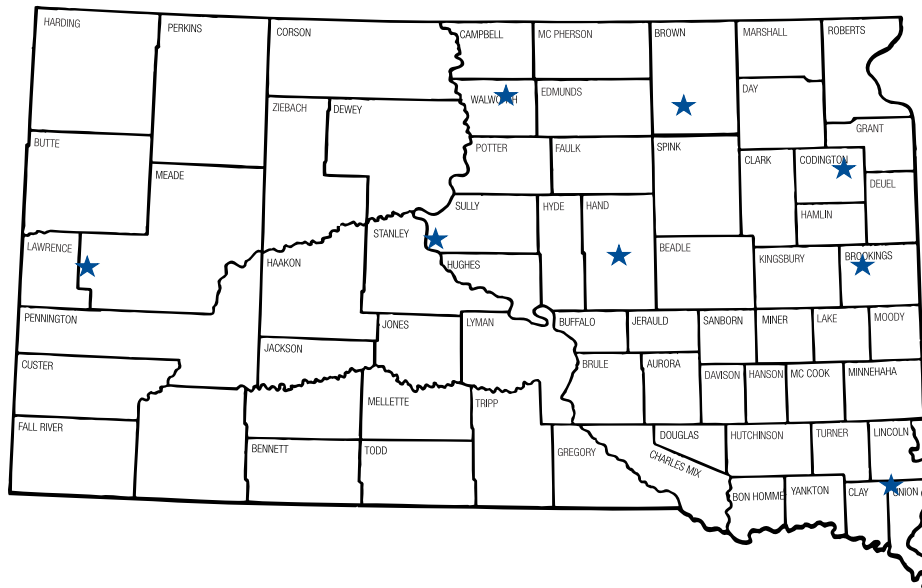




# 2024 South Dakota Oat Variety Trial Results Regional Summaries

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Eastern trial locations: Beresford, South Shore, Volga  
 Central trial locations: Aberdeen, Miller, Pierre, Selby  
 Western trial locations: Sturgis

Individual trial location results can be accessed online at: <https://extension.sdstate.edu/oat-variety-trial-results>

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# 2024 South Dakota Oat Variety Trial Results Variety List

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Table 1. List of oat varieties tested in 2024 along with origin, agronomic, and grain quality characteristics.

Variety	Testing and Origin		Agronomic Characteristics			Grain Quality§		Disease Ratings¶		
	Years tested in SD trials	Origin†-Year	Relative Heading (days)	Height (inches)	2024 Lodging Score‡	Grain Color	2024 Test Wt. (lb/bu)	Smut	Crown Rust	BYDV
2018Y1315	2	GM-exp	3	33	3.2	White	29.9	-	5	-
CDC Endure	3	MS-23	7	40	3.2	White	32.8	R	4	-
CS Camden	5+	MS-16	7	37	3.9	White	31.3	MR	6	4
Deon	5+	MN-13	5	40	3.7	Yellow	34.2	R	5	4
Goliath	5+	SD-12	7	45	4.0	White	34.5	MR	8	4
Hayden	5+	SD-14	4	40	3.9	White	34.7	R	8	4
MN Pearl	5+	MN-18	6	40	4.4	White	31.4	R	9	4
Rushmore	5+	SD-19	2	39	4.3	White	35.1	MR	8	4
SD-Buffalo	5+	SD-21	2	39	4.0	White	34.4	R	8	4
SD-Momentum	4	SD-23	7	47	3.0	White	35.7	R	2	4
SD-Titan	4	SD-23	4	44	3.0	White	34.4	R	2	4
Shelby427	5+	SD-09	0	38	3.7	White	35.5	R	8	3
Warrior	5+	SD-18	1	34	2.8	White	33.9	R	7	4
<b>Trial Average ¥</b>	-	-	-	39	3.6	-	34.3	-	-	-

† MN, Minnesota; MS, Meridian Seeds; SD, South Dakota; GM, General Mills - (Year of Release)  
‡ Lodging scores: 1, standing perfectly to 5, completely flat  
§ Grain protein content and test weight statewide averages  
¶ Disease ratings: 1, most resistant to 9, most susceptible (or traditional ratings MR, MS, etc.)  
¥ Trial averages may include values from experimental lines that are not reported.



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## 2024 South Dakota Oat Variety Trial Results Quality Characteristics

Table 2. Grain quality and milling characteristics.

Variety	% Plump	% Mid	% Thin	1000 Kernel Weight (g)	Groat %	NIR groat protein (%)	NIR groat beta- glucan (%)	NIR groat fat (%)
2018Y1315	54.9	38.5	6.6	32.8	67.4	17.6	5.6	6.4
CDC Endure	66.6	29.3	4.2	34.7	69.8	16.3	5.0	4.8
CS Camden	45.4	47.0	7.7	32.2	64.5	17.0	5.0	5.3
Deon	33.4	57.8	8.8	32.7	70.0	16.7	4.7	5.7
Goliath	35.0	55.8	9.1	30.4	69.3	16.7	4.6	5.2
Hayden	29.9	60.3	9.8	30.5	65.5	16.2	4.7	6.2
MN Pearl	37.5	49.6	12.9	28.0	64.7	14.9	4.4	6.2
Rushmore	39.9	50.8	9.3	30.2	67.4	16.0	4.5	5.3
SD-Buffalo	39.1	53.5	7.4	32.7	69.0	16.7	4.6	6.0
SD-Momentum	53.8	42.6	3.7	33.5	70.2	16.4	4.6	6.3
SD-Titan	40.9	50.6	8.5	32.2	72.1	17.8	4.4	4.8
Shelby427	43.3	49.0	7.8	28.9	70.1	17.3	4.5	5.6
Warrior	40.0	51.5	8.5	30.6	70.4	17.6	4.6	5.1
<b>Trial Average#</b>	43.1	48.9	8.0	31.5	68.5	16.7	4.7	5.6
<b>LSD(0.05)†</b>	10.4	9.0	2.8	1.9	2.9	0.8	0.3	0.4
<b>C.V.%‡</b>	20.1	19.3	37.1	5.7	4.0	4.2	5.5	7.5

# 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



## 2024 South Dakota Oat Variety Trial Results Eastern Summary

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Table 3. 2022-2024 oat variety performance trial results for testing sites in eastern South Dakota. Varieties ranking in the top 1/3 of each trial category are boldfaced and shaded light blue.

Variety	2024		2-year		3-year	
	Yield (bu/a)	Test Wt (lbs)	Yield (bu/a)	Test Wt (lbs)	Yield (bu/a)	Test Wt (lbs)
SD-Titan	<b>129.5</b>	34.0	<b>128.9</b>	34.9	<b>120.0</b>	33.7
SD-Momentum	<b>126.7</b>	35.0	<b>122.7</b>	35.9	<b>113.6</b>	35.0
CDC Endure	<b>108.8</b>	30.6	<b>117.5</b>	32.4	<b>113.3</b>	32.1
Deon	<b>103.3</b>	32.5	107.2	33.9	<b>104.9</b>	33.5
CS Camden	96.3	28.4	<b>107.4</b>	30.4	103.0	30.0
Goliath	101.5	32.2	106.4	34.4	100.1	33.6
Warrior	95.2	32.5	102.9	33.8	99.2	33.1
SD-Buffalo	90.8	31.7	97.1	33.1	96.2	32.8
Hayden	85.3	32.2	97.9	34.0	93.1	33.2
Shelby427	78.7	33.9	88.0	34.4	88	34.4
Rushmore	78.3	33.2	87.9	34.9	86.1	34.4
MN Pearl	68.8	26.6	84.9	30.9	85.4	30.8
2018Y1315	87.7	27.6	98.8	29	-	-
<b>Trial Average#</b>	103.8	32.6	106.9	33.0	101.0	33.1
<b>LSD(0.05)†</b>	15.1	1.4	16.5	1.9	15.6	2.1
<b>C.V.%‡</b>	10.2	-	11.0	-	10.9	-

# 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.



## 2024 South Dakota Oat Variety Trial Results Central Summary

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Table 4. 2022-2024 oat variety performance trial results for testing sites in central South Dakota. Varieties ranking in the top 1/3 of each trial category are boldfaced and shaded light blue.

Variety	2024		2-year		3-year	
	Yield (bu/a)	Test Wt (lbs)	Yield (bu/a)	Test Wt (lbs)	Yield (bu/a)	Test Wt (lbs)
CS Camden	<b>139</b>	33.2	<b>149</b>	32.7	<b>137</b>	33.1
CDC Endure	<b>139</b>	34.0	<b>147</b>	34.0	<b>136</b>	34.5
SD-Buffalo	128	36.1	<b>141</b>	35.6	<b>134</b>	36.1
SD-Momentum	128	36.8	137	36.6	<b>133</b>	37.3
Deon	<b>132</b>	35.6	139	35.2	131	35.8
Hayden	124	35.9	129	35.6	127	36.4
SD-Titan	123	35.3	132	35.4	127	36.0
MN Pearl	123	34.9	134	34.7	125	34.9
Warrior	118	35.0	126	34.1	123	34.8
Goliath	113	35.7	129	36.0	121	36.4
Rushmore	117	36.6	128	35.8	118	36.3
Shelby427	109	36.6	119	35.5	116	36.2
2018Y1315	<b>135</b>	31.2	<b>144</b>	31	-	-
<b>Trial Average#</b>	127.4	35.1	136	35.3	129	35.4
<b>LSD(0.05)†</b>	11.7	1.1	24.9	1.3	12.4	1.3
<b>C.V.%‡</b>	6.4	-	13.1	-	6.7	-

# 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.



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**2024 South Dakota  
Oat Variety Trial Results  
Western Summary**

Table 5. 2022-2024 oat variety performance trial results for testing sites in western South Dakota. Varieties ranking in the top 1/3 of each trial category are boldfaced and shaded light blue.

Variety	2024		2-year		3-year	
	Yield (bu/a)	Test Wt (lbs)	Yield (bu/a)	Test Wt (lbs)	Yield (bu/a)	Test Wt (lbs)
CDC Endure	<b>82.6</b>	36.6	<b>115.4</b>	37.4	<b>96.3</b>	35.7
CS Camden	<b>92.3</b>	35.0	<b>117.8</b>	36.0	<b>95.1</b>	35.7
SD-Momentum	56.7	35.3	88.4	37.1	<b>81.3</b>	36.1
Warrior	<b>83.4</b>	35.5	86.7	34.2	<b>81.0</b>	35.6
SD-Titan	61.0	34.4	87.3	35.8	80.8	36.4
Hayden	<b>81.7</b>	37.2	79.8	34.8	80.8	35.5
Shelby427	81.5	37.6	<b>89.6</b>	37.1	79.3	37.3
SD-Buffalo	80.0	37.0	82.4	35.4	78.1	35.7
Rushmore	71.4	37.6	<b>91.2</b>	36.7	76.5	36.3
MN Pearl	80.7	35.9	80.6	33.9	72.1	34.7
Goliath	64.2	37.1	78.8	37.5	71.4	37.2
Deon	78.3	36.2	78.8	34.9	67	35.6
2018Y1315	64.2	37.1	81.8	38.4	-	-
<b>Trial Average#</b>	76.7	36.4	90.0	35.9	79.8	36.0
<b>LSD(0.05)†</b>	12.9	1.3	25.3	2.5	19.0	2.5
<b>C.V.%‡</b>	11.9	-	18.5	-	16.7	-

# Trial averages may include values from experimental lines that are not reported.  
 † Value required (≥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.