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South Dakota Agricultural Experiment Station Research at SDSU

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

2020 South Dakota Winter Wheat Variety Trial Results Onida

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Cooperator:	Tom Young
Location:	44.715972°, -100.384500°
Soil Type:	Agar silt loam, 0-2% slopes
Previous crop:	millet
Tillage:	no-till
Row spacing:	8"
Seeding Rate:	1.2 million PLS/acre
Fertilizer:	
-Starter:	10 gal/acre 10-34-0
-Other:	250 lbs/acre 46-0-0 (115-0-0) broadcast applied
Herbicide:	
-Burndown:	not reported
-Post:	16 oz/acre PerfectMatch
Fungicide:	none
Date seeded:	9/18/2019
Date harvested:	7/28/2020
Notes:	Excellent growing conditions, some FHB (scab) pressure.

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Table 1. 2020 winter wheat variety performance trial results (average of 4 replications) at Onida, SD.
Entries are sorted by overall 2-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	35	1.3	61.3	11.4	hailed	83.0	106.6	94.8	-
Langin	32	2.8	59.6	10.9	out	82.9	106.3	94.6	-
SY Sunrise	33	1.7	60.5	10.8	-	84.1	103.8	94.0	-
Overland	37	2.2	61.8	11.6	-	80.9	102.8	91.8	-
Keldin	37	1.2	61.3	11.7	-	79.9	103.1	91.5	-
NW13493	34	2.5	62.4	11.7	-	82.3	100.0	91.1	-
Oahe	38	2.8	61.9	11.8	-	79.5	102.7	91.1	-
WB4462	37	2.3	62.0	11.6	-	79.9	102.1	91.0	-
WB4595	34	1.0	62.4	11.2	-	81.8	99.1	90.5	-
Ideal	35	2.7	61.0	11.9	-	81.8	98.3	90.0	-
WB-Grainfield	34	2.2	61.1	11.2	-	78.9	100.2	89.5	-
Redfield	34	1.2	61.4	12.0	-	77.9	98.1	88.0	-
Draper	34	1.0	60.2	11.9	-	75.9	100.1	88.0	-
SY Monument	34	1.0	58.5	11.2	-	80.3	94.1	87.2	-
Cowboy	34	1.3	59.5	11.1	-	78.5	93.0	85.7	-
SY Wolverine	31	1.0	60.2	11.8	-	81.5	89.3	85.4	-
Thompson	37	1.2	61.9	11.4	-	77.5	92.1	84.8	-
SY 517 CL	33	1.7	62.5	11.9	-	76.4	93.0	84.7	-
Expedition	35	1.8	60.6	12.1	-	74.9	92.2	83.6	-
CP7017CAX	34	2.5	60.3	11.2	-	-	110.9	-	-
LCS Helix AX	32	1.5	62.4	10.8	-	-	108.8	-	-
Crescent AX	34	2.3	61.5	11.5	-	-	104.9	-	-
CP7909	33	3.0	62.2	10.8	-	-	104.5	-	-
CP7050CAX	34	1.5	62.8	11.8	-	-	103.7	-	-
CP7010	34	1.0	62.8	11.3	-	-	100.3	-	-
WB4309	34	1.8	60.8	11.8	-	-	99.5	-	-
NE14696	38	2.0	61.5	11.9	-	-	98.3	-	-
AP 18AX	35	1.2	59.3	11.5	-	-	96.3	-	-
Guardian	35	1.8	61.8	11.8	-	-	95.1	-	-
14NORD-1	37	1.0	63.7	12.0	-	-	91.4	-	-
Northern	35	1.0	59.6	13.1	-	-	90.1	-	-
Flathead	36	1.0	60.1	11.8	-	-	85.8	-	-
LCS Diesel	34	1.0	60.1	12.0	-	-	85.0	-	-
MTF 1435	42	2.2	59.2	12.7	-	-	65.0	-	-
Trial Average#	35	1.7	61.1	11.7	-	78.7	98.1	89.3	-
LSD (0.05)†	2.0	0.9	1.2	0.8	-	5.5	5.6	-	-
C.V. %‡	3.6	-	1.2	4.6	-	5.0	4.1	-	-

* 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.