Evaluation of Foliar Fertilizer Application on Soybean Yield

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Objective

To determine what affect of foliar fertilizer has on soybean yield.

Background

Crop Year:	2011	Soil Test	pH = 6
Cooperator:	Morrow SWCD/County Home	2011 1000	OM = 3.5%
1	Farm		P = 60 ppm
County/Town:	Morrow/Mt. Gilead		K = 140 ppm
Soil Type:	Centerburg Silt Loam		CEC = 9.9
Drainage:	Random subsurface	Planting Date:	June 2,
Previous Crop:	Corn	Seeding Rate:	210,000 seeds/ac
Variety:	Pioneer 93M42	Row Width:	7.5 inches
Tillage:	No-Till	Herbicide:	June 6, 3.5 oz Canopy and
			1 qt Buccaneer Plus w/Array
		Harvest Date:	November 8

Methods

The study consisted of three replications in a randomized complete block experimental design. One treatment of 14-0-4-0.2Mg was applied on August 2, 2011 at a rate of 2 gal per acre. A non-treated control was also used. The treatments were made with a Case Patriot sprayer using a 90 foot boom. The center 50 feet of each treatment were harvested with an IH 1480 combine and weighed with a weigh wagon. Harvest area did not include wheel tracks. Row length averaged 972 feet. Yields were adjusted to 13% grain moisture.

Results

Soybean Yield (bu/ac) Response to Foliar Fertilizer

Fertilizer	Yield (bu/A)	
Yes	47	
None	48.8	
	NS	

Summary

There was not a significant difference in yields between the treatments. Rainfall for June to October was 2.46 inches above the 30 year average. Yields were typical for most years at this location. Thus for this one year study, the foliar fertilizer and no fertilizer treatment had the same yield. No differences in weed control, final plant stand or diseases were observed.

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