

## Soybean Inoculant Trial - Seed Applied vs. Seed Applied & In-Furrow Inoculant

Trial ID: 2015-S2In06 - R.M. of Rockwood

**Objective:** Quantify the agronomic and economic impacts of seed applied inoculant (single inoculation) vs. seed applied plus in-furrow inoculant (double inoculation) in soybean fields. The trial is conducted in the Central, Eastern and Interlake regions of Manitoba and requires a minimum history of 2 previous soybean crops.

| TRIAL INFORMATION    |                               |  |  |
|----------------------|-------------------------------|--|--|
| Treatment            | Single vs. Double Inoculation |  |  |
| Rural Municipality   | Rockwood                      |  |  |
| Previous Crop        | Winter Wheat                  |  |  |
| Soil Description     | Loamy Lacustrine              |  |  |
| Tillage              | Cultivate                     |  |  |
| Planting Date        | May 26, 2015                  |  |  |
| Variety              | 24-10 RY                      |  |  |
| Row Spacing          | 10"                           |  |  |
| Seeding Rate         | 190,000 seeds/ac              |  |  |
| Plant Stand @V1      | 202,000 plants/ac             |  |  |
| # of Years since Soy | 2012 – 3 years                |  |  |
| # of Prev. Soy Crops | 2 previous soybean crops      |  |  |
| In-Furrow Inoculant  | Granular 7 lbs                |  |  |
| Harvest Date         | October 3, 2015               |  |  |

| SOIL PROPERTIES |     |            |      |  |
|-----------------|-----|------------|------|--|
| N 0-24"         | pH  | Salts 0-6" | CCE% |  |
| 9 lbs/ac        | 8.4 | 0.5        | 11.4 |  |

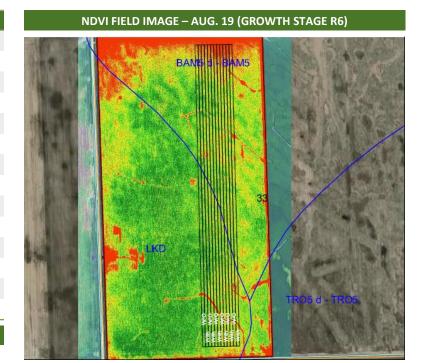
| PRECIPITATION <sup>†</sup> |     |      |  |      |        |      |   |     |
|----------------------------|-----|------|--|------|--------|------|---|-----|
|                            |     | May  |  | June | <br>   | July | ı | Aug |
| Rainfall                   |     | 20   |  | 45   | I<br>! | 67.5 | 1 | 175 |
| Normal                     | - - | 54.1 |  | 90   | 1-     | 79.5 | 1 | 77  |

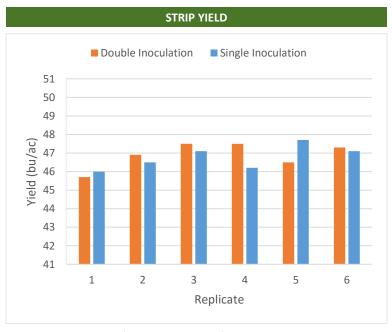
f Growing season precipitation (mm)

## **NODULATION COUNT**

|                           | Average # Of Nodules @ KZ |
|---------------------------|---------------------------|
| <b>Double Inoculation</b> | > 20 nodules              |
| Single Inoculation        | > 20 nodules              |

| OVERALL YIELD             |              |  |  |
|---------------------------|--------------|--|--|
|                           | Mean (bu/ac) |  |  |
| <b>Double Inoculation</b> | 46.9         |  |  |
| Single Inoculation        | 46.8         |  |  |
| Yield Difference          | 0.1          |  |  |
| P-Value                   | 0.7113       |  |  |
| CV                        | 1.4%         |  |  |
| Significance              | No           |  |  |





**Summary:** There was no significant yield difference between seed applied inoculant (single inoculation) and seed applied plus infurrow inoculant (double inoculation) applied to soybeans. There was three years since the last soybean crop was grown in 2012, and there was a history of two previous soybean crops on this field. There was more than 20 nodules per plant for both inoculation treatments.

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