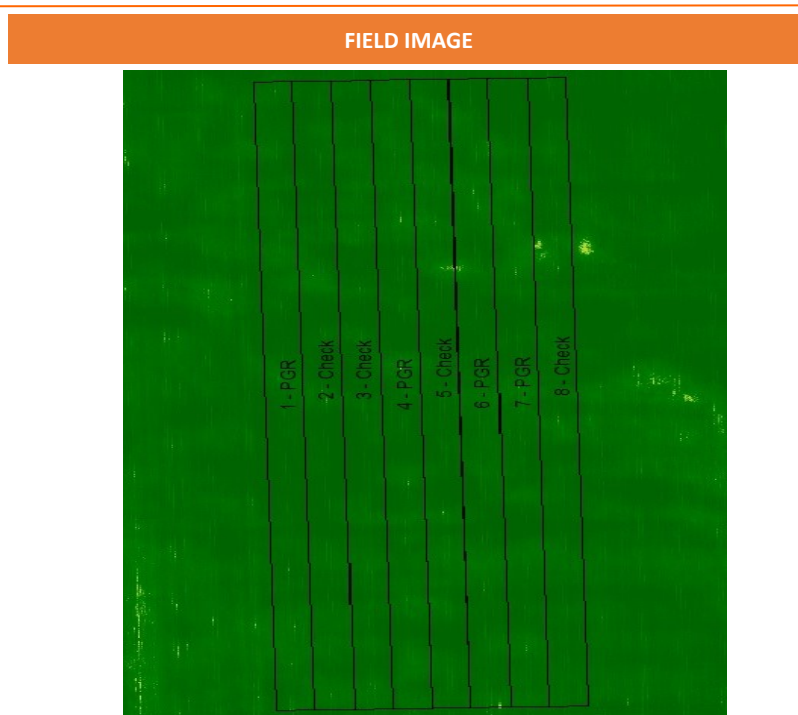


Wheat Plant Growth Regulator

Trial ID: 2019-WPGR12 — R.M. of Tache

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	Ste. Anne
Previous Crop	Soybeans
Soil Texture	Clay
Tillage	Conventional
Planting Date	May 14, 2019
Variety	SY Rowyn
Row Spacing	10"
Seeding Rate	156 lbs/ac
Residual N	---
Fertilizer (N-P-K-S)	110N 35P 10K
Application Date	June 18, 2019
Application Timing	5L
Application Rate	0.7 L/ac
Harvest Date	September 17, 2019

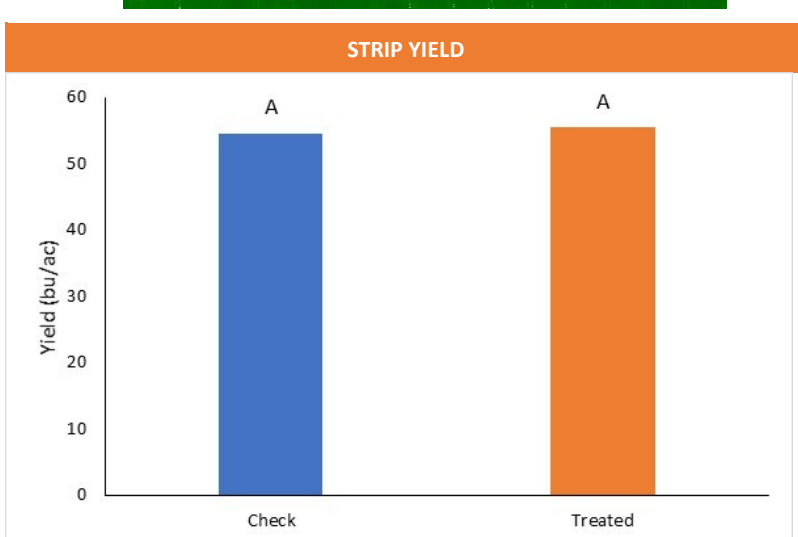


PRECIPITATION†					
	May	June	July	Aug	Total
Rainfall	17	32	123	66	240
Normal	44	88	72	69	274

†Growing season precipitation (mm)

WHEAT RESPONSE				
	Plant Height (inches)	Lodging		Protein
		Incidence	Severity	
Manipulator™ 620	24	0	1	13.3
Untreated	26	0	1	13.4

OVERALL YIELD	
	Mean (bu/ac)
Manipulator™ 620	55.6
Untreated	54.6
Yield Difference	1.0
P-Value	0.3332
CV	1.9%
Significance	No



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 3" with plant growth regulator application. There was no lodging observed within the trial. Rainfall was below normal in May and June; July was 171% above normal and August was near normal.