

Corn Planting Rate

Trial ID: 2022-CRNP03 — R.M. of Dufferin

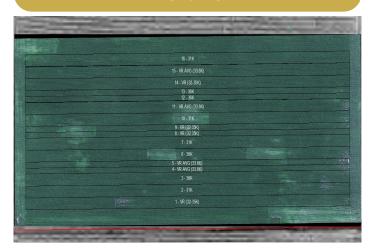
Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal planting rate in corn.

Summary: There was no significant yield difference between planting rates of 31,000, 33,800, 36,000 and a variable rate of 31,000-36,000 plants/ac. As a result, there was a decrease in profit equivalent to the increase in seed cost for the higher planting rates.

Trial Information

Treatment	31k vs. 33.8k vs 36k vs VR (31k-36k)
Soil Texture	Course Loams
Previous Crop	Potato
Tillage	Conventional
Planting Equipment	60' Planter
Planting Date	May 19
Variety	P7844AM
Germination	94%
Row Spacing	30"
Harvest Date	October 27

RGB Imagery August 13



Precipitation[†] (mm)

	May	June	July	Aug	Total
Rainfall	111	39	67	75	291
Normal	54	69	64	93	279
% Normal	206%	56%	104%	80%	104%

[†]Growing season precipitation (mm) - May 01—Aug 31

Plant Stand (plants/ac)

Planting Rate	31k	33.8k	36k	VR (31k-36k)
V2	27,750	28,400	27,200	27,200

Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}	
31k	191.7	\$96/ac	+\$9/ac	
33.8k	190.9	\$105/ac	\$0/ac	
36k	188.0	\$111/ac	-\$6/ac	
VR (31k-36k)	190.2	\$105/ac	\$0/ac	
P-Value	0.7584	Economics: There is an increase in profit for the lower planting rate due to		
cv	2.61%	the lower cost of seed/a	the lower cost of seed/acre.	
Significance	No			

[†]Based on MB Agriculture 2022 Cost of Production Guidelines (\$99.20/ac)

^{††}Change in profit is calculated as the difference in cost between planting rate treatments.



