

## **Wheat Plant Growth Regulator**

Trial ID: 2019-WPGR03 - R.M. of Roland

**Objective:** The purpose of this project is to quantify the impact of the plant growth regulator Manipulator  $^{\text{TM}}$  620 (chlormequat chloride) on plant height, lodging, yield and quality of spring wheat

| TRIAL INFORMATION         |                                |  |
|---------------------------|--------------------------------|--|
| Treatment                 | Manipulator™ 620 vs. Untreated |  |
| Location                  | Roland                         |  |
| <b>Previous Crop</b>      | Corn                           |  |
| Soil Texture              | Clay                           |  |
| Tillage                   | Conventional                   |  |
| Planting Date             | April 27, 2019                 |  |
| Variety                   | AAC Brandon                    |  |
| Row Spacing               | 9"                             |  |
| Seeding Rate              | 124 lbs/ac                     |  |
| Residual N                |                                |  |
| Fertilizer (N-P-K-S)      | 100N 50P 10S                   |  |
| <b>Application Date</b>   | June 06, 2019                  |  |
| <b>Application Timing</b> | 5L                             |  |
| Application Rate          | 0.7 L/ac                       |  |
| Harvest Date              | August 10, 2019                |  |

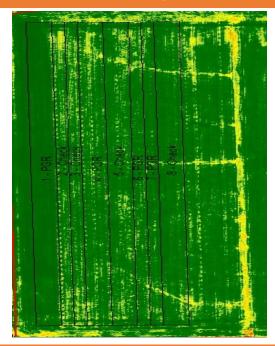
| PRECIPITATION† |     |      |      |     |       |
|----------------|-----|------|------|-----|-------|
|                | May | June | July | Aug | Total |
| Rainfall       | 45  | 37   | 57   | 0   | 141   |
| Normal         | 66  | 78   | 76   | 21  | 243   |

| †Growing seaso | on precipitation | (mm) |
|----------------|------------------|------|

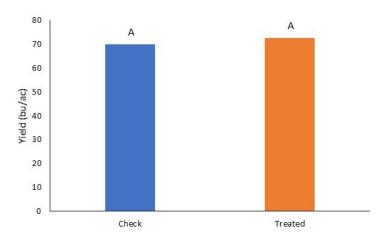
| WHEAT RESPONSE   |                 |                  |                    |         |
|------------------|-----------------|------------------|--------------------|---------|
|                  | Plant           | Lodging          |                    |         |
|                  | Height (inches) | Incidence<br>(%) | Severity<br>(1-10) | Protein |
| Manipulator™ 620 | 27              | 0                | 1                  | 11.0    |
| Untreated        | 29              | 0                | 1                  | 11.0    |

| OVERALL YIELD    |              |  |
|------------------|--------------|--|
|                  | Mean (bu/ac) |  |
| Manipulator™ 620 | 52.3         |  |
| Untreated        | 48.4         |  |
| Yield Difference | 2.6          |  |
| P-Value          | 0.2768       |  |
| CV               | 7.3%         |  |
| Significance     | No           |  |

## **FIELD IMAGE**



## STRIP YIELD



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 2" with plant growth regulator application. There was no lodging observed within the trial. Rainfall was below normal for the entire growing season.



