SDSU Extension

agronomy

South Dakota
Agricultural
Experiment Station

Research
at SDSU

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

2020 South Dakota Oat Variety Trial Results Aberdeen

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Cooperator:	Locken Farms
Location:	45.485252°, -98.558349°
Soil Type:	Barnes-Cresbard-Tonka complex, 0-3% 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:	116-40-40-13S preemerge broadcast
Herbicide:	
-Burndown:	none
-Post:	none
Fungicide:	none
Date seeded:	4/20/2020
Date harvested:	8/21/2020

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Table 1. 2020 oat variety performance trial results (average of 4 replications) at Aberdeen, SD.
Entries are sorted by overall 3-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)	2018 (bu/a)	2019 (bu/a)	2020 (bu/a)	2-year (bu/a)	3-year (bu/a)
CS Camden	34.0	2.3	29.1	89.5	123.5	180.2	151.8	131.0
Deon	37.5	2.8	32.7	72.6	132.0	182.3	157.1	128.9
Rushmore	34.3	1.8	35.2	70.1	136.3	178.4	157.4	128.3
Warrior	36.3	1.5	32.8	71.7	141.1	170.2	155.6	127.7
Hayden	35.0	2.3	34.1	82.1	92.0	184.0	138.0	119.4
Goliath	42.5	3.0	33.8	75.3	100.4	174.9	137.6	116.9
Natty	32.8	3.0	33.6	69.4	102.6	154.0	128.3	108.7
Saddle	32.3	1.3	31.7	56.4	119.6	147.1	133.4	107.7
Shelby427	34.3	1.8	33.9	67.7	85.6	145.4	115.5	99.6
Antigo	29.8	1.8	34.4	51.4	115.2	130.7	122.9	99.1
MN Pearl	36.3	3.0	33.3	-	147.4	177.2	162.3	-
Esker2020	31.8	2.3	29.7	-	-	170.3	-	-
GM2015Y3232	35.8	3.0	32.1	-	-	157.3	-	-
Trial Average#	36	2.3	33.4	67.8	108.3	169.7	141.8	116.7
LSD(0.05)†	1.5	0.6	0.9	8.0	9.3	6.7	-	-
C.V.%‡	3.1	-	1.8	8.1	5.4	2.8	-	-

* 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.