



# 2023 South Dakota Oat Variety Trial Results Pierre

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**Cooperator:** Dakota Lakes Reserach Farm  
**Location:** 44.292941°, -100.006965°  
**Soil Type:** Dorna silt loam  
**Previous crop:** soybeans  
**Tillage:** no-till  
**Row spacing:** 7"  
**Seeding Rate:** 1.2 million PLS/acre  
**Fertilizer:**  
-Starter: none  
-Other: 20 gal/acre 26.1-0-0-2.6S steambar applied on 5/18/2023  
**Herbicide:**  
-Burndown: 26 oz/acre Roundup + 1 pt/acre Curtail on 9/26/2022  
-Post: 1 pt/acre Bromoxynil on 5/17/2023  
**Fungicide:** none  
**Date seeded:** 4/18/2023  
**Date harvested:** 7/28/2023

**Note:** This trial site was initiated in 2019 as part of an initiative titled “Wheat and Oat Grains for Productivity in Regenerative, Organic, and Conventional Farming Systems”, sponsored by the General Mills Foundation.



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Table 1. 2023 oat variety performance trial results (average of 4 replications) at Pierre, SD. Entries are sorted by overall 3-year yield. Varieties yielding in the top 1/3 of the trial are boldfaced and shaded light blue.

Variety	Height (in)	Lodging* (1-5)	Test Wt (lbs)	2021 (bu/a)	2022 (bu/a)	2023 (bu/a)	2-year (bu/a)	3-year (bu/a)
CS Camden	35	1.0	35.4	<b>78.2</b>	<b>123.2</b>	<b>127.5</b>	<b>125.4</b>	<b>109.6</b>
SD-Buffalo	35	1.0	38.0	54.9	<b>120.7</b>	<b>137.9</b>	<b>129.3</b>	<b>104.5</b>
Hayden	35	1.0	37.0	58.7	<b>124.1</b>	118.8	<b>121.4</b>	<b>100.5</b>
Deon	39	1.0	36.7	<b>62.4</b>	102.1	<b>134.3</b>	118.2	99.6
MN Pearl	35	1.7	36.9	59.6	111.8	<b>126.9</b>	119.4	99.5
Warrior	32	1.0	36.6	55.4	120.0	121.0	120.5	98.8
Shelby427	37	1.0	36.4	<b>67.8</b>	106.1	115.2	110.6	96.4
Goliath	45	2.3	37.8	61.1	103.6	121.0	112.3	95.2
Rushmore	34	1.0	37.7	60.9	93.5	125.0	109.2	93.1
2018Y0689	33	1.0	33.9	-	-	124.1	-	-
CDC Endure	36	1.0	35.2	-	-	123.5	-	-
2018Y1315	28	1.0	32.8	-	-	110.5	-	-
<b>Trial Average#</b>	36	1.1	37.1	62.2	113.9	124.7	118.5	99.7
<b>LSD(0.05)†</b>	-	-	0.8	11.6	15.9	13.8	-	-
<b>C.V.%‡</b>	-	-	-	13.4	10.0	7.9	-	-

\* 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.