

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

Trial ID: 2015-S2In05 – R.M. of Montcalm

**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

<b>Treatment</b>	Single vs. Double Inoculation
<b>Rural Municipality</b>	Montcalm
<b>Previous Crop</b>	Canola
<b>Soil Description</b>	Clayey Lacustrine
<b>Tillage</b>	Conventional
<b>Planting Date</b>	May 27, 2015
<b>Variety</b>	25-10 RY
<b>Row Spacing</b>	30"
<b>Seeding Rate</b>	166,000 seeds/ac
<b>Plant Stand @V1</b>	158,000 plants/ac
<b># of Years since Soy</b>	2013 – 2 years
<b># of Prev. Soy Crops</b>	2 previous soybean crops
<b>In-Furrow Inoculant</b>	Liquid 1x rate
<b>Harvest Date</b>	September 29, 2015

### SOIL PROPERTIES

<b>N 0-24"</b>	<b>pH</b>	<b>Salts 0-6"</b>	<b>CCE%</b>
105 lbs/ac	6.3	0.6	0.2

### PRECIPITATION<sup>†</sup>

	<b>May</b>	<b>June</b>	<b>July</b>	<b>Aug</b>
<b>Rainfall</b>	10	102.5	122.5	140
<b>Normal</b>	67.6	101.8	85.6	83.9

<sup>†</sup> Growing season precipitation (mm)

### NODULATION COUNT

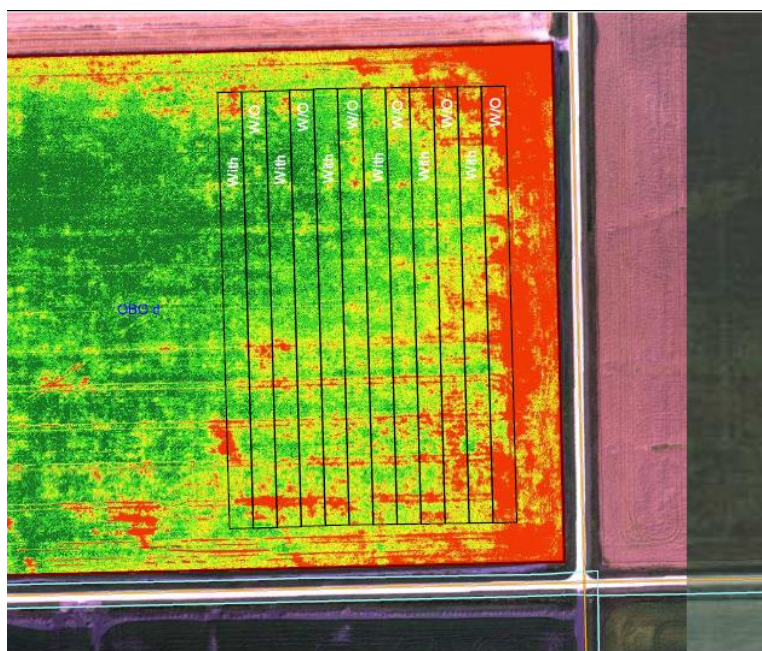
	<b>Average # of Nodules @ R2</b>
<b>Double Inoculation</b>	10-20 nodules
<b>Single Inoculation</b>	10-20 nodules

### OVERALL YIELD

	<b>Mean (bu/ac)</b>
<b>Double Inoculation</b>	48.8
<b>Single Inoculation</b>	50.0
<b>Yield Difference</b>	-1.2
<b>P-Value</b>	0.4540
<b>CV</b>	4.6%
<b>Significance</b>	<b>No</b>

**Summary:** There was no significant yield difference between seed applied inoculant (single inoculation) and seed applied plus in-furrow inoculant (double inoculation) applied to soybeans. There was two years since the last soybean crop was grown in 2013, and there was a history of two previous soybean crops on this field. There was 10-20 nodules per plant for both inoculation treatments.

### NDVI FIELD IMAGE – AUG. 19 (GROWTH STAGE R6)



### STRIP YIELD

