

Corn Seed Rate Trial

Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal seeding rate by 3,000 seeds/ac in corn.

Summary: 4 site-years showed a significant yield difference between the three seeding rates.

Single Site Analysis

Trial ID	Rural Municipality	Seeding Date	Row Spacing inch	Seed Rate (check) seeds/ac	Plant Stand @ V2			Yield			CV %	P-Value	Statistically Significant @ 95%
					High Seed Rate seeds/ac	Check Seed Rate seeds/ac	Low Seed Rate seeds/ac	High Seed Rate bu/ac	Check Seed Rate bu/ac	Low Seed Rate bu/ac			
2020-CRNP01	North Norfolk	May 13	30	31,000	34,000	31,500	29,000	138.5	145.9	150.1	5.8	0.2080	No
2020-CRNP02	North Norfolk	May 11	30	35,000	35,250	32,500	30,750	155.0	155.4	152.0	2.3	0.0698	No
2020-CRNP03	Hanover	May 12	30	33,000	35,500	29,250	28,250	78.6	73.5	75.7	14.8	0.4653	No
2020-CRNP04	Wallace-Woodworth	May 7	30	36,000	31,250	29,250	23,500	108.1	104.4	101.4	3.4	0.0046	Yes
2020-CRNP05	De Salaberry	May 16	22	33,000	28,250	29,750	27,250	142.7	140.7	127.4	5.9	0.0034	Yes
2020-CRNP06	Rhineland	May 15	10	42,000	42,000	40,250	36,500	156.2	161.4	169.6	4.7	0.0096	Yes
2020-CRNP07	Stanley	May 16	30	34,400	36,800	34,500	30,300	182.9	183.6	186.6	2.9	0.5890	No
2020-CRNP08	De Salaberry	May 17	22	30,000	28,250	24,740	23,500	153.2	143.7	141.6	4.1	0.0090	Yes
2020-CRNP09	Dufferin	May 19	20	34,000	36,250	34,000	32,250	127.7	128.9	126.7	1.9	0.2980	No
2020-CRNP10	Hanover	May 19	22	34,660	36,750	34,000	30,250	147.4	147.6	145.1	1.8	0.3110	No
2020-CRNP11	Glenboro-South Cypress	May 22	30	34,000	32,250	29,750	27,500	150.1	150.6	148.2	3.7	0.3383	No
Average				34,278	34,232	31,772	29,005	140	140	139	5		

Indicates Statistical Difference at 95% confidence interval



Corn Seed Rate Trial cont'd

Economic Analysis

Trial ID	Seed Rate (check) seeds/ac	Seed Cost/Acre \$/ac			Yield bu/ac			Net Profit/Acre (Seed Costs) \$/ac			CV %	P-Value	Statistically Significant @ 95%
		High Seed Rate	Check Seed Rate	Low Seed Rate	High Seed Rate	Check Seed Rate	Low Seed Rate	High Seed Rate	Check Seed Rate	Low Seed Rate			
2020-CRNP04	36,000	\$ 117.00	\$ 108.00	\$ 99.00	108.1	104.4	101.4	\$ 423.50	\$ 414.00	\$ 408.00	3.4	0.0046	Yes
2020-CRNP05	33,000	\$ 108.00	\$ 99.00	\$ 90.00	142.7	140.7	127.4	\$ 605.50	\$ 604.50	\$ 547.00	5.9	0.0034	Yes
2020-CRNP06	42,000	\$ 135.00	\$ 126.00	\$ 117.00	156.2	161.4	169.6	\$ 646.00	\$ 681.00	\$ 731.00	4.7	0.0096	Yes
2020-CRNP08	30,000	\$ 99.00	\$ 90.00	\$ 81.00	153.2	143.7	141.6	\$ 667.00	\$ 628.50	\$ 627.00	4.1	0.0090	Yes

Indicates Statistical Difference at 95% confidence interval

Median Seed Cost of \$240/bag

Corn Grain Price - \$5.00/bushel



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