FAMU-CAFS

Center for Biological Control Newsletter

Florida A&M University

College of Agriculture and Food Sciences

Tallahassee, FL 32307

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Ladybird Beetle, *Anovia* sp., a Promising Biological Control Agent for *Crypticerya genistae* in Haiti

Lambert Kanga, Ph.D.

Crypticerya genistae (Hemiptera: Monophlebidae), also known as the white partridge pea bug, is an invasive exotic scale insect native to Brazil. Its major hosts include peppers, eggplant, tomatoes and peanuts. It is reported as a pest in Barbados, and is frequently found on the ornamental ground peanut *Arachis glabrata* used in landscaping in Puerto Rico. It was first collected in the United States in 2005 at Port Everglades in Ft. Lauderdale, Florida. This insect feeds on more than 50 hosts in Florida, 37 hosts in Guadeloupe and 31 hosts in Barbados. *Crypticerya genistae* can cause a major food security and economic impact in Haiti as it has destroyed more than 10,000 ha of peanut in the Northeast of the country. A ladybird beetle *Anovia* sp. collected from Puerto Rico and tested in Haiti appears to be a promising biological control agent for *Crypticerya genistae*.

Inside This Issue

Dr. Lambert Kanga
Director/Professor, FAMU-CBC

Dr. Jesusa Legaspi
Co-Director, USDA-ARS-CMAVE-CBC

Dr. Robert Taylor, *Dean and Director*
College of Agriculture and Food Sciences

Adult ladybird beetle, *Anovia circumclusia* (Courtesy of Dr. Ian Stocks, FDACS - DPI)

Host plant infested with *Crypticerya genistae* in Haiti

Excellence in IPM Award:
Dr. Jesusa Legaspi (left) receiving the Excellence in IPM Award from Dr. David Hall (right), President of the Southeastern Branch of the Entomological Society of America

This Newsletter is published by the **Center for Biological Control**. Subscriptions for the newsletter are free, available upon request. Questions, comments or editorial submissions may be submitted to:

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Outlook for Optimism with Growth, Challenges and Changes

Dr. Lambert Kanga

The Center for Biological Control (CBC) continues to excel in its mission although limited by reductions in budget and faculty. Together with its federal agency partners (USDA-ARS and USDA-APHIS), the CBC remains committed to achieving successfully its goals and objectives. The Center continues to offer programs to better serve its clientele and strengthen its collaborative linkages with national and international collaborators.

The major priorities in the coming years are (a) the construction of a building to house and combine the expertise of the Entomology Program, the CBC and partners, (b) the expansion of breadth of research projects and (c) the filling of vacant positions. The Center has made substantial efforts towards these priorities: (a) Florida A &M University has identified the site for the new building on its Master Plan; (b) the facility program (blueprint) for the building as well as the fundraising brochure has been completed. The CBC will be receiving assistance for the FAMU Administration for fundraising activities. Appropriate staffing and facilities are critically important for the continued success of the activities of the Center. Currently, the CBC is in a process of hiring a new faculty member for the Urban Entomology position. An additional faculty member with expertise in Integrated Pest Management (IPM) will soon be hired.

Dr. Jesusa Legaspi

The Center continues its support of academic programs with enrollment of more than 70% of the graduate student population in the College of Agriculture and Food Sciences. Faculty members and students of the Center continue to succeed and raise our public professional profile. Dr. Jesusa Legaspi was the recipient of the Integrated Pest Management (IPM) Award from the Southeastern Branch of the Entomological Society of America. Graduate student Julius Eason was the 1st place winner of the graduate student poster competitions at the annual meeting of the Entomological Society of America, and graduate student Latasha Tanner was the 3rd place winner of the graduate student poster competitions at the Minorities in Agriculture, Natural Resources and Related Sciences annual meeting.

Danielle Wolaver was the winner of the Undergraduate Student Presentation Award from the Florida Associations of Benthologists. Further, Fourteen (14) students were recognized with "W. L. Peters Memorial Scholarship Awards" from the Reuben Capelouto Foundation. The Debate Team coached by Dr. Raymond Hix competes successful at the 2014 Entomological Society of America annual meeting.

We are proud of the accomplishments of our faculty and students as the CBC continues to gain worldwide recognition. We appreciate your continuing support of the Center as we move into the future.

Biological Control of the Invasive Asian Weed, Air Potato

Agricultural Research Service staff in Tallahassee are part of a multi-agency effort to control the invasive Asian weed known as air potato, *Dioscorea bulbifera*. Colleagues at the Florida Department of Agriculture, Division of Plant Industry (FDACS-DPI), University of Florida, and USDA-Invasive Plant Research Laboratory Ft. Lauderdale, have released nearly 500,000 adult air potato leaf beetles, *Lilioceris cheni* (Chinese biotype), to control the vine over the last four years. USDA-CBC staff have released over 3000 beetles in the Panhandle since June 2015.

Staff and collaborators are just completing a statewide survey of the distribution and impact of *L. cheni* in the 67 counties in Florida. At least two sites in every county were assessed for presence of air potato, abundance and size of bulbils (the air potatoes), number of adult beetles, presence of larvae and eggs, and a measure of beetle damage to the plants.

(continued on page 3)

Vines of air potato, an invasive plant from Asia, growing over a fence, vegetation, and into the canopy of bald cypress trees. The vegetative reproductive structure (inset) known as a bulbil (non-edible air potato) from a vine of the invasive air potato plant, *Dioscorea bulbifera*.

Research & Outreach News

Danielle Wolaver Completed a B.S. in Entomology

Danielle Wolaver graduated with a B. S. in Agricultural Sciences (major – Entomology) in Dec. 2014. During her degree she experienced a wide range of opportunities in Entomology. She first worked in Dr. Lamber Kanga's lab where she assisted graduate students working on ambrosia beetles and honey bees. As a CURE scholar, she worked with Dr. Andrew Rasmussen illustrating and describing an undescribed caddis fly species. She received two awards for her caddis fly work at the annual Florida Benthological Society meeting where she gave a poster and oral presentation. Before she finished her degree, she worked on the behavioral effects of insecticides on non-target predators and the repellency of various volatiles to whiteflies in Dr. Jesusa Legaspi's lab. After graduating from FAMU, Danielle was hired by the Florida Department of Agriculture and Consumer Services - Division of Plant Industry in Gainesville, FL to work on the invasive pest, the kudzu bug. [Source: J. C. Legaspi]

Ms. Daniell Wolaver

Dasia Harmon, Tavia Gordan and Muhammad Haseeb at the Aug 23, 2014 Grape Harvest Festival organized by the Center for Viticulture and Small Fruits Research

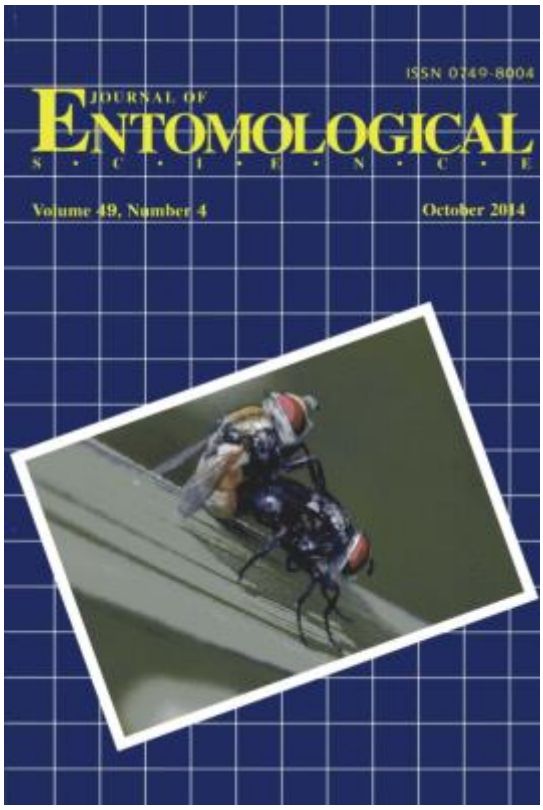
Air Potato (continued from page 2)

The third season of an overwintering and longevity field study will begin in October 2015. Beetles of both Chinese and Nepalese biotypes of the air potato beetle will be released in separate cages and followed all winter to determine their field tolerance to winter temperatures. In the spring, beetles will be collected and their fecundity and longevity will be evaluated. The outlook is very promising for a successful biological control program against the air potato throughout the state. Beetles have become established, increased in numbers, dispersed, and substantially impacted the weed at many locations. [Source S. D. Hight]

Adult air potato beetle, *Lilioceris cheni*

Journal Cover Photo *Entomological Science*, July 2013 (Vol 49 No 4) Tachinidae on Rice in the Dominican Republic

Dr. Raymond Hix



Malaise trap over sweet alyssum in kale crop
Source: Neil Miller, USDA, ARS

Companion and Refuge Plants to Control Vegetable Insect Pests

Whiteflies and aphids are important insect pests in vegetable crops. Laboratory olfactometer or odor detecting tests showed that mustard, *Brassica juncea* (var. Caliente 19 and Giant red mustard) and arugula, *Eruca sativa* (var. Nemat) plants are promising repellent plants against the sweetpotato whitefly, *Bemisia tabaci*. Preliminary analysis of a field study on annual ornamental plants, sweet alyssum, *Lobularia maritima*, intercropped with kale revealed the most abundant predatory hoverflies to be *Toxomerus marginatus*, followed by *Allograpta oblique*, and 5 other species. Our results indicate that use of companion and natural enemy refuge plants are promising cultural management techniques in an integrated pest management program to control vegetable insect pests such as whiteflies and aphids. [Source: Dr. Legaspi]

Sweetpotato whitefly adult, *Bemisia tabaci*
Source: Stephen Ausmus, USDA, ARS

Adult life stage of the hoverfly predator, *Toxomerus marginatus*
Source: Bob Peterson

Research & Outreach News

Developing Potential Biological Control Measures for a New Exotic Soft Scale Insect on Croton in South Florida (Hemiptera: Coccoidea)

Netalie Francis, Lambert Kanga, Muhammad Haseeb and Catharine Mannion

A new invasive species of scale insect, *Phalacrococcus howertoni* collected on croton (*Codiaeum variegatum* (L.) in 2008 has now been established in several counties in south Florida and has continued to spread (Mannion and Hodges, 2008; Cadwell 2008, Hodges, 2008). The economic importance of this new scale hasn't been estimated yet. Populations of the scale can build rapidly to high densities on some hosts; affected plants decline and produce excessive amounts of honeydew and sooty molt (Mannion and Hodges, 2008).

Phalacrococcus howertoni is particularly problematic on crotons in production and in the landscape but has also been reported on approximately 100 host plants. Currently, there are no recommended biological control measures for this pest and little is known of its biology and population dynamics. This scale has the potential to pose a serious threat to the state's $13 million-a-year avocado crop *(Persea americana)*, to guava, mango and other fruit trees in south Florida, and to ornamentals plants as well as the native plant species. important mangroves.

Our data indicated that a predatory beetle, *Thalassa montezumae* is a promising biological control agent for the croton scale, *Phalacrococcus howertoni*.

Croton Scale infestation

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Ms. Netalie Francis Started M.S. Research

Ms. Francis has been relocated to Dr. Catherine Mannion's lab at the UF/IFAS Tropical Research and Education Center (TREC) in Homestead, FL (where this invasive species is established on croton and other host plants). An exploratory survey trip for natural enemies to Guatemala will be contacted this summer by Drs. Kanga and Haseeb.

Ms. Netalie Francis works on croton scale at the Tropical Research & Education Center (TREC), Homestead, FL.

STUDENT NEWS

Mr. Eutychus Kariuki is now a Ph.D. candidate

Mr. Eutychus Kariuki successfully passed his qualifying exams in April 2014 and is now a Ph.D. candidate in the Cooperative Ph.D. degree program with the University of Florida. His major advisor is Dr. Raymond Hix (Associate Professor at FAMU) and his co-major adviser is Dr. Jim Cuda (Professor, UF Department of Entomology and Nematology). Other members of the committee include Dr. Stephen Hight (USDA-ARS & FAMU CBC) and Dr. Jennifer Gillette-Kaufman (UF Department of Entomology and Nematology)

Mr. Eutychus Kariuki, PhD candidate

Mr. Xavier Price

Mr. Xavier Price starts M.S. degree program in Entomology

Mr. Xavier Price began a M.S. degree program in entomology. His major adviser is Dr. Lambert Kanga, He is working on the management of the honey bee ectoparasite, *Varroa destructor* using RNAi (gene silencing) technieque to weaken the immune system of the mite. Mr. Price graduated from Fort Valley State University in the Fall 2012 Magna Cum Laude with BS in Plant Science Biotechnology.

Student News

Julius Eason Completed a M.S In Entomology

Mr. Julius Eason completed a Master's degree in Entomology in December 2014. His Thesis entitled "Monitoring and Mechanisms of Resistance to Insecticides in the Asian Citrus Psyllid Populations in South Florida. Members of his supervisory committee are Dr. Lambert Kanga (major advisor) and Drs. Muhamad Haseeb and Anthony Ananga. Mr. Eason was a member of the 2012 Entomology Debate Team which won 1st place in their category at the ESA annual meeting. He was also a member of our Linnaean Games from 2012-2014. Mr. Eason is currently working on a Ph.D. degree program in Entomology at Purdue University.

Dr. Ananga, Dr. Kanga, Mr. Julius Eason, and Dr. Haseeb (from left to right, respectively)

Mr. Wagner Tavares, visiting PhD student from Universidad Federal de Vicosa, Minas Gerais State, Brazil

Second Brazilian Ph.D. Student from UFV is currently working in CBC and USDA's labs

Mr. Wagner de Souza Tavares is currently a visiting research scholar in Dr. Legaspi's laboratory from Aug. 21 to Oct. 31, 2014 at USDA-ARS and FAMU-CBC. He is a Ph.D. student in the Department of Plant Science at the Federal University of Viçosa in Viçosa, Minas Gerais State, Brazil. Mr. Wagner de Souza Tavares is also under the guidance of Dr. Lambert Kanga, Dr. Muhammad Haseeb (FAMU-CBC), and Dr. Robert Meagher (USDA-ARS).

His research project is to assess the tritrophic interactions among corn, *Zea mays* (Poaceae); beet armyworm, *Spodoptera exigua* and fall armyworm, *Spodoptera frugiperda* (Lepidoptera: Noctuidae); *Cotesia flavipes* (Hymenoptera: Braconidae) and *Podisus maculiventris* (Heteroptera: Pentatomidae), and turmeric powder and its derivatives from *Curcuma longa* (Zingiberaceae) rhizomes and mustard seed oil from black mustard, *Brassica nigra* (Brassicaceae). [submitted by: Wagner de Souza Tavares; E-mail: wagnermaias@yahoo.com.br]

Student News

The FAMU Entomology Debate Team Competed During ESA National Meeting Student Debates

The FAMU Entomology Debate Team competed in the graduate student debates at the Entomological Society of America Annual Meeting in Portland, OR on November 12, 2014. The topic was "Best Malaria Management Strategy Worldwide". The team's position statement will be published in a future issue of *The American Entomologist*. Dr. Raymond Hix was the Advisor of the Debate team.

FAMU CAFS Entomology Debate Team from left: Tavia Gordon, Edidiong Inyang, Netalie Francis, Julius Eason and Whitley Stewart

Ms. Key'erra Rozier Starts M.S. Degree In Entomology

Ms. Key'erra Rozier completed her B.S. degree in Plant Science/Biotechnology at Fort Valley State University in December 2014. She is currently in a Master's degree program in Entomology. The tile of the project is "Biological control of the small hive beetles with fungal pathogens" Her Major Advisor is Dr. Lambert Kanga.

Ms. Key'erra Rozier

Mr. Edidiong Inyang began a M.S. degree in Entomology

Mr. Edidiong Inyang started a M.S. degree in Entomology in fall 2013. He has a B.S. in Biology from Fort Valley State University. His major advisor is Dr. Raymond Hix. His thesis research entitled "the acoustical monitoring of the grape root borer." Dr. Richard Mankin (USDA-ARS, Ganesville, FL) and Dr. Violeta Colova (FAMU, CAFS) are members of his Thesis committee.

Continuing Graduate Students in 2014

Several graduate students continued the research towards their degree programs in 2013: Eric Turner (major advisor: Dr. Lambert Kanga) Ms. Angela Galette (major advisor: Dr. Stephen Hight), Gunasegaran Chelliah, Ph.D. Student (major advisor: Dr. Lambert Kanga), Eutychus Kariuki, Ph.D. student (major advisor: Dr. Raymond Hix), Carolyn Polmpilus (major advisor: Dr. Mike Thomas), Tavia Gordon (major advisor: Dr. Muhammad Haseeb), Whitley Steward, Ph.D. Student (major advisor: Dr. Lambert Kanga).

Student News

Latasha Tanner Completed a M.S. Degree in Entomology

Ms. Latasha Tanner completed a M.S. in Entomology at Florida A&M University. Dr. Lambert Kanga was her major advisor. She received the 3rd place award in the graduate poster competition at the 29th Annual Career Fair and Training Conference of the National Society for Minorities in Agriculture Natural Resources and Related Sciences (MANRRS) in March, 2014 in Birmingham, AL. The award recognized Ms. Tanner's research on the redbay ambrosia beetle and laurel wilt fungus, a serious threat to the state's forest industry and to the $13 million-a-year avocado crop in south Florida, to cultivated and wild avocados in Mexico, Central America, and South America, and to the California bay laurel. Ms. Tanner discovered four new county records of bark beetles in the Apalachicola National Forest of Florida. One of the dominant species of ambrosia beetles found by Ms. Tanner has been reported to carry the laurel wilt fungus making this invasive species a potential threat to plants in the family Lauraceae in the Apalachicola National Forest. Ms. Tanner identified 2394 specimens of beetles and seasonal patterns of occurrence of introduced ambrosia beetles. Ms. Tanner also determined that gel ethanol was significantly more attractive to ambrosia beetles than the mixture of Manuka and Phoebe oil (currently used for management of this invasive species). She proposed that hand sanitizer attractant could be used as an alternative to gel ethanol as it is cost-effective, affordable, and sustainable. The research was conducted in collaboration with the Cooperative Agricultural Pest Survey and the Florida Division of Plant Industry. Latasha Tanner was featured in Tallahassee Democrat (Press Release) and was recognized at the FAMU Board of Trustees meeting on June 4 in Crestview, Florida.

Graduate Student Award Winner at MANRRS: Latasha Tanner (left) with FAMU President Elmira Mangum (right)

FAMU Entomology student scholarships awarded by the Reuben Capelouto Foundation – presented at the William L. Peters 38th Annual Field Day and Workshop in Entomology, Nov . 5, 2014, Tallahassee, FL. Award winners were Mr. Edidiong Inyang, Ms. Danielle Wolaver, Mr. Julius Eason, Ms. Carolyn Pompilus, Ms. Angela Galette, Ms. Tavia Gordon, Mr. Eric Turner, Ms. Dasia Harmon, Ms. Whitley Stewart, Ms. Key'erra Reid and Mr Xavier Price. Also in photo: Mr. John Dukes, Raymond Capelouto, Drs. Robert Taylor, Susie Legaspi and Lambert Kanga

Ms. Dasia Harmon Starts a M.S. Degree in Entomology

Ms. Dasia Harmon

Ms. Dasia Harmon is from Milwaukee, WI and has begun her first semester here at Florida A&M University as an Entomology graduate student under the guidance of Dr. Muhammad Haseeb, and Dr. Lambert Kanga. She received her bachelor's degree in Plant Science from Fort Valley State University in May 2014. She will be developing control strategies to manage spotted wing *Drosophila suzukii* (SWD). This new pest is an increasing invasive species that poses a serious threat to fruit production in Florida and in the United States. Dasia plans to develop monitoring tools and techniques, study the infestation levels on various host plants such as strawberries and blueberries, and identify the most suitable biological control agents for SWD. Dasia is expected to graduate with a Master's degree in Entomology in Spring 2016.

Article of the 2012 Debate Team of FAMU Entomology is Published in *The American Entomologist*

The FAMU Entomology Debate Team competed at the 2012 ESA National Meeting in Knoxville, TN. The article was published in the Winter 2014 issue of *The American Entomologist* (Vol 60:212-222). The title was "What is the best individual solution to meeting the world's growing energy demands? The FAMU Team won their section against Virginia Tech and finished 2nd nationwide.

From Left: Saundra Wheeler, Julius Eason, Megan Wilkerson, Entomological Society of America President, Dr Grayson Brown, Eutychus Kariuki and Omotola Dosunmu.

Peer-reviewed publications:

Diaz, R., Manrique, V., Hibbard, K., Fox, A., Roda, A., Gandolfo, D., Mckay, F., Medal, J., **Hight, S.D**., Overholt, W.A. 2014. Successful biological control of tropical soda apple (Solanales: Solanaceae) in Florida: A review of key program components. Florida Entomologist. 97(1):179-190.

Dosunmu, O.G., N. J. Herrick, M. Haseeb, R.L. Hix and R.W. Mankin. 2014. Accoustic detectability of *Rhynchophorus cruentatus* (Coleoptera: Dryophthoridae). Florida Entomologist 97 (2): 431-438.

German-Ramirez, E., M.T.K. Kairo, I. Stocks, **M. Haseeb** and C.A. Serra. 2014. New record of *Hypogeococcus pungens* (Hemiptera: Pseudococcidae) in the Dominican Republic with comments on specific characters (Scientific Note), Florida Entomologist 97(1), March 2014, 320-321pp.

Goñalons CM, Varone L, Logarzo L, Guala M, Rodriguero M, **Hight SD**, Carpenter JE. 2014. Geographical range and laboratory studies on *Apanteles opuntiarum* (Hymenoptera: Braconidae) in Argentina, a candidate for biological control of *Cactoblastis cactorum* (Lepidoptera: Pyralidae) in North America. Florida Entomologist 97(4): 1458-1468.

Lopez-Martinez, G., Carpenter, J.E**., Hight, S.D**., Hahn, D.A. 2014. Low-oxygen atmospheric treatment improves the performance of irradiation-sterilized male cactus moths used in SIT. Journal of Economic Entomology 107(1):185-197.

O'Brien, C. W. and M. Haseeb. 2014. Revision of the "rice water weevil" genus *Lissorhoptrus* in North America, north of Mexico (Coleoptera: Cuculionidae). The Coleopterist Bulletin 68 (2): 163-186.

Paraiso, O., Smith, T.R., **Hight, S.D**., & Davis, B.J. 2014. Rearing a native cactus moth, *Melitara prodenialis* (Lepidoptera: Pyralidae), on artificial diet and *Opuntia* cladodes: Preliminary comparisons. Florida Entomologist 97(3): 1232-1236.

Tavares, W. de S., **J. C. Legaspi**, A. R. Lima, M. A. Soares, A. I. de A. Perira, and J. C. Zanuncio. 2014. *Pseudautomeris brasiliensis* (Lep.: Saturniidae) and *Stenoma* sp. (Lep.: Elachistidae) feeding on crops of *Ctenanthe kummeriana* (Marantaceae) in Brazil and an associate parasitoid, *Enicospilus tenuigena* (Hym: Ichneumonidae). Annals of the Entomological Society of America. 107(2): 413-423.

Varone, L., Logarzo, G., Briano, J.A**., Hight, S.D**., Carpenter, J.E. 2014. *Cactoblastis cactorum* (Berg) (Lepidoptera: Pyralidae) use of *Opuntia* host species in Argentina. Biological Invasions 16(11): 2367-2380

Presentations, Seminars, Extension Activities:

Haseeb, M. and T. Gordon. 2014. Fruits and Vegetables IPM using Best Management Practices in North Florida. Poster presented in the 88th Annual Meeting of the Southeastern Branch Meeting of the Entomological Society of America held in Greenville, South Carolina, The United States (2-5 March 2014).

Haseeb, M., T. Gordon, L. Kanga. 2014. Enhancement of Family Farms Productivity and Profitability using IPM Strategies. Talk presented at the 50th Annual Meeting of the Caribbean Food Crops Society held in St. Thomas, US Virgin Islands, The United States (6-11 July 2014).
Legaspi, J. C. The spined soldier bug: an important biocontrol agent. FAMU-CAFS Lecture Series, Florida A&M University, Tallahassee, FL, Feb. 14, 2014

Presentations, Seminars, Extension Activities Continued:

Hix, R.L. 2014 presentations 2014 Florida Lake Watch Regional Meetings: Hyrdilla IPM
Panama City 22 August 2014 at the P.C. Marine Center
Santa Rosa Beach, 23 August 2014

Legaspi, J. C., A. M. Simmons, and N. Miller. Evaluating companion plants and plant products to control sweetpotato whitefly, *Bemisia tabaci*. Annual Meeting of the Southeastern Branch - Entomological Society of America, Greenville, SC, Mar. 2-5, 2014.

Legaspi, J.C. and N. Miller. Demonstrating companion planting to control insect pests of vegetables. Annual Meeting of the Entomological Society of America, Portland, OR, Nov. 16-19, 2014.

Umar, G., B. Phills and **M. Haseeb**. Training and Demonstration of Best Management Practices in Vegetables and Fruits on Small Farms in North Florida. Poster presented at the 111th Annual Meeting of the American Society for Horticultural Sciences held in Orlando, Florida, The United States (28-31 July 2014).

Participation (University and Public Service / Outreach Activities / Workshops):

Monarch Butterfly Festival, Entomology Club, St. Marks National Wildlife Refuge, St. Marks, FL. October 27, 2014

FAMU Grape Harvest Festival, Tallahassee, FL, August 23, 2014

W. L. Peters 38th Annual Field Day and Workshop in Entomology - FAMU, Tallahassee, FL, November 6-8, 2014

Vegetable and Small Farm Fruit IPM workshop, Center for Viticulture, FAMU, spring 2014

Small Farms IPM Working Group Meeting, Kentucky State University, Frankfurt, Kentucky, The United States (23-25 June 2014).

Service on Professional Committees Etc.

Hix, R. L., Chair of the Southeastern Branch of the Entomological Society Audit Committee

Legaspi, J. C., Co-Chair Diversity Committee, (2013-2016), International Congress of Entomology to be held in Orlando, FL on September 2016

Legaspi, J. C., member, scholarship committee, Reuben Capelouto Foundation, Tallahassee, FL.

Legaspi, J. C., graduate committee, College of Agriculture and Food Sciences, FAMU, Tallahassee, FL.

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Advisory Council Members

Julius Eason won the first place for the Graduate Poster Competition for the President's Prize at the 2014 Entomological Society of America annual meeting in Portland, OR. His presentation entitled "Monitoring and Mechanisms of Resistance to Insecticides in the Asian Citrus Psyllid Populations in South Florida" and it was co-authored by Julius Eason, Lambert H. B. Kanga, Muhammad Haseeb and Jawwad Qureshi.

Graduate Assistantships Available

Interested in joining our M.S. Entomology Program or the Cooperative Ph.D. Program? Please write to Dr. Lambert Kanga (Lambert.Kanga@FAMU.EDU).

Website Links:

FAMU: http://www.famu.edu/index.cfm?a=cesta&p=

Center for Biological Control

USDA-ARS: www.ars.usda.gov/saa/cmave/ibbru

Protecting the Nation's Food Supply, Natural Resources and Human Health

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