Corn Planting Rate

Trial ID: 2022-CRNP07 — R.M. of Hanover

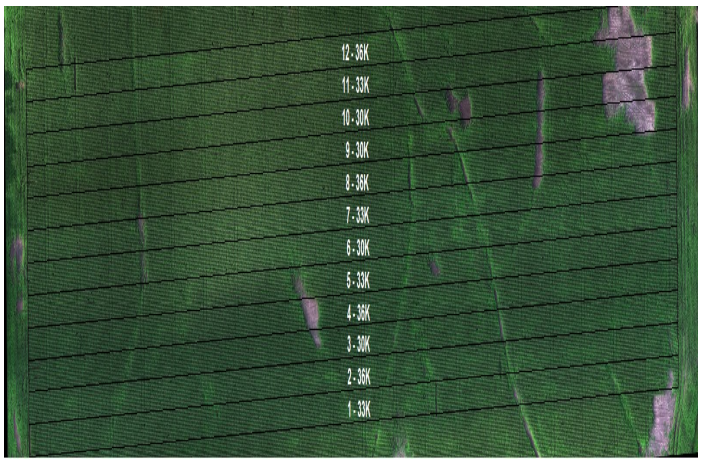
Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal planting rate in corn.

Summary: There was no significant yield difference between planting rates of 30,000, 33,000 and 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	30k vs. 33k vs. 36k
Soil Texture	Clay Loams
Previous Crop	Corn
Tillage	Conventional
Planting Equipment	40’ Planter
Planting Date	May 26
Variety	P7861YHR
Germination	94%
Row Spacing	30”
Harvest Date	November 02

RGB Imagery August 13



Precipitation† (mm)

	May	June	July	Aug	Total
Rainfall	115	107	130	138	**490**
Normal	58	77	80	97	**312**
% Normal	199%	139%	162%	142%	**157%**

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

Plant Stand (plants/ac)

Planting Rate	30k	33k	36k
V2	29,250	33,000	29,000

Overall Yield & Economics

	Mean (bu/ac)	Cost†	Change in Profit/ac††
30k	144.4	$93/ac	+$9/ac
33k	144.1	$102/ac	$0/ac
36k	142.6	$112/ac	-$10/ac
P-Value	0.6280	**Economics: There is an increase in profit for the lower planting rate due to the lower cost of seed/acre.**	
CV	1.93%		
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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