



Barley Seeding Rate

Trial ID: 2022-BP01 — R.M. of Wallace-Woodworth

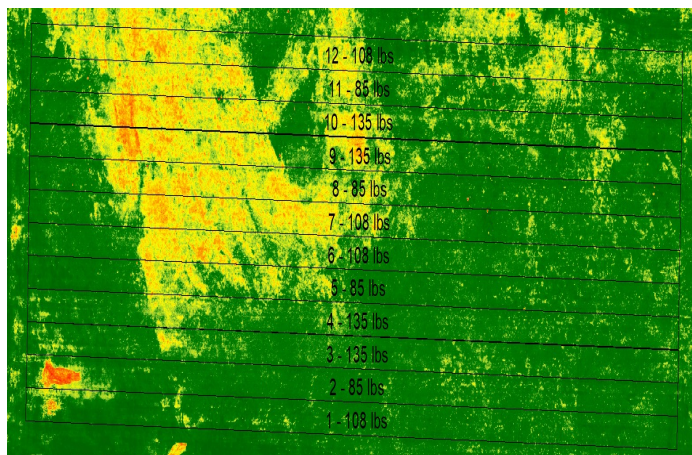
Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal seeding rate in barley.

Summary: There was no significant yield difference between seeding rates of 85, 108 and 135 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	85 lbs vs. 108 lbs vs. 135 lbs
Soil Texture	Fine Loams
Previous Crop	Canola
Tillage	Zero Till
Seeding Equipment	60' Air Drill
Seeding Date	May 12
Variety	CDC Austenson
Germination	99%
Row Spacing	12"
Harvest Date	August 12

NDVI Imagery July 24



Barley Response

	Plants/ft ²	Protein (%)	TWT (kg/hL)	Grade
85 lbs	19 ^B	14.5	62.0	2.0
108 lbs	20 ^B	—	—	—
135 lbs	22 ^A	—	—	—

Precipitation[†] (mm)

	May	June	July	Aug	Total
Rainfall	103	90	70	35	298
Normal	40	72	68	51	231
% Normal	258%	125%	102%	69%	129%

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

Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}
85 lbs	97.1	\$25/ac	+\$7/ac
108 lbs	92.9	\$32/ac	\$0/ac
135 lbs	97.6	\$39/ac	-\$7/ac
P-Value	0.6069	Economics: There is an increase in profit for the lower seeding rate due to the lower cost of seed/acre.	
CV	7.36%		
Significance	No		

[†]Based on MB Agriculture 2022 Cost of Production Guidelines (\$28.00/ac)

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



MCA would like to thank Tone Ag Consulting Ltd. for the research support and SGS Canada Inc. for quality analysis for this trial.



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Barley Seeding Rate

Trial ID: 2022-BP03 — R.M. of De Salaberry

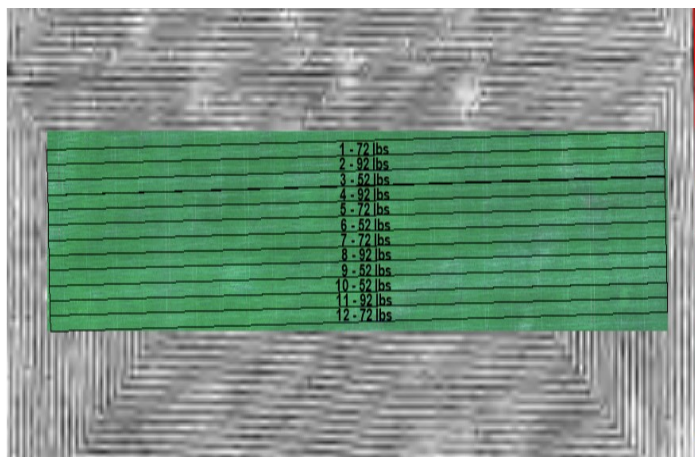
Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal seeding rate in barley.

Summary: There was no significant yield difference between seeding rates of 125, 145 and 165 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	125 lbs vs. 145 lbs vs. 165 lbs
Soil Texture	Clay
Previous Crop	Canola
Tillage	Conventional
Seeding Equipment	60' Disc Drill
Seeding Date	June 04
Variety	Conlon
Germination	99%
Row Spacing	10"
Harvest Date	September 02

RGB Imagery July 24



Barley Response

	Plants/ft ²	Protein (%)	TWT (kg/hL)	Grade
125 lbs	22 ^C	12.7	66.0	1.0
145 lbs	26 ^B	—	—	—
165 lbs	30 ^A	—	—	—

Precipitation[†] (mm)

	May	June	July	Aug	Total
Rainfall	115	107	130	86	439
Normal	58	77	80	54	269
% Normal	199%	139%	162%	159%	163%

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

Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}
125 lbs	97.6	\$36/ac	+\$6/ac
145 lbs	99.2	\$42/ac	\$0/ac
165 lbs	97.8	\$48/ac	-\$6/ac
P-Value	0.7242	Economics: There is an increase in profit for the lower seeding rate due to the lower cost of seed/acre.	
CV	3.03%		
Significance	No		

[†]Based on MB Agriculture 2022 Cost of Production Guidelines (\$28.00/ac)

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



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Barley Seeding Rate

Trial ID: 2022-BP04 — R.M. of Westlake-Gladstone

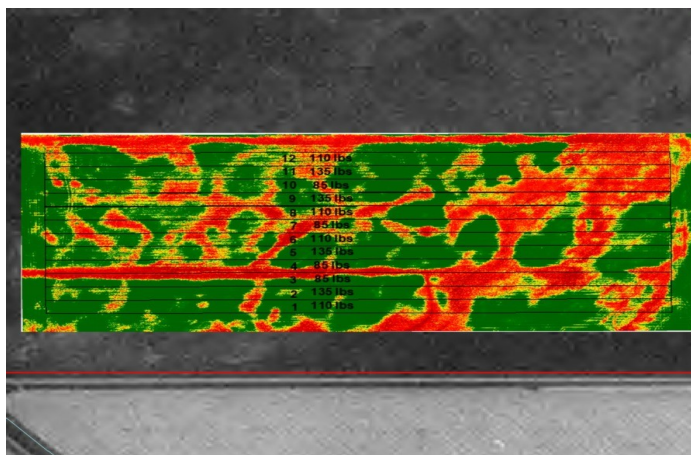
Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal seeding rate in barley.

Summary: There was no significant yield difference between seeding rates of 88, 110 and 131 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	88 lbs vs. 110 lbs vs. 131 lbs
Soil Texture	Clay Loams
Previous Crop	Canola
Tillage	Minimal
Seeding Equipment	60' Disc Drill
Seeding Date	June 09
Variety	Claymore
Germination	97%
Row Spacing	7"
Harvest Date	September 08

NDVI Imagery July 24



Barley Response

	Plants/ft ²	Protein (%)	TWT (kg/hL)	Grade
88 lbs	18 ^B	13.3	57	2.0
110 lbs	19 ^B	12.9	58	2.0
131 lbs	24 ^A	13.5	55	—

Precipitation[†] (mm)

	May	June	July	Aug	Total
Rainfall	123	71	61	34	288
Normal	53	60	72	63	248
% Normal	233%	117%	84%	54%	116%

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

Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}
88 lbs	59.8	\$26/ac	+\$6/ac
110 lbs	60.1	\$32/ac	\$0/ac
131 lbs	58.8	\$38/ac	-\$6/ac
P-Value	0.9508	Economics: There is an increase in profit for the lower seeding rate due to the lower cost of seed/acre.	
CV	10.37%		
Significance	No		

[†]Based on MB Agriculture 2022 Cost of Production Guidelines (\$28.00/ac)

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



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Barley Seeding Rate

Trial ID: 2022-BP05 — R.M. of Rockwood

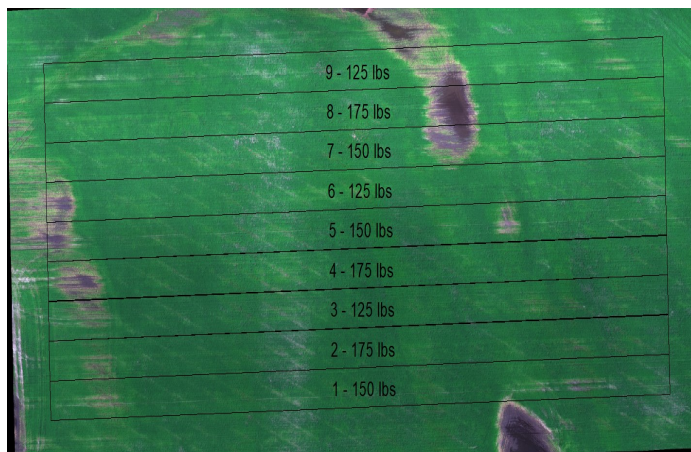
Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal seeding rate in barley.

Summary: There was no significant yield difference between seeding rates of 125, 150 and 175 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	125 lbs vs. 150 lbs vs. 175 lbs
Soil Texture	Fine Loams
Previous Crop	Oats
Tillage	Conventional
Seeding Equipment	60' Air Drill
Seeding Date	June 19
Variety	Claymore
Germination	98%
Row Spacing	10"
Harvest Date	September 11

RGB Imagery July 24



Barley Response

	Plants/ft ²	Protein (%)	TWT (kg/hL)	Grade
125 lbs	21	14.4	50	—
150 lbs	23	15.2	50	—
175 lbs	26	14.7	50	—

Precipitation[†] (mm)

	May	June	July	Aug	Total
Rainfall	126	90	141	39	396
Normal	54	83	64	58	259
% Normal	234%	108%	221%	67%	153%

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

Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}
125 lbs	48.6	\$36/ac	+\$8/ac
150 lbs	46.9	\$44/ac	\$0/ac
175 lbs	48.4	\$51/ac	-\$7/ac
P-Value	0.4964	Economics: There is an increase in profit for the lower seeding rate due to the lower cost of seed/acre.	
CV	3.84%		
Significance	No		

[†]Based on MB Agriculture 2022 Cost of Production Guidelines (\$28.00/ac)

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



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