Nebraska On-Farm Research Network

Years:	2011
Title:	Plant Population
Crop:	Corn
Study ID:	007155201102
County:	Saunders
Objective:	To determine & document the effect of plant population on the profitability of corn production.
Treatments:	26,000 vs 28,000 vs 30,000 seeds

Nebraska Soybean & Feed Grains Profitability Project

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Results: 2011	Corn	(Channel 212-45STX) Planting Rate	
Variable	26,000	28,000	30,000
Yield, bu/ac @ 15.5%	171	177	179
Moisture, %	16.4	16.5	16.6
Cost/ac	$81.25	$87.50	$93.75

Yield Prob>/T/	26,000	28,000
28,000	0.0126 **	---
30,000	0.0027 ***	0.3186 ns

Moisture Prob>/T/	26,000	28,000
28,000	0.2304 ns	---
30,000	0.0477**	0.3294 ns

Planting Date: 5/5/11 Harvesting Date: 10/22/11

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Results: 2011	Corn	(Channel 210-57STX) Planting Rate	
Variable	26,000	28,000	30,000
Yield, bu/ac @ 15.5%	174	176	178
Moisture, %	16.8	16.6	16.9
Cost/ac	$81.25	$87.50	$93.75

Yield Prob>/T/	26,000	28,000
28,000	0.2485 ns	---
30,000	0.0532 *	0.337 ns

Moisture Prob>/T/	26,000	28,000
28,000	0.3092 ns	---
30,000	0.6752 ns	0.1670 ns

Planting Date: 5/5/11 Harvesting Date: 10/22/11

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Summary: Yield increased as population increased. Variety 212-45STX showed statistically significant yield increases at both 28k and 30k over the 26k population. No difference was noted between the 28k and 30k. The additional $6.25 seed cost at 28k returned $24.00 while at 30k the additional $12.50 seed cost returned $48.00. The variety 210-57STX yield between 30k and 26k was statistically significant while 26k vs 28k and 28k vs 30k were not significant. The additional cost for 4k higher population was $12.50/Ac. while the additional revenue at $6.00/bu. was $24.00/Ac.

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