

**2019 and 2020 Oat Seeding Rate Trial at Minot**

**Summary:** The main objective of this trial was to document how seeding rates influence agronomic, grain quality and seed yields. Two commonly grown varieties, "Hayden" and "Camden", and the hullless variety "Paul" were grown in this trial. Actual established plant stands were a bit lower than the targeted seeding rates and the two highest seeding rates produced statistically similar stands. Days to flower, plant height, harvest moisture, test weight and kernel weights were statistically similar between seeding rates. Grain yields were statistically similar for 500k and 750k seeding rates and significantly higher for 1 million and 1.25 million seeding rates. This data would suggest that higher seeding rates should be considered for increasing yields without adversely affecting agronomic or other seed quality factors.

**Combined Means**

Seeding Rate	Plant Stand	Days to Flower	Plant Height	Harvest Moisture	Test Weight	1000 KWT**	Grain Yield
Seeds/A	Plants/A	DAP*	inches	%	lbs/bu	g	bu/A
500k	392,363a	44a	36a	12.7a	36.5a	29a	102.3a
750k	620,811b	44a	34a	13.6a	37.1a	29a	106.6a
1 mill	893,141c	45a	34a	12.2a	37.0a	28a	111.2b
1.25 mill	985,413c	44a	34a	13.3a	37.0a	27a	117.4c

Means followed by the same letter within each column were not statistically different at  $P \leq 0.05$ .

\*Days After Planting

\*\*1000 KWT data from 2019 only

Planting Date: April 24, 2019 and May 6, 2020

Harvest Date: August 8, 2019 and August 11, 2020

Previous Crop: Soybean

Tillage System: No-till

Soil Type: Williams Loam