

Soybean Row Spacing Trial

Trial ID: 2021-SRS02 – R.M. of Louise

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

Summary: There was no significant yield difference between 7.5" and 15" spacing. Canopy closure was significantly greater in the 15" treatment at R1, however by R5 the 7.5" treatment had statistically significantly greater canopy closure. Agronomically, canopy closure was quite similar between row spacings as the season progressed.

Trial Information

Treatment	7.5" vs. 15"
Soil Texture	Clay Loam
Previous Crop	Wheat
Tillage	Conventional
Seeding Equipment	42 ft Disc Drill
Seeding Date	May 12
Variety	P001A48X
Seeding Rate	190 000 seeds/ac
Harvest Date	September 23

Precipitation (mm)

	May	Jun	Jul	Aug	Total
Rainfall	27.4	105	38.4	66.8	237.6
Normal	61.1	89.8	68.3	72.3	291.5
% Normal	45%	117%	56%	92%	82%

Plant Stand (plants/ac)

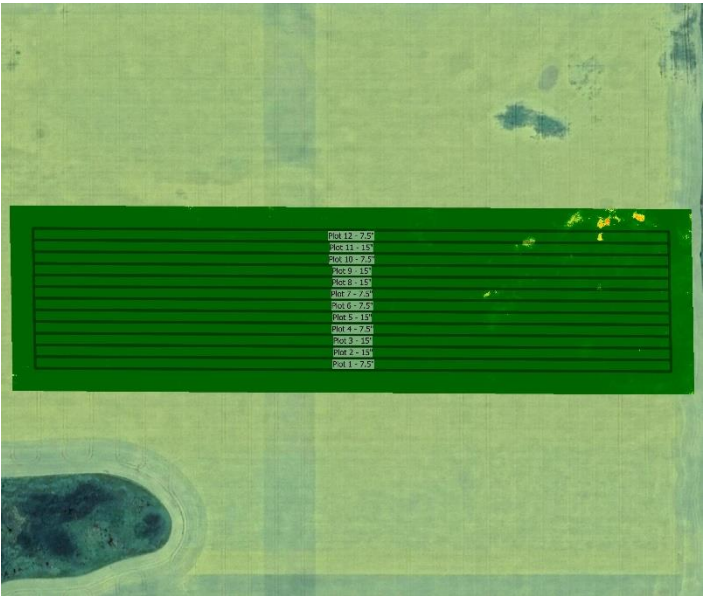
	V6	R8
7.5"	186,000	185,000
15"	145,000	114,000

% Canopy Closure†

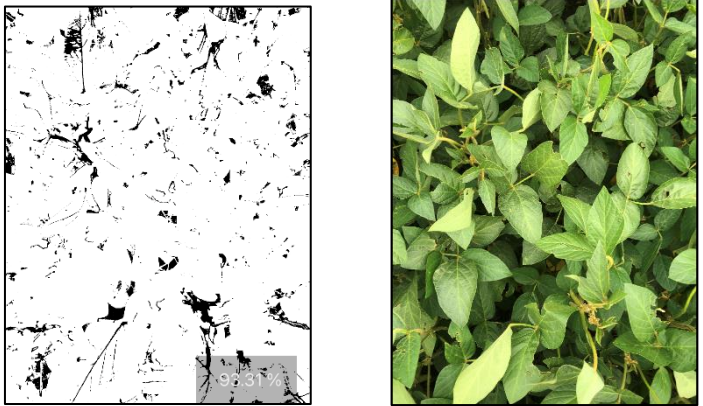
	R1	R3	R5
7.5"	70% B	83% A	93% A
15"	74% A	83% A	92% B

† Closure percentages in columns followed by different letters are significantly different from one another; Measurements taken using the Canopeo iPhone app

NDVI Field Image August 13



Canopy Closure Images

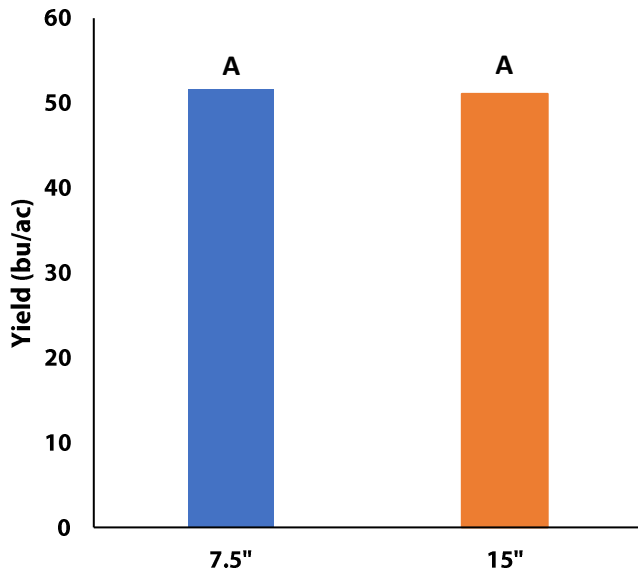


Canopeo app measurements of 7.5" row spacing canopy closure at R5 (left) and corresponding true colour image (right).



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Yield by Treatment



Overall Yield & Economics

	Mean (bu/ac)	Change in Profit/ac [†]
7.5"	51.7	n/a
15"	51.1	n/a
Yield Difference	0.6	
P-Value	0.1027	
CV	1.4%	
Significance	No	Economic n/a

[†] Does not account for any equipment/operating cost differences between spacings