

Wheat Plant Growth Regulator Trial

Trial ID: 2018-WPGR05 – R.M. of Hanover

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

TRIAL INFORMATION

Treatment	Manipulator vs. Untreated
Rural Municipality	Hanover
Previous Crop	Canola
Soil Texture	Clay
Tillage	Direct Seed into Winter Wheat
Seeding Date	May 16, 2018
Variety	Rowyn
Row Spacing	10"
Seeding Rate	2.6 bu/ac
Residual N	---
Fertilizer (N-P-K-S)	110-37-3.4-0
Application Date	June 9, 2018
Application Timing	5-6 leaf stage
Application Rate	0.7 L/ac
Harvest Date	August 17, 2018

PRECIPITATION[†]

	May	June	July	Aug
Rainfall	42	81	36	30
Normal	58	91	80	66

[†] Growing season precipitation (mm)

WHEAT RESPONSE

	Plant Height (inch)	Lodging	Protein
Manipulator	32.8	No	11.3
Untreated	34.2	Yes	11.8

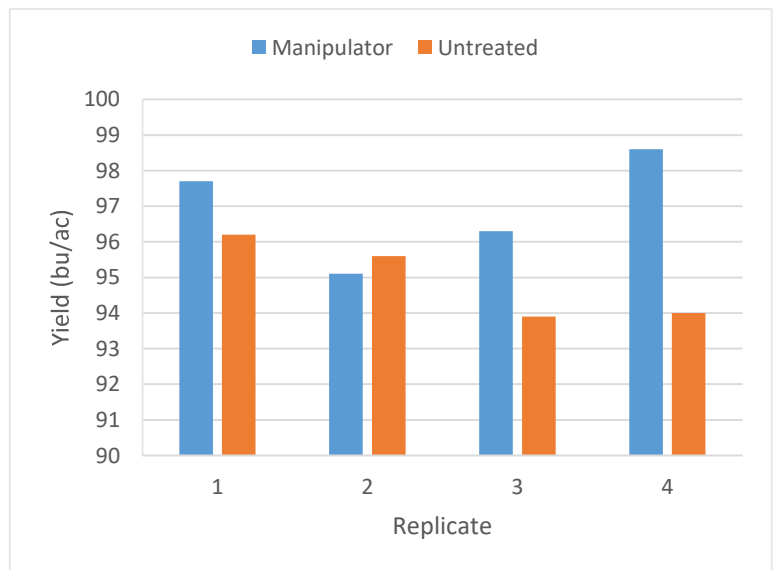
OVERALL YIELD

	Mean (bu/ac)
Manipulator	96.9
Untreated	94.9
Yield Difference	2.0
P-Value	0.0855
CV	1.7%
Significance	No

FIELD IMAGE – JULY 28, 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 near normal for the month of June but below normal for the remainder of the growing season. There was lodging observed within the untreated control strip at this location. Manipulator reduced plant height by 1.4 inches and there was no significant difference in seed protein content between the two treatments.