



2020 South Dakota Winter Wheat Variety Trial Results Wall

Jonathan Kleinjan | SDSU Extension Crop Production Associate

Christopher Graham | SDSU Extension Agronomist

Bruce Swan | Agricultural Research Manager

Kevin Kirby | Agricultural Research Manager

Shawn Hawks | Agricultural Research Manager

Cooperator: Dale Patterson
 Location: 44.087778°, -102.328611°
 Soil Type: Stanta loam, 2-6% slopes
 Previous crop: winter wheat
 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
 Herbicide:
 -Burndown: not reported
 -Post: none
 Fungicide: none
 Date seeded: 10/9/2019
 Date harvested: 8/4/2020

Table 1. 2020 winter wheat 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 each trial are shaded light blue.

Variety	Height (in)	Lodging* (1-5)	Test Wt (lbs)	Protein %	2018 (bu/a)	2019 (bu/a)	2020 (bu/a)	2-year (bu/a)	3-year (bu/a)
Winner	not reported	not reported	56.8	11.2	74.1	78.3	57.9	68.1	70.1
Redfield	-	-	56.7	12.6	74.0	68.0	51.1	59.5	64.4
Keldin	-	-	57.1	11.3	73.4	61.1	57.6	59.3	64.0
Ideal	-	-	56.5	11.9	70.9	66.3	51.4	58.8	62.9
Oahe	-	-	56.9	11.6	72.1	59.5	52.1	55.8	61.2
SY Monument	-	-	54.3	12.2	73.8	65.7	43.5	54.6	61.0
Draper	-	-	55.7	11.9	66.7	66.1	48.4	57.2	60.4
Overland	-	-	57.1	11.9	66.4	58.0	50.9	54.4	58.4
Thompson	-	-	56.3	12.4	66.2	61.9	45.4	53.6	57.8
WB-Grainfield	-	-	56.1	12.4	74.0	48.8	50.6	49.7	57.8
WB4462	-	-	57.0	11.6	63.5	55.4	52.0	53.7	57.0
Cowboy	-	-	55.3	12.3	65.5	54.7	50.2	52.5	56.8
SY 517 CL	-	-	57.2	12.8	73.0	53.4	43.3	48.3	56.5
Langin	-	-	55.9	11.7	67.6	47.8	47.1	47.5	54.2
SY Sunrise	-	-	55.9	12.3	70.8	45.2	44.1	44.6	53.4
Expedition	-	-	55.8	12.7	60.3	49.2	36.4	42.8	48.6
WB4595	-	-	58.8	11.3	-	49.9	53.4	51.6	-
SY Wolverine	-	-	55.9	11.9	-	53.5	44.8	49.2	-
NW13493	-	-	55.9	12.1	-	51.7	45.6	48.7	-
Guardian	-	-	57.6	11.6	-	-	53.5	-	-
LCS Helix AX	-	-	56.9	11.6	-	-	51.3	-	-
AP 18AX	-	-	55.1	11.5	-	-	51.2	-	-
NE14696	-	-	56.9	11.7	-	-	51.2	-	-
CP7017CA	-	-	54.5	11.7	-	-	51.1	-	-
WB4309	-	-	55.2	12.1	-	-	50.8	-	-
CP7909	-	-	55.8	12.3	-	-	49.7	-	-
Crescent AX	-	-	57.0	11.7	-	-	49.3	-	-
CP7050CA	-	-	57.8	12.2	-	-	48.8	-	-
LCS Diesel	-	-	56.0	12.1	-	-	48.5	-	-
CP7010	-	-	57.8	11.5	-	-	47.0	-	-
Flathead	-	-	56.1	12.5	-	-	46.5	-	-
Northern	-	-	55.9	12.4	-	-	44.9	-	-
14NORD-1	-	-	58.2	12.2	-	-	44.6	-	-
MTF 1435	-	-	54.1	12.5	-	-	40.6	-	-
Trial Average#	-	-	56.5	12.0	69.5	56.8	49.2	53.2	59.0
LSD (0.05)†	-	-	0.9	0.5	12.9	8.8	7.1	-	-
C.V. %‡	-	-	1.2	3.2	12.2	11.1	8.9	-	-

* 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.