

Wheat Seeding Rate

Trial ID: 2023-WP09 - R.M. of Morris

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 95, 117 and 138 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	95 lbs vs. 117 lbs vs. 138 lbs
Soil Texture	Clay
Previous Crop	Canola
Tillage	Conventional Tillage
Seeding Equipment	60' Disc Drill
Seeding Date	May 15
Variety	AAC Brandon
Germination	97%
Row Spacing	10″
Harvest Date	August 28

202300503	Plot 1	- 117 lbs/ac
	Plot 2 - 138 lbs/ac	
	Plot 3 - 138 lbs/ac	
20250/702	Plot 4 - 95 lbs/ac	
2023/07-09	Plot 5	- 117 lbs/ac
	Plot 6 - 95 lbs/ac	
	Plot 7 - 138 lbs/ac	
202500009	Plot 8	- 117 lbs/ac
2028WF39	Plot 9 - 95 lbs/ac	
	Plot 10 - 95 lbs/ac	
		- 117 lbs/ac
2823339569	Plot 12 - 138 lbs/ac	

Wheat Response					
	Plants/ft ²	Protein (%)	TWT (kg/hL)	Falling Number	Grade
95 lbs	27	16.2	65	330	1
117 lbs	33	16.2	65	314	1
138 lbs	30	16.2	65	293	1

Precipitation ⁺ (mm)					
	May	June	July	Aug	Cumulative
Rainfall	9	25	60	27	122
Normal	69	102	86	84	340
% Normal	13%	25%	70%	32%	36%
+Crawing source provinitation (mm)					

+Growing season precipitation (mm)

Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}		
95 lbs	52.4	\$27.20/ac	+ \$5.95/ac		
117 lbs	52.2	\$33.15/ac	\$0/ac		
138 lbs	54.4	\$39.10/ac	- \$5.95/ac		
P-Value	0.3651		Economics: There is an increase in profit for the lower seeding rate due t		
сv	4.18%	the lower cost of seed/a	the lower cost of seed/acre.		
Significance	Νο				

*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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