

## Soybean Inoculant Trial – Seed Applied vs. No Inoculant

Trial ID: 2017-S1In03 – R.M. of Springfield

**Objective:** Quantify the agronomic and economic impacts of seed applied inoculant (single inoculation) vs. no inoculant applied in soybean fields. The trial is conducted in the Central, Eastern and Interlake regions of Manitoba and requires a minimum history of three previous soybean crops.

### TRIAL INFORMATION

|                      |                          |
|----------------------|--------------------------|
| Treatment            | Seed Applied Inoculant   |
| Rural Municipality   | Springfield              |
| Previous Crop        | Soybeans                 |
| Soil Description     | Clayey Lacustrine        |
| Tillage              | Deep Tillage 1x          |
| Planting Date        | May 19, 2017             |
| Variety              | Astro R2                 |
| Row Spacing          | 10"                      |
| Seeding Rate         | 185,000 seeds/ac         |
| Plant Stand @ V1     | 158,000 plants/ac        |
| # of Years since Soy | 2016 – last year         |
| # of Prev. Soy Crops | 4 previous soybean crops |
| Harvest Date         | October 12, 2017         |

### SOIL PROPERTIES

| N 0-24"   | pH  | Salts 0-6" | CCE% |
|-----------|-----|------------|------|
| 47 lbs/ac | 7.2 | 0.62       | 0.2  |

### PRECIPITATION†

|          | May  | June  | July | Aug  |
|----------|------|-------|------|------|
| Rainfall | 24.9 | 55.5  | 53.8 | 27.7 |
| Normal   | 80.4 | 107.1 | 98.0 | 82.6 |

† Growing season precipitation (mm)

### NODULATION COUNT

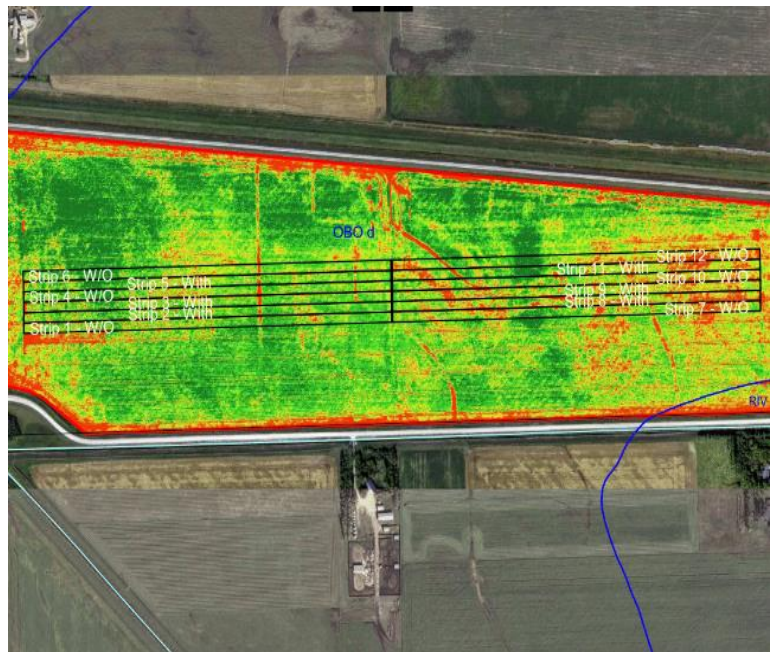
|                        | Average # of Nodules @ R2 |
|------------------------|---------------------------|
| Seed Applied Inoculant | 27                        |
| No Inoculant           | 24                        |

### OVERALL YIELD

|                        | Mean (bu/ac) |
|------------------------|--------------|
| Seed Applied Inoculant | 36.1         |
| No Inoculant           | 35.8         |
| Yield Difference       | 0.4          |
| P-Value                | 0.6535       |
| CV                     | 5.8%         |
| Significance           | No           |

**Summary:** There was no significant difference between seed applied inoculant and no inoculant applied to soybeans. The previous crop was soybeans, and there was a history of four previous soybean crops on this field. Nodulation was high for both treated and untreated strips.

### FIELD IMAGE



### STRIP YIELD

