



North Central Soybean Research Program

Disease Study Group: Focus on new and emerging soybean diseases

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Changes in crop production practices and environment impact disease severity and prevalence each year. Many diseases are sporadic, new, or emerging in the North Central Region and are concerning to farmers due to the lack of Extension information available when outbreaks occur. In a traditional system, research is conducted and Extension materials are developed and disseminated at the end of the project. This creates a "gap" in industry and farmer awareness for emerging diseases, and prevents stakeholders from obtaining the most current information about emerging issues until research projects can be completed.

It is critical to provide stakeholders with information to prevent unwarranted management practices, and improve awareness of disease. The main goal of this project is to identify emerging diseases, compile available resources and create Extension materials to provide information to farmers.

Project Objectives

- Provide information on emerging diseases at multiple levels of Extension interface (print, web, video, etc.) to reach diverse groups of stakeholders;
- Create a platform to host and brand Extension material developed in conjunction with the North Central Soybean Research Program to facilitate updates and allow users to identify trusted sources of material through this branding partnership; and
- Provide current research summaries on emerging diseases to direct and coordinate future research priorities thereby minimizing duplication, maximizing resources and increasing response time.

Reporting Period Accomplishments

March 2016

In the three years of the project, the group has developed several types of publications: full-length publications that serve as a reference for a particular disease/disorder; a two-page scouting card that contains brief information on a disease that is relevant for scouting and identifying disease in a field, and a one-

page factsheet that is focused on a research update for a specific topic. This effort has resulted in the development and/or revision of 13 total publications, which have been printed or downloaded over 68,000 times. Publications are available to stakeholders via state Extension programs and the Soybean Research & Information Initiative (SRII) website. In addition, this publication series won the 2015 American Society of Agronomy Outstanding Extension Education Materials Award for Publications >16 pages for *Soybean Disease Management Series*

Several videos have been developed, which are also available on the SRII website and the group aims to increase the awareness of these resources through press releases, meetings with industry, and a booth at the Commodity Classic. The group has leveraged approximately \$45,000 in additional support to create and distribute both publications and video outputs.

In 2016 we hope to improve the visibility of these outputs on SRII and with other stakeholder groups. We will also develop additional publications on important soybean diseases and continue to update and revise publications in this series.

October 2016

The group created one new publication this summer, "Soybean zone lines: Fact and Fiction" to help farmers distinguish between symptoms of Diaporthe diseases and charcoal rot. This was released via web, print, and the SRII website. The group also identified frogeye leaf spot as a disease that needs updated information and will meet from October 2-4 to create publications and outputs focused on frogeye leaf spot and fungicide use in soybean.

April 2017

The two most recent publications developed by this group, "Frogeye Leaf Spot", and "Frequently Asked Questions about Fungicide Resistance," were distributed and promoted at winter Extension meetings. Over 27,000 print copies of these publications were distributed across the North Central States and Ontario, Canada. Additional publications were requested from the southern states of Alabama, Kentucky, Mississippi, and Tennessee.

The group is currently planning a meeting to develop our next set of publications and will begin working to edit SRII content in the next quarter.