



## Wheat Seeding Rate

**Trial ID: 2023-WP10 — R.M. of Argyle**

**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 96, 128 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	96 lbs vs. 128 lbs vs. 160 lbs
Soil Texture	Clay Loams
Previous Crop	Summerfallow
Tillage	Conventional Tillage
Seeding Equipment	56' Hoe Drill
Seeding Date	May 15
Variety	AAC Brandon
Germination	98%
Row Spacing	12"
Harvest Date	August 23

### NDVI Imagery July 13



### Wheat Response

	Plants/ft <sup>2</sup>	Protein (%)	TWT (kg/hL)	Falling Number	Grade
96 lbs	19 <sup>C</sup>	14.3	64	352	1
128 lbs	22 <sup>B</sup>	14.4	64	356	1
160 lbs	27 <sup>A</sup>	14.2	64	351	1

### Precipitation<sup>†</sup> (mm)

	May	June	July	Aug	Cumulative
Rainfall	14	108	11	27	160
Normal	66	93	79	66	304
% Normal	22%	116%	14%	41%	53%

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

### Overall Yield & Economics

	Mean (bu/ac)	Cost <sup>†</sup>	Change in Profit/ac <sup>††</sup>
96 lbs	68.2	\$27.20/ac	+ \$9.07/ac
128 lbs	67.9	\$36.27/ac	\$0/ac
160 lbs	67.5	\$45.34/ac	- \$9.07/ac
P-Value	0.4854	<b>Economics: There is an increase in profit for the lower seeding rate due to the lower cost of seed/acre.</b>	
CV	1.17%		
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.



MCA would like to thank Tone Ag Consulting Ltd. for the research support and SGS Canada Inc. for quality analysis for this trial.



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