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

2020 South Dakota Winter Wheat Variety Trial Results Sturgis

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Cooperator: Dave Wilson
Location: 44.503611°, -103.473333°
Soil Type: Nunn clay loam, 0-2% slopes
Previous crop: spring 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: 22 oz/acre Roundup
 -Post: none
Fungicide: none
Date seeded: 9/24/2019
Date harvested: 7/20/2020

Table 1. 2020 winter wheat variety performance trial results (average of 4 replications) at Sturgis, 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)
Ideal	not reported	not reported	58.8	12.9	57.4	51.2	90.0	70.6	66.2
WB4462	reported	reported	57.2	12.1	56.5	59.5	73.0	66.3	63.0
Draper	-	-	59.5	12.8	59.2	50.5	77.3	63.9	62.3
Keldin	-	-	56.8	12.4	65.5	54.8	61.6	58.2	60.6
Oahe	-	-	57.3	12.3	52.8	50.6	74.9	62.8	59.4
Cowboy	-	-	58.7	12.2	60.0	41.6	74.9	58.3	58.9
SY Monument	-	-	57.6	12.3	52.2	46.7	74.4	60.6	57.8
SY 517 CL	-	-	59.0	13.1	52.2	42.4	75.2	58.8	56.6
Overland	-	-	60.8	13.1	52.4	43.3	72.9	58.1	56.2
Redfield	-	-	55.9	13.0	57.2	54.7	51.2	53.0	54.4
WB-Grainfield	-	-	58.3	11.9	43.8	48.9	68.5	58.7	53.7
Winner	-	-	57.8	12.5	36.7	49.9	66.1	58.0	50.9
SY Sunrise	-	-	57.4	12.4	46.5	38.9	66.5	52.7	50.6
Thompson	-	-	56.9	12.7	48.8	39.4	61.2	50.3	49.8
Langin	-	-	59.6	12.1	31.8	40.8	70.9	55.8	47.8
Expedition	-	-	58.4	12.4	49.1	36.1	57.1	46.6	47.4
NW13493	-	-	58.7	12.7	-	48.7	76.7	62.7	-
SY Wolverine	-	-	56.2	12.4	-	55.7	61.5	58.6	-
WB4595	-	-	56.9	12.2	-	40.3	70.8	55.5	-
CP7010	-	-	57.2	12.5	-	-	90.0	-	-
LCS Diesel	-	-	59.0	12.6	-	-	87.1	-	-
AP 18AX	-	-	59.0	11.8	-	-	82.0	-	-
Crescent AX	-	-	55.7	12.4	-	-	81.0	-	-
CP7050CA	-	-	60.7	13.5	-	-	78.3	-	-
Guardian	-	-	58.2	12.7	-	-	77.5	-	-
CP7017CA	-	-	57.5	12.0	-	-	74.2	-	-
CP7909	-	-	57.5	12.3	-	-	73.6	-	-
LCS Helix AX	-	-	56.3	12.4	-	-	70.7	-	-
Northern	-	-	57.3	13.2	-	-	67.6	-	-
WB4309	-	-	57.5	12.8	-	-	63.3	-	-
NE14696	-	-	55.8	12.6	-	-	61.9	-	-
14NORD-1	-	-	59.6	13.2	-	-	54.8	-	-
MTF 1435	-	-	55.4	13.0	-	-	51.8	-	-
Flathead	-	-	57.9	12.9	-	-	51.0	-	-
Trial Average#	-	-	57.8	12.6	52.2	48.1	70.4	58.4	56
LSD (0.05)†	-	-	1.8	0.71	5.0	6.9	6.6	-	-
C.V. %‡	-	-	2.2	4.03	6.9	8.8	6.7	-	-

* 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.