



OCTOBER 2018

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

# 2018 South Dakota Oat Variety Trial Results Volga

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

**Cooperator:** SDSU Volga Research Farm, Jack Ingemansen, manager  
**Location:** 44.302553°, -96.920860°  
**Soil Type:** Kranzburg-Brookings silty clay loams, 0-2% slopes  
**Previous crop:** soybeans  
**Tillage:** Minimum-till  
**Row spacing:** 8"  
**Seeding Rate:** 1.2 million PLS/acre  
**Fertilizer:**  
    **-Starter:** 90 lb/acre 30-10-10  
    **-Other:** 100-30-30 broadcast preplant  
**Herbicide:**  
    **-Burndown:** NA  
    **-Post:** 1.5 pt Bromac  
**Fungicide:** none  
**Date seeded:** 5/4/2018  
**Date harvested:** 8/22/2018  
**Notes:** Trial was affected by heat during grain fill and severe lodging.

Table 1. 2018 oat variety performance trial results (average of 4 replications) at Volga, 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)	2016 (bu/a)	2017 (bu/a)	2018 (bu/a)	2-year (bu/a)	3-year (bu/a)
CS Camden	-	5.0	28.2	151.6	155.6	79.7	117.7	129.0
Deon	-	5.0	33.5	146.8	151.4	74.0	112.7	124.1
Hayden	-	5.0	33.0	149.6	159.5	52.5	106.0	120.5
Goliath	-	5.0	31.4	131.6	158.4	70.2	114.3	120.0
Natty	-	5.0	30.2	154.5	149.2	49.8	99.5	117.8
Jury	-	5.0	29.1	122.8	157.7	63.1	110.4	114.5
Newburg	-	5.0	28.8	124.1	153.1	62.8	107.9	113.3
Souris	-	5.0	30.1	126.2	155.3	55.7	105.5	112.4
Saddle	-	5.0	31.4	155.7	125.4	53.7	89.5	111.6
Sumo	-	5.0	33.9	142.4	131.0	47.2	89.1	106.8
Shelby427	-	5.0	34.0	128.6	143.0	45.6	94.3	105.7
Horsepower	-	5.0	27.5	125.7	148.6	40.9	94.7	105.0
Rockford	-	5.0	28.9	117.2	148.6	42.4	95.5	102.7
Jerry	-	5.0	31.3	127.2	128.8	40.0	84.4	98.7
Antigo	-	5.0	33.4	-	131.1	45.4	88.3	-
<b>Trial Average#</b>	-	5.0	32.1	137.9	144.9	60.8	100.6	113.0
<b>LSD(0.05)†</b>	-	-	1.8	11.7	11.2	6.8	-	-
<b>C.V.%‡</b>	-	-	4.0	6.0	5.5	7.9	-	-

\* 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.