

*Auburn University College of Agriculture*

# PLANTS, INSECTS AND MICROBES SYMPOSIUM

**MAY 20, 2025**  
**AUBURN, AL**

---

*Academic Classroom and  
Laboratory Complex (ACLC)*

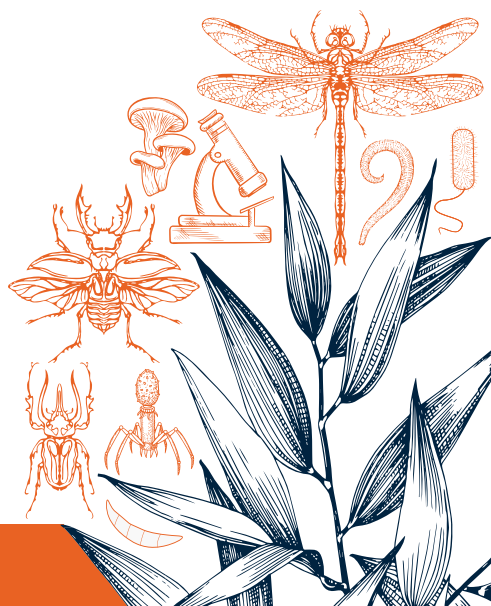
**Room Information**

*ACLC 012: Oral Presentations  
ACLC 202 & 208: Posters*



**AUBURN**

Entomology and Plant Pathology



# 2025 | AGENDA

---

**7:30-8:00 am** Collect your registration badge, set up presentations, posters and grab coffee and breakfast  
Judges check-in with the Symposium Planning Committee

**8:00-8:10 am** Welcome by Dr. Neha Potnis and Introductory remarks by Dr. David Held

**8:10-8:50 am** **KEYNOTE: Dr. Clare Casteel**  
(*ACLC012*) Microbial remodeling of plant-insect interactions

*Session I* *Oral Presentations*  
(*ACLC012*)

- 8:55-10:10 am**
- O-1 | Rachel M. Livingston** A novel system for virus-induced gene silencing in cotton with CLRDV
  - O-2 | Zimo Yang** Predicting the phenology of herbivorous insects
  - O-3 | Amanpreet Kaur** Pathogens on the prowl: Do abiotic stress-driven changes help pathogens exploit and overcome disease resistance more rapidly?
  - O-4 | Darmon A. Kahvazadeh** What good are soldiers during peacetime? Foraging efficiency of fire ant soldiers
  - O-5 | Jennifer M. Standley** Common floral forage found in the Southeastern United States and their biometric effects on the western honeybee
  - O-6 | Madelyn G. Thompson** Evaluating best fall management practices of pollinator plantings in Southeastern agriculture systems
  - O-7 | Kyle Oswalt** Transcriptomic discovery of RNAi targets for sex-specific and lethal gene silencing in the poultry pest *Alphitobius diaperinus*

**10:10 -10:30 am** Coffee/tea break

## Session II      Oral Presentations

(ACLC012)

- 10:30-11:50 am**      **O-8 | Maxwell L. Cavassa** In-furrow insecticide persistence and effects on peanuts and cotton in Southeast Alabama
- O-9 | Nicholas Wagner** Method development for use of synthetic tomato xylem to study biofilm formation of the plant pathogen *Ralstonia pseudosolanacearum*
- O-10 | Ivy N. Thweatt** Exploring the role of rhizosphere microbiome in hemp plant growth and defense against two-spotted spider mites
- O-11 | Ashmita Sapkota** Optimizing gel bait toxicity for all developmental stages of American Cockroach (*Periplaneta americana*) (Blattodea: Blattellidae): The role of competitive food availability
- O-12 | Mamata K C** Xylem sap-mediated growth and biofilm formation of *Xylella fastidiosa* and its potential role in host adaptation and virulence
- O-13 | Dylan Brown** Mechanisms and management: Impact of alternating insecticide selection in *Aedes aegypti*
- O-14 | Logan Luchs** From seed to shining seedling: The soil steaming effects on spermosphere assembly and plant health

**12:00-1:00 pm**      Lunch at The Edge Dining Hall

**1:10-1:50 pm**      **KEYNOTE: Dr. Brock Harpur**  
(ACLC012)      The life and death of recessive mutations as seen through the eyes of a honeybee

## Session III      Oral Presentations

(ACLC012)

- 1:55 – 3:00 pm**      **O-15 | Palash Ghosh** The hidden arsenal: How *Xanthomonas perforans* wields T6SS for survival and defense
- O-16 | Elijah Carroll** Stable pair coordination enables change in the order of mating behavior sequence in a termite
- O-17 | Erica Maul** How honeybees process dead mice in the nest
- O-18 | Morgan Bragg** Monitoring cotton soilborne seedling diseases through metabarcoding and shotgun metagenomics
- O-19 | Anthony W. Cuminale** Field edges as refuges: Conserving ground-nesting wasps in tilled landscapes
- O-20 | Dan Aurell** Environmental DNA as a detection approach for *Tropilaelaps* mites, invasive honeybee mites of global concern

## Session IV      Poster Presentations

(ACLC012)

**3:05-4:05pm**      Odd-numbered posters  
(ACLC202 & 208)

**4:05-5:05 pm**      Even-numbered posters  
(ACLC202 & 208)

**5:30-7:30 pm**      Awards ceremony at the Collegiate Hotel    205 S Gay St, Auburn, AL

# 2025 | SPONSORS

**Platinum level sponsor:**



---

**Bronze level sponsors:**

**eppendorf**

**Alabama**  
Peanut Producers Association



**avantor™**