Barley Plant Growth Regulator

Trial ID: 2023-BPGR04 — R.M. of MacDonald

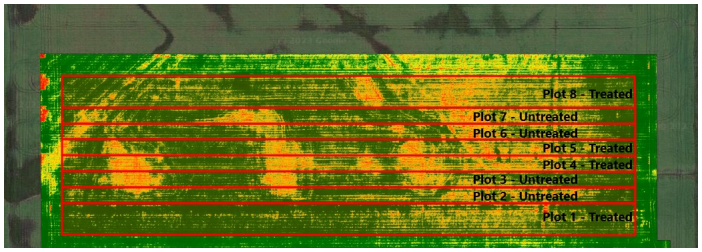
Objective: The purpose of this project is to quantify the agronomic and economic impacts of using a plant growth regulator for plant height, lodging, yield and quality on barley.

Summary: There was a significant reduction in plant height and lodging between the treatments. There was no significant yield or quality differences between the treatments. As a result, there was a decrease in profit equivalent to the increase in cost for the plant growth regulator.

Trial Information

Treatment	Moddus
Application Timing	GS32—June 13
Application Rate	30 ac/jug
Previous Crop	Canola
Tillage	Conventional Tillage
Seeding Equipment	60’ Disc Drill
Seeding Date	May 17
Seeding Rate	115 lbs/ac
Variety	AAC Connect
Row Spacing	10”
Harvest Date	August 30

NDVI Imagery July 20



Precipitation† (mm)

	May	June	July	Aug	Cumulative
Rainfall	40	58	26	36	**159**
Normal	60	84	77	75	**295**
% Normal	66%	69%	34%	48%	**54%**

†Growing season precipitation (mm)

Barley Response

	Plant Height (cm)	Lodging Severity (1-9)	Protein (%)	Grade
Treated	55[B]	1	10.6	2
Untreated	64[A]	1	11.2	1

Overall Yield & Economics

	Mean (bu/ac)	Cost†	Change in Profit/ac
Treated	73.5	$19.50/ac	-$19.50/ac
Untreated	68.8		$0/ac
P-Value	0.5169	**Economics: Since yield was not significantly different, there is no increased income to offset the cost of the plant growth regulator.**	
CV	12.89%		
Significance	**No**		

†Based on Nov 2023 MSRP of $833.68/case; represents product only, does not include application cost.

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