

**South Carolina Entomological Society
Elected Officers and Committee Chairs (2017)**

Elected Officers:

Executive Director: David Jenkins, South Carolina Forestry Commission, 5500 Broad River Rd, 29212; phone: 803 896 8838; email: djenkins@scfc.gov

President: David Jenkins, South Carolina Forestry Commission, 5500 Broad River Rd, 29212; phone: 803 896 8838; email: djenkins@scfc.gov

VP/President Elect: Livy Williams, USDA-ARS U.S. Vegetable Laboratory, 2700 Savannah Highway, Charleston, SC 29414; phone: 843-402-5392; email: livy.williams@ars.usda.gov

Past President: Rizana Mahroof, South Carolina State University, 300 College Street NE, Orangeburg, SC 29117; phone: 803 536 8174; fax: 803 516 4685; email: rmahroof@scsu.edu

Secretary: Powell Smith, Clemson University, 605 West Main St., Ste. 109, Lexington, SC 29072; phone: 803-359-8515X122; fax: 803-359-4245; email: jpsmith@clemson.edu

Historian: Gerry Carner, Clemson University, 318 Long Hall, Clemson, SC 29634; phone: 864-656-5040; fax: 803-284-3684; email: gcarner@clemson.edu

Committee Chairs:

Auditing: Merle Shepard, Clemson University, Coastal REC, 2700 Savannah Highway, Charleston, SC 29414; phone: 843-402-5393; fax: 843-571-4654; email: mshprd@clemson.edu

Honors and Awards: Juang-Horng Chong, Clemson University, Pee Dee REC, 2200 Pocket Rd., Florence, SC 29506; phone: 843-662-3526; fax: 843-661-5676; e-mail: juanghc@clemson.edu

Local Arrangements David Jenkins, South Carolina Forestry Commission, 5500 Broad River Rd, 29212; phone: 803 896 8838; email: djenkins@scfc.gov

Membership: Pat Zungoli, Clemson University, 118 Long Hall, Clemson, SC 29634; phone: 864-656-3137; fax: 864-656-5065; e-mail: pzngl@clemson.edu

Nomination: Dwight Williams, Cypress Gardens, 3030 Cypress Gardens Road, Moncks Corner, SC 29461; phone: 843-553-0515; fax: 843-569-0644; email: dwight.williams@berkeleycountysc.gov

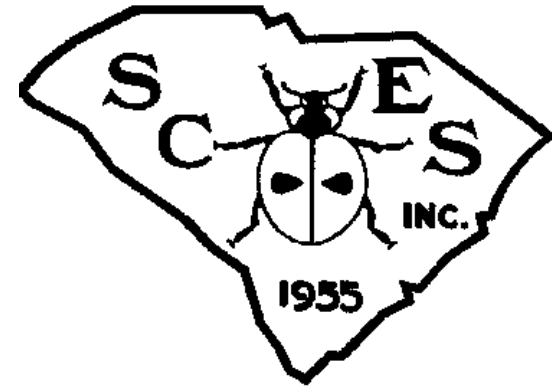
Program: Livy Williams, USDA-ARS U.S. Vegetable Laboratory, 2700 Savannah Highway, Charleston, SC 29414; phone: 843-402-5392; email: livy.williams@ars.usda.gov

Resolutions: Paula Mitchell, Winthrop University Biology Dept., Rock Hill, SC 29733; phone: 803-323-2111; fax: 803-323-3448; email: mitchell@winthrop.edu

The 63rd Annual Meeting

of the

**SOUTH CAROLINA
ENTOMOLOGICAL SOCIETY**



HOBCAW BARONY
GEORGETOWN, SC

5-6 October 2017

**PRESIDENTS OF THE SOUTH CAROLINA
ENTOMOLOGICAL SOCIETY**

1956	James H. Cochran	1957	Leon (Lefty) H. Moore
1958	Frank T. Arnold, Jr.	1959	John K. Reed
1960	William J. Reid, Jr.	1961	Norman Allen
1962	James N. Smith	1963	William Carl Nettles
1964	Wendell Tiller	1965	Vernon M. Kirk
1966	Edward W. King	1967	Julian E. Keil
1968	Charles S. Creighton	1969	Richard C. Fox
1970	Samuel G. Turnipseed	1971	Quinton L. Chapman
1972	Sidney B. Hays	1973	Max M. Askey
1974	Theodore R. Adkins, Jr.	1975	Julian Mikell
1976	William Bruce Ezell, Jr.	1977	Louie H. Senn
1978	Augustine Day	1979	Gerald R. Carner
1980	Charles A. Thomas	1981	Ray Noblet
1982	John A. DuRant	1983	Thomas E. Skelton
1984	Alfred R. Hopkins	1985	Kenneth A. Peebles
1986	Clyde S. Gorsuch	1987	Jay W. Chapin
1988	William P. DuBose	1989	David R. Alverson
1990	John C. Morse	1991	J. Benjamin Kissam
1992	Steven H. Roach	1993	John D. Hopkins
1994	B. Merle Shepard	1995	Randall P. Griffin
1996	Michael J. Sullivan	1997	Mitchell E. Roof
1998	Peter H. Adler	1999	Ron Burnette
2000	Donald G. Manley	2001	Paula Levin Mitchell
2002	Gloria S. McCutcheon	2003	Alfred G. Wheeler
2004	Paul M. (Mac) Horton	2005	William M. Hood
2006	D. Michael Jackson	2007	Eric P. Benson
2008	Jeremy K. Greene	2009	Francis Reay-Jones
2010	Juang-Horng Chong	2011	Bob Bellingier
2012	Brian Scholtens	2013	Pat Zungoli
2014	Laurie Reid	2015	Dwight Williams
2016	Rizana Mahroof	2017	David Jenkins

RECIPIENTS OF THE J. H. COCHRAN MEMORIAL SCHOLARSHIP

1970	David Arnold	1971	H. S. Moore
1972	Keith Griffin	1973	Roy Sutton
1974	Frank Davis	1975	Frank Davis
1976	Wayne Gardner	1977	Gayle Holman
1978	Jay Chapin	1979	Ed Quattlebaum
1980	Glenn Lee	1982	Robert Kelly
1983	Jerome Grant	1984	Steven Hamilton
1986	Eric Benson	1987	Mike Chambers
1988	Kevin Hoffman	1989	Charles Watson
1990	Marianne Willey	1991	Stuart Reitz
1993	Michael Floyd	1995	Jeffery Tomberlin
1996	Jennifer Zettler	1997	Kristen van den Meiracker
1998	Mohammed Kahn	1999	Will Reeves
2000	Michelle Colacicco	2001	J. Powell Smith
2002	Janet Kintz-Early	2003	Ozlem Kalkar
2004	Eric Paysen	2005	Donald Oswalt
2006	Mark Nelder	2007	Ian Stocks
2008	Dustin Swanson	2009	Holly Tuten
2010	Kevin R. Hinson	2011	Margie Lehnert
2012	Nicholas Seiter	2013	Ernesto Robayo-Camacho
2014	Hamilton Allen	2015	Francesca Stubbins

**RECIPIENTS OF THE J. H. COCHRAN
EXCELLENCE IN ENTOMOLOGY AWARD**

1993	Sidney B. Hays
1996	Thomas E. Skelton
1999	Peter H. Adler
2002	James A. Reinert and Alfred G. Wheeler
2005	John C. Morse
2008	B. Merle Shepard
2011	Sam Turnipseed
2014	Gerry Carner

Notes

SOUTH CAROLINA ENTOMOLOGICAL SOCIETY 63rd Annual Meeting Program

Thursday, October 5th 2017

AFTERNOON

- 12:30** Executive Committee Meeting
- 12:00-1:30** Meeting Registration
- 1:30-2:30** Keynote Presentation
How Insect Rearing Infrastructure Contributes to *Your* Research
Dr. Allen Carson Cohen, North Carolina State University, Dept. of Entomology, Raleigh, NC
- 2:30-3:30** Welcome, Business Meeting, Election
- 3:30-6:30** Insect Walks and Photo Safari
- 6:30-till** Poster Session, Social, Photo Salon, and Dinner

POSTERS

- D1. (PhD) Effects of single vs. pyramided Bt corn on the development and fecundity of *Helicoverpa zea*. **Thomas Bilbo**¹, Francis Reay-Jones¹, Jeremy Greene², Dominic Reisig³, and Fred Musser⁴, ¹Clemson University, Florence, SC, ²Clemson University, Blackville, SC, ³North Carolina State University, Plymouth, NC, ⁴Mississippi State University, Mississippi State, MS.
- D2. (MS) The distribution of the invasive dark rover ant, *Brachymyrmex patagonicus* Mayr, in South Carolina. **David Q. Bowers**, Eric P. Benson and Jinbo Song; Department of Plant and Environmental Sciences, Box 340310, E143 Poole Agricultural Center, Clemson, SC 29634-0310.
- D3. (MS) Learning to see, seeing to learn. **Madeline S. Genco**¹, John C. Morse¹, Andrea Kautz², John Wenzel² and Marti Louw³; ¹Clemson University, Clemson, SC, ²Powdermill Nature Reserve, Rector, PA, ³Carnegie Mellon University, Pittsburgh, PA.

Biography of our Keynote Speaker, Allen Carson Cohen

Allen Carson Cohen was born and raised in Chicago, Illinois, served 4 years in the U.S. Marine Corps, then attended college in California where he got a BA, and MA in English and later an MA in biology (focus on vertebrate physiology--rattlesnakes). He taught high school English for 2.5 years, then he taught English and biology at Cypress College for 12 years, and after getting a Ph.D. in entomology at U.C., Riverside, he moved to the USDA where he was a research scientist in Tucson, Phoenix, and Mississippi State. He published more than 150 papers, 2 books and holds 6 patents for insect diets and rearing systems. The USDA licensed 2 of his patents that were used by the biological control industry to mass-rear predators. After retiring from USDA, ARS in 2003, he started a research/consultation business for 6 years, then left his company to accept his current position as Research Professor in Entomology and Plant Pathology at North Carolina State University. He started and coordinates a program in Insect Rearing Education and Research where he teaches classes online and occasionally in person in insect rearing science. He has served as editor in physiology and biochemistry for the Journal of Entomological Science and in rearing and feeding biology for the Journal of Insect Science for about 6 years each. He received awards in technology transfer and the prestigious Federal Laboratory Consortium Award for his rearing system innovations. Since coming to NCSU, he has been awarded contracts and grants exceeding \$2.5 million, including current projects in spotted lanternfly and emerald ash borer rearing systems. He is currently writing a new book for CRC Press on Infrastructure of Insect Rearing.

Thursday, October 5th 2017

POSTERS, CONT'D

- D4. (UG) Illustration and insects: connecting art and science to educate the public about nature. **Allison Stoiser**, Caroline Brittingham and Suellen F. Pometto; Clemson University, Clemson, SC.
- D5. (UG) Efficacy of ozone fumigation against *Lasioderma serricorne* (F.) (Coleoptera: Anobiidae). **Cayela Glover**, Desirae Hook, Barbara Amoah and Rizana Mahroof; Department of Biological and Physical Sciences, South Carolina State University, Orangeburg, SC 29117.
- D6. (UG) Bioelectric patterns associated with binding and uptake of the baculovirus, *Autographa californica* MNPV. **Alexa Corker**, S. Lynch and Matthew Turnbull; Department of Biological Sciences and Entomology Graduate Program, Clemson University, Clemson, SC.
- D7. (UG) The guts of the matter: development, defense, and regeneration in the caterpillar midgut. **J. Parker**, D. Howard, R. Melton and M. Turnbull; Department of Biological Sciences and Entomology Graduate Program, Clemson University, Clemson, SC.
- D8. (UG) Characterizing freshwater macroinvertebrate food webs using DNA-based methods. **Benjamin Swartz** and Cynthia Tant; Winthrop University, Biology Department, Rock Hill, SC.
- D9. (UG) The structure and feeding behavior of short-proboscis moths. **Crystal Carpenter**, Alison Arling, Suellen Pometto, Charles E. Beard, Peter H. Adler and Konstantin G. Kornev; Department of Plant & Environmental Sciences E143 Poole Agricultural Center, Clemson University, Clemson, SC.
- D10. Egg hatch and nymphal survival of the bed bug (Hemiptera: Cimicidae) after exposure to insecticide dusts and sprays. **Jinbo Song**, Brittany R. Ellis and Eric P. Benson; Department of Plant and Environmental Sciences, Box 340310, E143 Poole Agricultural Center, Clemson, SC 29634-0310.
- D11. Methyl jasmonate induction of cotton: a field test of the 'attract and reward' strategy of conservation biological control. **Livy Williams**¹, Cesar Rodriguez-Saona² and Sandra C. Castle del Conte³; ¹USDA-ARS U.S. Vegetable Laboratory, Charleston, SC, ²Rutgers University, Philip E. Marucci Blueberry and Cranberry Research Center, Chatsworth, NJ,

³University of Idaho, Dept. Plant, Soil, and Entomological Sciences, Moscow, ID.

- D12. Backyard diversity: a survey of the moth fauna found on a suburban front porch, **Lisa Ames**, Department of Entomology, University of Georgia, Athens, GA.

Friday, October 6th 2017

- 8:15** Announcements

STUDENT PAPERS

Livy Williams, Moderator

- 8:30** 1. (Ph.D) Effects of Bt corn hybrids on the development, survival, and feeding behavior of the corn earworm. **Thomas Bilbo**¹, Francis Reay-Jones¹, Jeremy Greene², Dominic Reisig³, and Matt Turnbull⁴, ¹Clemson University, Florence, SC, ²Clemson University, Blackville, SC, ³North Carolina State University, Plymouth, NC, ⁴Clemson University, Clemson, SC.
- 8:45** 2. (MS) Agonistic interactions between the dark rover ant, *Brachymyrmex patagonicus* Mayr, and other selected ant species. **David Q. Bowers** and Eric P. Benson; Department of Plant and Environmental Sciences, Box 340310, E143 Poole Agricultural Center, Clemson, SC 29634-0310.
- 9:00** 3. (MS) Does light trapping for adult Trichoptera improve bioassessment of stream health in Appalachian river systems? **Coleson F. Wrege**; Clemson University, E143 Poole Agricultural Center, Clemson, SC 29631.
- 9:15** 4. (MS) Effects of planting date and variety on thrips populations and injury to cotton in the southeastern United States. **Cody Kerns**, Jeremy Greene, Francis Reay-Jones, Phillip Roberts, Alana Jacobson, Ames Herbert, Michael Toews, Tim Reed, Sally Taylor, Daniel Greene, James Smoak and Dan Robison; Clemson University.
- 9:30** 5. (MS) How good viruses do bad things? **Peng Zhang**¹ and Matthew W. Turnbull²; ¹Department of Plant and Environmental Sciences, Clemson University, Clemson, SC 29634, ²Department of Biological Sciences, Clemson University, Clemson, SC 29634

Friday, October 6th 2017

STUDENT PAPERS, CONT'D

9:45 6. (UG) Comparison of the fluid-feeding mouthparts of Diptera and Lepidoptera. **Alison M. Arling**, Suellen Pometto, Crystal R. Carpenter, C. E. Beard, Peter H. Adler and Konstantin G. Kornev; Plant and Environmental Sciences, Clemson University, E 143 Poole Ag, Clemson, SC 29634.

10:00 Break

Friday, October 6th 2017

Non-Student Papers

Livy Williams, Moderator

10:15 7. A survey of Hymenopteran pollinators on Spring Island, Okatie, SC. **B. Merle Shepard**¹, Dwight Williams² and Tony Mills³; ¹Clemson University, Coastal Research and Education Center, Charleston, SC 29414, ²P.O. Box 208, McClellanville, SC 29458, ³The Lowcountry Institute, 20 Callawassie Dr., Okatie, SC 29458.

10:30 8. A survey of non-Hymenopteran insects visiting flowers on Spring Island, Okatie, SC. **Dwight Williams**¹, B. Merle Shepard² and Tony Mills³; ¹P.O. Box 208, McClellanville, SC 29458, ²Clemson University, Coastal Research and Education Center, Charleston, SC 29414, ³The Lowcountry Institute, 20 Callawassie Dr., Okatie, SC 29458.

10:45 9. Dustywings (Neuroptera: Coniopterygidae) of South Carolina. **Michael L. Ferro**; Clemson University, Department of Plant and Environmental Sciences, 277 Poole Agricultural Center, Clemson, SC.

11:00 10. The future of our forests: scenarios based on past invasions. **David Jenkins**; South Carolina Forestry Commission, Columbia, SC.

11:15 11. Crop spatiotemporal dominance and management practices affect populations of a pest and natural enemies. **Rebecca A. Schmidt-Jeffris**¹ and Brian A. Nault²; ¹Clemson University, CREC, Charleston, SC, ²Cornell University, NYSAES, Geneva, NY.

11:30 12. Corn earworm growth in Bt corn and development of resistance in the Carolinas. **Francis P. F. Reay-Jones**¹, Thomas R. Bilbo¹, Dominic D. Reisig², and Jeremy K. Greene³; ¹Clemson University, Department of Plant

and Environmental Sciences, Pee Dee REC, Florence, SC, ²North Carolina State University, Department of Entomology and Plant Pathology, The Vernon G. James Research and Extension Center, Plymouth, NC, ³Clemson University, Department of Plant and Environmental Sciences, Edisto REC, Blackville, SC.

11:45 13. Mulberry whitefly (*Pealius mori*) interference with silkworm (*Bombyx mori*) nymphal development. **Alvin M. Simmons**¹, Shaaban Abd-Rabou² and Usama M. Ghazy³; ¹USDA-ARS, U.S. Vegetable Laboratory, Charleston, SC, ²ARC-PPRI, Mealybugs Research Department, Giza, Egypt, ³ARC-PPRI, Sericulture Research Department, Giza, Egypt.

12:00 14. Ozone as a potential fumigant for the control of *Sitophilus oryzae* in wheat. **Barbara Amoah** and Rizana Mahroof; Department of Biological and Physical Sciences, South Carolina State University, Orangeburg, SC 29117.

12:15 15. Scale insects of ornamental plants submitted to diagnostic services in GA, NC, SC and NPDN. **Juang-Horng "JC" Chong**¹ and William Klingeman²; ¹Clemson University, Pee Dee Research and Education Center, 2200 Pocket Road, Florence, SC, ²University of Tennessee, Department of Plant Sciences, 2431 Joe Johnson Dr., 252 Ellington Plant Sciences, Building, Knoxville, TN.

12:30 16. **Announcement:** 2018 Joint Meeting of the Georgia Entomological Society and the South Carolina Entomological Society. **Dan Suiter**; University of Georgia, Department of Entomology, Griffin, GA 30223.

12:45-2:30 Lunch on your own in downtown Georgetown

2:30-3:45 Final Business Meeting and Awards

3:45 Adjourn

3:45-4:30 Board Meeting