


2018

National Conference on
Urban Entomology
and
Invasive & Pest Ant
Conference



May 20-23
RTP, North Carolina

ncue.tamu.edu
 [groups/ncue18](https://www.facebook.com/groups/ncue18)
[#ncue18](https://twitter.com/ncue18)

NCUE/IPAC schedule at a glance

Refer to daily details for session locations

SUNDAY, MAY 20

- 1:00-5:00 Urban eXtension CoP Meeting
6:00-8:00 Welcome Reception

MONDAY, MAY 21

- 6:30-7:45 Breakfast (included with hotel registration)
7:45-7:55 **WELCOME**
7:55-8:00 **PRESENTATION OF ACHIEVEMENT AWARD**
8:00-9:00 **MALLIS MEMORIAL AWARD LECTURE**
9:00-9:45 **STUDENT SCHOLARSHIP AWARD PAPERS**
9:45-10:00 BREAK
10:00-12:00 **STUDENT PAPER COMPETITION**
12:00-1:15 Lunch on Your Own
1:15-2:30 **SUBMITTED PAPERS BED BUGS**
2:30-3:00 BREAK
3:00-5:00 Concurrent Sessions:
SYMPOSIUM BED BUG RESISTANCE MGMNT
SYMPOSIUM TICKS
Dinner & Evening on Your Own
8:00 – 10:30 Pi Chi Omega at RallyPoint Sport Grill

TUESDAY, MAY 22

- 6:30-8:00 Breakfast (included with hotel registration)
8:00-10:00 Concurrent Sessions:
SYMPOSIUM ASSESSMENT-BASED PM
SYMPOSIUM URBAN RODENT CONTROL
SUBMITTED PAPERS ANTS
10:00-10:15 BREAK
10:15-12:15 Concurrent Sessions:
SUBMITTED PAPERS FLIES AND MOSQUITOES
SUBMITTED PAPERS ANTS
12:15-1:40 AWARDS LUNCHEON
1:45-3:15 Concurrent Sessions:
SUBMITTED PAPERS COCKROACHES & TERMITES
SUBMITTED PAPERS ADDITIONAL TOPICS
3:15-3:30 BREAK
3:30-5:30 Concurrent Sessions:
SYMPOSIUM MILLENNIAL COCKROACH MGMNT
SYMPOSIUM REAL-WORLD APPLICATIONS OF MOLECULAR RESEARCH IN URBAN ENTOMOLOGY
4:00-5:45 Fire Ant eXtension Meeting
6:00 Buses Depart for NC Museum of Natural Sciences

WEDNESDAY, MAY 23

- 6:30-8:00 Breakfast (included with hotel registration)
8:00-10:00 Concurrent Sessions:
SYMPOSIUM FEDERAL POLICY WORK GROUPS
SUBMITTED PAPERS TERMITES
10:00-10:30 BREAK
10:30-11:30 FINAL BUSINESS MEETING
11:30-12:00 EXECUTIVE COMMITTEE BUSINESS MEETING

Registration Hours:

Sun 2:30-5:00, Mon & Tues 7:00-5:00, Wed 7:00-10:00

Upload your presentation during breaks at the table by registration.

Please be courteous and upload your talk at least one session prior to when you are speaking.

SUNDAY, MAY 20

- 2:30-5:00 Registration and Paper Upload Available
1:00-5:00 Urban eXtenson CoP Meeting
CAPE HATTERAS
6:00-8:00 Welcome Reception (free hors d'oeuvres)
TRIANGLE BALLROOM



MONDAY, MAY 21

- 6:30-7:45 **Breakfast (included with hotel registration)**

7:45-9:00 **AWARDS PRESENTATIONS**
TANGLEWOOD/ PINEHURST/ BLOWING ROCK

- 7:45-8:00 WELCOME

- 8:00-9:00 **Distinguished Achievement Award in Urban Entomology**

The Arnold Mallis Memorial Award Lecture

Arnold Mallis, a 20th Century Urban Entomologist, and how the next generation can honor his legacy in the 21st
BRIAN FORSCHLER

UNIVERSITY OF GEORGIA

- 9:00-9:15 **Bachelors of Science Award**

Growth Dynamics of *Blattabacterium*, an Endosymbiont of German Cockroaches

EMILY L. VERNON, Madhavi L. Kakumanu and Coby Schal

NORTH CAROLINA STATE UNIVERSITY

- 9:15-9:30 **Masters of Science Award**

Improving Baiting Methods for the European Fire Ant, *Myrmica rubra*

DANIELLE HOEFELE, Jaime Chalissery, Regine Gries, Gerhard Gries

SIMON FRASER UNIVERSITY

- 9:30-9:45 **Doctoral Award**

Toxicity and Neurophysiological Impacts of Plant Essential Oil Components on Bed Bugs (*Cimicidae: Hemiptera*)

SUDIP GAIRE, Michael Scharf and Ameya D. Gondhalekar

PURDUE UNIVERSITY

- 9:45-10:00 **BREAK**



10:00-12:00 **STUDENT PAPER COMPETITION**
TANGLEWOOD/ PINEHURST/ BLOWING ROCK

- 10:00-10:10 Apartment-Dwelling Versus Laboratory Cockroaches: A Diet Study

SAMANTHA McPHERSON, Coby Schal and Jules Silverman

NORTH CAROLINA STATE UNIVERSITY

- 10:12-10:22 Is There a Difference Between Bacterial Communities of Monogyne and Polygyne Fire Ant Colony Soils?

NICHOLAS V. TRAVANTY, Loganathan Ponnusamy and Charles S. Apperson

NORTH CAROLINA STATE UNIVERSITY

- 10:24-10:44 Effect of Ingestion of an Insect Growth Regulator on German Cockroach Survivorship, Feeding Behavior and Reproduction

JAMORA HAMILTON, Ayako Wada-Katsumata and Coby Schal

NORTH CAROLINA STATE UNIVERSITY

- 10:46-10:56 The Distribution and Agonistic Interactions of the Invasive Dark Rover Ant, *Brachymyrmex patagonicus* Mayr, in South Carolina
DAVID Q. BOWERS and Eric P. Benson
CLEMSON UNIVERSITY
- 10:58-11:08 Evaluation of Backmister® Blower for Barrier Treatments
BENJAMIN McMILLAN, Nicky Gallagher and Sally Paulson
VIRGINIA TECH; Syngenta Crop Science
- 11:10-11:20 What's in a Name? The Importance of Taxonomic Rigor in Managing Invasive Ant Species
JASON L. WILLIAMS and Andrea Lucky
UNIVERSITY OF FLORIDA
- 11:22-11:32 Water Relations of Several Stages of the Asian Cockroach, *Blattella asahinai*
PATRICK J. THOMPSON, Gokhan Benk, Xing P. Hu and Arthur G. Appel
AUBURN UNIVERSITY
- 11:34-11:44 Water Loss and Desiccation Tolerance of Several Stages of the Kudzu Bug, *Megacopta cribraria*
GOKHAN BENK, Patrick J. Thompson, Arthur G. Appel and Xing P. Hu
AUBURN UNIVERSITY
- 11:46-11:56 Knockdown of the Chromatin Remodeling Gene *Brahma* by RNA Interference Reduces Reproductive Fitness and Lifespan in Common Bed Bug (*Hemiptera: Cimicidae*)
SANJAY BASNET and Shripat T. Kamble
UNIVERSITY OF NEBRASKA, LINCOLN
- 12:00-1:15 **Lunch on your own**
- 1:15-2:30 **SUBMITTED PAPERS: BED BUGS
TANGLEWOOD/ PINEHURST/ BLOWING ROCK**
- 1:15-1:30 Impact of Bed Bugs on the Microbial Diversity of Infested Homes
MADHAVI L. KAKUMANU, Zachary C. Devries, Alexis Barbarin, Richard G. Santangelo and Coby Schal
NORTH CAROLINA STATE UNIVERSITY; North Carolina Department of Health and Human Services
- 1:35-1:50 Sex- and Stage-specific Recognition in the Bed Bug, *Cimex lectularius*
AHMED M. SAVEER, Eduardo Hatano and Coby Schal
NORTH CAROLINA STATE UNIVERSITY
- 1:55-2:10 Bed Bugs and Histamine: A Public Health Risk?
ZACHARY C. DeVRIES, Richard G. Santangelo, Alexis Barbarin and Coby Schal
NORTH CAROLINA STATE UNIVERSITY; North Carolina Department of Health and Human Services
- 2:15-2:30 Effects of Color Contrast on Bed Bug Locomotion Behavior
Roselyn Giordano, Changlu Wang and SALEHE ABBAR
RUTGERS UNIVERSITY
- 2:30-3:00 **BREAK**

3:00-5:00 Concurrent sessions:

**SYMPOSIUM: BED BUG RESISTANCE MANAGEMENT
TANGLEWOOD/ PINEHURST**

Organizer: Alvaro Romero, University of New Mexico

- 3:00-3:20 Use of Synergists for Management of Insecticide Resistance in Bed Bugs?
ALVARO ROMERO
NEW MEXICO STATE UNIVERSITY
- 3:20-3:40 Alternative Methods for Bed Bug Control: Do They Play a Role in Insecticide Resistance Management?
A. D. GONDHALEKAR¹, G. M. Bennett¹, A. R. Ashbrook¹, J. Feston² and S. Gaire¹
1 PURDUE UNIVERSITY; 2 Insects Limited
- 3:40-4:00 A Liquid Bait for Bed Bugs?
ZACHARY DEVRIES, Angela Sierras and Coby Schal
NORTH CAROLINA STATE UNIVERSITY
- 4:00-4:20 Residual Efficacy of Several Pesticide Products for Bed Bugs on Contaminated Surfaces
DONG-HWAN CHOE
UNIVERSITY OF CALIFORNIA, RIVERSIDE
- 4:20-4:40 Threshold-based Treatment Strategies for Bed Bugs
CHANGLU WANG, Narinderpal Singh, Chen Zha and Richard Cooper
RUTGERS UNIVERSITY
- 4:40-5:00 Q&A / Discussion

**SYMPOSIUM: TICKS
BLOWING ROCK**

Organizers: Nicky Gallagher and Allie Allen
Syngenta Crop Science; NPMA

- 3:00-3:05 Introduction
NICKY GALLAGHER
SYNGENTA CROP SCIENCE
- 3:05-3:25 Tick Distribution and Burden
CHARLES APPERSON
NORTH CAROLINA STATE UNIVERSITY
- 3:25-3:45 Tick Ecology
EMMA WEEKS
UNIVERSITY OF FLORIDA
- 3:45-4:05 Understanding Repellents: What Homeowners and PMPs Need to Know
JUDI ANDERSON
DEET EDUCATION PROGRAM
- 4:05-4:25 Tick Management Services: Not Just the What, but the Why
GLEN RAMSEY
ROLLINS, INC.
- 4:25-4:45 Working with the Public
HEATHER KOPSCO
UNIVERSITY OF RHODE ISLAND TICKENCOUNTER RESOURCE CENTER
- 4:45-5:00 Questions & Answers

Dinner & evening on your own

8:00-10:30 Pi Chi Omega – Raise the Bar at RallyPoint Sport Grill

TUESDAY, MAY 22

6:30-8:00 **Breakfast (included with hotel registration)**

8:00-10:00 Concurrent sessions

SYMPOSIUM: ASSESSMENT-BASED PEST MGMNT CAMERON/ REYNOLDS

Organizers: Michael Scharf and Dini Miller
Purdue University; Virginia Tech

8:00-8:12 What is APM?

DINI MILLER
VIRGINIA TECH

8:12-8:24 Assessing Pest Manager Knowledge and Performance
FAITH OI

UNIVERSITY OF FLORIDA

8:24-8:36 Bed Bug Monitoring

RICHARD COOPER
COOPER PEST SOLUTIONS

8:36-8:48 Resistance Assessment for Making Pesticide Choices
MICHAEL SCHARF

PURDUE UNIVERSITY

8:48-9:00 Minimum Trap Number and Quick Inspection
Combinations to Determine Bed Bug Building-wide
Infestation Rates

KAREN VAIL
UNIVERSITY OF TENNESSEE, KNOXVILLE

9:00-9:12 The HUD Perspective

RACHEL RILEY
U.S. DEPARTMENT OF HOUSING AND URBAN
DEVELOPMENT

9:12-9:24 Managing Bed Bugs with Ongoing Assessments and
Long-term Contracts

ANDREW SUTHERLAND
U.C. STATEWIDE IPM PROGRAM

9:24-9:36 Pest Risk Assessment in the Urban Environment
GENE WHITE

RENTOKIL STERITECH

9:36-9:48 Challenges that Technicians Face and Perspectives on
How Assessment Can be Priced Into a Contract

NANCY TROYANO
RENTOKIL STERITECH

9:48-10:00 Baiting Recommendations Based on Sampled Pest
Numbers – the Manufacturer's Perspective

NICKY GALLAGHER
SYNGENTA CROP SCIENCE

SYMPOSIUM: URBAN RODENT CONTROL TANGLEWOOD/ PINEHURST

Organizer: Bobby Corrigan
RMC Pest Management Consulting

8:00-8:20 State of The Union on Urban Rodents

ROBERT M. CORRIGAN
RMC PEST MANAGEMENT CONSULTING

8:20-8:40 Population Genetics and Pathogens: Understanding
Movement and Disease in Urban Brown Rats (*Rattus
norvegicus*)

MATTHEW COMBS
FORDHAM UNIVERSITY

- 8:40- 9:00 The Use of Trail Cams in Urban Rodent Pest Management
PHILIP L. SMITH, Friederike M. Bauder, Timothy H. Madere and Claudia Riegel
CITY OF NEW ORLEANS MOSQUITO, TERMITE AND RODENT CONTROL BOARD
- 9:00- 9:20 Early Detection of Rodents Demonstrated with the ActiveSense™ System
JOE DEMARK¹, Phil Smith², Claudia Riegel² and Neil Spomer¹
1 CORTEVA AGRISCIENCE™, AGRICULTURE DIVISION OF DOWDUPONT™; 2 New Orleans Mosquito Termite and Rodent Control Board
- 9:20-9:40 The Use of Dry Ice for Controlling Burrowing Populations of Norway Rats, *Rattus norvegicus* in Urban Environments
SHEILA HADDAD
BELL LABORATORIES
- 9:40-10:00 Field Evaluation of Selontra Soft Bait Rodenticide Against the House Mouse, *Mus musculus*
Grzegorz Buczkowski, Jason Meyers and KYLE JORDAN
Purdue University; BASF P&SS

**SUBMITTED PAPERS: ANTS
BLOWING ROCK**

- 8:00- 8:15 Transcriptomes of MS Fire Ant Larvae and Pupae
MARGARET L. ALLEN
USDA-ARS BIOLOGICAL CONTROL OF PESTS RESEARCH UNIT NBCL
- 8:17- 8:32 Multiplexed Lateral Flow Immunoassay to Discriminate *Solenopsis invicta* from *Solenopsis richteri*
STEVEN M. VALLES and Anne-Marie Callcott
USDA-ARS, IMPORTED FIRE ANT AND HOUSEHOLD INSECTS RESEARCH UNIT, CENTER FOR MEDICAL, AGRICULTURAL AND VETERINARY ENTOMOLOGY; Animal and Plant Health Inspection Service, Plant Protection and Quarantine-APHIS
- 8:34-8:49 Evaluation of Imported Fire Ant Quarantine Treatments in Commercial Grass Sod: Alabama 2016 & 2017
L.C. 'FUDD' GRAHAM, Anne-Marie Call Palmer and Josie Tripi
AUBURN UNIVERSITY; USDA-APHIS-PPQ-CPHST; Alabama Cooperative Extension System
- 8:51-9:06 Why Fire Ant Female Sexuals Mate Only Once
ROBERT VANDER MEER, Tappey Jones and Satya Chinta
USDA/ARS; Virginia Military Institute; Foresight, Science and Technology, Inc.
- 9:08-9:23 The Future of the Federal Imported Fire Ant Quarantine Program
RICHARD N. JOHNSON, Anne Marie Callcott, Melinda Sullivan and Ronald Weeks
USDA, ANIMAL AND PLANT HEALTH INSPECTION SERVICE, PLANT PROTECTION AND QUARANTINE

9:25-9:40 Improving Federal Imported Fire Ant Quarantine Treatments: Tracking Water and Bifenthrin Movement in Soil with Signal™ Green Dye
KARLA ADDESSO¹, Jason Oliver¹, Anthony Witcher¹, Anne-Marie Callcott², Nadeer Youssef¹ and Paul O'Neal¹
1 TENNESSEE STATE UNIVERSITY; 2 USDA-APHIS-PPQ Biloxi Station

9:42-9:57 Improving Federal Imported Fire Ant Quarantine Treatments for Post-harvest Field-grown Nursery Stock
JASON OLIVER, Karla Addesso, Anthony Witcher, Anne-Marie Callcott, Nadeer Youssef and Paul O'Neal
TENNESSEE STATE UNIVERSITY; USDA-APHIS-PPQ Biloxi Station

10:00-10:15 **BREAK**



10:15-12:15 Concurrent sessions:

**SUBMITTED PAPERS: FLIES AND MOSQUITOES
TANGLEWOOD/ PINEHURST**

10:15- 10:30 Fruit Flies as Potential Vectors of Foodborne Illness
S. J. BARCAY, E. P. Black, G. J. Hinrichs and D. B. Gardner
ECOLAB INC.

10:33- 10:48 Texas-Wide *Aedes aegypti* and *Aedes albopictus* Mosquito Surveillance Project
SONJA L. SWIGER, Whitney Qualls and Bethany Bolling
TEXAS A&M AGRILIFE EXTENSION SERVICE; Texas Department of State Health Services

10:51- 11:06 Comparison of Mosquito Species in New York City Over 70 Years
MADDIE PERLMAN-GABEL and Waheed I. Bajwa
NYC DEPARTMENT OF HEALTH AND MENTAL HYGIENE

11:09- 11:24 The Role of *Culex* Species in Transmission of West Nile Virus in New York City
WAHEED BAJWA, Liyang Zhou, Zahir Shah and Gabriela Fonseca
NYC DEPARTMENT OF HEALTH AND MENTAL HYGIENE

11:27- 11:42 Alpine 0.5% Fly Bait: Different But the Same
CHUCK KLEIN, Keena Mullin, Kyle Jordan
BASF Professional & Specialty Solutions

11:45- 12:00 Creating Credentials for Services Targeting Mosquitoes & Other Public Health Pests
ALLISON ALLEN
NPMA

**SUBMITTED PAPERS: ANTS
BLOWING ROCK**

10:15-10:30 Rain, Rain Go Away; Unless Water Resistant Fire Ant Baits are on Display?
DAVID H. OI and Chris Cavanaugh
USDA-ARS CENTER FOR MEDICAL, AGRICULTURAL, & VETERINARY, ENTOMOLOGY; Coachella Valley Mosquito and Vector Control District

- 10:32-10:47 Ant-Microbe Interactions: A Focus on Yeast Associates
MARK E MANKOWSKI and Jeffery J. Morrell
USDA FOREST SERVICE FOREST PRODUCTS
LABORATORY
- 10:49- 11:04 Supercolony Formation in Invasive Populations of the
Tawny Crazy Ant *Nylanderia fulva*
EDWARD L. VARGO¹, Bryant McDowell¹, DeWayne
Shoemaker², Robert Puckett¹, Luis
Calcaterra³ and Pierre-André Eyer¹
1 TEXAS A&M UNIVERSITY; 2 University of
Tennessee, Knoxville; 3 Fundación para el Estudio de
Especies Invasivas, Argentina
- 11:06- 11:21 Let's Get the Info Out About the Crazies (Tawny Crazy
Ants, That Is)...Stakeholder Resources Now Available!
KELLY PALMER, L.C. "Fudd" Graham and Jeremy
Pickens
ALABAMA COOPERATIVE EXTENSION SYSTEM;
Auburn University
- 11:23- 11:38 Establishment of a New Invasive Ant Species,
Plagiolepis alluaudi, in Florida
JOHNALYN GORDON and Thomas Chouvenec
UNIVERSITY OF FLORIDA
- 11:40- 11:55 How Citizen Science Can Benefit Invasion Science?
ANDREA LUCKY, Rob Dunn and Tyler Vitone
UNIVERSITY OF FLORIDA
- 11:57- 12:12 Confirmation of *Tapinoma sessile* Clades in Knoxville
Using a Novel and Cost-efficient Assay
Geordan Hall, Jennifer Chandler, Rebecca Trout
Fryxell and KAREN VAIL
UNIVERSITY OF TENNESSEE, KNOXVILLE

12:15-1:45 **AWARDS LUNCHEON**
CHIMNEY ROCK



1:45-3:15 Concurrent sessions:

**SUBMITTED PAPERS: COCKROACHES & TERMITES
BLOWING ROCK**

- 1:45- 2:00 German Cockroach Aggregation is Mediated by Gut
Bacteria
AYAKO WADA-KATSUMATA and Coby Schal
NORTH CAROLINA STATE UNIVERSITY
- 2:03-2:18 The Role of the Gut Microbiota in the Reproductive Life
History of the German Cockroach
JOSE E. PIETRI and Dangsheng Liang
APEX BAIT TECHNOLOGIES, INC.
- 2:21- 2:36 A New Borate Based Dual Active Cockroach Bait
REID IPSEY
NISUS CORPORATION
- 2:39-2:54 Assessing Residents' Attitudes toward German
Cockroach Infestations in Apartment Buildings
CHANGLU WANG, Amanda Eiden, Chen Zha and
Richard Cooper
RUTGERS UNIVERSITY
- 2:57- 3:15 Molecular Insights Into Invasive Subterranean Termites
(*Heterotermes*, *Coptotermes*) in the Caribbean Region
SUSAN C. JONES and Tyler D. Eaton
THE OHIO STATE UNIVERSITY

**SUBMITTED PAPERS: ADDITIONAL TOPICS
TANGLEWOOD/ PINEHURST**

- 1:45- 2:00 Direct Treatment and Residual Efficacy of Fendona TM CS Insecticide on Striped Bark Scorpions, *Centruroides vittatus* (Say)
ROBERT DAVIS and Matthew Lee
BASF P&SS; Entomology Consultants, LLC
- 2:03- 2:18 Novel Strategies to Explore Insect Attractants and Repellents
EDUARDO HATANO, Ayako Wada-Katsumata, Ahmed M. Saveer and Coby Schal
NORTH CAROLINA STATE UNIVERSITY
- 2:21- 2:36 Two Hands-on Training Facilities for Pest Management Professionals in Texas
MICHAEL MERCHANT and Robert Puckett
TEXAS A&M AGRILIFE EXTENSION SERVICE
- 2:39-2:54 The Synergy of Adulticides with IGRs Against Cat Fleas
MICHAEL K. RUST and W.L.H. Hemsarth
UNIVERSITY OF CALIFORNIA, RIVERSIDE; Hartz Mountain Inc.
- 2:39-2:54 Need Resources—We've Got 'Em
JANET HURLEY
TEXAS A&M AGRILIFE EXTENSION SERVICE
- 2:57- 3:15 The Lesser Mealworm, Darkling Beetle RNA Sequencing and RNA Interference
JINGJING XU, Sharath Chandra and Subba Reddy Palli
APEX BAIT TECHNOLOGIES, INC; University of Kentucky

3:15-3:30 **BREAK**

**SYMPOSIUM: MILLENNIAL COCKROACH MGMNT
BLOWING ROCK**

- Organizer: Chris Keefer, Syngenta Crop Science
- 3:30- 3:35 Opening Statements
CHRIS KEEFER
SYNGENTA CROP SCIENCE
- 3:35- 3:50 A Historical Perspective: Aspects of Resistance Management in German Cockroaches
WILLIAM A. DONAHUE, JR.
SIERRA RESEARCH LABORATORIES, INC.
- 3:50- 4:05 The X Factor, What are We Missing in German Cockroach Management in Commercial Kitchens?
JUDY BLACK
RENTOKIL STERITECH
- 4:05- 4:20 Nutrients as Deterrents in Cockroach Baits
COBY SCHAL, Ayako Wada-Katsumata and Jules Silverman
NORTH CAROLINA STATE UNIVERSITY
- 4:20- 4:35 Symposium Break
- 4:35- 4:50 Industry Perspective on Resistance and Aversion Programs for Cockroach Management
JASON MEYERS
BASF Professional & Specialty Solutions
- 4:50- 5:05 Insecticide Application Strategies for Cockroach Management: Not A Simple Subject
ROBERT PUCKETT
TEXAS A&M AGRILIFE EXTENSION SERVICE

- 5:05- 5:20 Stubby, Precocious, and Sterile? Overcoming IGR Inhibition in Pest Control Technicians
TIM HUSEN
ROLLINS INC.
- 5:20- 5:25 Closing Statements
CHRIS KEEFER
SYNGENTA CROP SCIENCE

SYMPOSIUM: REAL-WORLD APPLICATIONS OF MOLECULAR RESEARCH IN URBAN ENTOMOLOGY TANGLEWOOD/ PINEHURST

Organizers: Ameya D. Gondhalekar and Shripat T. Kamble

- 3:30- 3:47 Purdue University; University of Nebraska, Lincoln
Molecular Responses of the Termite Gut to Toxic Wood Diets
MICHAEL SCHARF
PURDUE UNIVERSITY
- 3:47- 4:04 Use of a Biodegradable Hydrogel to Deliver Aqueous Bait to Control Argentine Ants (*Hymenoptera: Formicidae*) in Residential Settings
JIA-WEI TAY, Mark Hoddle, Ashok Mulchandani, and Dong-Hwan Choe
UNIVERSITY OF CALIFORNIA, RIVERSIDE
- 4:04- 4:21 RNAi for Urban Pest Control
SUBBA REDDY PALLI
UNIVERSITY OF KENTUCKY
- 4:21- 4:38 RNAi Mediated Knockdown of V-ATPases in Bed Bug Decreases Reproduction and Survival
SANJAY BASNET and Shripat Kamble
UNIVERSITY OF NEBRASKA, LINCOLN
- 4:38- 4:55 Unravelling the Invasion Dynamics of the Bed Bug Using Molecular Tools
WARREN BOOTH¹, Christopher Lawrence¹, Gage Holleman¹, Ondrej Balvin², Grant Robison¹, Zachary DeVries³, Ed Vargo⁴ and Coby Schal³
1University of Tulsa; 2 Charles University in Pargue; 3North Carolina State University; 4 Texas A&M University
- 4:55- 5:12 Management of Insecticide Resistance in German Cockroaches (*Blattella germanica* (L.))
MAHSA FARDISI, Ameya Gondhalekar, Aaron Ashbrook, Zachery Wolfe and Michael Scharf
PURDUE UNIVERSITY

5:12- 5:30 Q&A / Discussion

3:30-5:30 **Fire Ant eXtension Meeting**
CAPE HATTERAS

6:00 Buses depart hotel for NC Museum of Natural Sciences
9:30 Buses depart museum for hotel



WEDNESDAY, MAY 23

6:30-8:00 **Breakfast (included with hotel registration)**

8:00-10:00 Concurrent sessions:

SYMPOSIUM: POLICY WORK GROUPS TANGLEWOOD/ PINEHURST

Organizer: Kyle Jordan, BASF P&SS

8:00- 9:00 Federal Discussion

- 9:00- 10:00 Break Out Working Groups:
Rodent Policy
Bed Bug Testing Guidelines
Others as needed

**SUBMITTED PAPERS: TERMITES
BLOWING ROCK**

- 8:00- 8:15 Soil Termiticide Barriers Work as Oral Toxins
BRIAN T. FORSCHLER
UNIVERSITY OF GEORGIA
- 8:18- 8:31 Termidor® HP11: Treat Today Like Tomorrow
FREDER MEDINA, Robert Hickman, Robert Davis,
Jason Meyers, Kyle Jordan, Barry Furman and Joe
Schuh
BASF Professional & Specialty Solutions
- 8:34- 8:49 Colony-level Effects of Liquid Termiticides and Baits on
Subterranean Termites
THOMAS CHOUVENC
UNIVERSITY OF FLORIDA
- 8:52- 9:07 Building Out Bugs: How the Use of New Building
Materials Leads to Sustainable Pest Control
CASSIE S. KREJCI and Roger E. Gold
POLYGUARD BARRIER SYSTEMS; Texas A&M
University
- 9:10- 9:25 Identification of a Queen and King Recognition
Pheromone in the Subterranean Termite,
Reticulitermes flavipes
COLIN FUNARO, Katalin Böröczky, Edward L. Vargo
and Coby Schal
NORTH CAROLINA STATE UNIVERSITY;
Pennsylvania State University; Texas A&M University;
North Carolina State University
- 9:28- 9:43 Efficacy of Trelona® Compressed Termite Bait for
Area-wide Control of Subterranean Termites in Historic
Buildings in Mobile, AL
CARRIE COTTONE¹, Kyle Jordan², Bob Hickman² and
Claudia Riegel¹
1 CITY OF NEW ORLEANS MOSQUITO, TERMITE
AND RODENT CONTROL BOARD; 2 BASF
Professional & Specialty Solutions
- 9:45- 10:00 The National Pest Management Association's Tiny
Termite House Project
ED FREYTAG¹, Shaun Broadley¹, Jack Leonard¹, Jim
Fredericks², Jessica Phelan³, Patricia Stofanak³,
Danielle Corrato³, Amanda Polyak³, Logan Yu³, Sara
Deviva³, Felicia Schwarz³, Cindy Mannes⁴ and Claudia
Riegel¹
1 NEW ORLEANS MOSQUITO, TERMITE AND
RODENT CONTROL BOARD; 2 National Pest
Management Association; 3 Vault Communications; 4
Professional Pest Management Alliance
- 10:00-10:30 **BREAK/CHECK OUT**
- 10:30-11:30 **FINAL BUSINESS MEETING**
CAPE HATTERAS
- 11:30-12:00 **EXECUTIVE COMMITTEE BUSINESS MEETING**
CAPE HATTERAS

**MARK YOUR CALENDARS FOR THE NEXT NCUE!
MAY 2020 IN MOBILE, AL**

Past Recipients of the Distinguished Achievement Award in Urban Entomology

1986	Walter Ebeling, James Grayson
1988	John V. Osmun, Eugene Wood
1990	Francis W. Leichleitner
1992	Charles G. Wright
1994	Roger D. Akre, Harry B. Moore, Mary H. Ross
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2014	Jules Silverman
2016	John Klotz
2018	Brian Forschler

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1990	Michael K. Rust
1992	Gary W. Bennett
1994	Roger E. Gold, Judy K. Bertholf
1996	Donald A. Reiersen
1998	Brian T. Forschler, Shripat Kamble
2000	Shripat Kamble
2004	Daniel R. Suiter
2006	Dini Miller, Robert Kopanic
2008	Richard Houseman, Bob Cartwright
2010	Karen Vail
2012	Faith Oi
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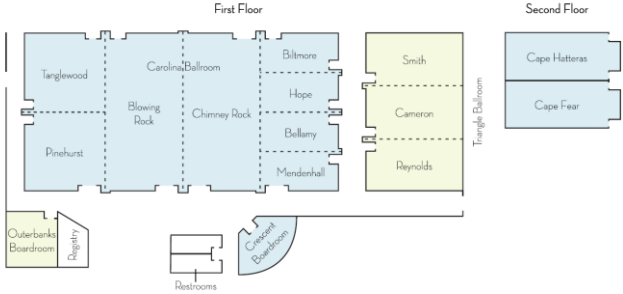
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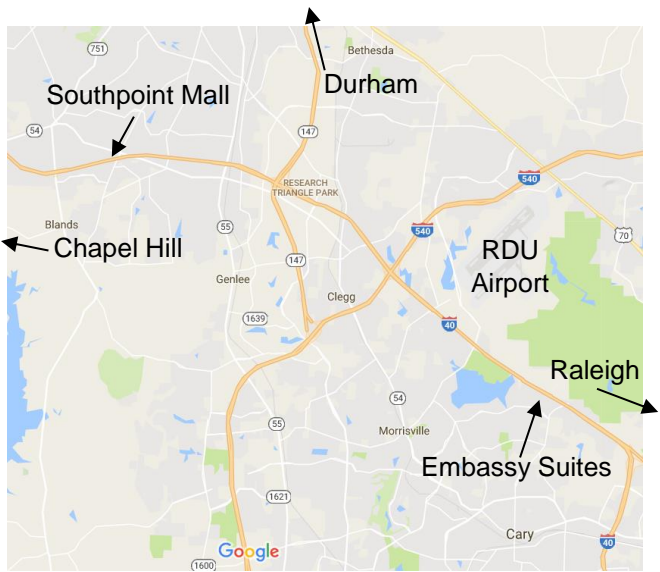
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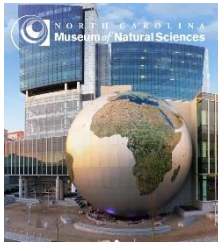
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