

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

Trial ID: 2014-S2In02 – R.M. of Alexander

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 was conducted in the Central, Eastern and Interlake regions of Manitoba and required a minimum history of 2 previous soybean crops.

| TRIAL INFORMATION | | | | |
|----------------------|-----|---|--|--|
| Treatment | | Single vs. Double Inoculation | | |
| Rural Municipality | | Alexander | | |
| Previous Crop | | Oats | | |
| Soil Description | | Clayey Lacustrine/ Shallow Organic Forest Peat | | |
| Tillage | | Conventional | | |
| Planting Date | | May 29, 2014 | | |
| Variety | | 24-10 RY | | |
| Row Spacing | | 10" | | |
| Seeding Rate | | 210,000 seeds/ac | | |
| Plant Stand @ V1 | | 130,000 plants/ac | | |
| # of Years since Soy | | 2012 - 2 years ago | | |
| # of Prev. Soy Crops | | 2 previous soybean crops | | |
| Harvest Date | | October 20, 2014 | | |
| SOIL PROPERTIES | | | | |
| N 0-24″ | рН | Salts 0-6" CCE% | | |
| 7 lbs/ac | 7.6 | 0.6 0.6 | | |



| Cumulative Rainfall | 348 mm | | | |
|-------------------------------------|--------|--|--|--|
| Historical Rainfall | 306 mm | | | |
| + Growing season precipitation (mm) | | | | |
| NODULATION COUNT | | | | |
| | | | | |

| | Average # of Nodules @ F |
|--------------------|--------------------------|
| Double Inoculation | >20 nodules |
| Single Inoculation | >20 nodules |

| OVERALL YIELD | | |
|--------------------|--------------|--|
| | Mean (bu/ac) | |
| Double Inoculation | 20.6 | |
| Single Inoculation | 20.8 | |
| Yield Difference | -0.2 | |
| P-Value | 0.7069 | |
| CV | 9.3% | |
| Significance | Νο | |





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



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