

**NDSU North Central Research Extension Center
2016 Soybean Seeding Rate and Row Spacing Trial at Garrison**

Seeding Rate Comparisons

Seeding Rate	Plant Height	Protein	Oil	Test Weight	Yield
1000's/A	inches	%	%	lbs/bu	bu/A
75	24	31.1	16.2	57.9	21.3
100	24	31.2	16.4	57.7	24.8
125	24	31.1	16.4	57.8	23.9
150	23	31.2	16.5	57.8	25.2
LSD 0.05	NS	NS	NS	NS	2.7

Row Spacing Comparisons

Row Spacing	Plant Height	Protein	Oil	Test Weight	Yield
inches	inches	%	%	lbs/bu	bu/A
7	24	31.0	16.5	57.7	25.4
14	23	31.4	16.2	58.0	23.8
21	24	31.1	16.6	57.7	22.2
LSD 0.05	NS	NS	NS	NS	2.3

Seeding Rate by Row Spacing Interactions

Row Spacing	Seeding Rate	Plant Height	Protein	Oil	Test Weight	Yield
inches	1000's/A	inches	%	%	lbs/bu	bu/A
7	75	24	31.0	16.3	57.6	21.7
	100	25	30.9	16.8	57.5	25.0
	125	23	30.9	16.4	57.8	25.9
	150	25	31.1	16.5	57.9	29.0
14	75	22	31.6	15.8	57.9	19.4
	100	23	31.4	16.0	58.0	24.1
	125	25	31.3	16.5	58.0	25.8
	150	23	31.3	16.4	57.9	26.1
21	75	26	30.8	16.6	58.1	22.8
	100	23	31.2	16.5	57.6	25.4
	125	25	31.1	16.5	57.6	20.2
	150	22	31.3	16.6	57.6	20.6
LSD 0.05		2	NS	NS	NS	4.4

NS = no statistical difference between treatments.

Planting Date: June 2

Harvest Date: October 13

Variety: Asgrow 0231

Tillage: No-till

Previous Crop: canola

Soil Type: Williams Bowbells loam

Summary: Seeding rates did not have an impact on plant height, protein, oil or test weight. 100k and 150k seeding rates produced statistically higher yields than the 75k rate and 100k, 125k and 150k rates produced similar yields. Statistically significant differences between row spacing was observed for yield with 7 inch rows producing higher yields than 21 inch rows. Seeding rate by row spacing interactions were detected with yields having an inverse relationship between row spacing and seeding rates. In other words, as you widen your row spacing, you should lower your seeding rate to achieve optimum yield.