

Wheat Plant Growth Regulator Trial

Trial ID: 2018-WPGR01 – R.M. of Morris

Objective: Quantify the impact of the plant growth regulator Manipulator 620 (chlormequat chloride) on plant height, lodging, yield and quality of spring wheat.

TRIAL INFORMATION

Treatment	Manipulator vs. Untreated
Rural Municipality	Morris
Previous Crop	Canola
Soil Texture	Clay
Tillage	Conventional
Seeding Date	April 28, 2018
Variety	ACC Brandon
Row Spacing	7.5"
Seeding Rate	117 lbs/ac
Residual N	---
Fertilizer (N-P-K-S)	194-30-0-7.5
Application Date	June 13, 2018
Application Timing	5-6 leaf stage
Application Rate	0.7 L/ac
Harvest Date	August 8, 2018

FIELD IMAGE – JULY 28, 2018



PRECIPITATION†

	May	June	July	Aug
Rainfall	28	85	38	27
Normal	54	86	72	65

† Growing season precipitation (mm)

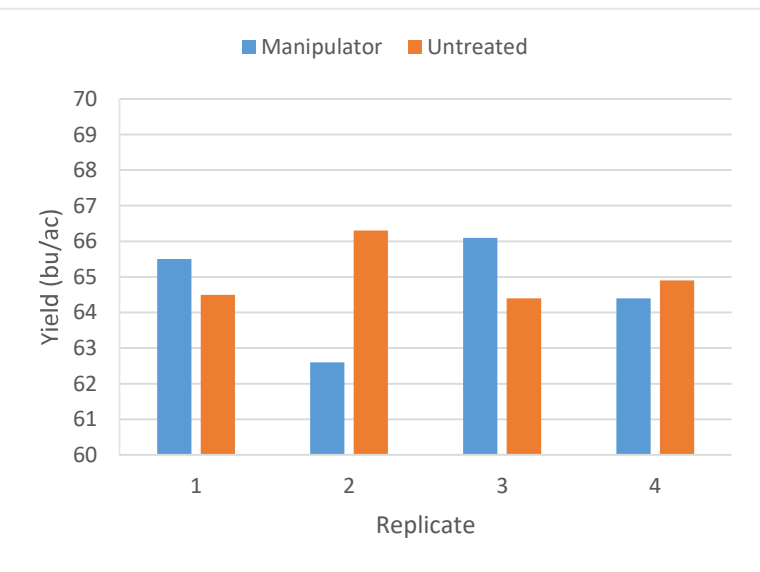
WHEAT RESPONSE

	Plant Height (inch)	Lodging	Protein
Manipulator	22.5	No	16.4
Untreated	26.1	No	16.4

OVERALL YIELD

	Mean (bu/ac)
Manipulator	64.6
Untreated	65.0
Yield Difference	-0.4
P-Value	0.6629
CV	1.8%
Significance	No

STRIP YIELD



Summary: There was no significant yield difference between Manipulator applied at the 5-6 leaf growth stage and untreated check strips. Rainfall was near normal for the month of June but below normal for the remainder of the growing season. There was no lodging observed within the trial. Manipulator reduced plant height by 3.6 inches and there was no significant difference in seed protein content between the two treatments.