

## Wheat Plant Growth Regulator

Trial ID: 2019-WPGR08 — R.M. of Oakland-Wawanesa

**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	Wawanesa
Previous Crop	Soybeans
Soil Texture	Loam
Tillage	Zero Tillage
Planting Date	May 03, 2019
Variety	AC Cardale
Row Spacing	10"
Seeding Rate	90 lbs/ac
Residual N	---
Fertilizer (N-P-K-S)	120N 30P
Application Date	June 14, 2019
Application Timing	Z32
Application Rate	0.7 L/ac
Harvest Date	September 06, 2019

### FIELD IMAGE



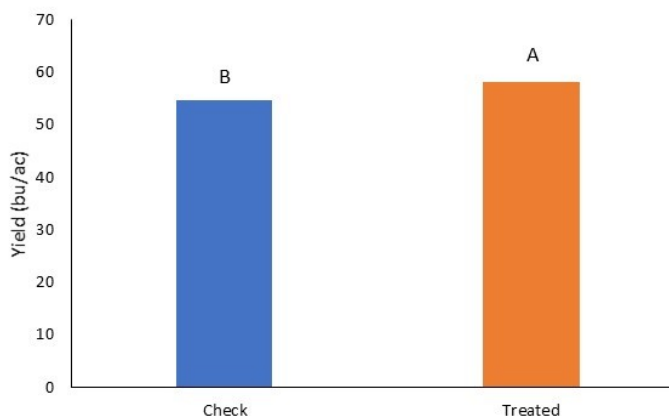
PRECIPITATION†					
	May	June	July	Aug	Total
Rainfall	38	109	106	58	312
Normal	59	81	73	66	279

†Growing season precipitation (mm)

WHEAT RESPONSE				
	Plant Height (inches)	Lodging Incidence (%)	Lodging Severity (1-10)	Protein
Manipulator™ 620	33	10	2	15.5
Untreated	36	40	5	15.7

OVERALL YIELD	
	Mean (bu/ac)
Manipulator™ 620	58.1
Untreated	54.6
Yield Difference	3.5
P-Value	0.0012
CV	4.0%
Significance	Yes

### STRIP YIELD



**Summary:** There was a significant yield increase of 3.5 bu/ac with Manipulator™ 620 plant growth regulator application compared to the untreated check. There was a significant reduction in plant height of 3" with plant growth regulator application. There was a significant reduction in lodging observed within the trial. Rainfall was near or above normal for most of the growing season.