

Conventional Tillage vs. No-till Soybeans 1992 and 1993

Don Schlictemeier

Private Industry Cooperator: Steve Mills

OBJECTIVE: To determine and document the profitability of conventional tillage versus no-till soybeans.

CONVENTIONAL TILLAGE

Treatment:

Cultivate

Herbicide: 1 quart Prowl, 1 pint
Command and 3.2 ounces
Scepter

Plant

Harvest

NO-TILL

Treatment:

Cultivate

Herbicide: 1 quart Prowl, 1 pint
Command and 3.2 ounces
Scepter

Plant

Harvest

Comparative cost (per acre)

	<u>1992</u>	<u>1993</u>
Field Cultivation	\$5.81	\$5.81
Total	<u>\$5.81</u>	<u>\$5.81</u>

Comparative cost (per acre)

	<u>1992</u>	<u>1993</u>
None	\$0.00	\$0.00
Total	<u>\$0.00</u>	<u>\$0.00</u>

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VARIABLE	1992 SOYBEANS	1993 SOYBEANS
Final population (seeds/acre)		
Conventional	227,000	155,900
No-till	236,000	153,900
Plant height		
Conventional	35.0"	33.4"
No-till	35.7"	31.4"
Pod height		
Conventional	6.8"	8.6"
No-till	7.0"	8.5"
Moisture (%)		
Conventional	11.7	10.5
No-till	11.7	10.5
Test weight (pounds/bushel)		
Conventional	57.0	57.3
No-till	57.0	57.3
Yield (13 %) (bushels/acre)		
Conventional	54	46
	(2 Yr. Avg. = 50)	
No-till	53	45
	(2 Yr. Avg. = 49)	

Summary: There has been no significant difference in yield between the conventional tillage and no-till treatment in 1992 or 1993. The additional field cultivation in the conventional tillage treatment cost approximately \$5.81/acre.