of *Salvinia molesta***. Alana Russell, Rodrigo Diaz & Seth Johnson1, Department of Entomology, Louisiana State University, Baton Rouge, LA |
| 7 | **Biological control of *Bemisia tabaci* Gennadius (Heteroptera: Aleyrodidae) by *Nesidiocoris tenuis* Reuter (Heteroptera: Miridae) in open field tomato crops in Florida**. José Castillo and Phil Stansly, UF-IFAS-SWFREC, Immokalee FL |
| 8 | **The Florida Cooperative Agricultural Pest Survey** Eric LeVeen, FDACS-DPI-CAPS Gainesville FL |
| 9 | **Trap development and testing in Giant African Snails**. Shweta Sharma, Amy Howe, James Snyder Florida Department of Agriculture, Division of Plant Industry, Gainesville, FL |
| 10 | **Service Learning and Plant Protection in Graduate Education-Reaching the Next Generation** Amanda Hodges, Morgan Pinkerton, and Nicole Casuso, Department of Entomology and Nematology, University of Florida, Gainesville, FL |
| **WEDNESDAY, 19 JULY Morning** |  |  |
| **Meeting/Function** | **Time** | **Room / Location** |
| Registration Continued | 8:00 – 9:00  | Registration Desk |
| SYMPOSIUM: **Entomological Research and Outreach in Puerto Rico**. Dr. Rosa Franqui, UPR, Organizer | 9:00-11:30 | Grand Opera |
| **Introduction:** Dr. Rosa Franqui, UPR, Organizer | 9 :00-9 :05 | Grand Opera |
| **The fascinating pest and non-pest termites of Puerto Rico**. Rudolf H. Scheffrahn, University of Florida, Ft. Lauderdale R.E.C. | 9:05-9:25 | Grand Opera |
| **Studies on the Old World Bollworm, an imminent agricultural pest for USA: Establishment of colonies, susceptibility to chemical control and hybridization**. Fernando Rodrigues da Silva, Dario Regalado, Yazmin Salgado, Carlos Morales, Daniel Carrillo, Woodward Bailey, José Carlos Verle Rodrigues. University of Florida Tropical Research and Education Center, Homestead, FL 33031**.** | 9:25-9:45 | Grand Opera |
| **The Florida and Caribbean pest pathway: tracking routes of introductions of fire ants and *Diaprepes* root weevils using genetic data**. Marina S. Ascunce, Emerging Pathogens Institute, Department of Plant Pathology, University of Florida | 9:45-10:05 | Grand Opera |
| **The bacterial microbiota of the coffee berry borer: composition and function, with emphasis on *Wolbachia***. Yobana A. Mariño, Oscar Ospina, José C. Verle-Rodrigues, and Paul Bayman. Department of Biology, University of Puerto Rico Río Piedras, Puerto Rico.  | 10:05-10:25 | Grand Opera |
| **Coffee Break** | 10:25 – 10:40  | Opera Foyer |
| **Acarina in Puerto Rico**. Edwin Abreu, Universidad de Puerto RicoDepartamento de Ciencias Agroambientales, Colegio de Ciencias Agrícolas, Recinto Universitario de Mayagüez | 10:40-11:00 | Grand Opera |
| **Contributions to the Taxonomy of Insects in Puerto Rico**. Edda L. Martínezand Rosa Amelia Franqui, Museo de Entomología y Biodiversidad Tropical, Departamento de Ciencias Agroambientales, Colegio de Ciencias Agrícolas, Recinto Universitario de Mayagüez, Universidad de Puerto Rico, San Juan Puerto Rico. | 11:00-11:20 | Grand Opera |
| Discussion**: Entomological Research and Outreach in Puerto Rico** | 11:40-12:00 | Grand Opera |
| SYMPOSIUM: **Revised Identity and Biological Control Potential of the Harrisia Cactus Mealybug (*Hypogeococcus* sp.) Currently Devastating the Dry Forest Cactus of Puerto Rico**Stephen Hight, USDA-ARS, Tallahassee, FL, and Hilda Diaz-Soltero, Caribbean Advisor for the APHIS Administrator, San Juan, PR, Organizers | 9:00-11:40 | Opera |
| **Introduction Status and plans for a biological control program against the Harrisia Cactus Mealybug (*Hypogeococcus pungens*).** Drs. Stephen Hight and Hilda Diaz-Soltero | 9:00-9:20 | Opera |
| **The need to establish *ex situ* collections for cacti threatened by *Hypogeococcus pungens* (Hemiptera: Pseudococcidae) in the Caribbean islands.** Christian W. Torres-Santana1**,** Hilda Díaz-Soltero, Darién López-Ocasio, and Alejandro E. Segarra-Carmona, 1Arboretum Parque Doña Inés, Fundación Luis Muñoz Marín, San Juan, PR | 9:20-9:40 | Opera |
| **Disentanglement of the Harrisia cactus mealybug complex, including the cacti pest species of Puerto Rico.** Guillermo A. Logarzo1, María Belén Aguirre, Stephen Hight, Serguei Triapitsynand Hilda Díaz-Soltero, 1CONICET-FuEDEI, Buenos Aires, Argentina. | 9:40-10:00 | Opera |
| **Biological information for parasitoids being considered as biological control agents against the Harrisia cactus mealybug in Puerto Rico.** María Belén Aguirre1, Serguei Triapitsyn, Stephen Hight, Hilda Díaz-Soltero, and Guillermo Logarzo, CONICET-FuEDEI, Buenos Aires, Argentina. | 10:00-10:20 | Opera |
| **Coffee Break** | 10:20-10:40 | Opera Foyer |
| **Efforts to Control Harrisia Cactus Mealybug (HCM) in Cactus in Puerto Rico.** Jose Carlos Verle Rodrigues1, Yorelyz Rodriguez Reyes, Oscar E. Ospina, Patricia Caligari, and Matthew Ciomperlik, 1Center for Excellence in Quarantine and Invasive Species, Agricultural Experimental Station-Río Piedras, San Juan, PR | 10:40-11:00 | Opera |
| **USDA, APHIS, PPQ - Biological Control Prevention and Preparedness efforts at the Center of Excellence for Quarantine and Invasive Species at Rio Piedras, Experiment Station, San Juan, Puerto Rico PPQ,** Ron Weeks1, 1USDA-APHIS-PPQ Science and Technology, 1730 Varsity Dr, Raleigh, NC  | 11:00-11:20 | Opera |
| **Discussion: Biological control of Harrisia Cactus Mealybug** | 11:20-11:40 | Opera |
| **WEDNESDAY, 19 JULY Afternoon** |  |  |
| **Meeting/Function** | **Time** | **Room / Location** |
| **FES Awards Luncheon** | 12:00-1:30 | Yees |
| **FES Business Meeting** | 1:30-3:00 | Yees |
| **THURSDAY, 20 JULY** |  |  |
| **Optional Field Trip to Guánica Dry Forest**  | 7:30-5:30pm | Hotel Entrance |