



HOW CAN GENETIC ENGINEERING BE USED TO HELP MANAGE SCN POPULATIONS?

INFORMATIONAL SHEET

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Project Status: NEW

GENETIC ENGINEERING METHODS FOR GENETIC CONTROL OF SOYBEAN CYST NEMATODE

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PROJECT SUMMARY

This project aims to use genetic engineering to impede soybean cyst nematode (SCN) reproduction and survival. Researchers will explore several methods and strategies, such as using CRISPR gene editing which has been used to create sterile male mosquito populations, and test in a controlled laboratory setting to identify the most viable option(s).

TRIAL LOCATIONS



WHY THIS RESEARCH IS IMPORTANT

- SCN cause substantial soybean yield loss each year, resulting in it being rated the top threat to U.S. soybean production. Effectiveness of varietal resistance is decreasing due to SCN's ability to overcome the resistance, and nematicides offer varying levels of defense.

HOW THIS RESEARCH BENEFITS THE FARMER

- Farmers would have an additional tool to lessen the impact of SCN on their soybean crops. Developing transgenic or genome-edited nematodes farmers can release into their fields may allow the control of SCN reproduction.



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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