



2021 South Dakota Winter Wheat Variety Trial Results Pierre

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Cooperator: Dakota Lakes Research Farm, Dwayne Beck, Manager
Location: 44.291682, -99.99915
Soil Type: Dorna silt loam
Previous crop: soybeans
Tillage: no-till
Row spacing: 8"
Seeding Rate: 1.2 million PLS/acre
Fertilizer:
-Starter: 10 gal/acre 10-34-0
-Other: 22 GPA 26.4-0-0-2.6S streambar applied on 4/30, another 10 GPA irrigated prior to heading
Herbicide:
-Burndown: Glyphosate + 2,4-D (rates not reported)
-Post: none
Fungicide: none
Date seeded: 9/30/2020
Date harvested: 7/21/2021
Notes: This trial was irrigated.



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Table 1. 2021 winter wheat variety performance trial results (average of four replications) at Pierre, South Dakota. Entries are sorted by overall third-year yield. Varieties yielding in the top third of the trial are shaded light blue.

Variety	Height (in)	Lodging* (1-5)	Test Wt (lbs/bu)	Protein %	2019 (bu/a) #	2020 (bu/a)	2021 (bu/a)	2-year (bu/a)	3-year (bu/a)
WB4462	37	2.8	61.7	13.2	79.6	104.2	119.9	112.0	101.2
SY Wolverine	31	2.5	62.0	12.8	77.0	102.9	113.4	108.2	97.8
Winner	33	1.5	61.5	13.4	76.4	101.6	111.6	106.6	96.5
Thompson	37	2.0	61.2	13.1	81.0	94.1	113.9	104.0	96.3
Draper	34	1.8	61.3	13.5	77.8	99.0	112.0	105.5	96.3
Overland	36	2.8	61.1	13.2	79.8	99.1	108.1	103.6	95.7
Langin	31	3.8	61.5	12.1	72.2	103.2	110.0	106.6	95.1
Ideal	34	1.3	61.8	13.0	77.8	93.6	112.6	103.1	94.7
Oahe	39	1.5	62.1	13.1	76.4	95.7	109.2	102.4	93.7
SD Andes	34	1.0	62.2	12.6	72.2	98.8	109.8	104.3	93.6
Cowboy	34	3.3	61.1	11.7	73.4	91.9	114.0	102.9	93.1
Expedition	35	2.3	61.7	13.2	66.4	95.4	104.4	99.9	88.7
SY 517 CL2	29	1.3	62.9	13.8	66.2	94.7	100.4	97.6	87.1
Redfield	29	1.0	61.8	13.9	70.8	96.3	92.8	94.5	86.6
CP7017AX	33	2.3	60.7	11.8	-	105.8	114.4	110.1	-
WB4309	33	1.8	61.7	13.3	-	104.5	112.3	108.4	-
Guardian	36	3.5	61.6	12.9	-	94.6	113.7	104.2	-
AP 18AX	33	2.0	60.7	12.8	-	99.5	107.4	103.5	-
CP7909	31	3.3	61.7	12.7	-	100.1	103.9	102.0	-
LCS Helix AX	32	2.3	62.7	12.8	-	104.1	99.2	101.6	-
Crescent AX	33	2.5	61.6	13.4	-	98.0	96.7	97.4	-
CP7050AX	33	1.3	62.4	13.9	-	92.4	96.1	94.3	-
ND Noreen	36	1.0	62.8	13.2	-	83.6	103.4	93.5	-
AP Bigfoot	31	1.3	61.1	13.1	-	-	114.6	-	-
AP Clair	31	1.0	62.0	13.1	-	-	110.6	-	-
LCS Steel AX	33	1.0	60.8	12.2	-	-	108.2	-	-
CP7869	30	2.8	61.3	12.5	-	-	104.5	-	-
MS Iceman	30	1.0	63.1	14.8	-	-	103.6	-	-
LCS Julep	31	1.3	63.4	14.0	-	-	100.8	-	-
LCS Chrome	34	1.0	61.8	13.8	-	-	100.6	-	-
Whistler	35	4.0	60.2	11.9	-	-	100.2	-	-
LCS Photon AX	30	1.0	62.4	14.6	-	-	85.8	-	-
Trial Average#	33	2.0	61.8	13.2	72.8	96.6	106.7	102.9	94.0
LSD (0.05)†	-	-	0.6	0.6	7.9	6.0	10.2	-	-
C.V. %‡	-	-	0.7	3.3	7.8	4.5	6.8	-	-

* 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.