

# Wheat Plant Growth Regulator Trial

Trial ID: 2018-WPGR07 – R.M. of Woodlands

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

## TRIAL INFORMATION

<b>Treatment</b>	Manipulator vs. Untreated
<b>Rural Municipality</b>	Woodlands
<b>Previous Crop</b>	Soybean
<b>Soil Texture</b>	Clay Loam
<b>Tillage</b>	Reduced
<b>Seeding Date</b>	April 30, 2018
<b>Variety</b>	Brandon
<b>Row Spacing</b>	10"
<b>Seeding Rate</b>	128 lbs/ac
<b>Residual N</b>	70 lbs N/ac
<b>Fertilizer (N-P-K-S)</b>	65-10-0-0
<b>Application Date</b>	June 13, 2018
<b>Application Timing</b>	5-6 leaf stage
<b>Application Rate</b>	0.7 L/ac
<b>Harvest Date</b>	August 12, 2018

## PRECIPITATION<sup>†</sup>

	May	June	July	Aug
<b>Rainfall</b>	41	62	23	45
<b>Normal</b>	54	92	66	63

<sup>†</sup> Growing season precipitation (mm)

## WHEAT RESPONSE

	Plant Height (inch)	Lodging	Protein
<b>Manipulator</b>	31.1	No	13.3
<b>Untreated</b>	34.2	No	14.8

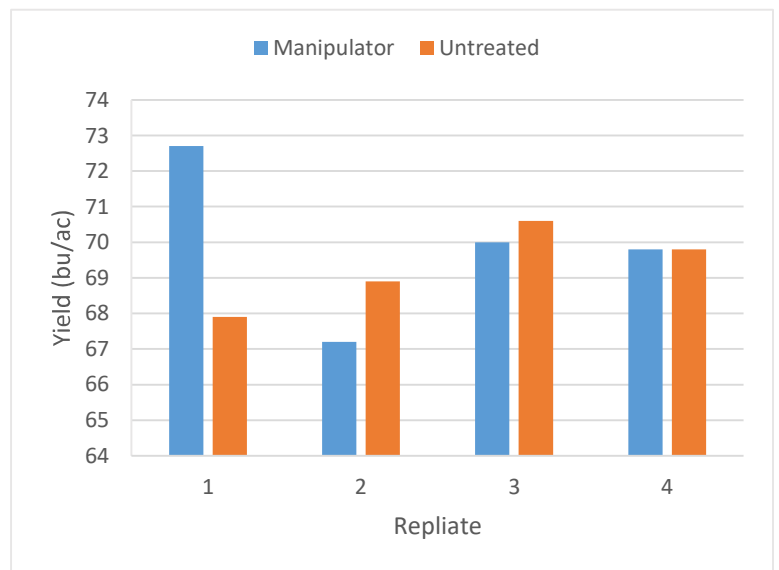
## OVERALL YIELD

	Mean (bu/ac)
<b>Manipulator</b>	69.9
<b>Untreated</b>	69.3
<b>Yield Difference</b>	0.6
<b>P-Value</b>	0.6340
<b>CV</b>	2.4%
<b>Significance</b>	No

## FIELD IMAGE – JULY 29, 2018



## 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 below normal for the entire growing season and there was no lodging observed within the trial. Manipulator reduced plant height by 3.1 inches and there was no significant difference in seed protein content between the two treatments.