

# Evaluation of USDA Soybean Inoculant in a Modified Relay Intercropping System

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## Objective

To evaluate the effect of a new inoculate on soybean yield in a modified relay intercropping system.

## Background

Cooperator:	Dave Brewer	Wheat Variety:	Hopewell
County:	Crawford	Wheat Planting Date:	October 1, 1999
Soil Type:	Blount silt loam	Wheat Planting Rate:	120 lbs/A
Previous Crop:	Soybeans	Wheat Row Width:	10 inches
Tillage:	No-till	Wheat Harvest Date:	July 5, 2000
Fertilizer:	21-75-75 N-P-K in fall 85 lb/A actual N in spring	Wheat Yield:	73 bu/A
Herbicides (W):	2,4-D (1.5 pt/A)	Soybean Variety:	Pioneer 9306
Herbicides (S):	POST: Select (5 oz/A) Firstrate (0.3 oz/A)	Soybean Planting Date:	June 12, 2000
		Soybean Planting Rate:	90 lbs/A
		Soybean Row Width:	10 inches
		Soybean Harvest Date:	October 14, 2000

## Methods

New soybean inoculants have been reported to give a positive yield response in conventional tillage soybeans. As such, USDA inoculate at the labeled rate was mixed well into soybean seed, and soybeans were immediately interseeded into wheat on 6/12/2000. Soils were moist at the time of planting.

A completely randomized design was used with four replications of two treatments USDA inoculate and untreated soybeans. Plot size per treatment was 0.138 acres. A 15-foot Great Plains 1500 drill was used to plant both the wheat and the soybeans in 10-inch rows. A 20-inch tramline was established in the wheat to facilitate soybean planting into wheat.

## Results

**Table 1. Soybean Inoculants.**

<b>Treatments</b>	<b>Yield (bu/A)</b>
Control	37.2
USDA Inoculate	37.1
Significance (P = 0.05)	NS
F <1, CV = 4.5%	

## Summary and Notes

There were no significant yield differences between the soybeans inoculated with USDA inoculate and soybeans without inoculate in the modified relay intercropping system.

For additional information, contact:

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