



2021 South Dakota Oat Variety Trial Results Pierre

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Cooperator: Dakota Lakes Research Farm
Location: 44.292986°, -99.992755°
Soil Type: Milboro silt loam, 0-3% slopes
Previous crop: field peas
Tillage: no-till
Row spacing: 7"
Seeding Rate: 1.2 million PLS/acre
Fertilizer:
-Starter: 70 lb/acre 30-10-10
-Other: 46 GPA 26.4-0-0-2.6S streambar applied on 5/19/21
Herbicide:
-Burndown: 16 oz/acre Roundup RT3 (glyphosate) + 16 oz/acre Brox 2EC (bromoxynil)
-Post: none
Fungicide: none
Date seeded: 3/24/2021
Date harvested: 7/20/21



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Table 1. 2021 oat variety performance trial results (average of four replications) at Pierre, South Dakota. Entries are sorted by overall three-year yield. Varieties yielding in the top third of the trial are shaded light blue.

Variety	Height (in)	Lodging* (1-5)	Test Wt (lbs)	2019 (bu/a)	2020 (bu/a)	2021 (bu/a)	2-year (bu/a)	3-year (bu/a)
Natty	28	1.0	27.3	151.3	158.6	64.4	111.5	124.8
Hayden	28	1.0	27.4	144.2	158.2	58.7	108.4	120.3
CS Camden	26	1.0	32.3	137.1	143.3	78.2	110.7	119.5
Shelby427	27	1.0	31.0	140.1	134.2	67.8	101.0	114.0
Warrior	26	1.0	28.7	148.0	136.8	55.4	96.1	113.4
Rushmore	30	1.0	32.9	139.6	136.1	60.9	98.5	112.2
Deon	29	1.0	32.0	130.8	142.3	62.4	102.4	111.8
Goliath	31	1.0	30.1	130.9	142.8	61.1	101.9	111.6
MN Pearl	25	1.0	34.2	128.2	142.4	59.6	101.0	110.1
Saddle	25	1.0	28.5	158.4	116.3	33.8	75.1	102.9
Esker2020	26	1.0	30.0	-	134.5	69.4	101.9	-
KWS Ocre	25	1.0	36.7	-	-	87.9	-	-
KWS Opaline	25	1.0	32.1	-	-	64.2	-	-
Reins	24	1.0	36.8	-	-	84.4	-	-
Trial Average#	27	1.0	30.7	140.8	139.1	61.5	100.8	114.1
LSD(0.05)†	-	-	3.8	10.9	8.9	11.6	-	-
C.V.%‡	-	-	8.7	5.5	4.6	13.4	-	-

* 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.