



OCTOBER 2019

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

2019 South Dakota Oat Variety Trial Results Okaton

Jonathan Kleinjan | SDSU Extension Crop Production Associate

Christopher Graham | SDSU Extension Agronomist

Bruce Swan | Agricultural Research Manager

Kevin Kirby | Agricultural Research Manager

Shawn Hawks | Agricultural Research Manager

Cooperator: Henry Roghair

Location: 43.908333°, -100.967222°

Soil Type: Kirley clay loam, 0-3% slopes

Previous crop: lentils and cover crop

Tillage: No-till

Row spacing: 10"

Seeding Rate: 1.2 million PLS/acre

Fertilizer:

-Starter: 6 gal/acre 10-25-0-5S-.25Z

-Other: 35 gal/acre 28-0-0 mid-row banded

Herbicide:

-Burndown: not reported

-Post: none

Fungicide: none

Date seeded: 5/13/2019

Date harvested: 8/15/2019

Notes: There is no data from this location in 2016-2017, multi-year averages are not available.

Table 1. 2019 oat variety performance trial results (average of 4 replications) at Okaton, SD. Entries are sorted by 2019 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)
MN Pearl	34	-	33.5	-	-	109.1	-	-
Goliath	40	-	33.5	-	-	108.1	-	-
Newburg	34	-	30.9	-	-	102.7	-	-
Deon	37	-	33.1	-	-	101.7	-	-
SD140515	29	-	33.4	-	-	101.2	-	-
Jury	36	-	32.4	-	-	97.8	-	-
CS Camden	32	-	26.8	-	-	97.3	-	-
Natty	33	-	34.5	-	-	97.1	-	-
Horsepower	30	-	31.9	-	-	93.7	-	-
Shelby427	34	-	33.6	-	-	92.7	-	-
Hayden	31	-	32.6	-	-	90.1	-	-
Warrior	31	-	31.5	-	-	89.9	-	-
Jerry	34	-	29.9	-	-	82.0	-	-
Sumo	32	-	32.9	-	-	72.1	-	-
Saddle	30	-	30.4	-	-	72.1	-	-
Antigo	30	-	33.2	-	-	70.8	-	-
Trial Average#	33	-	32.5	-	-	92.4	-	-
LSD(0.05)†	-	-	1.2	-	-	12.5	-	-
C.V.%‡	-	-	2.8	-	-	9.2	-	-

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

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.