SDSU Extension

agronomy

South Dakota Agricultural Experiment Station

Research at SDSU

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SOUTH DAKOTA STATE UNIVERSITY®
AGRONOMY, HORTICULTURE, & PLANT SCIENCE DEPARTMENT

2019 South Dakota Oat Variety Trial Results South Shore

Jonathan Kleinjan | SDSU Extension Crop Production Associate
Kevin Kirby | Agricultural Research Manager
Shawn Hawks | Agricultural Research Manager

Cooperator:	SDSU Northeast Research Farm, Al Heuer, manager
Location:	45.106224°, -97.089059°
Soil Type:	Kranzburg-Brookings silty clay loams, 0-2% slopes
Previous crop:	soybeans
Tillage:	Conventional
Row spacing:	8"
Seeding Rate:	1.8 million PLS/acre
Fertilizer:	
-Starter:	90 lb/acre 30-10-10
-Other:	none
Herbicide:	
-Burndown:	NR
-Post:	1 pt/acre Bronate
Fungicide:	none
Date seeded:	5/7/2019
Date harvested:	8/20/2019

Table 1. 2019 oat variety performance trial results (average of 4 replications) at South Shore, SD.
Entries are sorted by overall 2-year yield. Varieties yielding in the top 1/3 of the trial are shaded light blue.

Variety	Height (in)	Lodging* (1-5)	Test Wt (lbs)	2017 (bu/a)	2018 (bu/a)	2019 (bu/a)	2-year (bu/a)	3-year (bu/a)
SD140515	46	3.5	35.5	145.3	157.3	146.4	151.9	149.7
Saddle	43	3.0	33.1	162.5	146.0	129.5	137.7	146.0
Deon	43	4.0	34.5	147.8	140.8	144.1	142.5	144.2
Warrior	42	3.5	33.6	165.3	135.7	125.2	130.4	142.1
Goliath	50	4.3	34.0	153.5	151.9	119.4	135.6	141.6
CS Camden	40	4.0	33.0	131.7	160.6	131.0	145.8	141.1
Natty	46	4.5	32.3	152.0	148.8	104.0	126.4	134.9
Hayden	47	5.0	32.1	162.1	145.0	94.3	119.6	133.8
Antigo	40	4.3	35.7	117.2	138.1	133.4	135.7	129.5
Sumo	42	3.5	35.1	142.3	129.3	106.3	117.8	125.9
Jury	50	5.0	31.0	142.9	136.7	94.2	115.4	124.6
Newburg	48	5.0	31.2	160.1	134.5	76.8	105.6	123.8
Shelby427	43	5.0	32.8	140.5	130.1	87.2	108.7	119.3
Horsepower	39	5.0	27.7	143.2	143.2	68.3	105.7	118.2
Jerry	46	5.0	30.5	143.3	123.5	73.2	98.3	113.3
MN Pearl	46	4.0	34.3	-	-	138.2	-	-
Trial Average#	45	4.3	33.5	147.3	141.4	110.7	125.1	132.5
LSD(0.05)†	-	-	1.0	9.2	9.0	9.6	-	-
C.V.%‡	-	-	2.2	4.5	4.6	5.9	-	-

* Lodging score: 1, perfectly standing; to 5, completely flat.
\# 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.