

Evaluation of Effects of Foliar Fungicide and Insecticide Applications on Soybean Yields

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Objective

To determine soybean yield response from fungicide and insecticide

Background

Crop Year:	2010	Tillage:	Spring primary & secondary
Location:	Union Twp, Buckeye Lake	Planting Date:	June 16, 2010
County:	Licking County	Seeding Rate:	170,000 seeds/ac 7.5 inch rows
Soil Type:	Pewamo (silty clay loam) Benningtin (silt loam)	Variety:	Seed Consultants SC 9369
Previous Crop:	Soybeans	Herbicide:	1 qt 32% glyphosate
Fertilizer:	200 lbs/acre 0-0-61	Harvest Date:	October 28, 2010

Methods

This study was designed with two treatments and a control replicated three times in a randomized complete block design. The treatments consisted of a non-treated check and two foliar applied treatments. Treatments were:

1. Nontreated control
2. Quadris (10 oz/acre)
3. Quadris (10 oz/acre) + Perm-Up 3.2 EC (3 oz/acre)

The treatments were applied on July 15, 2010 to soybeans in growth stage R2. Applications were applied with 1 quart of glyphosate/acre and water as a carrier. Quadris is a foliar fungicide with an active ingredient Azoxystrobin. Perm-up is a foliar insecticide with an active ingredient Permethrin. Products were tank mixed where multiple products were used. Individual plot sizes were approximately one acre. Application was made by the cooperating farmer.

Insect and disease pressure was not noted during scouting at growth state R2. Yield measurements were made with a calibrated weigh wagon.

Results

Soybean Yield (bu/ac) Response to Fungicide and Insecticide Foliar Application

	Yield (bu/ac)
Non-treated Check	45.7
Quadris (10 oz/ac) rate	46.5
Quadris (10 oz/ac) + Perm-Up (3 oz/ac) rate	47.4
LSD (0.05)	NS
CV %	4.75

Summary

None of the products produced a yield significantly greater than the untreated check. Rainfall in May caused wet field conditions leading to the relatively late planting date.

Acknowledgement

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