



**SOUTH DAKOTA  
STATE UNIVERSITY**  
College of Agriculture, Food  
and Environmental Sciences

South Dakota State University Extension  
South Dakota Agricultural Experiment Station at SDSU

# 2023 South Dakota Oat Variety Trial Results Miller

Jonathan Kleinjan | SDSU Extension Agronomist  
Kevin Kirby | Agricultural Research Manager  
Shawn Hawks | Agricultural Research Manager

**Cooperator:** Lee Lichty  
**Location:** 44.524030°, -98.781479°  
**Soil Type:** Houdek-Prosper loams, 0-2% slopes  
**Previous crop:** soybeans  
**Tillage:** no-till  
**Row spacing:** 8"  
**Seeding Rate:** 1.2 million PLS/acre  
**Fertilizer:**  
-Starter: 90 lb/acre 30-10-10  
-Other: 243 lb/acre 46-0-0 + 2 gal/acre Coron (applied with herbicide)  
**Herbicide:**  
-Burndown: none  
-Post: 16 oz/acre WideMatch  
**Fungicide:** 2 oz/acre Quilt (applied with herbicide) + 8 oz/acre Prosoaro (at flowering)  
**Date seeded:** 4/26/2023  
**Date harvested:** 8/17/2023



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Table 1. 2023 oat variety performance trial results (average of 4 replications) at Miller, 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	29	1.8	31.0	<b>52.9</b>	96.2	<b>118.7</b>	<b>107.5</b>	<b>89.3</b>
SD-Buffalo	33	2.3	33.3	<b>36.1</b>	<b>104.2</b>	116.0	<b>110.1</b>	<b>85.4</b>
Deon	30	2.0	33.2	32.0	<b>106.7</b>	103.2	105.0	<b>80.6</b>
Goliath	38	3.0	35.5	<b>41.1</b>	96.8	103.8	100.3	80.6
Shelby427	32	2.3	33.5	35.4	103.2	100.0	101.6	79.5
Hayden	31	1.8	34.5	24.8	<b>107.7</b>	104.7	<b>106.2</b>	79.0
Warrior	26	1.3	31.3	32.7	101.5	93.8	97.7	76.0
MN Pearl	30	2.8	34.0	31.2	89.1	102.0	95.6	74.1
Rushmore	31	2.3	33.8	26.9	82.8	101.9	92.4	70.5
2018Y1315	29	1.5	30.7	-	-	<b>124.2</b>	-	-
CDC Endure	31	1.5	35.1	-	-	<b>122.2</b>	-	-
2018Y0689	31	1.3	31.6	-	-	<b>119.0</b>	-	-
<b>Trial Average#</b>	31	2.1	33.9	31.6	97.8	108.5	101.8	79.5
<b>LSD(0.05)†</b>	-	-	0.9	10.2	5.4	7.7	-	-
<b>C.V.%‡</b>	-	-	-	21.8	3.8	5.0	-	-

\* 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.