

Dry Bean Inoculant Trial

Trial ID: 2023-DB1IN02 – R.M. of Brokenhead

Objective: Quantify the agronomic and economic impacts of inoculant products vs. no inoculation in dry beans.

Summary: There were no significant differences in yield or nodulation among dry beans treated with AGTIV® FUEL™ or AGTIV® THRIVE™, compared to those without. Due to the lack of yield response, there was a decrease in profit/ac in the treated area of the trial, equivalent to the cost of the inoculant.

Trial Information †

Treatments	1x AGTIV® FUEL™ 1x AGTIV® THRIVE™
Years Since Dry Beans	First year
Soil Texture	Clay
Previous Crop	Canola
Tillage	Conventional
Seeding Date	May 25
Variety	Black Beans
Seeding Rate	200 lbs/ac
Row Spacing	10"
Plant Stand @ V2	106 000 plants/ac
Spring Soil Test N (0-24")	26 lb/ac
Harvest Date	September 19

Precipitation (mm)

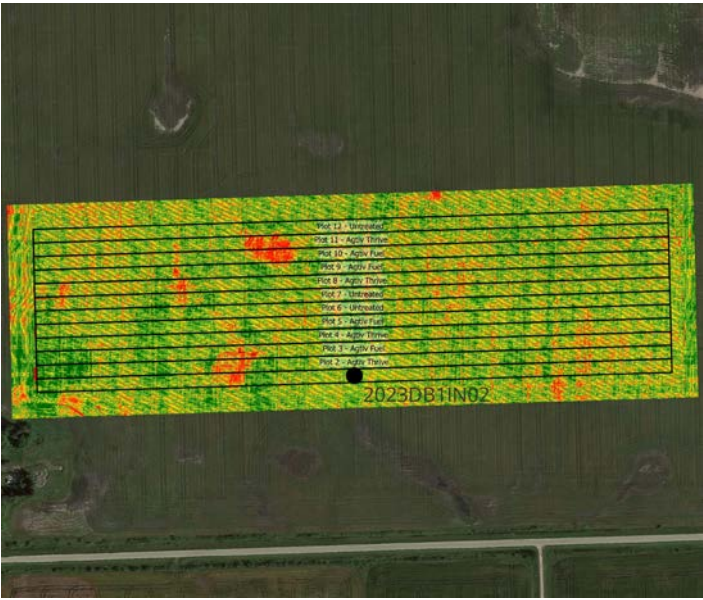
	May	June	July	Aug	Total
Rainfall	10.2	50.9	74	73.1	209
Normal	54.4	90.7	81	73.7	300
% Norm	19%	56%	92%	99%	70%

Nodulation †

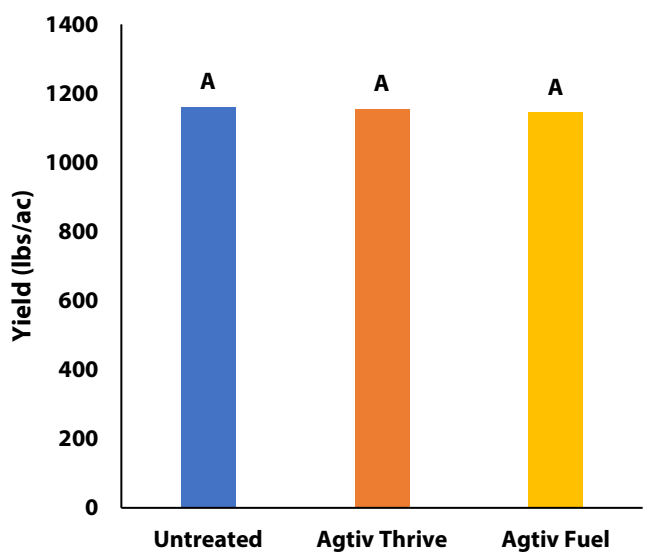
	Average total nodule number per plant at R2
Agtiv Thrive	2.6 A
Agtiv Fuel	1.4 A
Untreated	0.07 A

† Averages followed by different letters are significantly different at $\alpha = 0.05$

NDVI Field Image July 18



Yield by Treatment





on-farm network
PARTICIPATORY • PRECISE • PROACTIVE

Dry Bean Inoculant Trial

Overall Yield & Economics

	Mean (lbs/ac)	Cost †	Change in Profit ††
Aktiv Thrive	1153.5	\$18/ac	-\$18/ac
Aktiv Fuel	1144.3	\$5/ac	-\$5/ac
Untreated	1159.3		
Yield Difference	-6 (Untrt vs. Aktiv Thrive) -15(Untrt vs. Aktiv Fuel)		
P-Value	0.5596		
CV	3.3%		
Significance	No	Economic	No

† Based on an estimated cost for in-furrow inoculant

†† Because yields were not significantly different, there was no increased income to offset the cost of the inoculants