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

2019 South Dakota Oat Variety Trial Results Wall

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Cooperator: Merritt Patterson and Sons
Location: 44.095773°, -102.325297°
Soil Type: Santana loam, 2-6% slopes
Previous crop: Winter wheat
Tillage: No-till
Row spacing: 10"
Seeding Rate: 1.2 million PLS/acre
Fertilizer:
-Starter: 6 gal/acre 10-25-0-5S-.25Z
-Other: 25 gal/acre 28-0-0 mid-row banded
Herbicide:
-Burndown: 32 oz/acre Roundup
-Post: 16 oz/acre WideMatch + 4 oz/acre LV6
Fungicide: none
Date seeded: 5/14/2019
Date harvested: 8/19/2019

Table 1. 2019 oat variety performance trial results (average of 4 replications) at Wall, 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)
Goliath	40	-	35.0	53.6	59.7	140.1	99.9	84.4
SD140515	36	-	34.2	71.3	60.1	119.1	89.6	83.5
Hayden	35	-	33.8	71.3	70.5	106.0	88.3	82.6
Deon	35	-	32.8	70.7	64.9	106.0	85.4	80.5
Jury	43	-	32.4	73.2	60.6	105.8	83.2	79.9
Newburg	41	-	32.4	58.0	58.2	122.3	90.3	79.5
CS Camden	32	-	30.1	55.0	64.3	118.5	91.4	79.3
Natty	37	-	34.1	76.1	56.7	104.6	80.6	79.1
Warrior	32	-	31.0	63.6	50.9	108.2	79.6	74.2
Horsepower	29	-	32.4	63.5	56.6	93.3	74.9	71.1
Shelby427	37	-	32.3	65.1	45.3	90.1	67.7	66.8
Jerry	34	-	29.3	68.1	50.0	75.5	62.7	64.5
Antigo	31	-	32.2	70.8	50.9	71.8	61.4	64.5
Saddle	32	-	28.9	62.0	49.0	62.2	55.6	57.7
Sumo	35	-	30.6	53.6	45.5	59.8	52.6	53.0
MN Pearl	36	-	33.8	-	-	132.2	-	-
Trial Average#	35	-	32.7	66.0	59.7	107.0	77.5	73.4
LSD(0.05)†	-	-	1.6	18.9	9.4	18.5	-	-
C.V.%‡	-	-	3.4	20.3	11.1	12.2	-	-

* 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.