



WHICH PREEMERGENCE HERBICIDES ARE MORE LIKELY TO CAUSE CROP INJURY WHEN SOYBEANS ARE PLANTED EARLY?

INFORMATIONAL SHEET

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INJURY POTENTIAL TO VERY-EARLY PLANTED SOYBEANS FROM VARIOUS SOIL RESIDUAL HERBICIDES/ACTIVE INGREDIENTS

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PROJECT SUMMARY

Planting soybeans early often means cold, wet soil conditions that can delay seed germination and prolong plant emergence. These conditions can reduce the plant's ability to metabolize preemergence (PRE) herbicides, resulting in crop injury. This project is testing several herbicides and classes of chemistry to better understand which are more prone to cause crop injury under early planting conditions.

TRIAL LOCATIONS



WHY THIS RESEARCH IS IMPORTANT

- ⚠ The lure of potential yield increases combined with changes and advances in seed treatments, varieties, equipment and climate are spurring more farmers into planting soybeans weeks earlier than historical average planting dates.
- ⚠ However, several variables can contribute to crop injury and sabotage the quest for higher yield. Cold, wet soil conditions often delay soybean seed germination and prolong seedling emergence. These conditions not only increase the length of exposure to PRE herbicides, but they also can reduce the soybean plant's ability to metabolize the herbicide, both of which increase crop injury potential.

HOW THIS RESEARCH BENEFITS THE FARMER

- 🎯 Farmers will have access to crop injury ratings for common PRE herbicides to better inform their weed management decisions when planting soybeans earlier than the norm.
- 🎯 Insights from this research will influence additional research with very-early planted soybeans, such as including a cover crop, soybean row spacing for optimal weed control, etc.



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.



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