

ASSESSING INSECT PEST EFFECTS ON YIELD AND ROI OF PEST CONTROL INPUTS

PROJECT SUMMARY

This multi-year project aims to identify the insect pests affecting Illinois soybean crops, their impact on soybean yield and the return on investment of control mechanisms. It will help determine threshold levels for insect pests responsible for reducing grain quality and yield, as well as develop integrated pest management recommendations.

QUESTIONS THIS PROJECT WILL ADDRESS

- ① Which insect pests cause economic yield loss in soybean fields?
- ① What are the economic threshold levels to make a foliar insecticide application?
- ① How do soil insects impact soybean yield?
- ① Under what conditions do insecticide seed treatments provide a return on investment?

WHY THIS RESEARCH IS IMPORTANT

- ⚠ There is little research data about which insect pests are present in soybean fields, how they impact soybean yield, and at what infestation levels they cause economic damage.
- ⚠ Likewise, there is little research about the economic return of pest control tools, such as insecticide seed treatments and foliar insecticide applications.

HOW THIS RESEARCH BENEFITS THE FARMER

- 🎯 Farmers will gain valuable data about which insect pests are causing yield loss in Illinois soybean fields and how often insecticide applications provide a positive return on investment.
- 🎯 The information will help guide insect management recommendations provided by university and extension personnel.

ABOUT THE LEAD RESEARCHER

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Dr. Seiter is dedicated to helping Illinois' farmers more effectively and economically manage insect pests. His research focus includes developing decision-making tools, identifying natural enemies of insect pests, and assessing the effectiveness of insect control methods, as well as their fit within integrated management programs. He hopes to provide farmers with reliable guidance to address the unpredictable nature of pest management year-to-year and field-to-field across Illinois. To unwind, he and his wife enjoy hiking and recently checked off Sedona from their bucket list.

RESEARCH TEAM

- **Ashley Decker**, Senior Research Specialist, UIUC

TRIAL LOCATIONS

- **University of Illinois Urbana-Champaign and Illinois Extension field research centers:**
 - Champaign/Urbana, Monmouth, Ewing, Baylis
- **4 farmer fields throughout Illinois**
- **If you are a farmer or landowner interested in participating in this study, contact Dr. Nick Seiter**



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See updates and learn more about this project, the research team and other projects at ILSoyAdvisor.com and [@ILSoyAdvisor](https://www.facebook.com/ILSoyAdvisor) on Facebook and X.

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