

# **Soybean Seeding Rate Trial**

Trial ID: 2021-SSR07 - R.M. of Glenella-Lansdowne

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

**Summary:** There was no significant yield difference between seeding rates of 130,000, 160,000 and 190,000 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	Loamy Fine Sand		
Previous Crop	Soybeans		
Tillage	Conventional		
Seeding Equipment	43 ft Disc Drill		
<b>Seeding Date</b>	May 11		
Variety	Kudo R2X		
Germination	95%		
Row Spacing	10"		
<b>Harvest Date</b>	September 22		

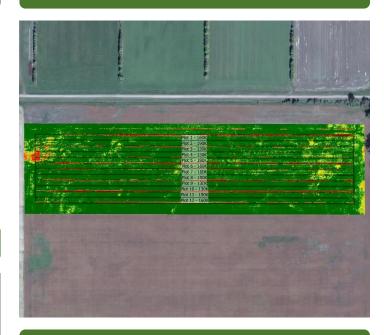
### **Precipitation (mm)**

	May	Jun	Jul	Aug	Total
Rainfall	15.1	38.8	28.5	142	224.5
Normal	49.7	76.9	61.7	64.3	252.6
% Normal	30%	50%	46%	221%	89%

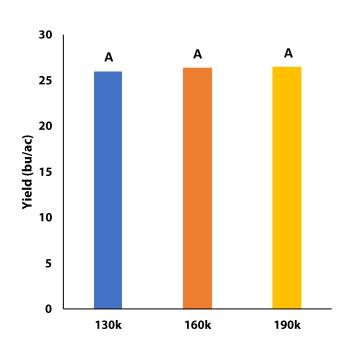
## Plant Stand (plants/ac)

	V5	R7
130k	114,000	101,000
160k	143,000	136,000
190k	167,000	143,000

### **NDVI Field Image August 16**



#### **Yield by Treatment**





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#### **Overall Yield & Economics**

	Mean (bu/ac)	Cost <sup>+</sup>	Change in Profit/ac++
130k	26.0	\$61/ac	
160k	26.3	\$75/ac	-\$14/ac
190k	26.4	\$89/ac	-\$28/ac
P-Value	0.9511	Economic	130k → 160k No
CV	12%		130k → 190k No
Significance	No		160k <b>→</b> 190k No

<sup>+</sup> Based on MB Agriculture 2021 Cost of Production Guidelines (\$65.30/unit)

<sup>++</sup> 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