



2021 South Dakota Winter Wheat Variety Trial Results Vivian

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Cooperator: Ryan Larson c/o Logan Reuman
Location: 43.970633, -100.186155
Soil Type: Millboro silty clay, 0-3% slopes
Previous crop: oats
Tillage: no-till
Row spacing: 10"
Seeding Rate: 1.2 million PLS/acre
Fertilizer:
-Starter: 10 gal/acre 10-25-0-.25S
-Other: 40 gal/acre 28-0-0 mid-row banded + 39 gal/acre 27-0-0-2S-0.1Zn
Herbicide:
-Burndown: 32 oz./acre Durango + 10 oz./acre Dicamba + 4 oz./acre Barrage + 10 zo/acre Firezone,
August applied; 32 oz/acre Durango, September applied.
-Post: none
Fungicide: none
Date seeded: 9/24/2021
Date harvested: 7/20/2021



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Table 1. 2021 winter wheat variety performance trial results (average of four replications) at Vivian, 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/bu)	Protein %	2019 (bu/a)#	2020 (bu/a)	2021 (bu/a)	2-year (bu/a)	3-year (bu/a)
Winner	26	not reported	59.9	14.6	63.0	69.0	57.9	63.4	63.3
SY Wolverine	26	reported	59.6	15.3	59.1	73.1	54.3	63.7	62.1
Ideal	22	-	59.7	16.0	63.4	73.9	48.3	61.1	61.9
Overland	23	-	60.5	15.3	57.5	66.0	57.1	61.5	60.2
Draper	27	-	58.4	15.7	61.7	65.7	49.4	57.5	58.9
WB4462	26	-	59.2	15.3	51.2	74.6	50.1	62.4	58.6
Oahe	25	-	61.2	15.3	60.7	66.4	48.2	57.3	58.5
Redfield	22	-	61.0	16.0	62.0	61.7	46.8	54.2	56.8
SD Andes	23	-	61.7	15.7	58.1	60.6	48.9	54.8	55.9
Cowboy	21	-	61.4	15.0	53.1	64.2	47.3	55.7	54.8
Langin	24	-	59.1	14.6	51.4	63.8	48.8	56.3	54.7
SY 517 CL2	23	-	62.2	15.3	53.3	58.3	45.9	52.1	52.5
Thompson	23	-	61.4	15.2	49.9	55.5	49.4	52.5	51.6
Expedition	26	-	59.5	16.3	45.9	58.1	45.1	51.6	49.7
WB4309	27	-	59.1	15.0	-	70.3	55.8	63.0	-
Guardian	24	-	59.8	15.9	-	74.9	50.4	62.6	-
CP7017AX	25	-	58.3	15.0	-	68.4	49.8	59.1	-
LCS Helix AX	22	-	61.2	14.5	-	67.2	46.9	57.1	-
CP7909	22	-	57.3	15.8	-	62.9	50.0	56.4	-
AP 18AX	21	-	58.1	15.4	-	68.3	42.6	55.4	-
CP7050AX	23	-	60.4	15.3	-	62.1	47.9	55.0	-
Crescent AX	23	-	60.3	15.7	-	66.8	40.9	53.8	-
ND Noreen	25	-	61.7	16.4	-	68.3	38.3	53.3	-
LCS Steel AX	23	-	60.6	14.7	-	-	53.7	-	-
LCS Julep	25	-	61.8	16.0	-	-	52.1	-	-
AP Bigfoot	21	-	59.4	16.0	-	-	51.9	-	-
AP Clair	23	-	59.9	15.2	-	-	50.9	-	-
LCS Chrome	25	-	60.5	15.7	-	-	49.5	-	-
Whistler	24	-	59.0	15.6	-	-	49.2	-	-
LCS Photon AX	22	-	60.7	15.4	-	-	48.7	-	-
CP7869	23	-	59.1	15.0	-	-	48.4	-	-
MS Iceman	25	-	60.9	16.1	-	-	46.8	-	-
Trial Average#	24	-	60.1	15.7	55.5	65.5	47.7	57.4	57.1
LSD (0.05)†	-	-	1.4	1.1	5.0	7.7	8.9	-	-
C.V. %‡	-	-	1.7	4.87	6.7	8.4	13.3	-	-

* 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.