

Soybean Iron Fertility Trial

Trial ID: 2024-SFe01 – R.M. of Montcalm

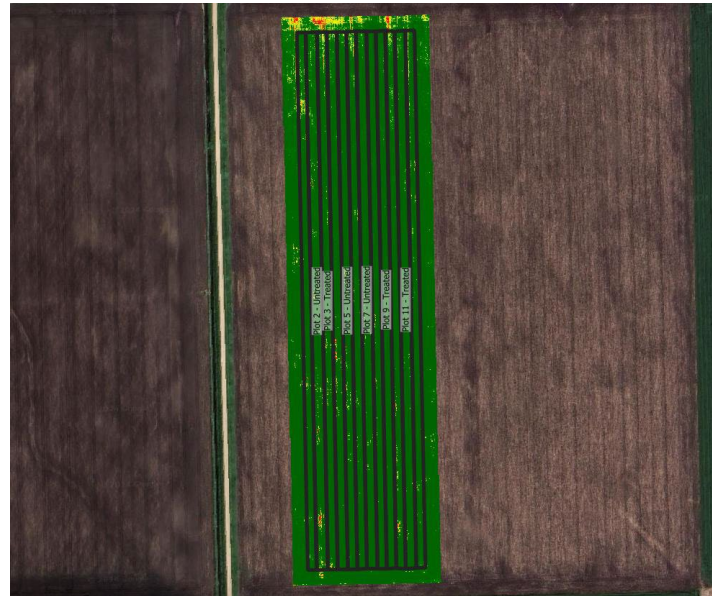
Objective: Quantify the agronomic and economic impacts of a single foliar fungicide application vs. none in soybeans.

Summary: There was no significant yield difference between soybeans with Soygreen and those without based on our standard statistical test. However, when we lower the confidence level from 95 to 90% there is some evidence Soygreen was responsible for the 2.4 bu/ac yield gain. By August 1 (R3) the field had largely grown out of the IDC.

Trial Information

Treatment	Soygreen vs Untreated
Application Timing	At Seeding
Application Date	May 10
Application Rate	4 lbs/acre
Application Method	Granular in-Furrow
Soil Texture	Clay
Previous Crop	Corn
Tillage	Conventional Tillage
Seeding Date	May 10
Variety	Stanley
Variety IDC Risk	2.2 Semi-Tolerant
Seeding Rate	170,000 seeds/acre
Row Spacing	7.5"
Plant Stand @ V2	159,000
Soil Carbonate (CCE)	5.6%
Soluble Salts	0-24" 1.18 mmho/cm
Field IDC Risk	Very High/Extreme
Harvest Date	October 2

Field Image



Precipitation (mm)

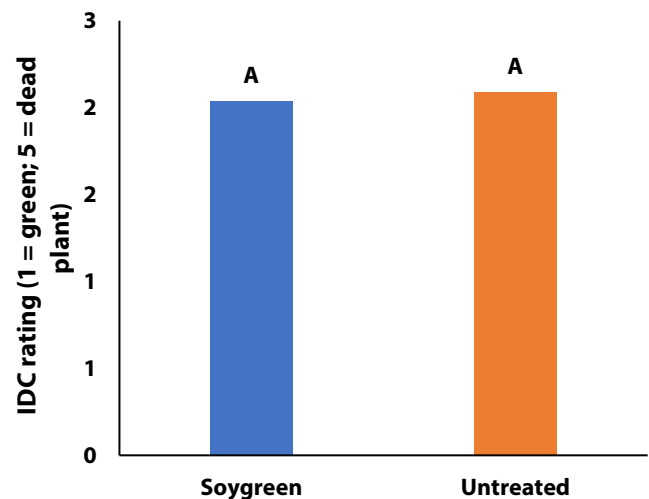
	May	June	July	Aug	Total
Rainfall	110.2	95.4	73.6	63.6	342.8
Normal	56.4	85.2	75.4	65.5	282.5
% Norm	195%	112%	98%	97%	121%

Summary of IDC Rating (V2-R3) †

	IDC Severity			
	V2	R2	R2	R3
Soygreen	1.9	2.2	2.1	1.5
Untreated	1.9	2.3	2.3	1.4

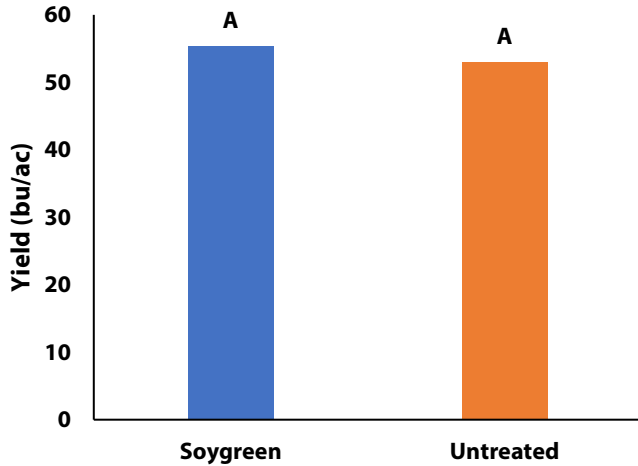
† IDC severity, listed in brackets, was rated on a 0-5 scale.

IDC Rating by Treatment





Yield by Treatment

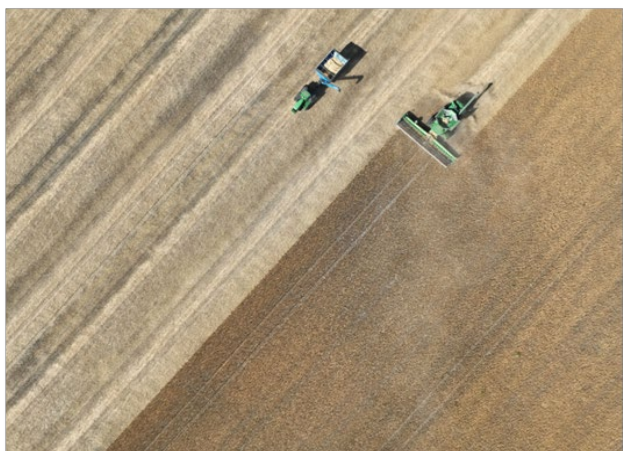


Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit ^{††}
Soygreen	55.4	\$28.35/ac	-\$28.35/ac
Untreated	53.0		
Yield Difference	2.4		
P-Value	0.063		
CV	3.3%		
Significance	No`	Economic	No

[†] Based on an estimated cost for a single application of granular in-furrow Soygreen; does not include application cost

^{††} Because yields were not significantly different, there is no increased income to offset the cost of the fungicide. Profit/ac declined by the cost of the fungicide application.



Drone image at harvest time (L) and IDC symptoms were more visible in-between wheel tracks (R).