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

2020 South Dakota Winter Wheat Variety Trial Results Vivian

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Location: 43.978333°, -100.184722°

SoilType: Millboro silty clay, 0-3% slopes

Previous crop: spring wheat

Tillage: no-till Row spacing: 10"

Seeding Rate: 1.2 million PLS/acre

Fertilizer:

-Starter: 6 gal/acre 10-25-0-.25S + 4 gal/acre water carrier

-Other: 40 gal/acre 28-0-0 mid-row banded

Herbicide:

-Burndown: 32 oz/acre Durango + 16 oz/acre WideMatch + 8 oz/acre Barrage HF

-Post: 16 oz/acre WideMatch + 0.2 oz/acre Rapport tankmix applied 5/17/20

Fungicide: none

Date seeded: 9/26/2019

Date harvested: 7/28/2020

Notes: Trial had slight hail damage from two separate storms on 6/7/20 and 6/17/20.



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Table 1. 2020 winter wheat variety performance trial results (average of 4 replications) at Vivian, 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	not	60.8	11.8	76.0	63.0	69.0	66.0	69.3
Ideal	reported	reported	59.4	11.5	68.6	63.4	73.9	68.6	68.6
Draper	_	-	59.2	11.7	74.9	61.7	65.7	63.7	67.4
WB4462	_	_	57.8	11.5	70.2	51.2	74.6	62.9	65.3
SY Monument	-	-	59.2	12.0	67.1	58.4	68.3	63.3	64.6
Oahe	_	_	58.6	11.4	64.0	60.7	66.4	63.6	63.7
Redfield	_	_	59.5	11.4	62.9	62.0	61.7	61.8	62.2
WB-Grainfield	_	_	59.4	11.8	67.4	57.2	59.1	58.1	61.2
Overland	-	-	60.5	11.7	58.7	57.5	66.0	61.7	60.7
Langin	_	_	59.2	11.2	63.1	51.4	63.8	57.6	59.4
Cowboy	_	_	60.7	11.7	60.8	53.1	64.2	58.6	59.4
Keldin	-	_	60.0	11.7	48.8	62.8	65.3	64.0	59.0
SY Sunrise	-	-	60.0	11.4	64.4	46.0	63.6	54.8	58.0
Thompson	_	<u>-</u>	59.3	11.6	66.1	49.9	55.5	52.7	57.2
Expedition	_	_	59.1	12.2	64.0	45.9	58.1	52.0	56.0
SY 517 CL	_	<u>-</u>	60.0	12.1	56.0	53.3	58.3	55.8	55.9
SY Wolverine	-	-	60.3	11.8	-	59.1	73.1	66.1	-
WB4595	_	_	59.6	11.9	-	55.9	69.4	62.7	_
NW13493	_	_	60.2	11.8	-	54.2	61.8	58.0	_
Guardian	_	<u>-</u>	58.8	11.5	-	_	74.9	<u>-</u>	<u>-</u>
Flathead	-	-	60.4	12.2	-	-	70.4	-	-
WB4309	_	_	59.5	12.0	-	_	70.3	_	_
CP7017CAX	_	_	59.4	11.7	-	_	68.4	_	_
14NORD-1	_	<u>-</u>	60.2	11.7	-	_	68.3	<u>-</u>	<u>-</u>
AP 18AX	-	-	59.7	12.1	-	-	68.3	-	-
LCS Helix AX	_	<u>-</u>	59.3	11.6	<u>-</u>	_	67.2	<u>-</u>	_
Crescent AX	_	<u>-</u>	60.5	11.3	-	_	66.8	<u>-</u>	_
NE14696	_	_	59.5	11.5	-	_	66.1	_	-
LCS Diesel	-	-	60.2	12.0	-	-	64.6	-	-
CP7909	_	<u>-</u>	59.8	11.5	<u>-</u>	_	62.9	<u>-</u>	-
CP7050CAX	_	_	60.8	12.2	-	_	62.1	_	-
CP7010	_	_	59.7	12.4	<u>-</u>	_	58.3	_	_
Northern	-	-	60.1	12.0	-	-	54.1	-	_
MTF 1435	_	_	58.8	11.8	<u>-</u>	_	47.5	_	_
Trial Average#	-	-	59.7	11.8	64.5	55.5	65.5	60.6	64.6
LSD (0.05)†	_	_	1.2	0.9	7.5	5.0	7.7	-	-
C.V. %‡	_	_	1.4	5.2	8.3	6.7	8.4	_	-

^{*} 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.