

# Evaluation of Effects of Foliar Fungicide, Insecticide or Combination Treatments on Soybean Yield

Eric A. Richer, Ohio State University Extension Educator, Fulton County

## Objective

To evaluate the effect of foliar fungicide, insecticide or combination treatments on soybean yield.

## Background

---

Crop Year: 2013

Location: Lyons, OH

County: Fulton County

Soil Type: Mermill, Haskins, Rimer

Drainage: Systematic 50 ft laterals, 0-2% slope

Previous Crop: Corn

Tillage: Conventional

Planting Date: May 15, 2013

Fertilizer:

Seeding Rate: 185,000 seeds/acre, 15" rows

Herbicide: Authority pre-emerge, glyphosate post

Harvest Date: October 16, 2013

## Methods

This study was arranged in a randomized complete block design with four replications. Treatment plots were roughly 80 feet wide by 2,500 feet long (field length). Treatments were planted with a 1790 JD Planter after light conventional tillage. Seed used was Pioneer 32T80 PR in all treatments. Plots were harvested with a commercial combine. Yield measurements were taken with an Insight Ag Leader monitor.

### Treatments

- 1) 9 oz/ac Aproach fungicide at R1 (one pass)
- 2) 9 oz/ac Aproach fungicide at R1 and 9 oz/ac Aproach at R3, 7-10 days later (two passes)
- 3) 9 oz/ac Aproach fungicide and 8 oz/ac Asana insecticide at R1 (one pass)
- 4) 8 oz/ac Asana insecticide at R1 (one pass)
- 5) Untreated (no fungicide/no insecticide application)

## Results

Table 1. Mean Yield (bu/ac) in Response to Foliar Fungicide & Insecticide applications on soybean

Treatment	Yield (bu/ac)
Aproach fungicide (one pass)	64.8
Aproach fungicide (two pass)	66.0
Aproach fungicide + Asana insecticide (one pass)	66.3
Asana insecticide (one pass)	65.1
Untreated check	63.3

LSD (0.05) 1.45; CV 1.44; P value  $\leq$  0.01

Yes, significant difference between treatments.

## Summary

The research was found to show a statistically significant difference in grain yield among the untreated check and both the two pass fungicide treatment (+2.7 bushels per acre) and the fungicide plus insecticide treatment (+3.0 bushels per acre). Further data in the form of multi-year replications will add to the validity of these results.

## Acknowledgement

The author expresses appreciation to L & L Farms as the cooperating landowners and for crop management. Thanks also to DuPont Pioneer for product used in the plot and the Ohio Soybean Council for providing funding to conduct this research.



**THE OHIO STATE UNIVERSITY**

For more information, contact:  
Eric Richer  
OSU Extension – Fulton County  
8770 State Route 108  
Wauseon, OH 43567  
Richer.5@osu.edu