Nebraska On-Farm Research Network

Years:	2012
Title:	Plant Population
Crop:	Corn
Study ID:	007155201201
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

Sponsored by: University of Nebraska Lincoln **In partnership with:** Nebraska Corn Board, Nebraska Corn Growers Association

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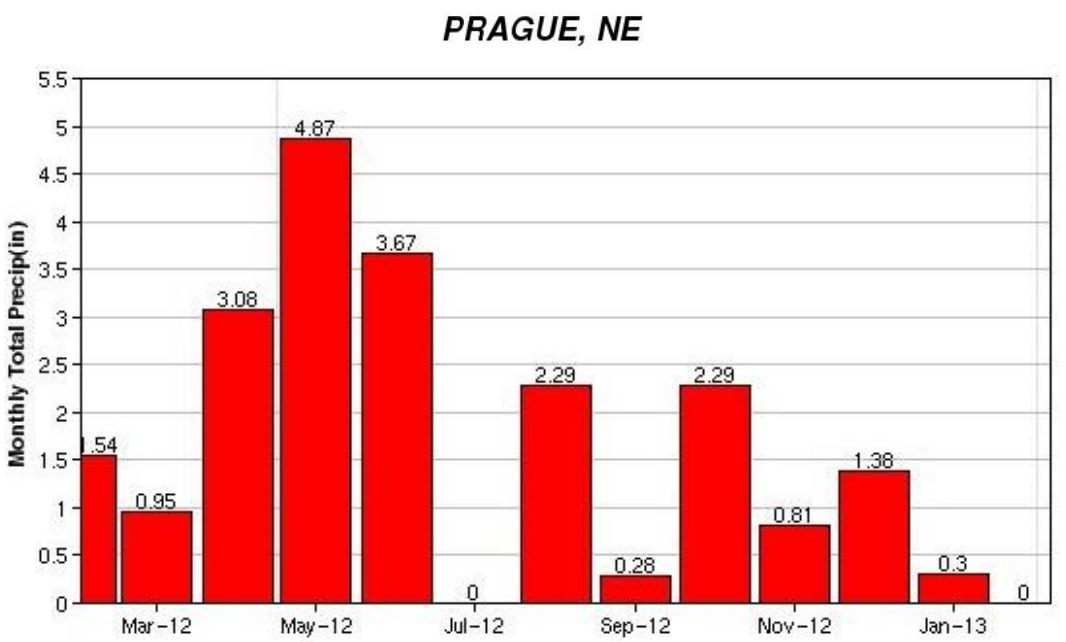

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Results: 2012
Rainfed

Corn-Yield

Population

	26k	28k	30k
Population	106.8	107.0	101.6
Cost/Acre	---	$6.60	$13.20
Prob>/T/ 0.1860 ns	A	A	A

	208-71VT2	212-45STX
Hybrid	109.1	101.1
Cost/Acre	$84.35	$100.45
Prob>/T/ 0.0073***	A	B

Population * Hybrid	Yield	Group	Cost/Acre
28 208-71VT2	111.4	A	$84.35
26 208-71VT2	109.5	AB	$78.30
30 208-71VT2	106.5	AB	$90.40
26 212-45 STX	104.2	AB	$93.30
28 212-45 STX	102.6	AB	$100.45
30 212-45 STX	96.6	B	$107.60

Prob>/T/ 0.7634 ns

Planted: 5/11/12 Harvested: 10/8/12

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Results: 2012
Rainfed

Corn-Moisture

	Population		
	26k	28k	30k
Population	14.3	14.1	14.2
Prob>/T/ 0.6339 ns	A	A	A
	208-71VT2	212-45STX	
Hybrid	13.1	15.3	
Prob>/T/ <0.0001***	B	A	

Population * Hybrid		
26 212-45 STX	15.5	A
30 212-45 STX	15.2	A
28 212-45 STX	15.1	A
30 208-71VT2	13.2	B
28 208-71VT2	13.2	B
26 208-71VT2	13.1	B
Prob>/T/ 0.2869 ns		

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Results: 2012
Rainfed

Corn-Harvest Population

	Population		
	26k	28k	30k
Population	24.1k	25.6k	26.3k
Prob>/T/ 0.2207 ns	A	A	A
	208-71VT2	212-45STX	
Hybrid	25.6k	25.1k	
Prob>/T/ 0.6310 ns	A	A	

Population * Hybrid		
30 208-71VT2	27.2k	A
28 208-71VT2	25.8k	A
28 212-45 STX	25.4k	A
30 212-45 STX	25.3k	A
26 212-45 STX	24.4k	A
26 208-71VT2	23.7k	A
Prob>/T/ 0.5792 ns		

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Summary: (2012) There was no statistical yield difference amongst the populations when combining both Hybrids Channel 208-21Vt2 and Channel 212-45STX for seeding rates. This study was planted no-till into soybean residue and received around 10.5" of rainfall (according to NE Rain). The Hybrid Channel 208- 71VT2 yielded statistically higher and had higher economic return than Hybrid Channel 212-45STX. The combination of Channel 208-71VT2 at a seeding rate of 28,000 seeds/acre statistically yielded the most and was the most economical (assuming $7/bu corn price).

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