



OCTOBER 2019

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

2019 South Dakota Oat Variety Trial Results Miller

Jonathan Kleinjan | SDSU Extension Crop Production Associate

Kevin Kirby | Agricultural Research Manager

Shawn Hawks | Agricultural Research Manager

Cooperator: Chris Howard
Location: 44.555321°, -98.910597°
Soil Type: Houdek-Prosper loams, 0-2% 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: no response from cooperator
Herbicide:
 -Burndown: no response from cooperator
 -Post: no response from cooperator
Fungicide: no response from cooperator
Date seeded: 5/16/2019
Date harvested: 8/29/2019
Notes: Trial was affected by herbicide carryover.

Table 1. 2019 oat variety performance trial results (average of 4 replications) at Miller, 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)	2017 (bu/a)	2018 (bu/a)	2019 (bu/a)	2-year (bu/a)	3-year (bu/a)
Hayden	42	5.0	33.9	84.5	123.8	55.5	89.7	87.9
CS Camden	36	5.0	27.2	77.0	121.8	52.6	87.2	83.8
Deon	43	3.5	33.9	77.1	108.3	61.8	85.0	82.4
Goliath	45	4.5	33.5	74.5	107.1	58.2	82.7	79.9
Newburg	42	4.5	27.0	84.7	102.8	39.6	71.2	75.7
Warrior	38	2.3	32.9	86.0	98.3	41.4	69.9	75.2
SD140515	36	2.0	32.7	73.7	102.4	49.3	75.9	75.1
Shelby427	42	4.8	31.4	82.3	94.0	48.1	71.1	74.8
Jury	41	4.0	30.2	75.9	104.9	39.8	72.4	73.5
Natty	38	3.0	32.3	68.2	111.8	31.3	71.5	70.4
Saddle	34	1.5	27.7	63.4	99.4	31.7	65.5	64.8
Horsepower	34	5.0	25.6	72.6	103.3	18.6	60.9	64.8
Antigo	37	5.0	34.6	64.7	79.2	50.6	64.9	64.8
Jerry	35	4.8	31.2	69.8	95.3	27.1	61.2	64.0
Sumo	33	2.0	30.0	66.9	75.6	31.5	53.5	58.0
MN Pearl	37	2.5	32.0	-	-	56.6	-	-
Trial Average#	38	3.5	31.0	74.8	101.9	43.3	72.2	73
LSD(0.05)†	-	-	1.5	5.9	5.8	7.5	-	-
C.V.%‡	-	-	3.3	5.6	3.9	9.6	-	-

* 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.