



**on-farm network**  
PARTICIPATORY • PRECISE • PROACTIVE

# Soybean Row Spacing Trial

**Trial ID:** 2023-SRS01 – R.M. of Louise

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

**Summary:** There were no significant yield differences between 7.5" and 15" row spacings. At VC, plant stand counts were similar and at R6, soybeans on 7.5" rows had 33,000 more plants/ac than 15" rows. Canopy closure, disease pressure and weed density were also similar between row widths.

## Trial Information

<b>Treatment</b>	7.5" vs. 15"
<b>Soil Texture</b>	Clay Loam
<b>Previous Crop</b>	Canola
<b>Tillage</b>	Zero Till
<b>Seeding Equipment</b>	30 ft Disc Drill
<b>Seeding Date</b>	May 20
<b>Variety</b>	B0012RX
<b>Germination</b>	85%
<b>Seeding Rate</b>	166 000 seeds/ac
<b>Harvest Date</b>	September 30

## Precipitation (mm)

	May	June	July	Aug	Total
<b>Rainfall</b>	29.3	53.4	2.9	44.2	130
<b>Normal</b>	61.1	89.8	68	72.3	292
<b>% Norm</b>	48%	59%	4%	61%	45%

## Plant Stand (plants/ac) †

	VC	R6
<b>7.5"</b>	156,000 A	168,000 A
<b>15"</b>	135,000 A	135,000 B

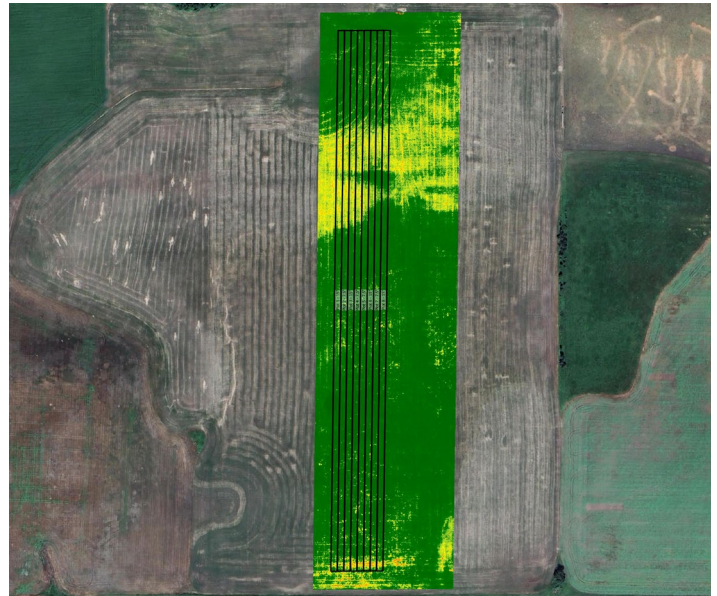
† Columns followed by different letters are significantly different from one another

## % Canopy Closure †

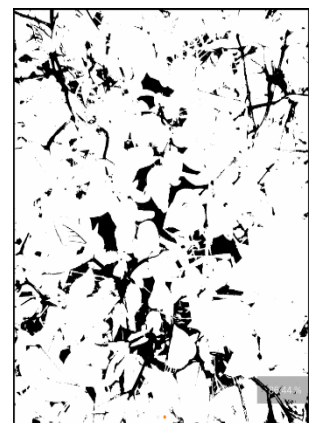
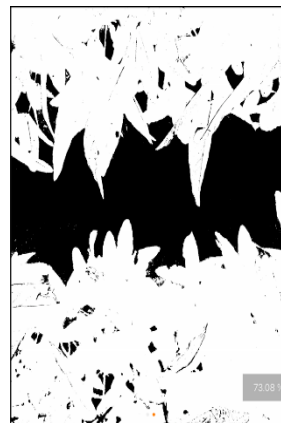
	R1	R3	R5
<b>7.5"</b>	74.7% A	71.1% A	87.3% A
<b>15"</b>	76.6% A	73.7% A	84.7% A

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

## NDVI Field Image August 8



## Canopy Closure Images

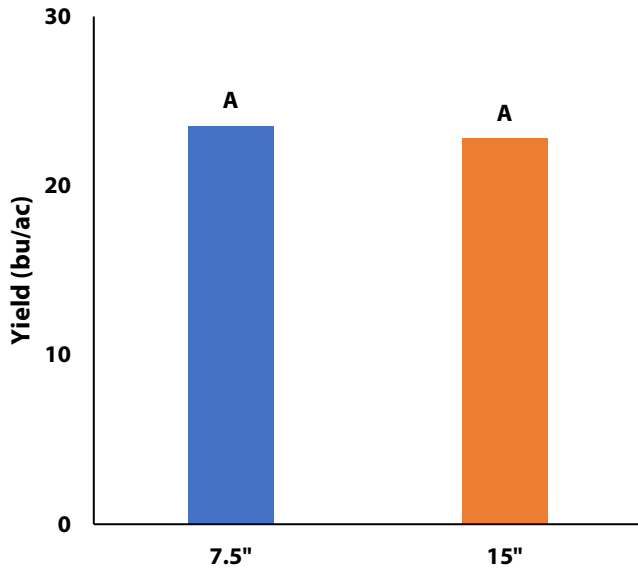


Canopeo app measurements of 15" row spacing canopy closure at R1 (left) and R5 (right).



# Soybean Row Spacing Trial

## Yield by Treatment



## Overall Yield & Economics†

	Mean (bu/ac) <sup>††</sup>	Change in Profit/ac <sup>†</sup>
7.5"	23.5	n/a
15"	22.8	n/a
<b>Difference</b>	0.7	
<b>P-Value</b>	0.492	
<b>CV</b>	5.9%	
<b>Significance</b>	No	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.

## Summary of Disease Rating (R3)<sup>†</sup>

	Incidence (% plants infected)				
	Septoria	Frog Eye	Stem Canker	White Mould	Bacterial Blight
<b>7.5"</b>	90% (1.1)	33%	0%	0%	45%
<b>15"</b>	80% (1.0)	35%	0%	0%	45%

## Late Season Weed Pressure (R5)<sup>†</sup>

	Average Number of Weeds/ft <sup>2</sup>
7.5"	6.9 A
15"	5.8 A

† Higher late season weed pressure in the 7.5" spacing compared to the 15" row spacing

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