

EFFECTS OF FUNGICIDE AND PLANTING DATE ON SOYBEAN YIELD

TRIAL OVERVIEW

· In many cases, a foliar fungicide application can protect soybean plant health and help maintain the yield potential of the product.

RESEARCH OBJECTIVE

• The objective of this trial is to help determine the effect of a foliar fungicide application on soybean yield potential with respect to planting date.

Location	Soil	Previous Crop	Tillage Type	Planting Date	Harvest Date	Potential Yield/Acre	Planting Rate/Acre
Monmouth, IL	Silt Loam	Corn	Conventional	04/25/2017	10/18/2017	70 bu/acre	130,000 seeds/acre
Monmouth, IL	Silt Loam	Corn	Conventional	05/30/2017	10/18/2017	70 bu/acre	130,000 seeds/acre

SITE NOTES:

- The trial used a 3.6 RM soybean product with Roundup Ready 2 Xtend® technology.
- The trial was replicated twice.
- Two planting dates:
 - April 25, 2017
 - May 30, 2017
- Foliar fungicide application dates depended on the plants reaching the R3 growth stage:
 - April 25 planting date was sprayed on July 20, 2017
 - May 30 planting date was sprayed on August 7, 2017

UNDERSTANDING THE RESULTS

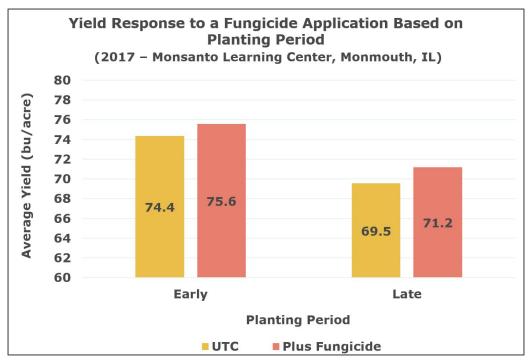


Figure 1. Yield response to a fungicide application based on planting period (2017 - Monsanto Learning Center, Monmouth, IL)

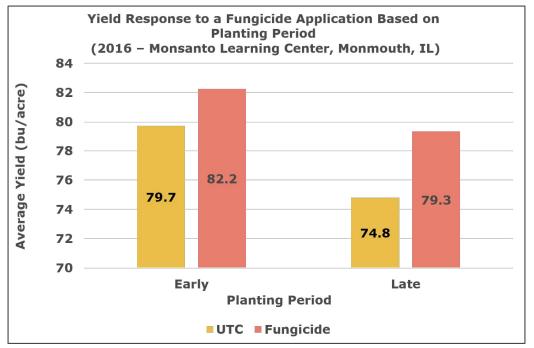


Figure 2. Yield response to a fungicide application based on planting period (2016 - Monsanto Learning Center, Monmouth, IL).

- A fungicide application showed little effect on soybean yield in 2017 (Figure 1).
- The early planting led to a substantial advantage over the late planting in 2017 (Figure 1).
- A very low disease incidence occurred in 2017 because of cooler and drier than normal conditions.
- In years such as 2016, when disease incidence was higher, a fungicide application can do more to protect yield potential (Figure 2).

WHAT DOES THIS MEAN FOR YOUR FARM?

- The benefit of fungicide applications will vary from year to year.
- Scouting regularly is the recommended way to determine if a fungicide application can be beneficial.
- Over the majority of years, early-planted soybean crops tend to out-perform later-planted crops fairly consistently.
- Early planting assumes that the soil and weather conditions are suitable for seedbed preparation and seed germination.
- Individual fungicide application results may vary based on disease presence. Consult your local seed provider for recommendations.

SOURCES

1 Fungicide response and planting date in soybean. 2016. Demonstration Report. Monsanto Learning Center at Monmouth, IL.

https://monsanto.com/app/uploads/2017/05/fungicide-response-planting-date-soybean.pdf.

 $2\,Fungicide\,application\,yield\,response\,by\,soybean\,planting\,dates.\,2015.\,Demonstration\,Report.\,Monsanto\,Learning\,Center\,at\,Monmouth,\,IL\,Monsanto\,Learning\,Center\,at\,Monmouth,\,IL\,Monsanto\,Learning\,Center\,at\,Monmouth,\,IL\,Monsanto\,Learning\,Center\,at\,Monmouth,\,IL\,Monsanto\,Learning\,Center\,at\,Monmouth,\,IL\,Monsanto\,Learning\,Center\,at\,Monmouth,\,IL\,Monsanto\,Learning\,Center\,at\,Monmouth,\,IL\,Monsanto\,Learning\,Center\,at\,Monmouth,\,IL\,Monsanto\,Learning\,Center\,at\,Monmouth,\,IL\,Monsanto\,Learning\,Center\,at\,Monmouth,\,IL\,Monsanto\,Learning\,Center\,at\,Monmouth,\,IL\,Monsanto\,Learning\,Center\,at\,Monmouth,\,IL\,Monsanto\,Learning\,Center\,at\,Monsanto\,Learning\,Center\,at\,Monsanto\,Learning\,Center\,at\,Monsanto\,Learning\,Center\,at\,Monsanto\,Learning\,Center\,at\,Monsanto\,Learning\,Center\,at\,Monsanto\,Learning\,Center\,at\,Monsanto\,Learning\,Center\,at\,Monsanto\,Learning\,Center\,at\,Monsanto\,Learning\,Center\,At\,Mo$

https://monsanto.com/app/uploads/2017/05/fungicide-application-yield-response-by-soybean-planting-dates-mic.pdf. Websites verified 11/9/17. 171107153903

LEGAL STATEMENT

For additional agronomic information, please contact your local brand representative. Developed in partnership with Technology Development & Agronomy by Monsanto. The information discussed in this report is from a single-site demonstration trial. This informational piece is designed to report the results of this demonstration and is not intended to infer any confirmed trends. Please use this information accordingly. Monsanto Company is a member of Excellence Through Stewardship® (ETS). Monsanto products are commercialized in accordance with ETS Product Launch Stewardship Guidance, and in compliance with Monsanto's Policy for Commercialization of Biotechnology-Derived Plant Products in Commodity Crops. This product has been approved for import into key export markets with functioning regulatory systems. Any crop or material produced from this product can only be exported to, or used, processed or sold in countries where all necessary regulatory approvals have been granted. It is a violation of national and international law to move material containing biotech traits across boundaries into nations where import is not permitted. Growers should talk to their grain handler or product purchaser to confirm their buying position for this product. Excellence Through Stewardship® is a registered trademark of Excellence Through Stewardship.

ALWAYS READ AND FOLLOW DIRECTIONS FOR USE ON PESTICIDE LABELING. IT IS A VIOLATION OF FEDERAL AND STATE LAW to use any pesticide product other than in accordance with its labeling. NOT ALL formulations of dicamba or glyphosate are approved for in-crop use with Roundup Ready 2 Xtend® soybeans. ONLY USE FORMULATIONS THAT ARE SPECIFICALLY LABELED FOR SUCH USES AND APPROVED FOR SUCH USE IN THE STATE OF APPLICATION. Contact the U.S. EPA and your state pesticide regulatory agency with any questions about the approval status of dicamba herbicide products for in-crop use with Roundup Ready 2 Xtend® soybeans contains genes that confer tolerance to glyphosate and dicamba. Glyphosate will kill c