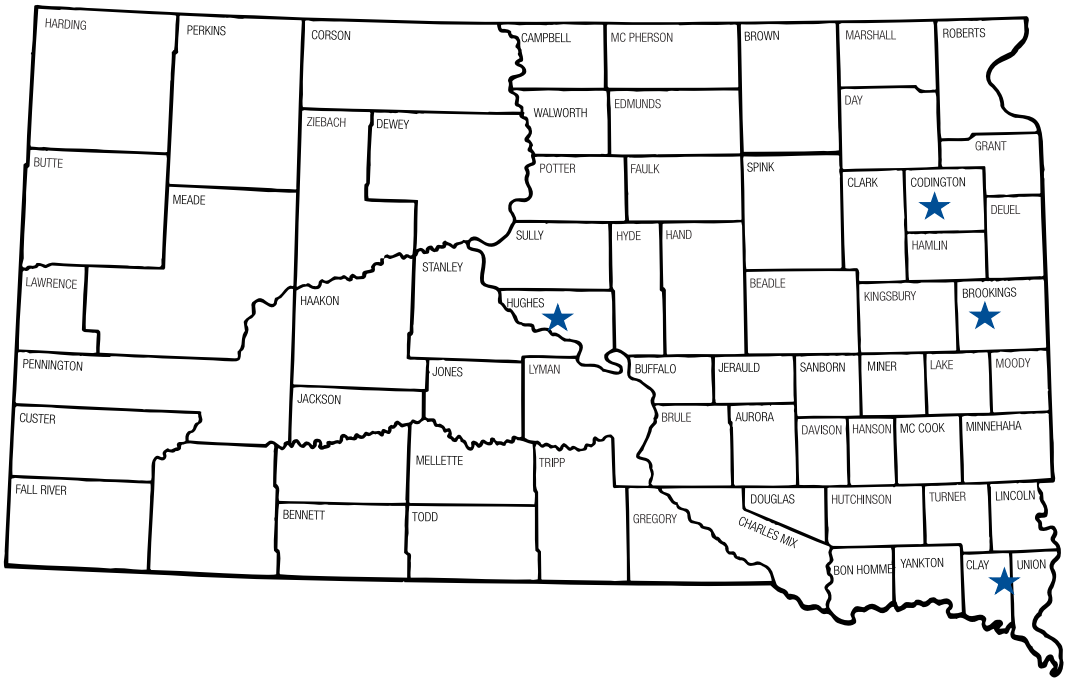
South Dakota State University

College of Agriculture, Food and Environmental Sciences | SDSU Extension | South Dakota Agricultural Experiment Station

2026 South Dakota Oat Variety Trial Results - Forage

David Karki | SDSU Extension Agronomist
Melanie Caffe | SDSU Winter Wheat Breeder
Nick Hall | CPT Program Trial Manager



Locations: Beresford (Clay County), Pierre (Hughes County)
South Shore (Codington County), Volga (Brookings County)

SDSU Extension is an equal opportunity provider and employer in accordance with the nondiscrimination policies of South Dakota State University, the South Dakota Board of Regents and the United States Department of Agriculture.

Learn more at extension.sdstate.edu.

© 2026, South Dakota Board of Regents

S-0002-2026-02-Oat-Forage

South Dakota State University Extension

2026 South Dakota Oat Forage Trial Results Beresford

Table 1. 2026 oat forage trial results (average of 3 replications- Height and DM) at Beresford, SD.

Variety Information			Yield & Nutritional Performance						
Variety	Height (inches)	DM[1] (T/A)	CP[2] (%DM)	ADF[3] (%DM)	NDF[4] (%DM)	NE L[5] (Mcal/lb)	NE G[6] (Mcal/lb)	NE M[7] (Mcal/lb)	RFV[8]
Kodiac (Barley)	34	7.7	12.8	20.9	35.7	0.7	0.4	0.7	162
SD Soldier	39	7	10.8	25.4	41.6	0.6	0.3	0.6	130
Goliath	45	6.9	12.6	24.8	41.9	0.7	0.4	0.6	130
SD Momentum	46	6.9	9.7	30.8	48.4	0.6	0.3	0.6	103
SD Ranger	39	6.8	12.7	25.3	41.6	0.6	0.3	0.6	130
Rockford	42	6.6	12.7	24	41.6	0.6	0.4	0.6	130
Rushmore	41	6.6	13.4	24.5	41.9	0.6	0.3	0.6	130
Hayden	41	6.1	11.9	30.5	49.4	0.6	0.3	0.6	102
SD Buffalo	39	6.1	11.8	27	43.2	0.6	0.4	0.6	122
SD Titan	44	6.1	12.8	28.6	48.7	0.6	0.3	0.5	106
Deon	41	5.8	8.2	36.6	55.6	0.5	0.2	0.4	83
Trial Average	41	6.6	12.1	26.2	43.4	0.6	0.3	0.6	121
LSD (0.05)§	3	1.2	-	-	-	-	-	-	-
CV	4.3	10.9	-	-	-	-	-	-	-

§ Value required (≥LSD) to determine if varieties are significantly different from one another.
[1] Tons per acre of dry matter (DM).
[2] Crude protein as a percentage of DM.
[3] Acid detergent fiber as a % of dry matter. Generally samples with lower ADF are considered higher quality.
[4] Neutral detergent fiber as a % of dry matter. Generally samples with lower NDF are considered higher quality.
[5] Net energy, lactation - an estimate of energy value for dairy cattle diets. (Mcal/lb, DM basis)
[6] Net energy, gain - an estimate of energy value to support beef cattle growth. (Mcal/lb, DM basis)
[7] Net energy, maintenance - an estimate of energy value for meeting maintenance needs of beef cattle. (Mcal/lb, DM basis).
[8] Relative feed value - a value representing how well a forage will be consumed and digested.

SDSU Extension is an equal opportunity provider and employer in accordance with the non discrimination policies of South Dakota State University, South Dakota Board of Regents and United States Department of Agriculture. © 2026

South Dakota State University Extension

2026 South Dakota Oat Forage Trial Results Pierre

Table 2. 2026 oat forage trial results (average of 3 replications- Height and DM) at Pierre, SD.

Variety Information			Yield & Nutritional Performance						
Variety	Height (inches)	DM[1] (T/A)	CP[2] (%DM)	ADF[3] (%DM)	NDF[4] (%DM)	NE L[5] (Mcal/lb)	NE G[6] (Mcal/lb)	NE M[7] (Mcal/lb)	RFV[8]
SD Momentum	45	5.6	12.2	28.7	58.1	0.5	0.2	0.5	89
Rockford	42	5.4	7.8	36.6	60.9	0.5	0.2	0.4	76
SD Titan	43	5.3	8.9	34.9	58.4	0.5	0.2	0.5	81
Rushmore	42	4.9	9.7	35.6	55.2	0.5	0.2	0.5	85
Hayden	39	4.8	9.5	31.9	58.2	0.5	0.2	0.5	85
Goliath	47	4.7	11.7	33.9	54.5	0.5	0.2	0.5	88
Deon	40	4.6	9.5	37.7	59.5	0.5	0.2	0.4	77
SD Buffalo	42	4.6	11.4	37.4	55.1	0.5	0.2	0.5	83
SD Ranger	38	4.6	10	34.5	57.4	0.5	0.2	0.5	83
Kodiac (Barley)	32	4.3	13	25.8	44.9	0.6	0.3	0.6	120
SD Soldier	42	4.2	9.1	39.2	61.9	0.5	0.1	0.4	72
Trial Average	41	4.8	10.3	34.2	56.7	0.5	0.2	0.5	85
LSD (0.05)§	7.3	1.3	-	-	-	-	-	-	-
CV	9.9	15.2	-	-	-	-	-	-	-

§ Value required (≥LSD) to determine if varieties are significantly different from one another.
[1] Tons per acre of dry matter (DM).
[2] Crude protein as a percentage of DM.
[3] Acid detergent fiber as a % of dry matter. Generally samples with lower ADF are considered higher quality.
[4] Neutral detergent fiber as a % of dry matter. Generally samples with lower NDF are considered higher quality.
[5] Net energy, lactation - an estimate of energy value for dairy cattle diets. (Mcal/lb, DM basis)
[6] Net energy, gain - an estimate of energy value to support beef cattle growth. (Mcal/lb, DM basis)
[7] Net energy, maintenance - an estimate of energy value for meeting maintenance needs of beef cattle. (Mcal/lb, DM basis).
[8] Relative feed value - a value representing how well a forage will be consumed and digested.

SDSU Extension is an equal opportunity provider and employer in accordance with the non discrimination policies of South Dakota State University, South Dakota Board of Regents and United States Department of Agriculture. © 2026

South Dakota State University Extension

2026 South Dakota Oat Variety Trial Results South Shore

Table 3. 2026 oat forage trial results (average of 3 replications- Height and DM) at South Shore, SD.

Variety Information			Yield & Nutritional Performance						
Variety	Height (inches)	DM[1] (T/A)	CP[2] (%DM)	ADF[3] (%DM)	NDF[4] (%DM)	NE L[5] (Mcal/lb)	NE G[6] (Mcal/lb)	NE M[7] (Mcal/lb)	RFV[8]
SD Soldier	42	2.1	7.3	41.3	60.3	0.5	0.2	0.4	73
SD Momentum	48	2	8.5	29	45.7	0.6	0.3	0.5	113
Goliath	48	1.9	8.8	38	56.7	0.5	0.2	0.4	80
Kodiac (Barley)	35	1.9	12.8	30.6	50.4	0.5	0.3	0.5	102
Rushmore	40	1.9	7.9	35.1	52.2	0.5	0.2	0.5	92
SD Buffalo	41	1.9	7.4	33.3	50.4	0.5	0.2	0.5	97
SD Ranger	41	1.9	7.9	35.3	56.8	0.5	0.2	0.4	83
SD Titan	46	1.9	8.4	27.9	44.4	0.6	0.3	0.5	119
Deon	42	1.8	9.5	30.9	48.6	0.6	0.3	0.5	104
Rockford	43	1.7	9.5	36.5	56.1	0.5	0.2	0.4	83
Hayden	41	1.6	8.7	28.5	45.4	0.6	0.3	0.5	115
Trial Average	43	1.9	8.8	33.3	51.5	0.5	0.2	0.5	97
LSD (0.05)§	3.1	0.4	-	-	-	-	-	-	-
CV	4.4	13.7	-	-	-	-	-	-	-

§ Value required (≥LSD) to determine if varieties are significantly different from one another.
[1] Tons per acre of dry matter (DM).
[2] Crude protein as a percentage of DM.
[3] Acid detergent fiber as a % of dry matter. Generally samples with lower ADF are considered higher quality.
[4] Neutral detergent fiber as a % of dry matter. Generally samples with lower NDF are considered higher quality.
[5] Net energy, lactation - an estimate of energy value for dairy cattle diets. (Mcal/lb, DM basis)
[6] Net energy, gain - an estimate of energy value to support beef cattle growth. (Mcal/lb, DM basis)
[7] Net energy, maintenance - an estimate of energy value for meeting maintenance needs of beef cattle. (Mcal/lb, DM basis).
[8] Relative feed value - a value representing how well a forage will be consumed and digested.

SDSU Extension is an equal opportunity provider and employer in accordance with the non discrimination policies of South Dakota State University, South Dakota Board of Regents and United States Department of Agriculture. © 2026

South Dakota State University Extension

2026 South Dakota Oat Forage Trial Results Volga

Table 4. 2026 oat forage trial results (average of 3 replications- Height and DM) at Volga, SD.

Variety Information			Yield & Nutritional Performance						
Variety	Height (inches)	DM[1] (T/A)	CP[2] (%DM)	ADF[3] (%DM)	NDF[4] (%DM)	NE L[5] (Mcal/lb)	NE G[6] (Mcal/lb)	NE M[7] (Mcal/lb)	RFV[8]
Kodiac (Barley)	30	5.5	11	23.2	40.1	0.7	0.4	0.7	138
Goliath	41	5.4	13.9	23.8	44.2	0.6	0.4	0.6	124
SD Momentum	40	5.1	11	29.5	51.7	0.6	0.3	0.6	99
SD Ranger	35	5.1	11.7	27.9	48.1	0.6	0.3	0.6	110
SD Soldier	36	5.1	9.8	34.8	54.1	0.5	0.2	0.5	88
Hayden	35	5	9.6	31.4	53.8	0.6	0.3	0.5	92
Rushmore	35	4.8	10.9	27.4	47.1	0.6	0.3	0.6	110
SD Buffalo	35	4.8	10.7	28.1	50.4	0.6	0.3	0.6	104
SD Titan	39	4.7	11.4	30.4	53.6	0.6	0.3	0.5	95
Rockford	36	4.5	10.3	30.7	50.8	0.6	0.3	0.5	98
Deon	36	4.2	13.3	27	48.8	0.6	0.3	0.5	106
Trial Average	36	4.9	11.2	28.6	49.3	0.6	0.3	0.6	106
LSD (0.05)§	3.6	1.4	-	-	-	-	-	-	-
CV	5.9	16.8	-	-	-	-	-	-	-

§ Value required (≥LSD) to determine if varieties are significantly different from one another.
[1] Tons per acre of dry matter (DM).
[2] Crude protein as a percentage of DM.
[3] Acid detergent fiber as a % of dry matter. Generally samples with lower ADF are considered higher quality.
[4] Neutral detergent fiber as a % of dry matter. Generally samples with lower NDF are considered higher quality.
[5] Net energy, lactation - an estimate of energy value for dairy cattle diets. (Mcal/lb, DM basis)
[6] Net energy, gain - an estimate of energy value to support beef cattle growth. (Mcal/lb, DM basis)
[7] Net energy, maintenance - an estimate of energy value for meeting maintenance needs of beef cattle. (Mcal/lb, DM basis).
[8] Relative feed value - a value representing how well a forage will be consumed and digested.

SDSU Extension is an equal opportunity provider and employer in accordance with the non discrimination policies of South Dakota State University, South Dakota Board of Regents and United States Department of Agriculture. © 2026