



## Wheat Plant Growth Regulator

Trial ID: 2021-WPGR01 — R.M. of De Salaberry

**Objective:** The purpose of this project is to 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™ 620 vs. Untreated
Location	Otterburne
Previous Crop	Corn
Soil Texture	Clay
Tillage	Zero Tillage
Planting Date	April 29, 2021
Variety	AAC Brandon
Row Spacing	10"
Seeding Rate	135 lbs/ac
Fertilizer (N-P-K-S)	136N 30P
Application Date	June 02, 2021
Application Timing	GS29 (4L)
Application Rate	0.7 L/ac
Harvest Date	August 08, 2021

### PRECIPITATION†

	May	June	July	Aug	Total
Rainfall	35	61	12	51	160
Normal	52	86	63	41	242

†Growing season precipitation (mm) - May 01—Aug 15

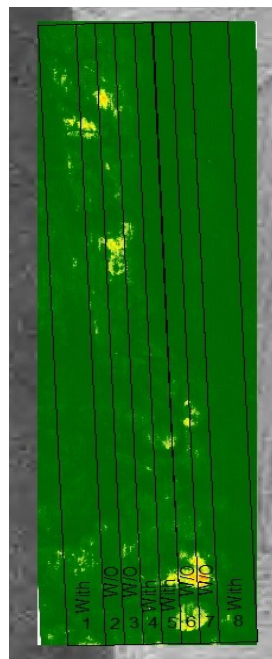
### WHEAT RESPONSE

	Plant Height (cm)	Lodging		Protein %
		Incidence (%)	Severity (1-10)	
Manipulator™ 620	74 <sup>A</sup>	0	1	15.0
Untreated	76 <sup>A</sup>	1	1	15.2

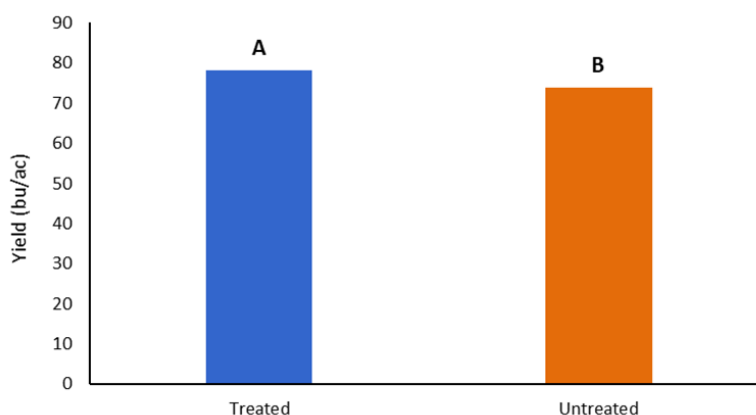
### OVERALL YIELD

	Mean (bu/ac)
Manipulator™ 620	78.1 <sup>A</sup>
Untreated	73.8 <sup>B</sup>
Yield Difference	4.3
P-Value	0.0132
CV	1.52%
Significance	Yes

### FIELD IMAGE



### YIELD BY TREATMENT



**Summary:** There was a significant yield difference between the Manipulator™ 620 (chlormequat chloride) plant growth regulator application and the untreated check. There was no significant reduction in plant height with the application of the plant growth regulator. There was low amounts of lodging observed within the trial. Rainfall was below normal for the growing season.



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