

## Wheat Plant Growth Regulator

Trial ID: 2019-WPGR11 — R.M. of MacDonald

**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	Starbuck
Previous Crop	Soybeans
Soil Texture	Clay
Tillage	Conventional
Planting Date	May 07, 2019
Variety	AAC Brandon
Row Spacing	7.5"
Seeding Rate	110 lbs/ac
Residual N	---
Fertilizer (N-P-K-S)	101N 31P
Application Date	June 14, 2019
Application Timing	5L
Application Rate	0.7 L/ac
Harvest Date	September 06, 2019



PRECIPITATION†					
	May	June	July	Aug	Total
Rainfall	24	40	71	63	199
Normal	50	85	71	74	281

†Growing season precipitation (mm)

WHEAT RESPONSE				
	Plant Height (inches)	Lodging		Protein
		Incidence	Severity	
Manipulator™ 620	27	0	1	15.1
Untreated	28	0	1	15.1

OVERALL YIELD	
	Mean (bu/ac)
Manipulator™ 620	53.4
Untreated	53.0
Yield Difference	0.4
P-Value	0.8025
CV	3.5%
Significance	No



**Summary:** There was no significant yield difference between the Manipulator™ 620 plant growth regulator application and the untreated check. There was a significant reduction in plant height of 1" with plant growth regulator application. There was no lodging observed within the trial. Rainfall was below normal in May and June and normal through the remainder of the growing season.