

Soybean Seeding Rate Trial

Trial ID: 2020-SP10 – R.M. of Morris

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 seeds/ac, 160,000 seeds/ac 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	Canola
Tillage	Conventional
Seeding Equipment	90 ft Planter
Seeding Date	May 31
Variety	LS 007XT
Row Spacing	30"
Harvest Date	September 26

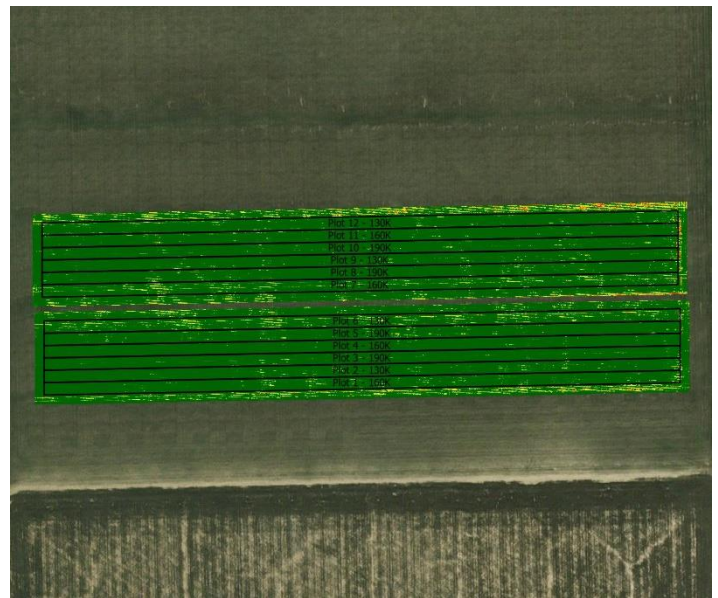
Precipitation (mm)

	May	June	July	August
Normal	53.6	86.4	71.9	65.4
Rainfall	9.9	96	82.6	117

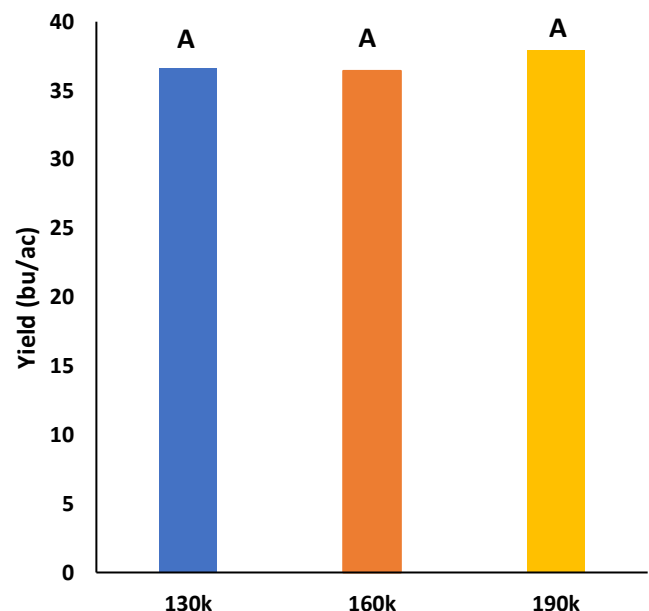
Plant Stand (plants/ac)

	V1	R6
130k	118 000	109 000
160k	143 000	136 000
190k	160 000	148 000

NDVI Field Image August 17



Yield by Treatment





on-farm network
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Overall Yield & Economics

	Mean (bu/ac)	Cost †	Change in profit/ac ††
130k	36.7	\$62/ac	
160k	36.4	\$76/ac	-\$14/ac
190k	38.0	\$90/ac	-\$28/ac
P-Value	0.6343		
CV	6.0%		
Significance	No	Economic	130k → 160k No 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. Because yields were not significantly different, there is no increased income to offset the increase in seed cost