

2025 South Dakota Oat Variety Trial Results - Regional Summaries

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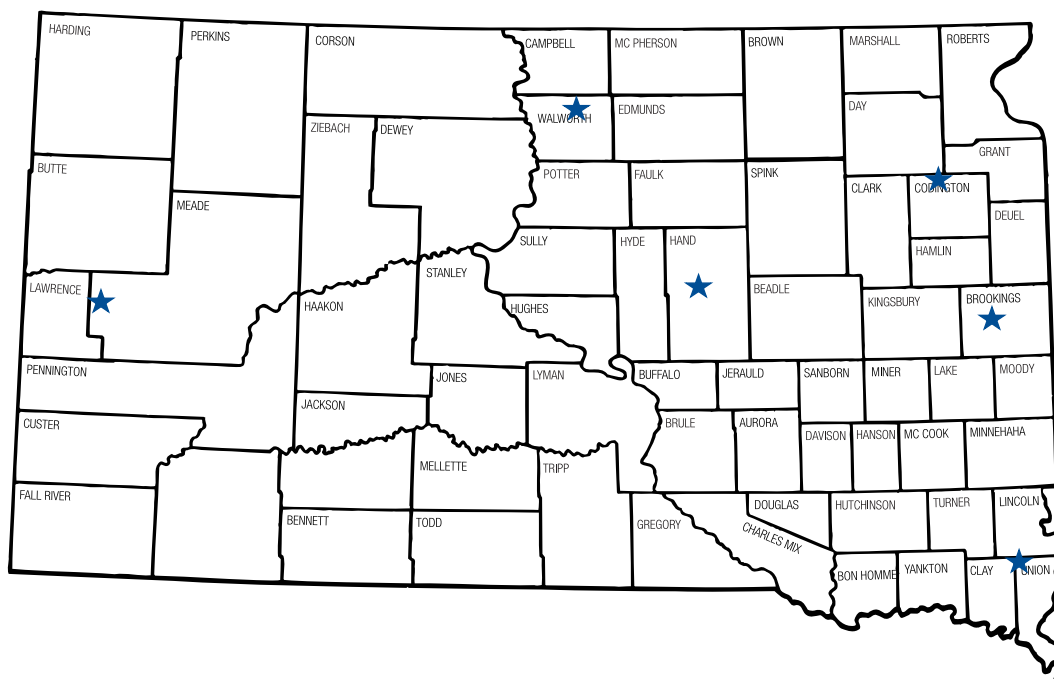
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Eastern trial locations: Beresford, South Shore, Volga

Central trial locations: Miller, 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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2025 South Dakota Oat Variety Trial Results Variety List

Table 1. List of oat varieties tested in 2025 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)	2025 Lodging Score‡	Grain Color	2025 Test Wt. (lb/bu)	Smut	Crown Rust	BYDV
CDC ENDURE	4	MS-23	8	40	2.3	White	30.2	R	4	7
CS CAMDEN	5+	MS-16	7	38	3.0	White	29.3	MR	5	7
DEON	5+	MN-13	5	41	3.1	Yellow	32.1	R	5	4
ESKER2020	3	WI-19	2	37	3.2	Yellow	29.4	R	2	-
Fred	1	ALS-25	2	41	2.6	White	33.9	R	2	-
GMI2020Y2863	1	GM-exp	8	41	3.0	White	30.7	R	3	8
GOLIATH	5+	SD-12	7	45	3.8	White	31.7	MR	7	2
HAYDEN	5+	SD-14	6	40	3.8	White	33.4	R	8	1
MN PEARL	5+	MN-18	5	40	3.7	White	29.9	R	9	-
RUSHMORE	5+	SD-19	3	39	3.7	White	32.4	MR	8	2
SADDLE	5+	SD-17	0	35	3.1	White	31.9	R	8	1
SD Buffalo	5+	SD-21	4	39	3.8	White	31.8	R	7	1
SD Momentum	5	SD-23	7	47	2.9	White	32.9	R	1	3
SD Ranger	4	SD-24	4	40	3.6	White	32.7	R	4	3
SD Titan	5	SD-23	5	44	2.5	White	32.4	MR	1	3
SHELBY427	5+	SD-09	2	38	3.6	White	33.9	R	8	3
SUMO	5+	ALS-16	0	36	2.6	White	33	R	3	-
WARRIOR	5+	SD-18	3	38	2.8	White	32.3	R	7	4
Trial Average#	-	-	-	40	3.2	-	31.9	-	-	-
† MN, Minnesota; MS, Meridian Seeds; SD, South Dakota; WI, Wisconsin; GM, General Mills, ALS (Albert Lea Seed) - (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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2025 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 %
CDCEndure	72.1	24.0	3.9	33.2	76.0	17.4	5.62	6.07
CSCamden	54.1	40.9	5.0	31.6	72.2	18.3	5.70	6.74
Deon	42.5	50.5	6.9	32.6	73.8	17.7	5.21	7.01
Esker2020	35.1	54.8	10.0	28.4	73.4	18.2	5.43	5.96
Fred	49.7	44.6	5.6	33.0	74.4	17.8	5.45	7.88
GMI2020Y2863	66.4	29.4	4.2	32.0	76.1	17.2	5.74	6.24
Goliath	39.7	50.9	9.3	29.0	73.5	17.4	5.27	6.68
Hayden	40.4	52.8	6.7	32.0	72.8	16.7	5.31	7.55
MNPearl	48.8	42.0	9.1	28.4	74.9	15.2	4.87	7.27
Rushmore	45.5	46.6	7.8	29.4	73.1	17.5	4.93	6.49
Saddle	26.7	65.0	8.3	28.9	75.4	17.2	4.96	5.86
SDBuffalo	42.0	51.9	6.1	31.9	73.1	17.5	5.03	7.47
SDMomentum	53.6	42.0	4.4	32.9	73.8	16.5	5.01	7.94
SDRanger	70.9	25.6	3.4	30.3	74.6	16.9	4.92	5.85
SDTitan	47.5	45.2	7.2	31.0	73.6	18.1	4.89	6.04
Shelby 427	36.4	54.8	8.8	27.7	74.9	18.0	5.09	7.08
Sumo	66.8	30.0	3.1	34.0	74.4	19.0	4.62	5.85
Warrior	40.4	52.4	7.0	30.0	74.5	18.1	5.28	6.52
Trial Average#	48.8	44.6	6.5	30.9	74.1	17.5	5.18	6.7
LSD (0.05)†	10.0	9.0	2.3	2.1	2.1	0.8	0.28	0.36
C.V. %‡	17.4	18.3	32.8	5.8	2.4	3.8	4.6	4.5
# 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								



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2025 South Dakota Oat Variety Trial Results Eastern Summary

Table 3. 2022-2025 oat variety performance trial results for testing sites in eastern South Dakota. Varieties yielding in the top 1/3 of the trial are bold and shaded light blue.

Variety	2023	2024	2025		2-year		3-year	
	Yield (bu/a)	Yield (bu/a)	Yield (bu/a)	Test Wt (lbs/bu)	Yield (bu/a)	Test Wt (lbs/bu)	Yield (bu/a)	Test Wt (lbs/bu)
SD Titan	122.6	129.5	111.0	32.0	120.3	33.0	121.1	33.5
SD Ranger	120.8	120.1	109.1	32.5	114.6	33.4	116.7	34.3
SD Momentum	111.8	126.7	110.3	33.0	118.5	34.0	116.3	34.5
CDC ENDURE	124.9	108.8	95.5	30.3	102.1	30.4	109.7	31.5
CS CAMDEN	118.7	96.3	100.2	28.7	98.2	28.6	105.1	29.6
DEON	108.5	103.3	102.9	32.0	103.1	32.3	104.9	32.9
WARRIOR	109.9	95.2	106.0	32.1	100.6	32.3	103.7	32.9
HAYDEN	111.9	85.3	95.0	33.0	90.2	32.6	97.4	33.4
GOLIATH	108.8	101.5	79.9	30.7	90.7	31.5	96.8	33.0
SD Buffalo	101.8	90.8	89.0	31.2	89.9	31.4	93.9	32.2
SHELBY427	101.5	78.7	87.6	33.9	83.2	33.9	89.3	34.1
RUSHMORE	98.0	78.3	82.2	31.6	80.3	32.4	86.2	33.6
MN PEARL	104.5	68.8	82.0	29.2	75.4	27.9	85.1	30.5
ESKER2020	-	-	110.0	29.4	-	-	-	-
Fred	-	-	109.3	33.9	-	-	-	-
GMI2020Y2863	-	-	106.3	30.7	-	-	-	-
SADDLE	-	-	83.9	31.3	-	-	-	-
SUMO	-	-	91.5	32.8	-	-	-	-
Trial Average#	112.2	103.8	103.2	32.4	32.4	101.4	33.4	98.4
LSD (0.05)†	6.8	15.1	14.9	1.9	1.9	16.9	2.2	16.7
C.V. %‡	6.1	10.2	9.2	2.5	2.7	8.8	2.7	8.5

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, 15% or less is considered acceptable.



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2025 South Dakota Oat Variety Trial Results Central Summary

Table 4. 2022-2025 oat variety performance trial results for testing sites in central South Dakota. Varieties yielding in the top 1/3 of the trial are bold and shaded light blue.

Variety	2023	2024	2025		2-year		3-year	
	Yield (bu/a)	Yield (bu/a)	Yield (bu/a)	Test Wt (lbs/bu)	Yield (bu/a)	Test Wt (lbs/bu)	Yield (bu/a)	Test Wt (lbs/bu)
CS CAMDEN	154.9	139	157.2	30.4	148.1	31.8	150.4	32.1
SD Ranger	144.8	135.0	163.3	33.2	149.2	34.0	147.7	34.7
CDC ENDURE	152.3	139	143.9	30.0	141.3	32.0	144.9	32.9
DEON	141.6	132	153.1	32.3	142.7	34.0	142.3	34.4
SD Buffalo	152.2	128	143.7	33.1	135.8	34.6	141.3	34.9
SD Momentum	144.2	128	145.1	32.7	136.5	34.8	139.0	35.5
SD Titan	137.7	123	152.2	33.3	137.6	34.3	137.6	34.9
MN PEARL	142.9	123	142.4	31.4	132.5	33.1	136.0	33.8
HAYDEN	131.0	124	143.3	34.4	133.5	35.2	132.7	35.3
WARRIOR	130.8	118	145.7	32.7	131.6	33.8	131.4	33.9
RUSHMORE	136.4	117	127.6	34.1	122.4	35.4	127.1	35.5
GOLIATH	137.4	113	129.1	33.6	121.1	34.6	126.5	35.3
SHELBY427	126.5	109	118.8	34.0	113.9	35.3	118.1	35.3
ESKER2020	-	-	140.9	29.4	-	-	-	-
Fred	-	-	139.0	33.9	-	-	-	-
GMI2020Y2863	-	-	151.2	30.7	-	-	-	-
SADDLE	-	-	134.7	32.9	-	-	-	-
SUMO	-	-	121.7	33.3	-	-	-	-
Trial Average#	140.7	127.4	144.6	32.9	141.7	34.3	147.1	34.9
LSD (0.05)†	6.5	11.7	18.3	1.6	16.4	1.3	16.9	1.2
C.V. %‡	5.8	6.4	8.7	3.0	8.5	2.9	7.6	2.5

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.



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2025 South Dakota Oat Variety Trial Results Western Summary

Table 5. 2022-2025 oat variety performance trial results for testing sites in western South Dakota. Varieties yielding in the top 1/3 of the trial are bold and shaded light blue.

Variety	2023	2024	2025		2-year		3-year	
	Yield (bu/a)	Yield (bu/a)	Yield (bu/a)	Test Wt (lbs/bu)	Yield (bu/a)	Test Wt (lbs/bu)	Yield (bu/a)	Test Wt (lbs/bu)§
CS CAMDEN	143.3	92.3	103.2	not	97.7	not	112.9	36.1
CDC ENDURE	148.2	82.6	103.8	available	93.2	available	111.5	37.4
SD Ranger	99.1	92.7	121.6	-	107.1	-	104.4	37.2
SD Momentum	120.1	56.7	122.6	-	89.7	-	99.8	37.1
HAYDEN	82.5	81.7	115.2	-	98.5	-	93.2	35.1
SD Titan	113.6	61.0	99.1	-	80.0	-	91.2	35.8
GOLIATH	93.5	64.2	113.9	-	89.0	-	90.5	37.5
WARRIOR	89.9	83.4	97.2	-	90.3	-	90.2	34.2
RUSHMORE	111.1	71.4	86.2	-	78.8	-	89.6	36.7
SD Buffalo	84.8	80.0	100.6	-	90.3	-	88.5	35.4
MN PEARL	80.6	80.7	100.2	-	90.4	-	87.2	33.9
SHELBY427	97.7	81.5	78.2	-	79.8	-	85.8	37.1
DEON	79.3	78.3	96.9	-	87.6	-	84.8	34.9
ESKER2020	-	-	84.9	-	-	-	-	-
Fred	-	-	92.1	-	-	-	-	-
GMI2020Y2863	-	-	119.3	-	-	-	-	-
SADDLE	-	-	82.4	-	-	-	-	-
SUMO	-	-	66.4	-	-	-	-	-
Trial Average#	97.6	76.7	106.1	-	89.7	-	91.7	-
LSD (0.05)†	13	12.9	22.1	-	30.1	-	35.1	-
C.V. %‡	9.4	11.9	15.3	-	14.3	-	12.9	-
# 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. § average of 2023 and 2024								