

Project D



Manitoba Crop Alliance

BARLEY - PLANT GROWTH REGULATOR

Replicated Strip Trial Protocol



**MANITOBA
CROP
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PROJECT: MANAGEMENT OF LODGING IN BARLEY WITH MODDUS, A PLANT GROWTH REGULATOR (PGR)

OBJECTIVE: The purpose of this project is to quantify the impact of Moddus, a plant growth regulator on height, lodging and yield of barley – 6 sites.

BRIEF SUMMARY:

- The grower will manage their crop as per their normal best management practices.
- The grower will ensure that the PGR product being applied has market acceptance.
- The grower will spray PGR at the recommended rate at the growth stage (GS) 30 to 32 (5 to 6 leaf stage) timing on 4 strips, alternating with 4 untreated strips. An example is shown on the right.
- Strips should be full length of the field (minimum 1000ft.) and width to allow for a full “pure” pass with combine header.

Rep 1	PGR
	Check
Rep 2	Check
	PGR
Rep 3	Check
	PGR
Rep 4	PGR
	Check

GROWER REQUIREMENTS:

- Accurately record soil test results, variety, seeding date and rate, previous cropping history (rotation, fertilizer rates), tillage practices, fertilizer rates and application timing.
- Accurately record where all treatments are applied, temperature at application, crop stage at application, and rainfall a week prior and one week after application.
- Note any significant weather events throughout the growing season, such as high winds, hail, or extreme precipitation events.
- Areas containing waterways and headlands should be avoided. All other factors in the trial area must be treated the same.
- Notify project coordinator prior to application so fields can be scouted prior to and after application of product.
- Alert project coordinator of expected harvest date and ensure all treatments are harvested the same day into a weigh wagon/calibrated grain cart, and that grain samples can be secured for protein and moisture content analysis.
- Allow MCA to use data for research, educational and information purposes.
- **Must be a member in good standing with the MCA.**

MCA AND PARTNERS AGREE TO:

- Be available during product application and harvesting.
- Take various measurements, including stand establishment, height, lodging and crop maturity.
- Provide a report analyzing treatment differences.

RESEARCH ON THE FARM COACHES:

- Trial coordinator will work with local Research On The Farm coaches to collect field observations and harvest.
- Research On The Farm coaches may be local Manitoba Agriculture staff, retail or independent agronomists.

BENEFITS TO GROWERS:

- Access to latest research that can be applied to their farm.
- Determine profitability of the practices.
- Learn accepted on-farm-testing procedures.

CAUTION:

- *Using a plant growth regulator on malt barley can have market access implications. Manipulator 620 carries a “be informed” rating for malt barley as a part of the Keep it Clean campaign. No market access issues have been identified for Moddus, however, if applying a PGR to malt barley, MCA recommends consulting your grain buyer prior to application.*

To sign up for a trial or for questions about the trial, please contact: Daryl Rex (204)745-6661 (Daryl@mbcropalliance.ca) or Jordan Karpinchick (204)433-7189 (jordankarpinchick@toneag.ca)



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Data to be Collected by Contractor or MCA (2023 Trials):

- ✓ Plant Stand – plants/ft² – after emergence but prior to harvesting
- ✓ Plant Height – record height in inches
- ✓ Lodging – 1=no lodging; 5=flat – just prior to harvest or before swathing
- ✓ Yield – bushels/acre
- ✓ Harvest Sample – 1 composite sample/treatment for quality analysis
- ✓ General Observations – eg. General weed control; early season plant vigor