

# Starter Fertilizer versus no Starter Fertilizer on Corn & Soybeans

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OBJECTIVE: To determine and document the profitability of using starter fertilizer on corn and soybeans.

TREATMENTS:

<u>No Starter</u>	<u>Starter Fertilizer</u>
1997 Corn (Soil P = 17 ppm) Plant corn	Plant corn with 5 gal/ac 10-34-0 in furrow
1997 Soybean (Soil P = 17 ppm) Plant soybeans	Plant soybeans with 5 gal/ac 10-34-0 behind press wheels
1998 Corn (Soil P = 17 ppm) Plant corn	Plant corn with 5 gal/ac 10-34-0 in furrow
1998 Soybean (Soil P = 27 ppm) Plant soybeans	Plant soybeans with 5 gal/ac 10-34-0 behind press wheels

<b>Comparative cost (per acre)</b>	<b>Comparative cost (per acre)</b>	
	<u>1997 Corn</u>	
<b>None</b>	\$ 0.00	5 gal 10-34-0 \$ 6.19
		Application <u>\$ 1.50</u>
		<b>Total \$ 7.69</b>
	<u>1997 Soybeans</u>	
<b>None</b>	\$ 0.00	5 gal 10-34-0 \$ 6.19
		Application <u>\$ 1.50</u>
		<b>Total \$ 7.69</b>

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	<u>1998 Corn</u>		
<b>None</b>	\$ 0.00	5 gal 10-34-0	\$ 6.41
		Application	<u>\$ 1.50</u>
		<b>Total</b>	<b>\$ 7.91</b>
	<u>1998 Soybeans</u>		
<b>None</b>	\$ 0.00	5 gal 10-34-0	\$ 6.41
		Application	<u>\$ 1.50</u>
		<b>Total</b>	<b>\$ 7.91</b>

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**RESULTS:**

	<b>CORN</b>	
	<b>1997</b>	<b>1998</b>
Moisture (%)		
No starter	16.2	15.2
Starter	16.3	15.1**
Test Weight (pounds/bushel)		
No starter	57.4	58.5
Starter	57.3	58.3*
Yield (bushel/acre @ 15.5%)		
No starter	124	118
Starter	128	123

	<b>SOYBEANS</b>	
	<b>1997</b>	<b>1998</b>
Moisture (%)		
No starter	9.5	10.5
Starter	9.6	10.5
Test Weight (pounds/bushel)		
No starter	55.8	55.4
Starter	55.9	55.3
Yield (bushel/acre @ 13.0%)		
No starter	30	58
Starter	32**	58
Population, plants/ac		
No starter	154,600	-----
Starter	151,200	-----

\* significantly different at 90% confidence level  
\*\* significantly different at 95% confidence level

**Summary:** Soybean seed yields were increased by starter fertilizer in 1997. No differences were detected in the corn trial. In 1998, starter fertilizer use resulted in slightly drier corn at harvest and slightly lower test weight. Yield difference is significant at 80% confidence level. No differences were detected in the soybean trial.

