



## Wheat Seeding Rate

**Trial ID: 2023-WP11 — R.M. of Dauphin**

**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 90, 120 and 150 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	90 lbs vs. 120 lbs vs. 150 lbs
Soil Texture	Clay Loams
Previous Crop	Peas
Tillage	Zero Till
Seeding Equipment	70' Air Drill
Seeding Date	May 19
Variety	Accelerate
Germination	99%
Row Spacing	10"
Harvest Date	August 19

### Wheat Response

	Plants/ft <sup>2</sup>	Protein (%)	TWT (kg/hL)	Falling Number	Grade
90 lbs	29 <sup>C</sup>	13.0	65	292	2
120 lbs	36 <sup>B</sup>	12.9	65	305	2
150 lbs	45 <sup>A</sup>	12.9	65	293	2

### NDVI Imagery July 25



### Precipitation<sup>†</sup> (mm)

	May	June	July	Aug	Cumulative
Rainfall	42	70	15	52	179
Normal	55	82	73	61	271
% Normal	77%	85%	21%	85%	66%

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

### Overall Yield & Economics

	Mean (bu/ac)	Cost <sup>†</sup>	Change in Profit/ac <sup>††</sup>
90 lbs	60.0	\$25.50/ac	+ \$8.50/ac
120 lbs	61.8	\$34.00/ac	\$0/ac
150 lbs	62.6	\$42.50/ac	- \$8.50/ac
P-Value	0.3343	<b>Economics: There is an increase in profit for the lower seeding rate due to the lower cost of seed/acre.</b>	
CV	3.77%		
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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