

Soybean Seeding Rate Trial

Trial ID: 2020-SP02 - R.M. of Lac du Bonnet

Objective: Quantify the agronomic and economic impacts of different soybean seeding rates

Summary: There was no significant yield difference between seeding rates of 190,000, 160,000 and 130,000 seeds/ac. As a result, there was a decrease in profit equivalent to the increase in seed cost for the higher seeding rates.

Trial Information

Treatment	130k vs 160k vs 190k	
Soil Texture	Clay	
Previous Crop	Wheat	
Tillage	Conventional	
Seeding Equipment	60 ft Disc Drill	
Seeding Date	May 18	
Variety	LS 007XT	
Row Spacing	7.5"	
Harvest Date	October 3	

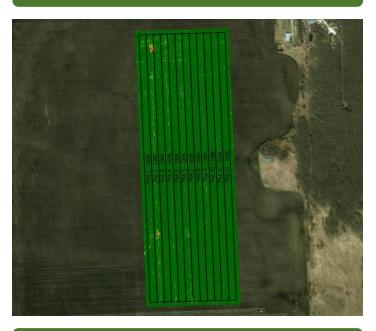
Precipitation (mm)

	May	June	July	August
Normal	58.2	92.6	77	69.9
Rainfall	16.3	97.9	69.7	141

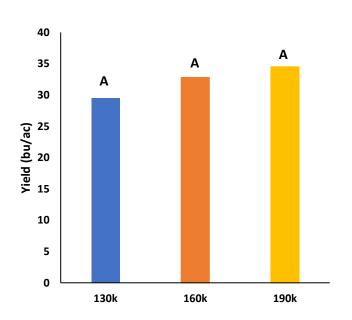
Plant Stand (plants/ac)

	V2	R6	
130k	121 000	116 000	
160k	138 000	126 000	
190k	153 000	141 000	

NDVI Field Image August 19



Yield by Treatment





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Overall Yield & Economics					
	Mean (bu/ac)	Cost +	Change in Profit/ac++		
130k	29.5	\$62/ac			
160k	32.8	\$76/ac	-\$14		
190k	34.5	\$90/ac	-\$28		
P-Value	0.1030				
CV	7.7%				
			130k → 160k No		
Significance	No	Economic	130k → 190k No 160k → 190k No		

⁺ Based on MB Agriculture 2020 Cost of Production Guidelines (\$66.50/unit)

⁺⁺ Change in profit is calculated as the difference in cost between seeding rate treatments. Yields were not significantly different so there is no increased income to offset the increase in seed cost