

## **Corn Planting Rate**

## Trial ID: 2021-CRNP10 — R.M. of Brokenhead

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

| TRIAL INFORMATION  |            |                  |                   |   |               | FIELD IMAGE |        |        |  |  |
|--|------------|------------------|-------------------|---|---------------|-------------|--------|--------|--|--|
| Location Tyndall   |            |                  |                   |   |               |             |        |        |  |  |
| Previous Crop Soybeans   |            |                  |                   |   |               |             |        |        |  |  |
| Soil Texture Clay  |            |                  |                   |   |               |             |        |        |  |  |
| Tillage Conventional Tillage                                   |            |                  |                   |   |               |             |        |        |  |  |
| Planting Date May 07, 2021                                     |            |                  |                   |   |               |             |        |        |  |  |
| Fertilizer (N-P-K-S) 144N 12P                                  |            |                  |                   |   |               |             |        |        |  |  |
| Variety  | DKC26-40R  | C26-40RIB        |                   |   |               |             |        |        |  |  |
| Row Spacing  | 22"        | 22″              |                   |   |               |             |        |        |  |  |
| Planting Rate  | (seeds/ac) | 31K, 34K &       | 37K               |   |               |             |        |        |  |  |
| Harvest Date   | October 12 | October 12, 2021 |                   |   |               |             |        |        |  |  |
| SOIL PROPERTIES <sup>†</sup>                                   |            |                  |                   |   |               |             |        |        |  |  |
| N 0-24″  | P (ppm)    | K (ppn           |                   | % O.M.  |               |             |        |        |  |  |
| 145  | 19         | 411              |                   | 6.8   |               |             |        |        |  |  |
| †Nutrient values prior to spring seeding                       |            |                  |                   |   |               |             |        |        |  |  |
| PLANT STAND @ V2   |            |                  |                   |   |               |             |        |        |  |  |
| Planting Rate  | (seeds/ac) | 31,000           | 34,000            | 37,000  |               |             |        |        | YIELD BY TREATMENT                     |  |
| Plants/acre  |            | 30,667           | 33,667            | 35,667  |               | 120         | I      |        |  |  |
| PRECIPITATION <sup>†</sup>                                     |            |                  |                   |   |               | 100         |        |        |  |  |
| 1  | May Ju     | ne July          | Aug               | Total   |               | 100         |        | Α      | A A                                    |  |
| Rainfall   | 52 2       | 6 24             | 91                | 192   | ac)           | 80          |        |        |  |  |
| Normal   | 51 8       | 5 71             | 76                | 283   | Yield (bu/ac) | 60          |        |        |  |  |
| <sup>†</sup> Growing season precipitation (mm) - May 01—Aug 31 |            |                  |                   |   | Yield         | 40          |        |        |  |  |
| OVERALL YIELD  |            |                  |                   |   |               | 40          |        |        |  |  |
| Mean (bu/ac)   |            |                  |                   |   |               | 20          |        |        |  |  |
| <b>31,000 plants/ac</b> 89.7 <sup>A</sup>                      |            |                  |                   |   | 0             |             |        |        |  |  |
| 34,000 plants,   | /ac        |                  | 90.2 <sup>A</sup> |   |               |             | 31,000 | plants | s/ac 34,000 plants/ac 37,000 plants/ac |  |
| <b>37,000 plants/ac</b> 86.1 <sup>A</sup>                      |            |                  |                   | <b>C</b>  |               |             |        |        |  |  |
| <b>P-Value</b> 0.6886  |            |                  |                   | Summary: There was no significant difference in yield or plant stands<br>at V2 between the 31,000, 34,000 and 38,000 seeds/acre planting<br>rates. Rainfall was well below average throughout the growing season. |               |             |        |        |  |  |
| CV 6.80%   |            |                  |                   |   |               |             |        |        |  |  |
| Significance   |            |                  | No                |   |               |             |        |        | <b>- -</b>                             |  |



