

Nebraska On-Farm Research Network

Preplant vs. Sidedressed Liquid (28%) and Anhydrous Ammonia Fertilizer - Corn

Study ID: 131131199501 Study Year: 1995

County: Otoe

OBJECTIVE: To determine and document the profitability of two liquid nitrogen applica-

tion rates at planting and two sidedress anhydrous ammonia rates.

HIGH RATE LOW RATE

Treatment: Treatment:

Field Cultivate Field Cultivate

Plant: 1995 - Early June Plant: 1995 - Early June

Fertilize: 1995 - 100 pounds nitrogen per acre.

liquid nitrogen (28%) banded 3" from seed with planter versus sidedress anhydrous ammonia in

72" knife spacings (early July)

Fertilize: 1995 - 40 pounds nitrogen per acre.

liquid nitrogen (28%) banded 3" from seed with planter versus

sidedress anhydrous ammonia in 72"

knife spacings (early July)

	Liquid	Anhydrous Ammonia		Liquid	Anhydrous Ammonia
Fertilizer	\$28.55	\$18.25	Fertilizer	\$11.42	\$ 7.30
Anhydrous Rig	\$ 0.00	\$ 6.67	Anhydrous Rig	\$ 0.00	\$ 6.67
Planter Fertilizer	ſ		Planter Fertilizer	-	
Attachment	\$ 1.23	\$ 0.00	Attachment	\$ 1.23	\$ 0.00
Total	\$29.78	\$24.9 2	Total	\$12.65	\$13.97

Nebraska Soybean & Feed Grains Profitability Project



Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska–Lincoln cooperating with the Counties and the United States Department of Agriculture.



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VARIABLE	1995 CORN
Moisture (%)	
High Liquid (28%) at planting High Anhydrous sidedress	16.4 16.4
Low Liquid (28%) at planting Low Anhydrous sidedress	15.7 16.1
Means for Liquid	16.0
Means for Anhydrous	16.3
Means for High Rate	15.9**/2
Means for Low Rate	16.4
Test Weight (pounds/bushel)	
High Liquid (28%) at planting	54.5
High Anhydrous sidedress	53.8
<i>5</i> ,	
Low Liquid (28%) at planting	55.2
Low Anhydrous sidedress	54.5
Means for Liquid	54.8**/1
Means for Anhydrous	54.2
cao.ioi / iiiiyaioab	3 1.2
Means for High Rate	54.2 **/2
Means for Low Rate	54.8

^{**/1} source signifcant at 95% confidence level

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^{**/2} rate significantly different at 95% confidence level



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VARIABLE	1995 CORN
Yield (bushels/acre @ 15.5%) High Liquid (28%) at planting High Anhydrous sidedress	93 * 85
Low Liquid (28%) at planting	86
Low Anhydrous sidedress	88
Means for Liquid	89
Means for Anhydrous	86
Means for High Rate	89
Means for Low Rate	87

^{*} rate by source interaction at 90% confidence level

Summary: In 1995, yield

In 1995, yields were increased by higher rates of liquid nitrogen, but not by anhydrous ammonia. Nitrogen loss was observed during the high rate application of anhydrous ammonia.

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