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

2018 South Dakota Oat Variety Trial Results Aberdeen

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Cooperator: Locken Farms
Location: 45.487637°, -98.551674°
Soil Type: Barnes-Cresbard-Tonka complex, 0-3% 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: 147-70-0-17S preplant broadcast
Herbicide:
 -Burndown: NR
 -Post: 1.5 pt Bromac
Fungicide: none
Date seeded: 5/1/2018
Date harvested: 8/17/2018
Notes: Trial was affected by drought conditions

Table 1. 2018 oat variety performance trial results (average of 4 replications) at Aberdeen, 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	-	-	27.9	116.8	80.5	89.5	85.0	95.6
Hayden	-	-	32.0	126.4	77.0	82.1	79.6	95.2
Souris	-	-	31.1	122.2	77.1	72.9	75.0	90.7
Newburg	-	-	28.3	118.6	72.5	68.2	70.4	86.4
Goliath	-	-	32.4	110.7	70.2	75.3	72.7	85.4
Rockford	-	-	31.1	126.1	66.6	62.8	64.7	85.2
Jury	-	-	30.9	106.1	79.5	69.7	74.6	85.1
Horsepower	-	-	31.6	117.8	69.8	63.8	66.8	83.8
Natty	-	-	31.7	108.1	73.8	69.4	71.6	83.8
Deon	-	-	30.8	111.3	63.4	72.6	68.0	82.4
Shelby427	-	-	32.1	93.9	78.9	67.7	73.3	80.2
Saddle	-	-	31.6	104.2	48.2	56.4	52.3	69.6
Jerry	-	-	30.1	92.3	57.2	55.4	56.3	68.3
Sumo	-	-	31.0	91.2	48.7	53.1	50.9	64.3
Antigo	-	-	32.9	-	59.2	51.4	55.3	-
Trial Average#	-	-	31.0	107.9	66.5	70.0	68.1	83.2
LSD(0.05)†	-	-	1.1	8.9	9.7	8.0	-	-
C.V.%‡	-	-	2.6	5.8	10.4	8.1	-	-

* 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.