

Soybean Row Spacing Trial

Trial ID: 2021-SRS04 – R.M. of Rockwood

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

Summary: There was no significant yield difference between soybeans planted on 15 and 30" spacing. Canopy closure was statistically similar at R1 and R3, however at R5, the 15" spacing canopy was significantly more closed than the 30" spacing strips.

Trial Information

Treatment	15″ vs. 30″
Soil Texture	Clay Loam
Previous Crop	Corn
Tillage	Conventional
Seeding Equipment	40 ft Planter
Seeding Date	May 21
Variety	Akras R2
Seeding Rate	160 000 seeds/ac
Harvest Date	October 25

Precipitation (mm)					
	May	Jun	Jul	Aug	Total
Rainfall	39.2	32.7	25.7	86.8	184.4
Normal	53.8	92	66.4	63.3	275.5
% Normal	73%	36%	39%	137%	67%

Plant Stand (plants/ac)

	V2	R7
15″	129,000	127,000
30″	72,000	72,000

% Canopy Closure⁺

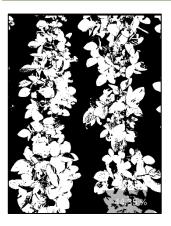
	R1	R3	R5
15″	24% A	45% A	68% A
30″	24% A	44% A	61% B

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

NDVI Field Image August 15



Canopy Closure Images





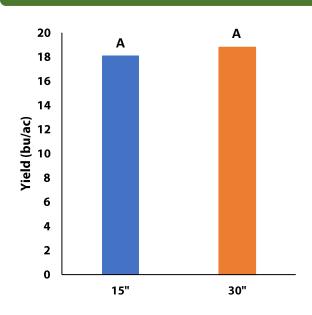
Canopeo app measurements of 15" row spacing canopy closure at R3 (left) and corresponding true colour image (right).





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Yield by Treatment



Overall Yield & Economics

	Mean (bu/ac)	Change in Profit/ac ⁺
15″	18.1	n/a
30″	18.8	n/a
Yield Difference	07	
P-Value	0.3415	
CV	5.1%	
Significance	No	Economic n/a

+ Does not account for any equipment/operating cost differences between spacings

