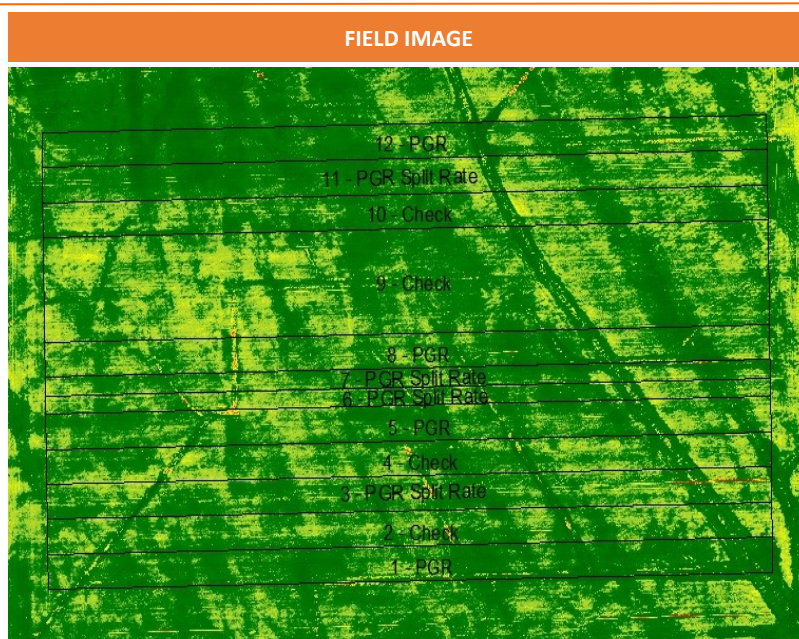


Wheat Plant Growth Regulator

Trial ID: 2019-WPGR06 — R.M. of Morris

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	Zero Tillage
Planting Date	May 09, 2019
Variety	AAC Cameron VB
Row Spacing	9"
Seeding Rate	
Residual N	27 lbs N/ac
Fertilizer (N-P-K-S)	146N 50P 10K
Application Date	June 12, 2019
Application Timing	5L
Application Rate	0.7 L/ac vs. 350 mL/ac
Harvest Date	August 16, 2019

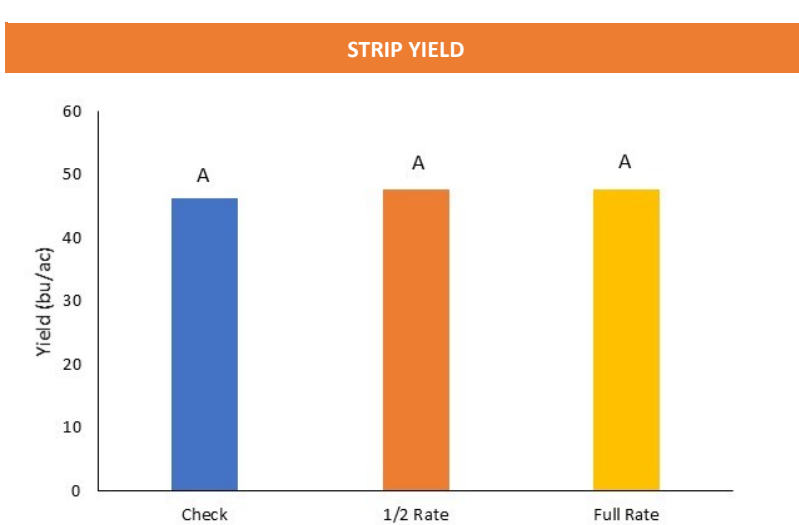


PRECIPITATION†					
	May	June	July	Aug	Total
Rainfall	26	40	110	12	189
Normal	46	78	76	38	239

†Growing season precipitation (mm)

WHEAT RESPONSE				
	Plant Height (inches)	Lodging		Protein
		Incidence	Severity	
Manipulator™ 620	31	0	1	15.0
Untreated	31	0	1	14.9

OVERALL YIELD	
	Mean (bu/ac)
Full Rate	47.6
Half Rate	47.5
Untreated	46.2
P-Value	0.3342
CV	2.8%
Significance	No



Summary: There was no significant yield difference between the Manipulator™ 620 plant growth regulator application and the untreated check. There was no significant reduction in plant height with plant growth regulator application. There was no lodging observed within the trial. Rainfall was below normal through May, June and August; July was 145% above normal.