



Barley Seeding Rate

Trial ID: 2023-BP03 — R.M. of Westlake-Gladstone

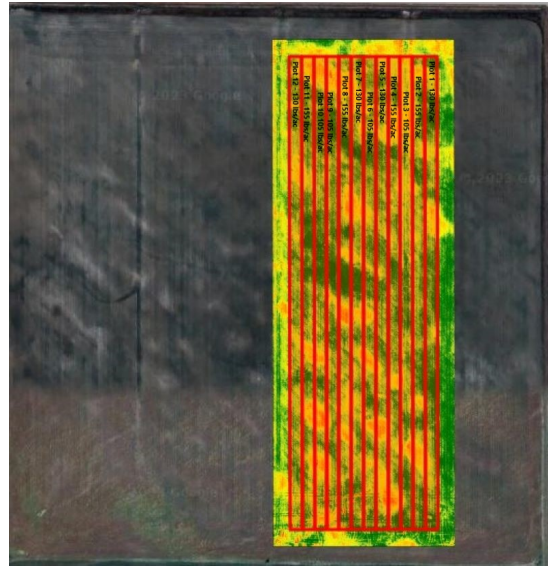
Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal seeding rate in barley.

Summary: There was a significant yield difference between seeding rates of 105, 130 and 155 lbs/ac. As a result, there was a decrease in profit for the 105 lbs/ac rate versus the 130 and 155 lbs/ac rates based on seed costs and grain price.

Trial Information

Treatment	105 lbs vs. 130 lbs vs. 155 lbs
Soil Texture	Clay Loams
Previous Crop	Wheat
Tillage	Minimal Tillage
Seeding Equipment	60' Disc Drill
Seeding Date	May 10
Variety	CDC Austenson
Germination	98%
Row Spacing	10"
Harvest Date	August 19

NDVI Imagery July 19



Barley Response

	Plants/ft ²	Protein (%)	TWT (kg/hL)	Grade
105 lbs	11	13.7	63	1
130 lbs	13	13.2	63	1
155 lbs	15	12.5	62	2

Precipitation[†] (mm)

	May	June	July	Aug	Cumulative
Rainfall	25	65	14	31	135
Normal	62	89	78	66	295
% Normal	40%	73%	18%	47%	46%

[†]Growing season precipitation (mm)

Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}
105 lbs	70.7 ^B	\$31.72/ac	-\$7.55/ac
130 lbs	76.9 ^A	\$39.27/ac	\$0/ac
155 lbs	75.6 ^A	\$46.82/ac	-\$7.55/ac
P-Value	0.0253	Economics: There is a decrease in profit for the lower seeding rate due to the lower yield/acre than the higher seeding rates.	
CV	3.05%		
Significance	Yes		

[†]Based on MB Agriculture 2023 Cost of Production Guidelines (\$29.00/ac)

^{††}Change in profit is calculated as the difference in cost between seeding rate treatments. A price of \$7.00/bushel for #1 grade feed barley is used in the economic calculation (Nov 2023)



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