Corn Planting Rate

Trial ID: 2022-CRNP02 — R.M. of North Norfolk

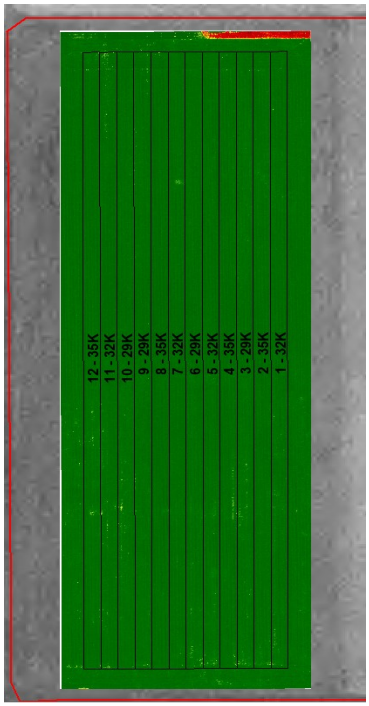
Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal planting rate in corn.

Summary: There was no significant yield difference between planting rates of 29,000, 32,000 and 35,000 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	29k vs. 32k vs. 35k
Soil Texture	Course Loams
Previous Crop	Wheat
Tillage	Strip Till
Planting Equipment	60’ Planter
Planting Date	May 17
Variety	P7527AM
Germination	94%
Row Spacing	30”
Harvest Date	October 14

NDVI Imagery August 13



Precipitation† (mm)

	May	June	July	Aug	Total
Rainfall	140	140	67	103	**450**
Normal	50	71	65	94	**279**
% Normal	282%	198%	102%	110%	**161%**

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

Plant Stand (plants/ac)

Planting Rate	29k	32k	35k
V2	26,700^{B}	28,900^{AB}	30,800^{A}

Overall Yield & Economics

	Mean (bu/ac)	Cost†	Change in Profit/ac††
29k	153.4	$90/ac	+$9/ac
32k	158.1	$99/ac	$0/ac
35k	160.4	$109/ac	-$10/ac
P-Value	0.3775	**Economics: There is an increase in profit for the lower planting rate due to the lower cost of seed/acre.**	
CV	4.23%		
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.

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