



Wheat Seeding Rate

Trial ID: 2022-WP05 — R.M. of Oakland-Wawanesa

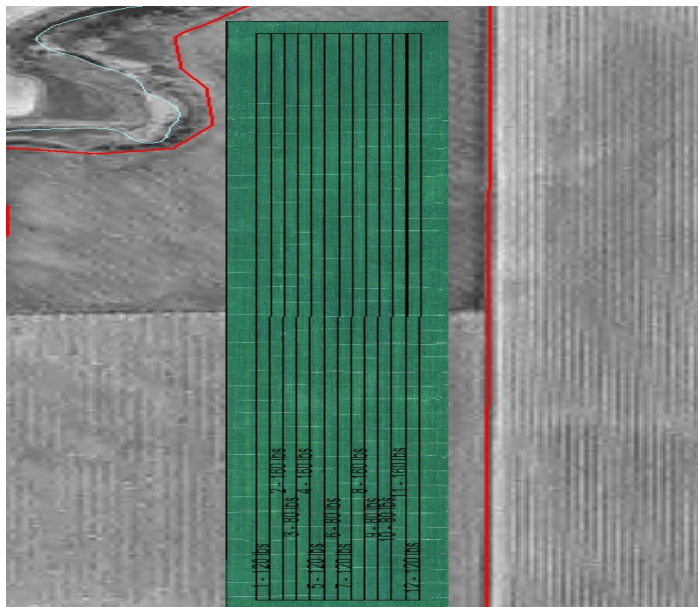
Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal seeding rate in wheat.

Summary: There was no significant yield difference between planting rates of 80, 120 and 160 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 | 80 lbs vs. 120 lbs vs. 160 lbs |
| Soil Texture | Clay Loams |
| Previous Crop | Soybeans |
| Tillage | Conventional |
| Seeding Equipment | 40' Hoe Drill |
| Seeding Date | May 25 |
| Variety | AAC Wheatland VB |
| Germination | 94% |
| Row Spacing | 9" |
| Harvest Date | September 08 |

RGB Imagery July 24



Wheat Response

| | Plants/ft ² | Protein (%) | TWT (kg/hL) | Falling Number | Grade |
|---------|------------------------|-------------|-------------|----------------|-------|
| 80 lbs | 30 ^C | 13.5 | 83 | 340 | 1.0 |
| 120 lbs | 41 ^B | 13.5 | 82 | 341 | 2.0 |
| 160 lbs | 54 ^A | 13.2 | 83 | 350 | 2.0 |

Precipitation[†] (mm)

| | May | June | July | Aug | Total |
|----------|------|------|------|-----|-------|
| Rainfall | 96 | 94 | 107 | 26 | 322 |
| Normal | 51 | 62 | 76 | 52 | 242 |
| % Normal | 187% | 151% | 140% | 50% | 133% |

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

Overall Yield & Economics

| | Mean (bu/ac) | Cost [†] | Change in Profit/ac ^{††} |
|--------------|--------------|---|-----------------------------------|
| 80 lbs | 58.2 | \$22/ac | +\$10/ac |
| 120 lbs | 59.2 | \$33/ac | \$0/ac |
| 160 lbs | 58.5 | \$43/ac | -\$11/ac |
| P-Value | 0.3607 | Economics: There is an increase in profit for the lower seeding rate due to the lower cost of seed/acre. | |
| CV | 1.54% | | |
| 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.



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