



HOW DO ENVIRONMENTAL FACTORS IMPACT GLUFOSINATE EFFICACY AGAINST WATERHEMP, AND HOW CAN I MITIGATE THOSE CHALLENGES?

INFORMATIONAL SHEET

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IMPROVING EFFICACY AND SUSTAINABILITY OF GLUFOSINATE FOR WATERHEMP MANAGEMENT

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PROJECT SUMMARY

There have been reports over the past three growing seasons of sub-par waterhemp control from glufosinate in soybeans. This project will dig into how environmental factors, such as humidity, temperature and light intensity, interact with time of application and impact glufosinate efficacy. Researchers will also investigate the resistance mechanism with the goal of developing a rapid resistance diagnostic test, similar to those developed for glyphosate and Group 14 herbicides.

TRIAL LOCATIONS



WHY THIS RESEARCH IS IMPORTANT

- Waterhemp has developed documented resistance to nearly all herbicide modes of action, except Group 9 of which glufosinate is a member. Nearly all other herbicides have been deemed ineffective, and there are no new postemergence herbicides in the industry pipeline near commercial-ready.
- There are reports and samples submitted of waterhemp populations exhibiting poor control following glufosinate applications. Oftentimes environmental conditions play a role in glufosinate performance.

HOW THIS RESEARCH BENEFITS THE FARMER

- Understanding the environmental factors that reduce glufosinate efficacy will enable farmers to make applications in optimal conditions to bolster the ability of glufosinate to control waterhemp populations.



CHECK OUT FIELD ADVISOR!

See updates and learn more about this project, the research team and other projects at FieldAdvisor.org.

Contact the ISA agronomy team: agronomy-team@ilsoy.org.

