

agronomy



SEPTEMBER 2020

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

2020 South Dakota Oat Variety Trial Results Winner

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Cooperator: Jorgenson Land & Cattle **Location:** 43.528329°, -99.841422°

Soil Type: Millboro silty clay, 3-6% slopes

Previous crop: sorghum
Tillage: No-till
Row spacing: 7"

Seeding Rate: 1.2 million PLS/acre

Fertilizer:

-Starter: 80 lbs/acre 30-10-10

-Other: 3 gal/acre 30-0-0 + 1 gal/acre SG Shift + 16 oz/acre SG E-balance (with herbicide)

Herbicide:

-Burndown: none

-Post: 16 oz/acre Widematch + 5 oz/acre MCPA

Fungicide:

Date seeded: 4/10/2020 Date harvested: 7/29/2020



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Table 1. 2020 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)	2018 (bu/a)	2019 (bu/a)	2020 (bu/a)	2-year (bu/a)	3-year (bu/a)
Deon	35.3	3.0	32.8	93.5	79.3	118.2	98.7	97.0
Hayden	32.5	2.3	34.1	92.2	67.4	129.3	98.4	96.3
Goliath	38.8	3.3	33.7	92.9	73.1	118.4	95.8	94.8
CS Camden	30.5	3.0	27.9	91.3	71.6	111.1	91.3	91.3
Natty	33.8	3.5	33.4	93.7	61.5	113.3	87.4	89.5
Shelby427	33.5	2.3	33.7	80.6	65.2	118.5	91.8	88.1
Rushmore	32.3	3.3	34.6	87.1	60.3	115.2	87.7	87.5
Warrior	29.5	1.0	33.4	86.8	60.6	113.7	87.1	87.0
Antigo	29.3	3.5	35.6	70.5	54.0	106.9	80.4	77.1
Saddle	28.8	1.0	33.9	70.9	48.3	104.5	76.4	74.5
MN Pearl	32.3	3.0	33.4	-	67.5	126.1	96.8	-
Esker2020	29.0	2.8	29.8	-	-	110.1	-	-
GM2015Y3232	30.8	3.0	29.8	-	-	94.5	-	-
Trial Average#	32.3	2.7	33.4	88.2	65.6	115.7	90.2	88.3
LSD(0.05)†	1.3	0.5	1.0	12.4	9.4	7.2	-	-
C.V.%‡	-	-	2.2	9.9	10.2	4.4	-	-

^{*} 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.