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

2018 South Dakota Oat Variety Trial Results Winner

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Cooperator: Jorgenson Land & Cattle
Location: 43.530135°, -99.841030°
Soil Type: Witten silty clay, 0-3% slopes
Previous crop: forage sorghum
Tillage: no-till
Row spacing: 7"
Seeding Rate: 1.2 million PLS/acre
Fertilizer:
 -Starter: 90 lbs/acre 30-10-10
 -Other: 256 lbs/acre 36-0-0-10 broadcast preplant
 1 gal/acre /SG Shift + 16 oz/acre Elements Balance at heading
Herbicide:
 -Burndown: NA
 -Post: 8 oz Widematch +.6 oz Affinity
Fungicide:
Date seeded: 4/12/2018
Date harvested: 8/2/2018

Table 1. 2018 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)	2016 (bu/a)	2017 (bu/a)	2018 (bu/a)	2-year (bu/a)	3-year (bu/a)
Hayden	37	3.0	34.7	107.4	41.5	92.2	66.8	80.3
Rockford	38	2.6	35.4	86.9	33.1	106.3	69.7	75.4
Natty	36	2.5	35.1	96.5	31.3	93.7	62.5	73.8
Deon	37	2.4	33.5	86.7	40.8	93.5	67.1	73.6
CS Camden	33	1.9	27.8	85.9	43.1	91.3	67.2	73.4
Horsepower	29	2.0	31.3	98.2	34.5	85.7	60.1	72.8
Souris	34	3.1	32.8	85.8	39.4	87.8	63.6	71.0
Newburg	38	3.5	31.6	87.8	37.8	86.1	61.9	70.5
Goliath	41	4.1	35.3	85.8	26.9	92.9	59.9	68.5
Shelby427	37	2.6	34.6	89.3	33.8	80.6	57.2	67.9
Saddle	33	1.0	33.1	95.1	35.0	70.9	53.0	67.0
Jury	38	3.4	33.2	84.3	32.1	81.2	56.6	65.8
Jerry	36	2.6	34.4	82.7	27.9	83.1	55.5	64.6
Sumo	33	1.0	34.9	75.8	30.8	76.8	53.8	61.1
Antigo	35	1.0	35.4	-	33.7	70.5	52.1	-
Trial Average#	35	2.5	33.9	86.8	34.8	88.2	60.5	70.4
LSD(0.05)†	2	-	1.3	14.1	6.8	12.4	-	-
C.V.%‡	3.5	-	2.7	11.5	13.8	9.9	-	-

* 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.