

Corn Planting Rate Trials

Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal planting rate in corn.

Summary: One site-year showed a significant yield difference between the three planting rates.

Summary of 2022 corn planting rate trial yield results by site-year

Trial ID	Rural Municipality	Row Spacing	Planting Rate			Plant Stand @ Midseason			Yield			CV		
			Low	Med	High	Low	Med	High	Low	Med	High	CV	P-Value	Statistically Significant @ 95%
		inch	'000/ac			'000/ac			bu/ac			%		G 2010
CRNP01	North Norfolk	30	32	35	38	32.5 ^C	34.6 ^B	37.5 ^A	165.8 ^B	172.1 ^A	163.0 ^B	1.16	0.0016	Yes
CRNP02	North Norfolk	30	29	32	35	26.7 ^B	28.9 ^{AB}	30.8 ^A	153.4	158.1	160.4	4.23	0.3775	No
CRNP03	Dufferin	30	31	33.8	36	27.8	28.4	27.2	191.7	190.9	188.0	2.61	0.7584	No
CRNP04	Grey	30	29	32	35	29.5	31.4	32.1	144.8	145.8	136.3	9.99	0.6099	No
CRNP05	Dufferin	20	30	33	40	32.5 ^B	31.6 ^B	38 ^A	167.8	163.7	160.9	3.31	0.2710	No
CRNP06	Springfield	15	32	35	38	32.6 ^C	34.7 ^B	37.1 ^A	109.8	112.4	113.9	2.38	0.1634	No
CRNP07	Hanover	30	30	33	36	29.3	33	29	144.4	144.1	142.6	1.93	0.6280	No

Long Term Results (2020-2022): There have been 30 corn planting rate trials conducted through MCA's Research on the Farm since 2020. Among those 30 trials there have been 5 statistically significant yield responses to the planting rates (16% of the time). Most often, planting rate has not significantly changed corn yield.



