

Understanding and managing soybean stem canker

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Overview of project objectives

In 2014, soybean stem canker was frequently observed and mentioned as the second most prevalent disease in the North Central region, behind SDS (NCERA137 reports). Before soybean farmers can effectively manage stem canker, researchers need to understand more about the disease and the causal fungi. This research project will help to increase understanding and importance of diseases such as stem canker caused by Diaporthe species. Results will be communicated with farmers, agribusinesses and other soybean stakeholders.

Key results

Diaporthe species that cause diseases, like stem canker or pod and stem blight, are diverse. This project helped capture the diversity of species to better direct breeding efforts.

Researchers determined that chemical products tested in this research do not seem to offer a positive return on investment, when Diaporthe-induced diseases are the main goal of control. This means that resistant varieties of soybean will continue to be the primary basis of management for diseases like stem canker or pod and stem blight.

Benefit to farmers

This project will directly benefit soybean farmers in the North Central region by providing them a better understanding of the impact of stem canker, which has seen a dramatic increase in importance the past several years. Project results will allow farmers to more accurately apply the appropriate management techniques to maximize return on investment when trying to control stem canker and other related diseases.

Links

<u>Improving our understanding of stem canker and how to manage it in soybean across the Midwest</u>

USB National Soybean Checkoff Research Database

Crop Protection Network webpages

Fact sheets:

https://cropprotectionnetwork.org/download/2564/ https://cropprotectionnetwork.org/download/2606/ https://cropprotectionnetwork.org/download/2560/