



# Barley Plant Growth Regulator

**Trial ID: 2023-BPGR03 — R.M. of Woodlands**

**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	24 ac/jug
Previous Crop	Canola
Tillage	Conventional Tillage
Seeding Equipment	50' Disc Drill
Seeding Date	May 16
Seeding Rate	120 lbs/ac
Variety	CDC Austenson
Row Spacing	7.5"
Harvest Date	August 31

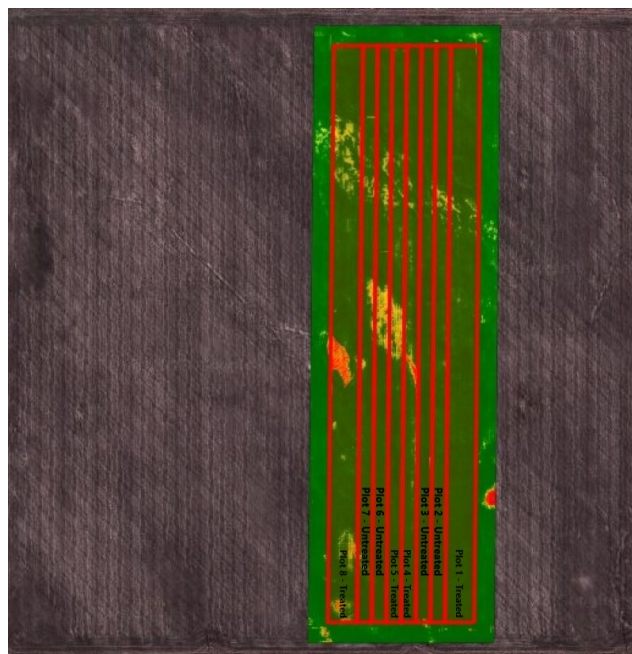
## Precipitation<sup>†</sup> (mm)

	May	June	July	Aug	Cumulative
Rainfall	8	61	74	33	176
Normal	60	98	76	68	302
% Normal	14%	62%	97%	49%	58%

<sup>†</sup>Growing season precipitation (mm)



## NDVI Imagery July 19



## Barley Response

	Plant Height (cm)	Lodging Severity (1-9)	Protein (%)	Grade
Treated	65 <sup>B</sup>	1	11.7	2
Untreated	78 <sup>A</sup>	2	11.2	2

## Overall Yield & Economics

	Mean (bu/ac)	Cost <sup>†</sup>	Change in Profit/ac
Treated	105.7	\$19.50/ac	-\$19.50/ac
Untreated	107.5		\$0/ac
P-Value	0.0992	<b>Economics: Since yield was not significantly different, there is no increased income to offset the cost of the plant growth regulator.</b>	
CV	1.03%		
Significance	No		

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



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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