

Soybean Rolling Trial

Trial ID: 2020-SR02 – R.M. of Springfield

Objective: Quantify the agronomic and economic impacts of late rolling in soybeans

Summary: Late rolling caused extensive plant damage. Yield significantly decreased with late rolling, by 6.8 bu/ac. As a result, late rolling was not economic.

Trial Information†

Treatment	Late Rolling (R1)
Soil Texture	Clay
Previous Crop	Ryegrass
Tillage	Zero Till
Seeding Equipment	60 ft Planter
Seeding Date	May 22
Variety	NSC Sperling RR2Y
Row Spacing	15"
Plant Stand @ R1	129 000 plants/ac
Harvest Date	September 22

† Rolling after V2 is not recommended; this trial was designed to test late rolling

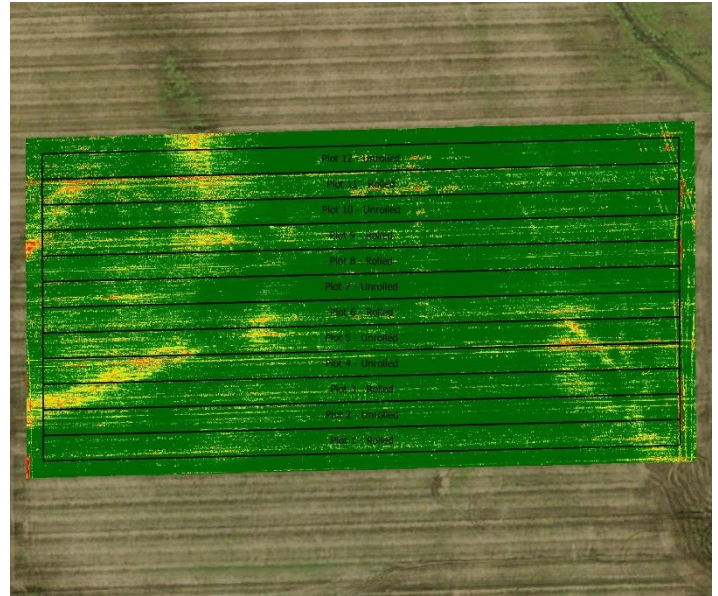
Precipitation (mm)

	May	June	July	August
Normal	54.4	90.7	81.1	73.7
Rainfall	19.6	58.1	30.5	85

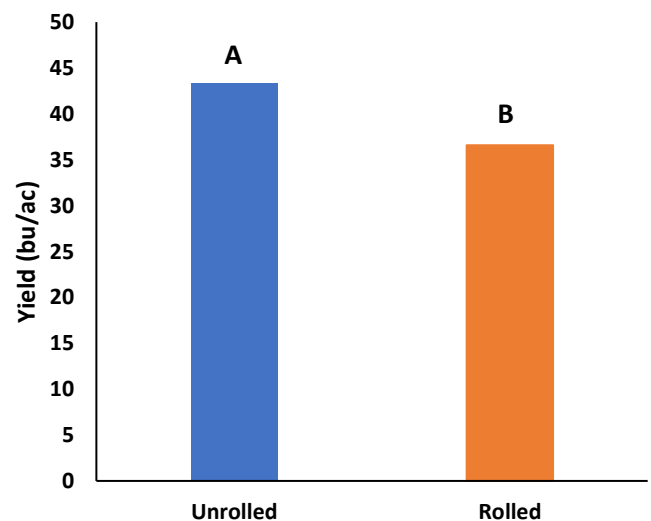
Post-Rolling Breakage

	Breakage (R1, after rolling)
Rolled	47 000 plants/ac
Unrolled	0 plants/ac

NDVI Field Image August 19



Yield by Treatment





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Overall Yield & Economics

	Mean (bu/ac)	Cost †	Change in Profit/ac (@ soybean price \$10-\$12/bu) ††
Rolled	36.6	\$5/ac	-\$73 to -\$87/ac
Unrolled	43.4		
Yield Difference	-6.8		
P-Value	0.0154		
CV	13.1%		
Significance	Yes	Economic	No

† Based on estimated cost of rolling

†† Change in profit is calculated using the change in income/ac due to the significant yield difference and the cost/ac of rolling