



Wheat Seeding Rate

Trial ID: 2023-WP06 — R.M. of MacDonald

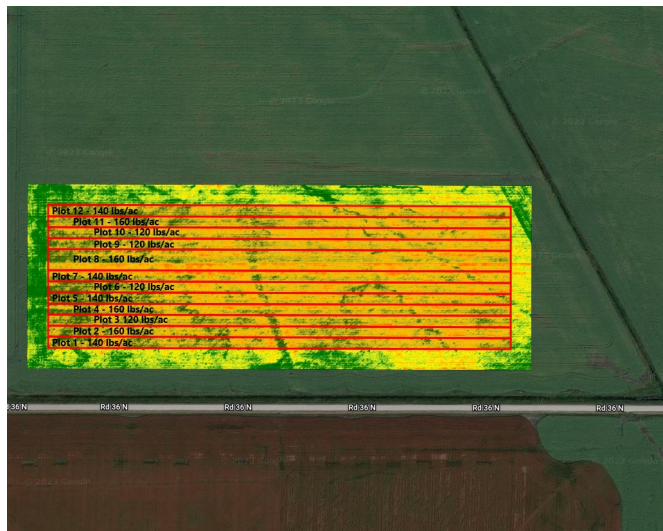
Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal seeding rate in wheat.

Summary: There was no significant yield difference between seeding rates of 120, 140 and 160 lbs/ac. As a result, there was a decrease in profit equivalent to the increase in seed cost for the higher seeding rates.

Trial Information

Treatment	120 lbs vs. 140 lbs vs. 160 lbs
Soil Texture	Clay
Previous Crop	Canola
Tillage	Conventional Tillage
Seeding Equipment	43' Disc Drill
Seeding Date	May 13
Variety	Faller
Germination	98%
Row Spacing	7.5"
Harvest Date	August 26

NDVI Imagery July 20



Wheat Response

	Plants/ft ²	Protein (%)	TWT (kg/hL)	Falling Number	Grade
120 lbs	22 ^B	14.6	65	313	1
140 lbs	23 ^{AB}	15.4	65	325	1
160 lbs	25 ^A	13.4	65	328	2

Precipitation[†] (mm)

	May	June	July	Aug	Cumulative
Rainfall	22	49	59	49	179
Normal	62	100	92	72	325
% Normal	35%	49%	64%	68%	55%

[†]Growing season precipitation (mm)

Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}
120 lbs	44.8	\$34.00/ac	+ \$5.67/ac
140 lbs	45.8	\$39.67/ac	\$0/ac
160 lbs	43.2	\$45.34/ac	- \$5.67/ac
P-Value	0.5663	Economics: There is an increase in profit for the lower seeding rate due to the lower cost of seed/acre.	
CV	7.44%		
Significance	No		

[†]Based on MB Agriculture 2023 Cost of Production Guidelines (\$34.00/ac)

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



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