SDSU Extension
agronomy
South Dakota Agricultural Experiment Station Research at SDSU
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.

Publication: 03-3037-2018

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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	-
Trial Average#	-	5.0	32.1	137.9	144.9	60.8	100.6	113.0
LSD(0.05)†	-	-	1.8	11.7	11.2	6.8	-	-
C.V.%‡	-	-	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 (≥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.