



# Wheat Seeding Rate

**Trial ID: 2023-WP04 — R.M. of Rhineland**

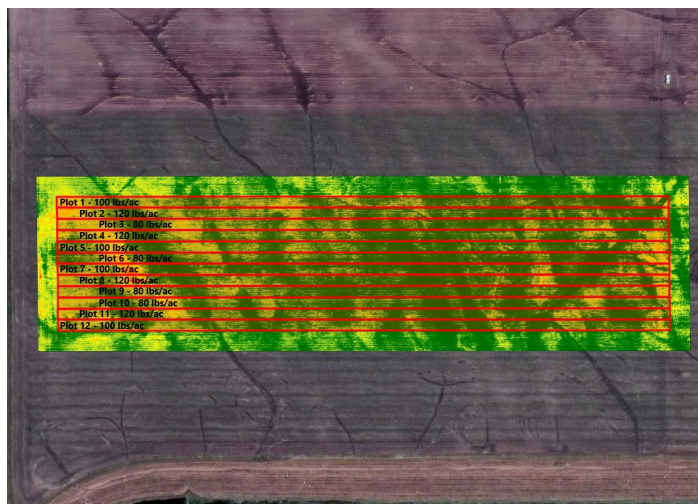
**Objective:** The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal seeding rate in wheat.

**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	Clay
Previous Crop	Soybeans
Tillage	Conventional Tillage
Seeding Equipment	45' Air Drill
Seeding Date	May 12
Variety	AAC Brandon
Germination	96%
Row Spacing	9"
Harvest Date	August 19

## NDVI Imagery July 17



## Wheat Response

	Plants/ft <sup>2</sup>	Protein (%)	TWT (kg/hL)	Falling Number	Grade
80 lbs	19 <sup>B</sup>	14.4	66	367	1
100 lbs	21 <sup>A</sup>	14.3	66	357	1
120 lbs	21 <sup>A</sup>	14.5	66	317	1

## Precipitation<sup>†</sup> (mm)

	May	June	July	Aug	Cumulative
Rainfall	9	26	32	19	87
Normal	71	102	75	68	315
% Normal	13%	26%	43%	28%	28%

<sup>†</sup>Growing season precipitation (mm)

## Overall Yield & Economics

	Mean (bu/ac)	Cost <sup>†</sup>	Change in Profit/ac <sup>††</sup>
80 lbs	74.7	\$22.66/ac	+ \$6.67/ac
100 lbs	76.5	\$28.33/ac	\$0/ac
120 lbs	75.7	\$34.00/ac	- \$5.67/ac
P-Value	0.3686	<b>Economics: There is an increase in profit for the lower seeding rate due to the lower cost of seed/acre.</b>	
CV	2.10%		
Significance	No		

<sup>†</sup>Based on MB Agriculture 2023 Cost of Production Guidelines (\$34.00/ac)

<sup>††</sup>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