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

# 2019 South Dakota Oat Variety Trial Results Winner

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**Cooperator:** Jorgenson Land & Cattle  
**Location:** 43.515211°, -99.980829°  
**Soil Type:** Witten silty clay, 0-3% slopes  
**Previous crop:** Soybeans  
**Tillage:** No-till  
**Row spacing:** 7"  
**Seeding Rate:** 1.2 million PLS/acre  
**Fertilizer:**  
-Starter: 90 lbs/acre 30-10-10  
-Other: 5 gal/acre 28-0-0 + .5 gal/acre SG Shift + 4 oz/acre SG Releaf (with herbicide)  
**Herbicide:**  
-Burndown: 32 oz/acre Buccaneer + 1 oz/acre Sharpen + 10 oz/acre Firezone  
-Post: 16 oz/acre Widematch + 8 oz/acre MCPA  
**Fungicide:**  
**Date seeded:** 4/26/2019  
**Date harvested:** 8/20/2019

Table 1. 2019 oat variety performance trial results (average of 4 replications) at Winner, 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)
Deon	-	2.5	34.5	40.8	93.5	79.3	86.4	71.2
CS Camden	-	4.0	27.6	43.1	91.3	71.6	81.4	68.6
Hayden	-	3.3	34.8	41.5	92.2	67.4	79.8	67.0
Newburg	-	4.0	31.1	37.8	86.1	70.9	78.5	64.9
Goliath	-	3.8	33.8	26.9	92.9	73.1	83.0	64.3
Warrior	-	1.0	32.6	39.6	86.8	60.6	73.7	62.3
Natty	-	3.3	34.9	31.3	93.7	61.5	77.6	62.2
SD140515	-	2.8	33.3	32.2	87.1	60.3	73.7	59.9
Shelby427	-	4.5	32.8	33.8	80.6	65.2	72.9	59.8
Jury	-	3.3	33.4	32.1	81.2	64.9	73.0	59.4
Horsepower	-	5.0	29.7	34.5	85.7	52.7	69.2	57.7
Sumo	-	1.3	33.4	30.8	76.8	61.5	69.1	56.3
Antigo	-	2.8	34.4	33.7	70.5	54.0	62.2	52.7
Saddle	-	1.0	31.1	35.0	70.9	48.3	59.6	51.4
Jerry	-	3.3	30.9	27.9	83.1	41.3	62.2	50.8
MN Pearl	-	3.0	33.6	-	-	67.5	-	-
<b>Trial Average#</b>	-	2.7	33.3	34.8	88.2	65.6	73.5	60.6
<b>LSD(0.05)†</b>	-	-	1.4	6.8	12.4	9.4	-	-
<b>C.V.%‡</b>	-	-	3.0	13.8	9.9	10.2	-	-

\* 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.