# Wheat Seeding Rate

## Trial ID: 2022-WP02 — R.M. of De Salaberry

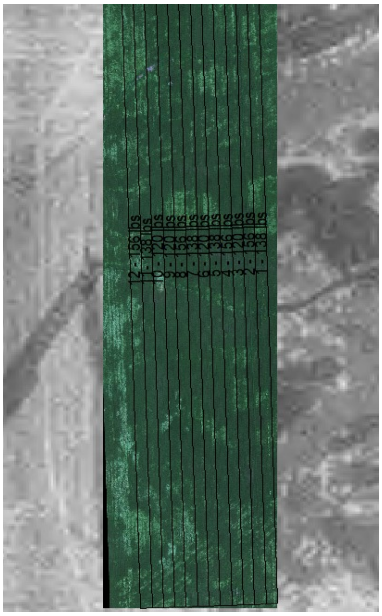
**Objective:** The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal seeding rate in wheat.

**Summary:** There was no significant yield difference between planting rates of 120, 138 and 156 lbs/ac. As a result, there was a decrease in profit equivalent to the increase in seed cost for the higher seeding rates.

## Trial Information

| | |
|---|---|
| **Treatment** | 120 lbs vs. 138 lbs vs. 156 lbs |
| **Soil Texture** | Clay Loams |
| **Previous Crop** | Sunflower |
| **Tillage** | Conventional |
| **Seeding Equipment** | 30’ Hoe Drill |
| **Seeding Date** | May 17 |
| **Variety** | AAC Starbuck VB |
| **Germination** | 98% |
| **Row Spacing** | 7.5” |
| **Harvest Date** | September 03 |

## RGB Imagery July 24



## Wheat Response

| | Plants/ft² | Protein (%) | TWT (kg/hL) | Falling Number | Grade |
|---|---|---|---|---|---|
| **120 lbs** | 16 | 15.6 | 82 | 335 | 1.0 |
| **138 lbs** | 16 | — | — | — | — |
| **156 lbs** | 17 | — | — | — | — |

## Precipitation† (mm)

| | May | June | July | Aug | Total |
|---|---|---|---|---|---|
| **Rainfall** | 77 | 68 | 89 | 123 | **357** |
| **Normal** | 52 | 86 | 63 | 41 | **242** |
| **% Normal** | 149% | 79% | 141% | 303$ | **148%** |

†Growing season precipitation (mm) - May 01—Aug 15

## Overall Yield & Economics

| | Mean (bu/ac) | Cost† | Change in Profit/ac†† |
|---|---|---|---|
| **120 lbs** | 68.1 | $33/ac | +$4/ac |
| **138 lbs** | 70.6 | $37/ac | $0/ac |
| **156 lbs** | 71.5 | $42/ac | -$5/ac |
| **P-Value** | 0.4648 | **Economics: There is an increase in profit for the lower seeding rate due to the lower cost of seed/acre.** | |
| **CV** | 5.42% | | |
| **Significance** | **No** | | |

**†Based on MB Agriculture 2022 Cost of Production Guidelines ($32.50/ac)**
**††Change in profit is calculated as the difference in cost between seeding rate treatments.**

*MCA would like to thank Tone Ag Consulting Ltd. for the research support and SGS Canada Inc. for quality analysis for this trial.*

MANITOBA CROP ALLIANCE
Phone: 204-745-6661
Website: mbcropalliance.ca
Email: hello@mbcropalliance.ca