

## Wheat and Barley Plant Growth Regulator Trial

**Objective:** The purpose of this project is to quantify the agronomic and economic impacts of using a plant growth regulator on plant height, lodging, yield and quality of wheat and barley.

**Summary:** 4 site-years showed a significant difference in yield and a significant reduction in plant stand using a plant growth regulator versus untreated.

## **Single Site Analysis**

			Height			Yield					Statistically	Protein		
Trial ID	Rural Municipality	Variety	Product A	Product B	Untreated	Product A	Product B	Untreated	cv	P-Value	Significant @	Product A	Product B	Untreated
			cm			bu/ac			%		95%	%		
2021-BPGR01	Woodlands	Claymore	49 <sup>B</sup>	59 <sup>A</sup>	59 <sup>A</sup>	61.0 <sup>B</sup>	72.4 <sup>A</sup>	71.3 <sup>A</sup>	4.11	0.0023	Yes	14.4	14.0	14.4
2021-WPGR08	Dufferin	CDC SKRush	31	37	38	16.2 <sup>B</sup>	21.0 <sup>A</sup>	17.1 <sup>B</sup>	4.16	0.0002	Yes	15.9	15.2	16.7

			Height		Height	Yield		Yield			Statistically	Protein	
Trial ID	Rural Municipality	Variety	Treated	Untreated	Difference	Treated	Untreated	Difference	CV	P-Value	Significant @	Treated	Untreated
			cm		cm	bu	/ac	bu/ac	%		95%	%	
2021-BPGR02	De Salaberry	CDC Austenson	46 <sup>A</sup>	65 <sup>B</sup>	-19	87.6	94.3	-6.7	4.68	0.1122	No	13.0	13.7
2021-WPGR01	De Salaberry	AAC Brandon	74	76	-2	78.1 <sup>A</sup>	73.8 <sup>B</sup>	4.3	1.52	0.0132	Yes	15.0	15.2
2021-WPGR02	De Salaberry	Faller	64.3 <sup>A</sup>	68.5 <sup>B</sup>	-4	66.8	68.5	-1.7	3.92	0.4268	No	14.0	13.8
2021-WPGR03	Ritchot	AAC Starbuck VB	73	75	-2	61.2	58.9	2.3	8.31	0.5698	No	14.0	13.8
2021-WPGR04	Morris	SY Rowyn	72 <sup>A</sup>	77 <sup>B</sup>	5	80.5 <sup>B</sup>	84.1 <sup>A</sup>	-3.6	1.35	0.0193	Yes	13.1	12.9
2021-WPGR05	Ste. Anne	AAC Brandon	71	75	-4	67.5	66.4	1.1	5.58	0.7073	No	15.1	15.1
2021-WPGR06	Lac du Bonnet	AC Carberry	80 <sup>A</sup>	84 <sup>B</sup>	-4	69.0	69.6	-0.6	2.09	0.6693	No	13.7	13.9
2021-WPGR07	Rockwood	AAC Starbuck VB	59 <sup>A</sup>	62 <sup>B</sup>	-3	32.5	31.1	1.4	6.25	0.6719	No	16.6	16.6
2021-WPGR09	Woodlands	AAC Starbuck VB	72	72	0	30.0	29.7	0.3	2.64	0.6166	No	15.7	15.9
2021-WPGR10	Springfield	Daybreak	67 <sup>A</sup>	76 <sup>B</sup>	-9	48.1	49.4	-1.3	3.39	0.2744	No	14.6	14.2
2021-WPGR11	Westlake-Gladstone	Bolles	72 <sup>A</sup>	74 <sup>B</sup>	-2	42.6	41.6	1.0	2.22	0.2107	No	15.7	15.9
2021-WPGR12	Brokenhead	AAC Starbuck VB	80 <sup>A</sup>	84 <sup>B</sup>	-4	76.6	79.6	-3.0	2.97	0.1612	No	14.9	14.9

Indicates Statistical Difference at 95% confidence interval

