

# Soybean Row Spacing Trial

**Trial ID:** 2024-SRS03 – R.M. of Grey

**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 V1 and R5, plant stand counts were similar between spacings. Disease pressure and weed density were also similar between spacings. There was more canopy closure in the 15" rows at R3 and R5 compared to the 30" rows.

## Trial Information

<b>Treatment</b>	30" vs 15"
<b>Soil Texture</b>	Clay
<b>Previous Crop</b>	Wheat
<b>Tillage</b>	Conventional Till
<b>Seeding Equipment</b>	60ft Planter
<b>Seeding Date</b>	May 17
<b>Variety</b>	CP00523WPX
<b>Germination</b>	80%
<b>Seeding Rate</b>	150,000 seeds/ac
<b>Harvest Date</b>	October 1

## Precipitation (mm)

	May	June	July	Aug	Total
<b>Rainfall</b>	108.4	118.7	40.2	54.5	321.8
<b>Normal</b>	53.8	80.6	65.7	71	271.1
<b>% Norm</b>	201%	147%	61%	77%	119%

## Plant Stand (plants/ac) †

	V1	R5
<b>30"</b>	129,000 A	126,000 A
<b>15"</b>	132,000 A	128,000 A

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

## % Canopy Closure †

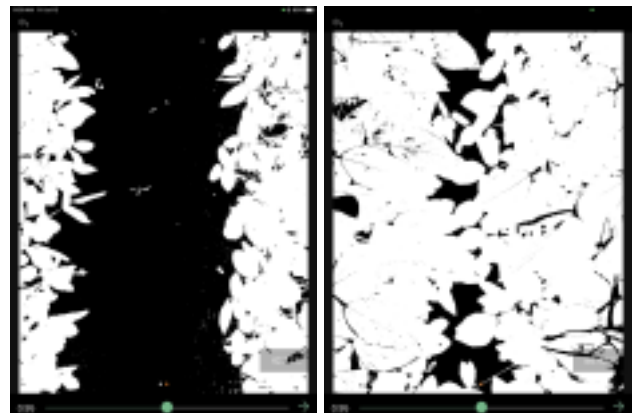
	R1	R3	R5
<b>30"</b>	45% A	76% A	86% A
<b>15"</b>	55% A	88% B	95% B

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

## NDVI Field Image August 8



## Canopy Closure Images

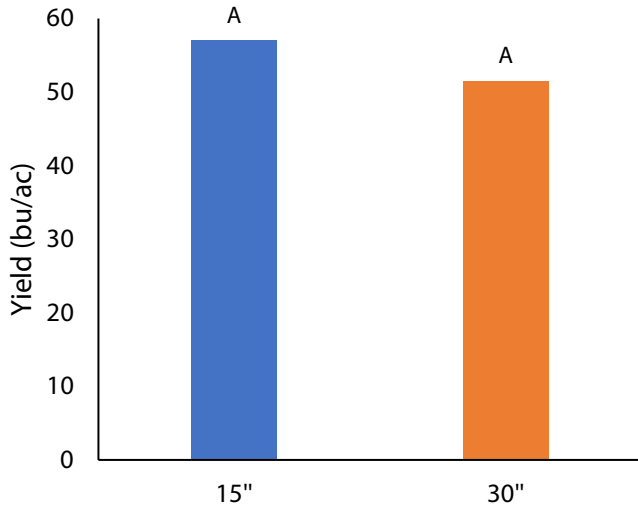


Canopeo app measurements of 30" row spacing canopy closure at R1 (left) and R5 (right).



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### Yield by Treatment



### Overall Yield & Economics<sup>†</sup>

	Mean (bu/ac)	Change in Profit/ac <sup>†</sup>
<b>30"</b>	51.5	n/a
<b>15"</b>	56.9	n/a
<b>Difference</b>	5.4	
<b>P-Value</b>	0.077	
<b>CV</b>	5.3%	
<b>Significance</b>	<b>No</b>	<b>Economic N/A</b>

<sup>†</sup> 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)<sup>†</sup>

	Incidence (% plants infected)				
	Septoria	Frog Eye	Stem Canker	White Mould	Bacterial Blight
<b>30"</b>	70% (1.1)	5%	0%	0%	100%
<b>15"</b>	90% (1.1)	3%	3%	0%	98%

<sup>†</sup> Septoria brown spot severity, listed in brackets, was rated on a 0-5 scale.

### Late Season Weed Pressure (R5)

	Average Number of Weeds/ft <sup>2</sup>
30"	0.7
15"	0.1