Effect of Inoculants on Soybean Yields

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In cooperation with Morrow County Soil and Water Conservation District

Objective

To evaluate the effect of two inoculants on soybean yields.

Background

Cooperator:	Morrow County Home Farm	Fertilizer:	None
		Herbicides:	PRE: Canopy (3 oz/A), 2,4-D
County:	Morrow		POST: Roundup Ultra (1 pt/A)+ AMS
Nearest town:	Mt. Gilead	Variety:	Golden Harvest 93706RR
Soil Type:	Centerburg silt loam	Planting Date:	May 15, 2000
Previous Crop:	Corn	Planting Rate:	235,600 seeds/A
Drainage:	Randomly tiled	Row Width:	10 inches
Tillage:	No-till	Harvest Date:	October 16, 2000
Soil Test:	pH 6.7, P 52 ppm, K 169 ppm, CEC 8.0		

Methods

This study compared two relatively new soybean inoculants (CellTech 2000 and USDA Rhizo Stick). The study was three side-by-side comparisons. The individual treatment plots were 30-feet wide, and the harvested area was the center 20 feet of each plot and measured approximately 1/4 acre in size. The plots were all weighed with a weigh wagon. The soybeans were inoculated as directed by the manufacturer. One treatment was planted, then the drill was cleaned out completely with a shop vac and a second treatment was completed.

Results

Table 1. Effects of Inoculants.

Inoculant	Yield (bu/A)
Cell Tech	48
USDA Rhizo Stick	47.7
F <1, P = 0.05	NS
CV 4.2%	

NS = Not Significant

Summary and Notes

The soybeans were clean of weeds and looked good. There was no significant difference in yields between the two treatments.

Acknowledgment

The author would like to thank Golden Harvest for its donation of seed used in this study. Also, thanks to Royster Clark for donating the inoculants used. And thanks to the Morrow County Commissioners for the donation of land for this study.

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