



MISSISSIPPI STATE UNIVERSITY™

DEPARTMENT OF AGRICULTURAL SCIENCE AND PLANT PROTECTION

PhD Graduate Research Assistant – Applied Insect Ecology

The Insect Ecology Lab at Mississippi State University seeks a motivated graduate student to pursue a PhD in Life Sciences with a concentration in Entomology, focusing on applied insect ecology. The lab investigates the ecology, behavior, and population dynamics of agriculturally and ecologically significant insects through laboratory and field research. We emphasize independent, student-driven projects within a supportive and collaborative environment and are committed to mentoring students to achieve their full potential while encouraging initiative, creativity, and professional growth.

Project Themes: The lab's flagship project focuses on the population ecology of the fall armyworm (*Spodoptera frugiperda*), examining strain-level variation in dispersal, host use, and responses to management. Students may also pursue independent projects in other insect systems exploring population, behavioral, and dispersal ecology; host interactions and nutritional ecology; natural enemy and beneficial insect dynamics; pathogen–host interactions; and/or field population dynamics of invasive or emerging pests. Projects can incorporate laboratory, field, and molecular or analytical approaches depending on student interests.

Qualifications: We are seeking a highly motivated, enthusiastic, and self-directed student with a strong interest in applied insect ecology. Successful candidates will take ownership of their research while collaborating effectively with the lab team and external partners. Desired experience includes insect rearing, laboratory and field data collection, molecular or analytical techniques, and quantitative analysis skills. Strong organizational skills, attention to detail, and effective written and oral communication abilities are essential. Students will gain experience in ecological experimentation, colony maintenance, molecular and analytical approaches, and quantitative data analysis, with opportunities to present and publish results.

Funding and Support: Funding is guaranteed for three years and includes tuition, a competitive stipend, and health insurance. **The expected start date is August 1, 2026.**

About the Department: The Department of Agricultural Science and Plant Protection brings together entomologists, plant pathologists, and weed scientists in a collaborative, interdisciplinary environment. Faculty and students engage in applied and fundamental research across diverse insect and plant systems. The department has a strong legacy of entomological excellence and prepares students for careers in academia, extension, and industry.

Location: Starkville offers abundant outdoor recreation, a lively student community, local restaurants and festivals, and was voted the “Best Small Southern Town” by USA Today in 2024 & 2025.

To Apply: Review of applications begins **February 13, 2026**, and will continue until the position is filled. Submit the following to acm1161@msstate.edu:

- CV
- Brief statement of research interests
- Transcripts
- Contact information for three references

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