Nebraska On-Farm Research Network

Years:	2007
Title:	Nitrogen Fertilizer Rates Corn
Crop:	
Study ID:	108155200701
County:	Saunders
Objective:	Determine & document the effect of nitrogen fertilizer rates & application timing on the profitability of fertilizer rate on non-irrigated corn in 2007.

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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2007 Treatments

Treatments - Non-Irrigated Nitrogen Sidedress:

1. 60% Eff Rate (75 lbs/ac)
2. UNL Rec Rate (112 lbs/ac)
3. UNL Econ N Rate (119 lbs/ac)
4. 1.2 lbs @YG-40 (158 lbs/ac)

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Results: 2007 (Pioneer 33B51)

Non-Irrigated	Nitrogen, lbs/ac				
	75	112	119	158	Prob>F
Yield, bu/ac @15.5%	154 ***	162 **	164	167	<.0001 ***
Moisture, %	14.6	14.6	14.6	14.6	0.829 ns
Monitor, bu/ac	157 ***	165 *	167	169	0.0001 ***
Cost/ac (nitrogen)	$24.75	$30.96	$39.27	$52.14	
Cost/ac (application@V4)	$7.50	$7.50	$7.50	$7.50	

Plant Population, 23,000 seeds/ac

Planting Date: 4/21/07 Harvest Date: 10/25/07

Summary: In 2007, increasing the rate of applied nitrogen resulted in an increase in grain yield (weigh wagon or monitor); however, there was no significant difference between the highest rate (158 lbs/ac) & the UNL Economic N Rate (119 lbs/ac). Grain moisture at harvest was not affected by rate of applied nitrogen.

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