



2020 South Dakota Winter Wheat Variety Trial Results South Shore

Jonathan Kleinjan | SDSU Extension Crop Production Associate

Kevin Kirby | Agricultural Research Manager

Shawn Hawks | Agricultural Research Manager

Cooperator: SDSU Northeast Research Farm, Al Heuer, Manager
Location: 45.105912°, -97.098666°
Soil Type: Kranzburg-Brookings silty clay loams, 0-2% slopes
Previous crop: oats
Tillage: no-till
Row spacing: 8"
Seeding Rate: 1.2 million PLS/acre
Fertilizer:
 -Starter: 90 lbs/acre 30-10-10
 -Other: 200-0-100 as urea + potash broadcast applied
Herbicide:
 -Burndown: 32 oz Roundup Powermax
 -Post: 1.5 pt/acre Maestro Advanced applied on 5/27/20
Fungicide: none
Date seeded: 9/26/2019
Date harvested: 7/28/2020

Table 1. 2020 winter wheat variety performance trial results (average of 4 replications) at South Shore, 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)	Protein %	2018 (bu/a)	2019 (bu/a)	2020 (bu/a)	3-year§ (bu/a)
Winner	30	3.0	61.5	13.8	68.5	winter-kill	75.1	71.8
Thompson	34	2.3	60.8	14.0	69.4	-	74.0	71.7
Oahe	32	2.8	61.0	13.9	67.9	-	74.7	71.3
Overland	30	2.0	61.3	14.3	68.3	-	70.9	69.6
Draper	30	3.0	58.5	13.7	65.4	-	73.4	69.4
Ideal	30	2.5	58.1	13.9	63.0	-	73.7	68.4
WB4462	28	2.0	61.6	14.5	59.3	-	75.8	67.5
Redfield	31	4.0	60.5	13.5	59.8	-	71.5	65.6
Keldin	32	3.0	61.3	12.6	54.2	-	77.0	65.6
Cowboy	32	3.3	59.1	12.6	57.9	-	73.3	65.6
SY Monument	29	3.0	58.8	13.2	56.4	-	67.5	61.9
WB-Grainfield	29	3.0	59.7	14.1	51.2	-	71.6	61.4
Langin	28	3.5	61.2	13.7	51.9	-	68.6	60.2
SY 517 CL	28	2.5	62.2	15.1	52.3	-	64.9	58.6
SY Sunrise	25	2.8	60.8	13.4	46.8	-	70.3	58.5
Expedition	27	2.8	58.7	14.0	52.7	-	57.8	55.2
DH11HRW55-4	29	3.0	60.0	14.5	-	-	78.6	-
WB4595	28	2.5	62.1	13.0	-	-	75.8	-
NE14696	32	3.0	59.5	13.6	-	-	75.5	-
SY Wolverine	28	2.0	60.5	14.4	-	-	74.5	-
LCH15ACC-8-21	29	2.3	61.3	13.7	-	-	73.5	-
14NORD-1	35	2.5	61.0	13.8	-	-	73.4	-
CP7017CA	28	3.0	59.7	13.3	-	-	71.6	-
WB4309	29	3.0	60.4	14.6	-	-	71.1	-
Guardian	30	3.0	61.5	13.6	-	-	70.7	-
Northern	31	2.8	59.4	13.5	-	-	69.6	-
Crescent AX	29	3.0	61.2	14.2	-	-	69.6	-
AP 18AX	28	3.0	59.2	13.7	-	-	67.3	-
CP7010	29	2.5	59.7	13.2	-	-	67.2	-
CP7909	26	3.3	61.0	13.9	-	-	67.2	-
Flathead	29	2.3	59.6	14.1	-	-	65.8	-
NW13493	28	3.0	61.5	14.1	-	-	64.4	-
CP7050CA	27	2.3	62.6	16.3	-	-	58.9	-
MTF 1435	38	2.8	57.1	14.5	-	-	47.8	-
Trial Average#	30	2.8	60.5	14.0	59.1	-	70.9	65.2
LSD (0.05)†	1.6	0.5	1.3	0.4	5.1	-	4.5	-
C.V. %‡	3.7	-	1.5	2.1	6.3	-	4.5	-

* 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.

§ Reported 3-year yields are actually an average of 2018 and 2020 as the location was not harvested in 2019.