

Soybean Row Spacing Trial

Trial ID: 2024-SRS05 – R.M. of Hanover

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

Summary: The 30" spacing yielded 3.2 bu/ac more than the 15" spacing. At V2 and R5, plant stand counts were similar between spacings. The canopy in the 15" rows began to close earlier in the season than the 30" rows. Weed density and disease pressure were similar between spacings.

Trial Information

Treatment	30″ vs 15″
Soil Texture	Clay
Previous Crop	Corn
Tillage	Conventional
Seeding Equipment	60ft Planter
Seeding Date	May 23
Variety	P00A49X
Germination	87%
Seeding Rate	140,000 seeds/ac
Harvest Date	September 30

Precipitation (mm)

	May	June	July	Aug	Total
Rainfall	105.5	112.2	56.8	43.1	317.6
Normal	57.8	89.5	80.6	71.8	299.7
% Norm	183%	125%	70%	60%	106%

Plant Stand (plants/ac) ⁺

	V2	R5
30″	112,000 A	105,000 A
15″	108,000 A	98,000 A

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

% Canopy Closure ⁺

	R1	R3	R5
30″	65% B	95% B	98% A
15″	80% A	99% A	99% A

+ 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).



Additional On-Farm Network Research Reports



Soybean Row Spacing Trial

Yield by Treatment



Summary of Disease Rating (R4)⁺

	Incidence (% plants infected)				
	Septoria	Frog Eye	Stem Canker	White Mould	Bacterial Blight
30″	100% (1.3)	5%	0%	0%	53%
15″	100% (1.325)	0%	0%	0%	43%

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

	Mean (bu/ac)	Change in Profit/ac ⁺			
30″	42.4	n/a			
15″	39.2	n/a			
Difference	3.2				
P-Value	0.042				
CV	3.3%				
Significance	Yes	Economic N/A			

⁺ 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.

Late Season Weed Pressure (R5)

	Average Number of Weeds/ft2		
30″	2.0		
15″	0.6		

