

### **Soybean Row Spacing Trial**

Trial ID: 2024-SRS06 - R.M. of Richot

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

**Summary:** There was no significant yield difference between 20" and 10" row spacing. At V2 and R5, plant stand counts were similar between treatments. Canopy closure and disease pressure were also similar between treatments.

#### **Trial Information**

Treatment	20" vs 10"
Soil Texture	Clay
<b>Previous Crop</b>	Corn
Tillage	Conventional Till
Seeding Equipment	40ft Planter
Seeding Date	June 9
Variety	TH82005R2X
Germination	73%
Seeding Rate	168,000 seeds/ac
<b>Harvest Date</b>	October 9

#### **Precipitation (mm)**

	May	June	July	Aug	Total
Rainfall	114.8	116.8	84.4	42.7	358.7
Normal	57.5	88	69.5	75.8	290.8
% Norm	200%	133%	121%	56%	123%

# Plant Stand (plants/ac) †

	V2	R5
20"	138,000 A	110,000 A
10"	119,000 A	104,000 A

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

#### % Canopy Closure 1

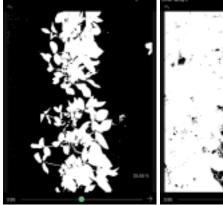
	R1	R3	R5
20"	45% A	76% A	92% A
10"	61% A	84% A	96% A

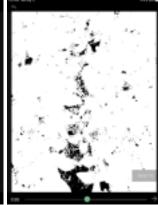
† Closure percentages in columns followed by different letters are significantly different from one another

#### **NDVI Field Image August 8**



#### **Canopy Closure Images**



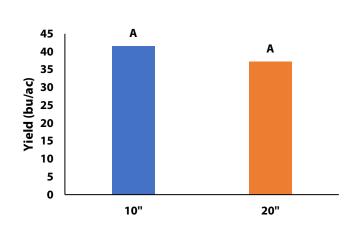


Canopeo app measurements of 20" row spacing canopy closure at R1 (left) and R5 (right).

# on-farm network PARTICIPATORY - PRECISE - PROACTIVE

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#### **Yield by Treatment**



#### Summary of Disease Rating (R4)+

	Incidence (% plants infected)				
	Septoria	Frog Eye	Downy Mildew	White Mould	Bacterial Blight
20"	100% (1.4)	3%	15%	0%	100%
10"	100% (1.7)	8%	18%	0%	100%

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

# Overall Yield & Economics†

	Mean (bu/ac)	Change in Profit/ac+
20"	37.2	n/a
10"	41.5	n/a
Difference	4.3	
P-Value	0.059	
CV	4.8%	
Significance	No	Economic N/A

<sup>&</sup>lt;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.