

Evaluation of Foliar Products on Soybean Yields

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Objective

To evaluate various inputs on soybean yield and net income.

Background

Cooperator:	O.A.R.D.C. NW Branch	Variety:	Wellman 4024
County:	Wood	Planting Date:	5-31-10
Nearest Town:	Hoytville	Planting Rate:	180,000 seeds/acre
Drainage:	Tile, well-drained	Row Width:	7.5 in.
Soil type:	Hoytville, clay	Herbicides:	Canopy, 2,4-D Ester, glyphosate, liquid AMS
Tillage:	notill	Harvest Date:	9-30-10
Previous Crop:	corn		

Methods

The entries were replicated four times in a randomized complete block design. Plot size- 10 x 80 feet each entry. Harvest data was collected from the center rows.

All treatments received the same tillage, herbicide, and seeding rate. On July 14, 2010 applications were made to all treatments at growth stage R2- R3.

Foliar Fungicide = Headline at 4.5 oz/ac

Foliar Insecticide = Mustang Max at 2.8 oz/ac

Foliar Fertilizer = Crop Booster (5 % Mn, 2.8% Sulfur) at 1 qt/ac {source–Morrall Chemical Co.}

Table 1. Treatment List

Treatment	Foliar Fungicide	Foliar Insecticide	Foliar Fertilizer
1	none	none	none
2	R 2	none	none
3	none	R2	none
4	none	none	R 2
5	R 2	R2	none
6	none	R2	R 2
7	R 2	none	R 2
8	R 2	R2	R 2

Results

Table 2. Soybean Yields by Treatment

Treatment	Foliar Fungicide	Foliar Insecticide	Foliar Fertilizer	Soybean Yield Bu/ac
1	none	none	none	39.5
2	R 2	none	none	41.3
3	none	R2	none	40.6
4	none	none	R 2	41.4
5	R 2	R2	none	42.0
6	none	R2	R 2	43.0
7	R 2	none	R 2	40.3
8	R 2	R2	R 2	41.2

LSD (0.10) NS

Summary

The study found no significant yield response to the foliar applications. This location did not have significant insect feeding damage or significant foliar disease damage. No root disease was present. In the absence of pest pressure, foliar applications did not have an effect on soybean yield.

Acknowledgement

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Crop Booster foliar fertilizer donated by:

Morrall Companies, LLC
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