Wheat Plant Growth Regulator

Trial ID: 2020-WPGR07 — R.M. of Montcalm

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	Morris
Previous Crop	Soybeans
Soil Texture	Clay
Tillage	Conventional Tillage
Planting Date	May 05, 2020
Variety	AAC Brandon
Row Spacing	10”
Seeding Rate	123 lbs/ac
Residual N	——
Fertilizer (N-P-K-S)	139N 42P 10K
Application Date	June 12, 2020
Application Timing	5L
Application Rate	0.7 L/ac
Harvest Date	August 26, 2020

PRECIPITATION†

	May	June	July	Aug	Total
Rainfall	11	79	99	118	**306**
Normal	56	84	65	74	**278**

†Growing season precipitation (mm)

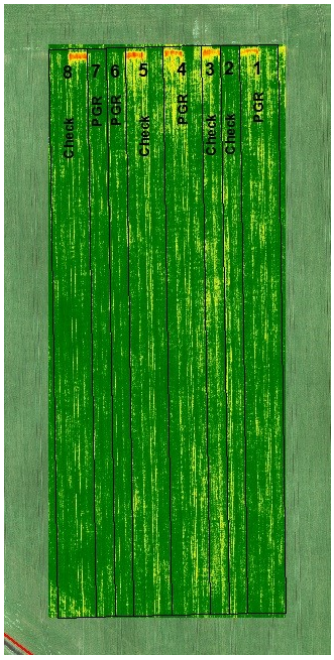
WHEAT RESPONSE

	Plant Height (cm)	Lodging		Protein %
		Incidence (%)	Severity (1-10)	
Manipulator™ 620	68	0	1	14.4
Untreated	76	0	1	14.9

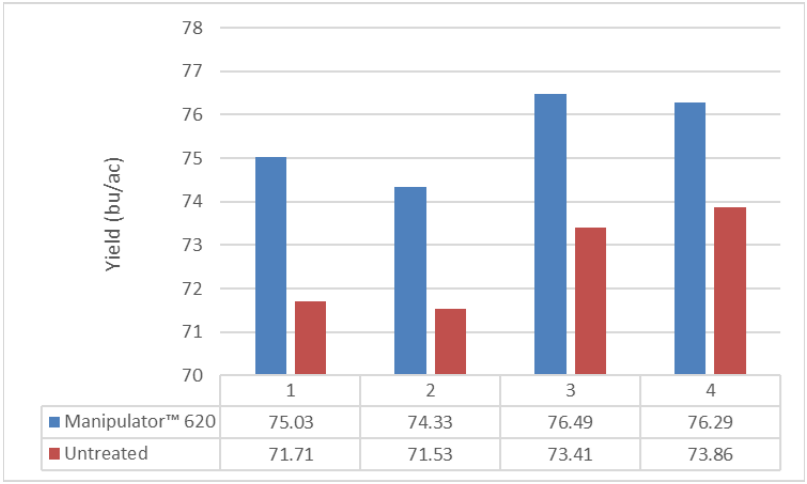
OVERALL YIELD

	Mean (bu/ac)
Manipulator™ 620	75.5
Untreated	72.6
Yield Difference	2.9
P-Value	0.00063
CV	2.5%
Significance	**Yes**

FIELD IMAGE



STRIP YIELD



Summary: There was a significant yield difference between the Manipulator™ 620 plant growth regulator application and the untreated check. There was a significant reduction in plant height due to the plant growth regulator application. There was no lodging observed within the trial. Rainfall was above normal for the growing season.

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