Nebraska On-Farm Research Network

Years:	2008
Title:	Nitrogen Fertilizer Rates & Application Timing
Crop:	Corn
Study ID:	108155200802
County:	Saunders
Objective:	In 2008, fertilizer rates & application timing were evaluated on irrigated corn after soybeans, also in a no-till cropping system.

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2008 Treatments

Treatments - Irrigated:

1. Split 100 Fall (NH_3) + 45 SD(UAN) = 145 lbs/ac
2. UNL Rec @ 145 lbs/ac Fall (NH_3)
3. Farm @ 180 lbs/ac Fall (NH_3)
4. Econ Rate @ 160 lbs/ac Fall (NH_3)

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Results: 2008 (Pioneer 34R67)

Irrigated

	Nitrogen Treatment				
	145 P/S	145 P	180 P	160 P	Prob>F
Yield, bu/ac @15.5%	200 ab	196 b	203 a	196 b	0.056 *
Moisture, %	15.9	15.9	15.9	15.9	0.841 ns
Monitor, bu/ac	214 ab	210 b	218 a	212 b	0.062 *
Cost/ac (nitrogen)	$56.55	$43.50	$54.00	$48.00	
Cost/ac (application)	$12.50	$7.50	$7.50	$7.50	
Cost/ac (total)	$69.05	$51.00	$61.50	$55.50	

Plant Population, 32,000 seeds/ac

Planting Date: 4/29/08 Harvest Date: 11/06/08

Statistical Analysis (Duncans Multiple Range Test): Values with the same letter are not significantly different of 0.10 probability.

Summary: In 2008, grain yield was highest with the highest rate of applied nitrogen in this study. Splitting the application also resulted in maximum yield. Grain moisture at harvest was not affected by nitrogen treatment. Results are the same using weigh wagon or monitor.

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