

Wheat Seeding Rate

Trial ID: 2022-WP06 — R.M. of Louise

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 100, 120 and 140 lbs/ac. As a result, there was a decrease in profit equivalent to the increase in seed cost for the higher seeding rates.

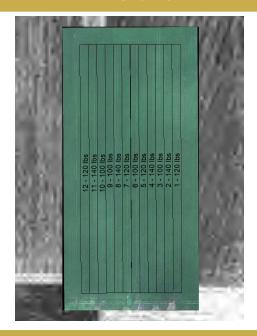
Trial Information

Treatment	100 lbs vs. 120 lbs vs. 140 lbs
Soil Texture	Fine Loams
Previous Crop	Canola
Tillage	Conventional
Seeding Equipment	40' Hoe Drill
Seeding Date	May 27
Variety	AAC Brandon
Germination	97%
Row Spacing	10"
Harvest Date	September 05

Wheat Response

	Plants/ft ²	Protein (%)	TWT (kg/hL)	Falling Number	Grade
100 lbs	27	14.4	80	347	1.0
120 lbs	31	_	_	_	
140 lbs	37	_	_	_	_

RGB Imagery July 24



Precipitation[†] (mm)

	May	June	July	Aug	Total
Rainfall	116	47	81	22	266
Normal	61	75	67	71	274
% Normal	189%	62%	122%	31%	97%

[†]Growing season precipitation (mm) - May 01—Aug 15

Overall Yield & Economics

	Mean (bu/ac)	$Cost^{\dagger}$	Change in Profit/ac ^{††}		
100 lbs	64.3	\$27/ac	+\$6/ac		
120 lbs	58.8	\$33/ac	\$0/ac		
140 lbs	66.2	\$38/ac	-\$5/ac		
P-Value	0.2112		Economics: There is an increase in profit for the lower seeding rate due to		
cv	8.52%	the lower cost of seed/ac	the lower cost of seed/acre.		
Significance	No				

[†]Based on MB Agriculture 2022 Cost of Production Guidelines (\$32.50/ac)

^{††}Change in profit is calculated as the difference in cost between seeding rate treatments.



