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

Trial ID: 2015-S2In04 – R.M. of Springfield

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	Springfield
Previous Crop	Spring Wheat
Soil Description	Clayey Lacustrine
Tillage	Conventional
Planting Date	May 27, 2015
Variety	NSC Richer RR2Y
Row Spacing	9.8”
Seeding Rate	210,000 seeds/ac
Plant Stand @V1	150,000 plants/ac
# of Years since Soy	2013 – 2 years
# of Prev. Soy Crops	3 previous soybean crops
In-Furrow Inoculant	Granular 7 lbs
Harvest Date	December 4, 2015

SOIL PROPERTIES

N 0-24”	pH	Salts 0-6”	CCE%
61 lbs/ac	7.8	1.7	1.6

PRECIPITATIONǂ

	May	June	July	Aug
Rainfall	5	27.5	85	215
Normal	55	87.5	87.1	76.3

ǂ Growing season precipitation (mm)

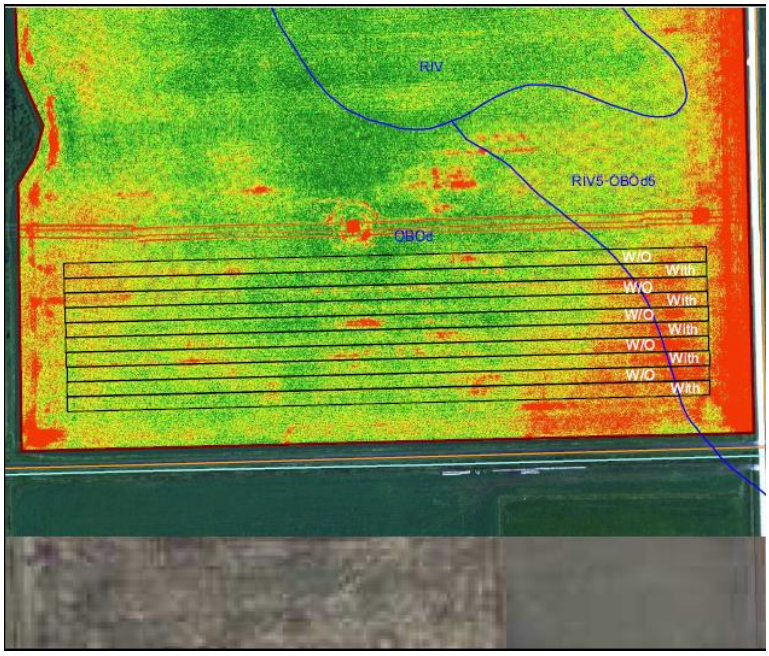
NODULATION COUNT

	Average # of Nodules @ R2
Double Inoculation	> 20 nodules
Single Inoculation	> 20 nodules

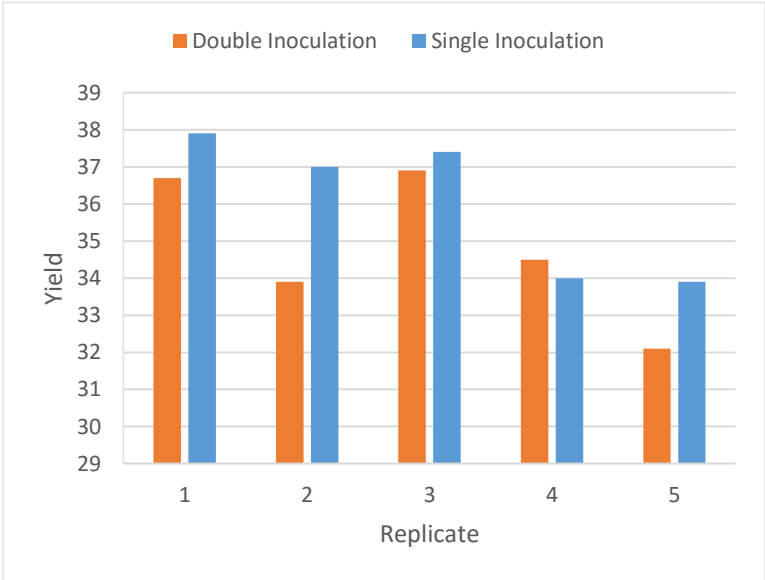
OVERALL YIELD

	Mean (bu/ac)
Double Inoculation	34.8
Single Inoculation	36.0
Yield Difference	-1.2
P-Value	0.1144
CV	5.6%
Significance	**No**

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



STRIP YIELD



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 three previous soybean crops on this field. There was more than 20 nodules per plant for both inoculation treatments.

MPSG would like to thank Tone Ag Consulting for conducting the research

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