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

Trial ID: 2018-S2In06 – R.M. of Glenella-Lansdowne

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. This trial requires a minimum field history of 2 previous soybean crops.

TRIAL INFORMATION

Treatment	Single vs. Double Inoculation
Rural Municipality	Glenella-Lansdowne
Previous Crop	Winter Wheat
Soil Description	Loamy Fine Sand
Tillage	Conventional
Planting Date	May 19, 2018
Variety	P006T46R
Row Spacing	10”
Seeding Rate	162,000 seed/ac
Plant Stand @V1	123,000 plants/ac
# of Years since Soy	3 years
# of Prev. Soy Crops	2015, 2014
In-Furrow Inoculant	5 lbs/ac Nodulator (granular)
Harvest Date	September 19, 2018

SOIL PROPERTIES

N 0-24”	pH	Salts 0-6”	CCE%
61 lbs/ac	8.2	0.25	4.8%

PRECIPITATIONǂ

	May	June	July	Aug
Rainfall	46	42	67	37
Normal	50	77	62	64

ǂ Growing season precipitation (mm)

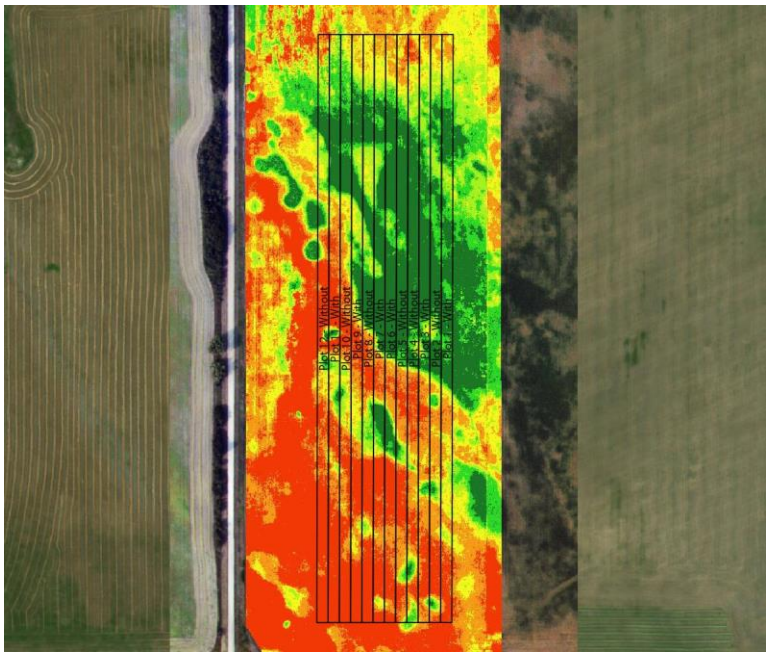
NODULATION COUNT

	Average # of Nodules @ R2
Double Inoculation	18
Single Inoculation	18

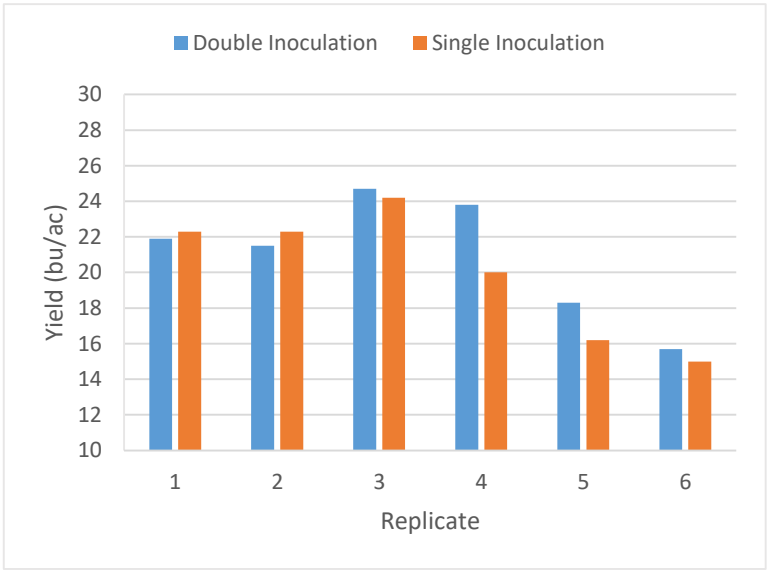
OVERALL YIELD

	Mean (bu/ac)
Double Inoculation	21.0
Single Inoculation	20.0
Yield Difference	1.0
P-Value	0.2176
CV	16.7%
Significance	**No**

NDVI FIELD IMAGE – AUG 11, 2018 (GROWTH STAGE R6)



STRIP YIELD



Summary: There was no significant yield difference between seed applied inoculant (single inoculant) and seed applied plus in-furrow inoculant (double inoculation) applied to soybeans. There was good nodulation for both single and double inoculation treatments. This trial was established on a field with a history of at least two previous, well nodulated soybean crops.

MPSG would like to thank BASF for providing the granular inoculant and Tone Ag Consulting for the research support

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