



2021 South Dakota Winter Wheat Variety Trial Results Hayes

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Cooperator: Terry Hand
Location: 44.415092, -101.031129
Soil Type: Promise clay, 3-6% slopes
Previous crop: fallow
Tillage: no-till
Row spacing: 8"
Seeding Rate: 1.2 million PLS/acre
Fertilizer:
-Starter: 10 gal/acre 10-34-0
-Other: 83-0-0-8S fall-applied + 28-0-0 as UAN spring-applied
Herbicide:
-Burndown: not reported
-Post: 16 oz/acre Bronate + 16 oz/acre GoldSky
Fungicide: none
Date seeded: 9/16/2020
Date harvested: 7/15/2021
Notes: Very dry weather throughout the growing season.



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Table 1. 2021 winter wheat variety performance trial results (average of four replications) at Hayes, South Dakota. Entries are sorted by overall three-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)
Winner	28	1.0	60.0	14.4	85.7	114.7	64.7	89.7	88.4
WB4462	30	1.0	59.5	15.2	80.4	107.8	67.7	87.7	85.3
Draper	27	1.0	58.7	15.2	81.4	106.0	63.2	84.6	83.6
Overland	29	1.0	60.3	14.9	88.5	100.9	60.2	80.6	83.2
Langin	27	1.0	59.6	14.3	75.2	107.3	63.9	85.6	82.1
SY Wolverine	26	1.0	61.2	14.9	72.1	103.0	71.0	87.0	82.0
Ideal	28	1.0	59.0	15.8	79.5	103.5	61.2	82.3	81.4
Thompson	28	1.0	59.6	15.3	83.6	97.6	61.9	79.7	81.0
Oahe	29	1.0	60.4	14.9	81.9	102.4	57.7	80.0	80.7
Redfield	26	1.0	60.3	16.0	80.1	102.1	54.2	78.1	78.8
Expedition	29	1.0	60.8	15.5	81.0	97.7	56.7	77.2	78.4
SD Andes	26	1.0	60.2	15.4	78.8	95.3	59.6	77.5	77.9
Cowboy	27	1.0	59.4	14.9	76.6	97.0	59.0	78.0	77.6
SY 517 CL2	25	1.0	61.5	15.0	73.2	97.3	54.8	76.0	75.1
CP7017AX	25	1.0	60.3	14.3	-	110.1	62.2	86.1	-
CP7909	28	1.0	60.1	14.3	-	107.5	64.0	85.7	-
AP 18AX	26	1.0	60.0	14.6	-	106.8	61.4	84.1	-
LCS Helix AX	25	1.0	61.1	14.2	-	106.7	61.4	84.1	-
CP7050AX	28	1.0	62.1	15.0	-	101.5	63.0	82.3	-
Crescent AX	27	1.0	61.1	14.7	-	109.0	54.8	81.9	-
WB4309	29	1.0	59.5	15.9	-	97.8	62.7	80.2	-
Guardian	28	1.0	58.5	15.7	-	100.1	59.2	79.6	-
ND Noreen	28	1.0	60.0	16.5	-	91.4	50.8	71.1	-
AP Clair	26	1.0	60.4	15.3	-	-	67.8	-	-
AP Bigfoot	27	1.0	60.1	15.1	-	-	64.1	-	-
LCS Steel AX	27	1.0	58.8	14.7	-	-	63.6	-	-
LCS Chrome	29	1.0	59.8	15.6	-	-	63.4	-	-
MS Iceman	27	1.0	61.0	15.4	-	-	63.3	-	-
Whistler	26	1.0	58.1	14.8	-	-	62.9	-	-
CP7869	26	1.0	59.5	14.8	-	-	62.9	-	-
LCS Julep	27	1.0	62.5	15.6	-	-	62.9	-	-
LCS Photon AX	27	1.0	62.1	14.8	-	-	60.0	-	-
Trial Average#	27	1.1	60.0	15.2	70.4	87.1	60.8	80.3	77.9
LSD (0.05)†	-	-	1.0	0.7	7.2	7.0	4.8	-	-
C.V. %‡	-	-	1.2	3.3	7.4	5.8	5.6	-	-

* 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.