Barley Plant Growth Regulator

Trial ID: 2023-BPGR05 — R.M. of Alexander

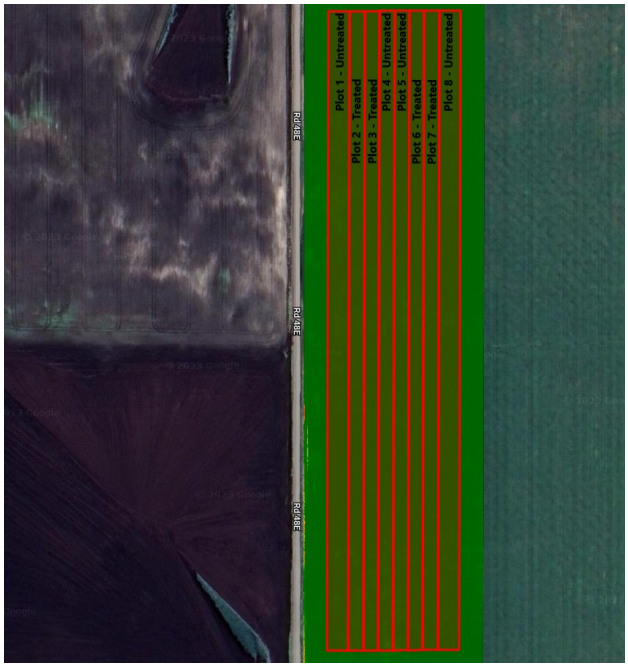
Objective: The purpose of this project is to quantify the agronomic and economic impacts of using a plant growth regulator for plant height, lodging, yield and quality on barley.

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	GS37—June 19
Application Rate	30 ac/jug
Previous Crop	Canola
Tillage	Conventional Tillage
Seeding Equipment	60’ Air Drill
Seeding Date	May 19
Seeding Rate	145 lbs/ac
Variety	AAC Synergy
Row Spacing	10”
Harvest Date	August 28

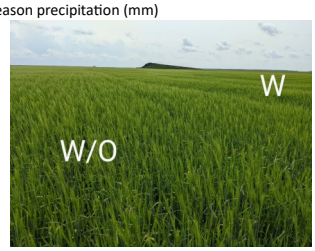
NDVI Imagery July 18



Precipitation† (mm)

	May	June	July	Aug	Cumulative
Rainfall	11	73	31	27	**142**
Normal	58	88	87	76	**309**
% Normal	19%	83%	35%	36%	**46%**

†Growing season precipitation (mm)



Barley Response

	Plant Height (cm)	Lodging Severity (1-9)	Protein (%)	Grade
Treated	87	1	12.9	1
Untreated	88	6	13.5	2

Overall Yield & Economics

	Mean (bu/ac)	Cost†	Change in Profit/ac
Treated	136.1	$19.50/ac	-$19.50/ac
Untreated	130.3		$0/ac
P-Value	0.0595	**Economics: Since yield was not significantly different, there is no increased income to offset the cost of the plant growth regulator.**	
CV	2.06%		
Significance	**No**		

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

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