



Wheat Seeding Rate

Trial ID: 2023-WP07 — R.M. of Morris

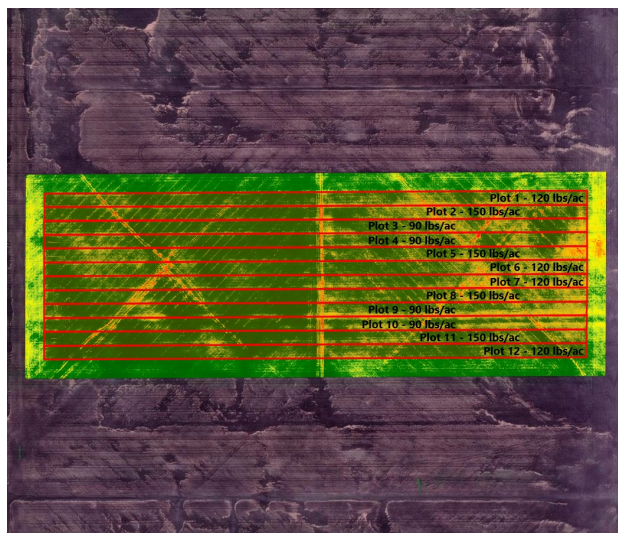
Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal seeding rate in wheat.

Summary: There was no significant yield difference between seeding rates of 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
Previous Crop	Canola
Tillage	Conventional Tillage
Seeding Equipment	60' Disc Drill
Seeding Date	May 15
Variety	AAC Brandon
Germination	98%
Row Spacing	10"
Harvest Date	August 28

NDVI Imagery July 17



Wheat Response

	Plants/ft ²	Protein (%)	TWT (kg/hL)	Falling Number	Grade
90 lbs	24	15.9	66	344	1
120 lbs	29	16.0	65	335	1
150 lbs	31	16.3	65	327	1

Precipitation[†] (mm)

	May	June	July	Aug	Cumulative
Rainfall	10	22	23	36	91
Normal	56	98	82	70	305
% Normal	17%	23%	28%	51%	30%

[†]Growing season precipitation (mm)

Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}
90 lbs	51.5	\$25.50/ac	+ \$8.50/ac
120 lbs	54.0	\$34.00/ac	\$0/ac
150 lbs	48.4	\$42.50/ac	- \$8.50/ac
P-Value	0.2265	Economics: There is an increase in profit for the lower seeding rate due to the lower cost of seed/acre.	
CV	7.82%		
Significance	No		

[†]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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