

Pelleted Lime vs. No Lime

Soybeans-1993, Corn-1994, Soybeans-1995

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Private Industry Cooperator: Jerry Mulliken

OBJECTIVE: To determine and document the profitability of soybeans and corn using pelleted lime versus no lime. (Soybeans-1993, Corn-1994, Soybeans-1995)

PELLETED LIME

Treatment:

Fertilize: Anhydrous Ammonia

Field Cultivate

Plant: Apply pelleted lime with
seed at 150 pounds per acre

Herbicide: 1993-3 pints Squadron and
9 ounces Command

1994-1 quart Bullet and
1.75 pints Atrazine

1995-3 ounces Pursuit and
3 ounces Fusilade

Rotary Hoe: 1993

Row Cultivate

Harvest

NO LIME

Treatment:

Fertilize: Anhydrous Ammonia

Field Cultivate

Plant

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9 ounces Command

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PELLETED LIME

NO LIME

Comparative cost (per acre)

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	<u>1993</u>	<u>1994</u>	<u>1995</u>		<u>1993</u>	<u>1994</u>	<u>1995</u>
Lime (150 pounds @ \$72/ton)	\$5.40	\$5.40	\$5.40	No lime	\$0.00	\$0.00	\$0.00
Total	<u>\$5.40</u>	<u>\$5.40</u>	<u>\$5.40</u>	Total	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>

VARIABLE	1993 SOYBEANS	1994 CORN	1995 SOYBEANS
Final population (seeds/acre)			
Lime	106,400	16,500	88,200
No Lime	103,700	17,100	88,400
Plant height			
Lime	29.1"	N/A	26.9"
No Lime	28 "	N/A	26.9"
Moisture (%)			
Lime	9.3	17.0 **	8.7
No Lime	9.2	17.3	8.7
Test weight (pounds/bushel)			
Lime	54.4	57.4	N/A
No Lime	54.2	56.8	N/A
Yield (bushels/acre)	(13%)	(15.5%)	(13%)
Lime	43	139 **	37
No Lime	45	136	37

** significantly different at 95% confidence level

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Summary: There was no significant yield difference between the limed and non-limed treatments in 1993 nor 1995; however, the 1994 comparison showed a significant advantage on the limed corn. The liming treatment costs approximately \$5.40/acre.