



Wheat Seeding Rate

Trial ID: 2023-WP03 — R.M. of Brokenhead

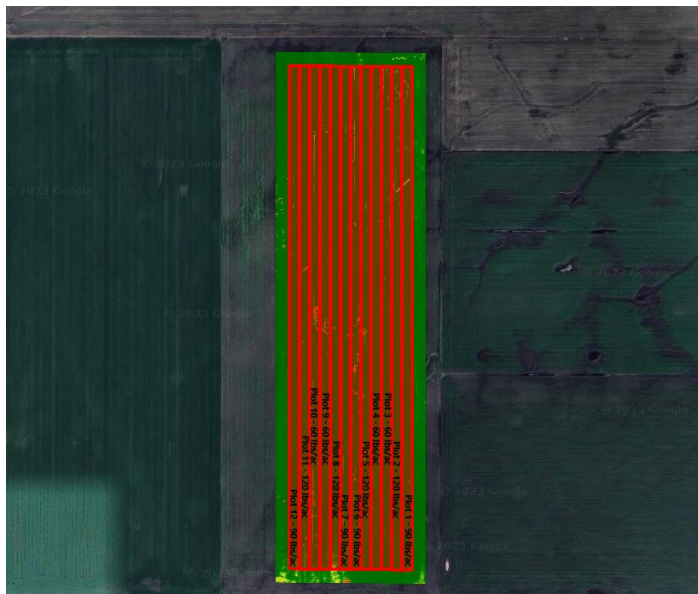
Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal seeding rate in wheat.

Summary: There was no significant yield difference between planting rates of 60, 90 and 120 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	60 lbs vs. 90 lbs vs. 120 lbs
Soil Texture	Clay
Previous Crop	Flax
Tillage	Conventional Tillage
Seeding Equipment	30' Press Drill
Seeding Date	May 10
Variety	AAC Viewfield
Germination	99%
Row Spacing	6"
Harvest Date	August 23

NDVI Imagery July 18



Wheat Response

	Plants/ft ²	Protein (%)	TWT (kg/hL)	Falling Number	Grade
60 lbs	24	15.6	66	303	1
90 lbs	25	15.6	65	306	1
120 lbs	38	15.9	65	264	1

Precipitation[†] (mm)

	May	June	July	Aug	Cumulative
Rainfall	8	106	50	39	203
Normal	58	88	87	76	309
% Normal	14%	121%	57%	51%	66%

[†]Growing season precipitation (mm)

Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}
60 lbs	70.2	\$17.00/ac	+ \$8.50/ac
90 lbs	74.8	\$25.50/ac	\$0/ac
120 lbs	71.7	\$34.00/ac	- \$8.50/ac
P-Value	0.1419	Economics: There is an increase in profit for the lower seeding rate due to the lower cost of seed/acre.	
CV	3.95%		
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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