Wheat Seeding Rate

Trial ID: 2022-WP04 — R.M. of Brokenhead

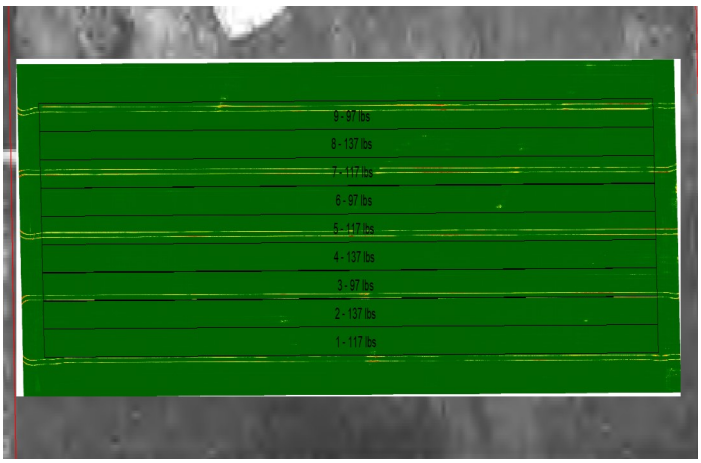
Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal seeding rate in wheat.

Summary: There was no significant yield difference between seeding rates of 97, 117 and 137 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	97 lbs vs. 117 lbs vs. 137 lbs
Soil Texture	Clay
Previous Crop	Soybeans
Tillage	Conventional
Seeding Equipment	60’ Disc Drill
Seeding Date	May 24
Variety	AAC Brandon
Germination	99%
Row Spacing	10”
Harvest Date	September 04

NDVI Imagery July 24



Wheat Response

	Plants/ft²	Protein (%)	TWT (kg/hL)	Falling Number	Grade
97 lbs	23[B]	13.4	83	356	1.0
117 lbs	25[B]	—	—	—	—
137 lbs	29[A]	—	—	—	—

Precipitation† (mm)

	May	June	July	Aug	Total
Rainfall	118	77	67	67	**329**
Normal	54	78	70	18	**219**
% Normal	218%	99%	96%	377%	**150%**

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

Overall Yield & Economics

	Mean (bu/ac)	Cost†	Change in Profit/ac††
97 lbs	86.3	$26/ac	+$6/ac
117 lbs	87.7	$32/ac	$0/ac
137 lbs	86.0	$37/ac	-$5/ac
P-Value	0.5176	**Economics: There is an increase in profit for the lower seeding rate due to the lower cost of seed/acre.**	
CV	2.06%		
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.

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