

Soybean Seeding Rate Trial

Trial ID: 2020-SP04 – R.M. of Grey

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 Planter
Seeding Date	May 19
Variety	PS 0074 R2
Row Spacing	30"
Harvest Date	September 24

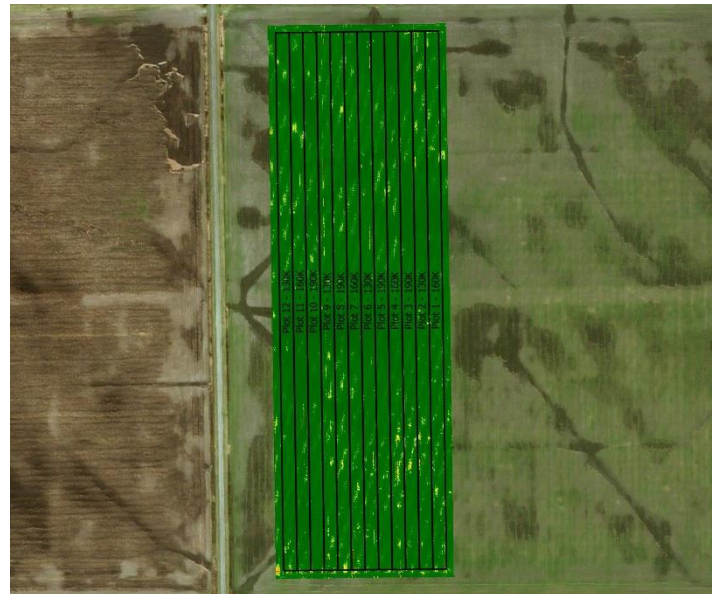
Precipitation (mm)

	May	June	July	August
Normal	53.8	80.6	65.7	71
Rainfall	28.3	52.6	49.5	39.4

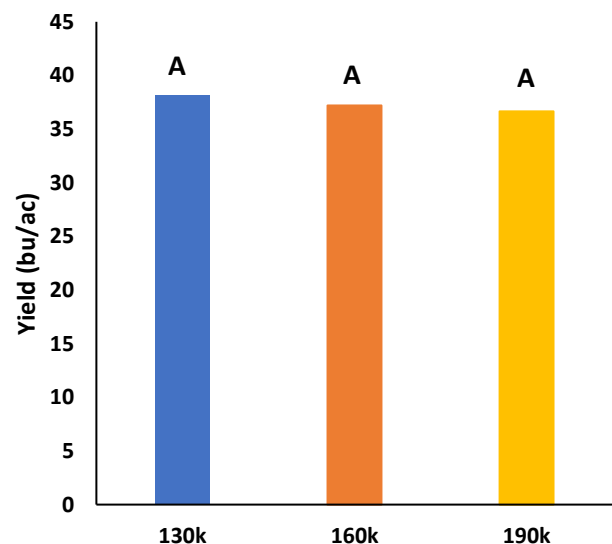
Plant Stand (plants/ac)

	V1	R6
130k	125 000	119 000
160k	148 000	140 000
190k	168 000	164 000

NDVI Field Image August 18



Yield by Treatment





Soybean Seeding Rate Trial

Overall Yield & Economics

	Mean (bu/ac)	Cost †	Change in Profit/ac ††
130k	38.2	\$62/ac	
160k	37.2	\$76/ac	-\$14/ac
190k	36.7	\$90/ac	-\$28/ac
P-Value	0.0970		
CV	2.7%		
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