Corn Planting Rate

Trial ID: 2022-CRNP01 — R.M. of North Norfolk

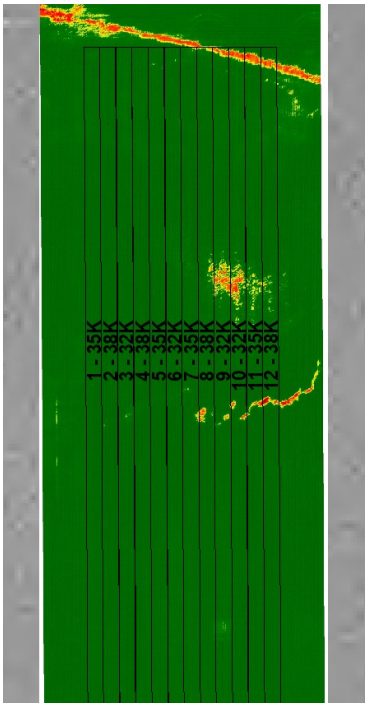
Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal planting rate in corn.

Summary: There was a significant yield difference between planting rates of 32,000, 35,000 and 38,000 plants/ac. As a result, the farmer's normal practice of 35,000 plants/ac was most profitable compared to the other two rates.

Trial Information

Treatment	32k vs. 35k vs. 38k
Soil Texture	Fine Loams
Previous Crop	Corn
Tillage	Strip Till
Planting Equipment	60' Planter
Planting Date	May 17
Variety	TH6278 VT2P
Germination	99%
Row Spacing	30"
Harvest Date	October 31

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	32k	35k	38k
V2	32,500^{C}	34,600^{B}	37,500^{A}

Overall Yield & Economics

	Mean (bu/ac)	Cost†	Change in Profit/ac††
32k	165.8^{B}	$99/ac	-$53/ac
35k	172.1^{A}	$109/ac	$0/ac
38k	163.0^{B}	$118/ac	-$100/ac
P-Value	0.0016	**Economics: Yields were significantly different between the farmer's normal practice of planting 35,000 seeds/acre compared to increasing and decreasing planting rates.**	
CV	1.16%		
Significance	Yes		

†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. A price of $10.00/bushel (Nov 2022) is used for the calculation of changes in profit between treatments.

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