



Wheat Seeding Rate

Trial ID: 2023-WP02 — R.M. of Wallace-Woodworth

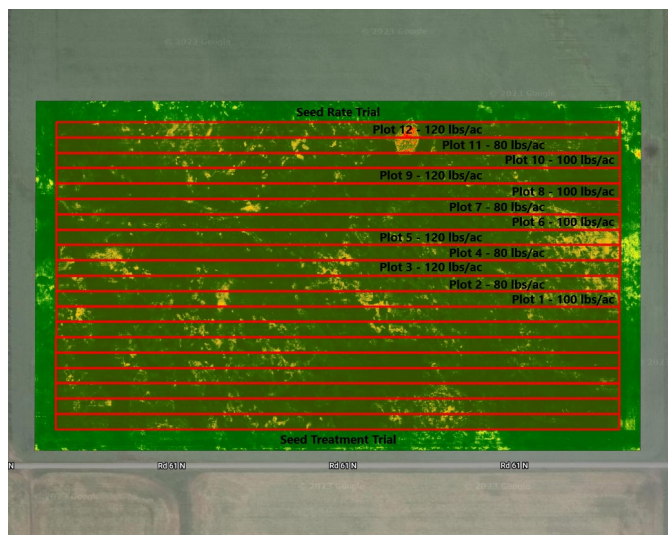
Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal seeding rate in wheat.

Summary: There was no significant yield difference between seeding rates of 80, 100 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	80 lbs vs. 100 lbs vs. 120 lbs
Soil Texture	Fine Loams
Previous Crop	Soybeans
Tillage	Zero Till
Seeding Equipment	60' Air Drill
Seeding Date	May 06
Variety	AAC Wheatland VB
Germination	92%
Row Spacing	12"
Harvest Date	August 29

NDVI Imagery July 12



Wheat Response

	Plants/ft ²	Protein (%)	TWT (kg/hL)	Falling Number	Grade
80 lbs	26	14.4	65	361	1
100 lbs	23	13.8	65	359	1
120 lbs	24	14.0	65	353	1

Precipitation[†] (mm)

	May	June	July	Aug	Cumulative
Rainfall	22	92	38	24	177
Normal	54	82	67	62	265
% Normal	41%	112%	57%	39%	67%

[†]Growing season precipitation (mm)

Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}
80 lbs	83.4	\$22.66/ac	+ \$5.67/ac
100 lbs	86.5	\$28.33/ac	\$0/ac
120 lbs	75.0	\$34.00/ac	- \$5.67/ac
P-Value	0.3847	Economics: There is an increase in profit for the lower seeding rate due to the lower cost of seed/acre.	
CV	2.83%		
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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**MANITOBA
CROP
ALLIANCE**

Phone: 204-745-6661
Website: mbcropalliance.ca
Email: hello@mbcropalliance.ca