

## **Soybean Row Spacing Trial**

Trial ID: 2022-SRS01 - R.M. of Tache

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

**Summary:** There was no significant yield difference between 15" spacing at regular populations, or 30" spacing at low or regular populations. As a result, profit decreased by the extra cost of seed for higher population treatments. Canopy closure was not significantly different within growth stages for any of the treatments.

#### Trial Information +

Treatment	15"@156k vs 30"@134k vs 30"@156k		
Soil Texture	Clay		
<b>Previous Crop</b>	Soybeans		
Tillage	Conventional		
Seeding	40 ft Planter		
Seeding Date	May 23		
Variety	25-10RY		
Seeding Rate	156,000 seeds/ac		
<b>Harvest Date</b>	October 11		

### **Precipitation (mm)**

	May	Jun	Jul	Aug	Total
Rainfall	107.9	82.3	121.9	125.2	437.3
Normal	58.1	91.3	80.1	66.1	295.6
% Normal	186%	90%	152%	189%	148%

### Plant Stand (plants/ac)

	VC	R6
15" @ 156k	105,000	97,000
30" @ 134k	97,000	100,000
30" @ 156k	104,000	104,000

#### Canopy Closure (%)+

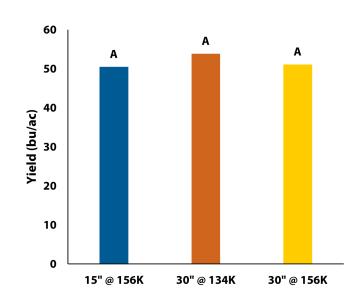
	R1	R3	R5
15" @ 156k	53.7 A	78.7 A	96.8 A
30" @ 134k	51.8 A	82.9 A	98.9 A
30" @ 156k	49.4 A	76.8 A	98.6 A

<sup>+</sup> Closure percentages in columns followed by different letters are significantly different from one another.

### **NDVI Field Image August 12**



#### **Yield by Treatment**





Significance

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Overall Yield & Economics			
	Mean (bu/ac)	Cost <sup>†</sup>	Change in Profit/ac++
30" @ 134k	53.8	\$65/ac	
15" @ 156k	50.5	\$76/ac	-\$11/ac
30" @ 156k	51.1	\$76/ac	-\$11/ac
P-Value	0.2279		
CV	4.6%		

No + Based on Manitoba Agriculture's 2022 Cost of Production Guidelines (\$67.90/unit).

**Economic** 

No

<sup>++</sup> Loss reflects difference in seed cost between a seeding rate of 134,000 seeds/ac and 156,000 seeds/ac; Does not account for any equipment or operating cost differences between spacings.