



# 2021 South Dakota Oat Variety Trial Results Beresford

Jonathan Kleinjan | SDSU Extension Agronomist  
Melanie Caffè | SDSU Oat Breeder  
Kevin Kirby | Agricultural Research Manager  
Shawn Hawks | Agricultural Research Manager  
Nicholas Hall | Agricultural Research Manager

**Cooperator:** SDSU Southeast Research Farm  
**Location:** 43.044547°, -96.9015013°  
**Soil Type:** Egan-Clarno-Trent complex, 0-2% slopes  
**Previous crop:** soybeans  
**Tillage:** conventional  
**Row spacing:** 7"  
**Seeding Rate:** 1.2 million PLS/acre  
**Fertilizer:**  
-Starter: 70 lb/acre 30-10-10  
-Other: 80-0-0-10S  
**Herbicide:**  
-Burndown: NR  
-Post: 1.5 pt/acre MCPA  
**Fungicide:** 7 oz/acre Stratego applied at Feekes 8.0 (flag leaf emerged) on the fungicide-treated plots  
**Date seeded:** 3/29/2021  
**Date harvested:** 7/29/2021  
**Notes:** This trial location is set up with a split-plot design. All varieties are tested with and without fungicide.



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Table 1. 2021 oat variety performance trial results (average of four replications) at Beresford, South Dakota. Entries are sorted by overall three-year yield. Varieties yielding in the top third of the trial are shaded light blue.

Variety	Height (in)	Lodging* (1-5)	Test Wt (lbs)	2019 (bu/a)	2020 (bu/a)	2021 (bu/a)	with fungicide		2-year (bu/a)	3-year (bu/a)
							Test Wt (lbs)	2021 (bu/a)		
MN Pearl	24	1.0	33.4	111.3	113.3	55.8	34.2	63.7	88.5	96.1
Deon	26	1.0	28.8	116.6	111.7	61.8	29.8	59.0	85.4	95.8
Rushmore	26	1.0	30.9	98.2	105.9	53.0	32.8	62.0	83.9	88.7
Warrior	25	1.0	28.8	114.7	93.2	53.3	29.9	57.7	75.5	88.6
Natty	28	1.0	28.3	77.5	98.5	60.1	28.6	67.8	83.1	81.2
Goliath	30	1.0	29.9	64.8	104.5	56.1	30.6	72.4	88.5	80.6
Saddle	24	1.0	25.6	115.3	70.2	36.4	26.9	48.4	59.3	78.0
CS Camden	24	1.0	29.4	68.6	93.5	-	29.1	67.7	80.6	76.6
Hayden	24	1.0	26.8	54.6	92.2	47.8	29.5	61.2	76.7	69.3
Shelby427	27	1.0	31.9	44.2	90.1	54.7	32.6	62.3	76.2	65.5
Esker2020	25	1.0	29.0	-	91.3	59.3	30.3	61.2	76.3	-
KWS Ocre	22	1.0	33.7	-	-	69.7	32.8	79.5	-	-
KWS Opaline	22	1.0	30.6	-	-	57.9	29.7	66.3	-	-
Reins	21	1.0	34.5	-	-	61.3	35.7	62.9	-	-
<b>Trial Average#</b>	25	1.0	29.6	89.9	100.5	55.8	30.8	62.5	79.5	82.0
<b>LSD(0.05)†</b>	-	-	2.6	13.6	9.5	6.8	2.4	7.6	-	-
<b>C.V.%‡</b>	-	-	6.4	10.8	6.7	8.6	5.5	8.6	-	-

\* Lodging score: 1, perfectly standing; to 5, completely flat.

# Trial averages may include values from experimental lines that are not reported.

† Value required ( $\geq$ LSD) to determine if varieties are significantly different from one another.

‡ C.V. is a measure of variability or experimental error, 15% or less is considered acceptable.