

Soybean Row Spacing Trial

Trial ID: 2024-SRS02 – R.M. of Westlake-Gladstone

Objective: Quantify the agronomic and economic impacts of different row spacings on soybean production.

Summary: There was no significant yield difference between 30" and 15" row spacing. At V3 and at R6, plant stand counts were similar between spacings. Weed density was also similar between spacings. There was more canopy closure in the 15" rows at R3 and R5 compared to the 30" rows. There was higher Septoria brown spot severity in the 15" rows than the 30" rows.

Trial Information

Treatment	30″ vs 15″
Soil Texture	Silty Loam
Previous Crop	Canola
Tillage	Conventional Till
Seeding Equipment	60ft Planter
Seeding Date	May 16
Variety	P006A37X
Germination	83%
Seeding Rate	140,000 seeds/ac
Harvest Date	October 7

Precipitation (mm)

	May	June	July	Aug	Total
Rainfall	120.1	122.4	24.4	53	319.9
Normal	52.7	70.5	73.5	67.7	264.4
% Norm	228%	174%	33%	78%	121%

Plant Stand (plants/ac) +

	V3	R4
30″	115,000 A	109,000 A
15″	116,000 A	115,000 A

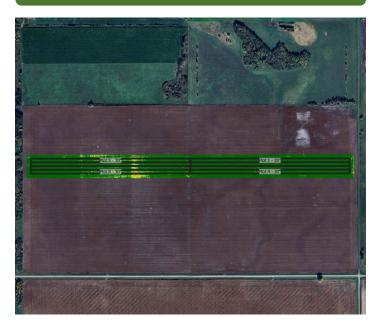
+ Columns followed by different letters are significantly different from one another

% Canopy Closure ⁺

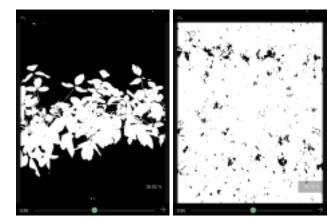
	R1	R3	R5
30″	38% A	81% A	92% A
15″	50% A	95% B	97% B

+ Closure percentages in columns followed by different letters are significantly different from one another

NDVI Field Image August 8



Canopy Closure Images

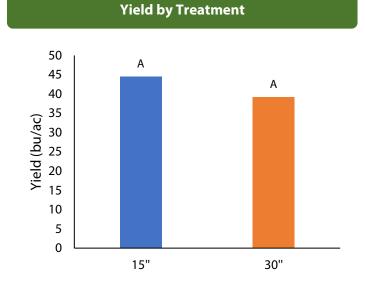


Canopeo app measurements of 30" row spacing canopy closure at R1 (left) and R5 (right).





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Overall Yield & Economics ⁺			
	Mean (bu/ac)	Change in Profit/ac ⁺	
30″	39.2	n/a	
15″	44.5	n/a	
Difference	5.3		
P-Value	0.168		
CV	9.8%		
Significance	No	Economic N/A	
Economics of how different you widths are achieved in the field are your			

⁺ Economics of how different row widths are achieved in the field are very farm and equipment specific. As a result, they are not estimated here.

Summary of Disease Rating (R4)⁺

	Incidence (% plants infected)				
	Septoria	Frog Eye	Stem Canker	White Mould	Bacterial Blight
30″	96% (1.1) B	15%	0%	0%	88%
15″	95% (1.3) A	5%	0%	0%	95%

+ Septoria brown spot severity, listed in brackets, was rated on a 0-5 scale.

Late Season Weed Pressure (R5)

	Average Number of Weeds/ft ²
30″	0.2
15″	0.1

