



# Nebraska On-Farm Research Network

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

## 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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Results: 2011	Corn	(Channel 212-45STX)	
<u>Variable</u>		<u>Planting Rate</u>	
Yield, bu/ac @ 15.5%	<u>26,000</u>	<u>28,000</u>	<u>30,000</u>
Moisture, %	171	177	179
Cost/ac	16.4	16.5	16.6
	\$81.25	\$87.50	\$93.75
<u>Yield Prob&gt;/T/</u>	<u>26,000</u>	<u>28,000</u>	
28,000	0.0126 **	---	
30,000	0.0027 ***	0.3186 ns	
<u>Moisture Prob&gt;/T/</u>	<u>26,000</u>	<u>28,000</u>	
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
<u>Variable</u>	<u>26,000</u>	<u>28,000</u>	<u>30,000</u>
Yield, bu/ac @ 15.5%	174	176	178
Moisture, %	16.8	16.6	16.9
Cost/ac	\$81.25	\$87.50	\$93.75
<u>Yield Prob&gt;/T/</u>	<u>26,000</u>	<u>28,000</u>	
28,000	0.2485 ns	---	
30,000	0.0532 *	0.337 ns	
<u>Moisture Prob&gt;/T/</u>	<u>26,000</u>	<u>28,000</u>	
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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