



# 2021 South Dakota Winter Wheat Variety Trial Results Hayes

Jonathan Kleinjan | SDSU Extension Agronomist  
Sunish Sehgal | SDSU Winter Wheat Breeder  
Kevin Kirby | Agricultural Research Manager  
Shawn Hawks | Agricultural Research Manager  
Cody Hall | Agricultural Research Assistant

**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.



## 2021 South Dakota Winter Wheat Variety Trial Results Hayes

**SOUTH DAKOTA STATE  
UNIVERSITY EXTENSION**

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	-	-
<b>Trial Average#</b>	27	1.1	60.0	15.2	70.4	87.1	60.8	80.3	77.9
<b>LSD (0.05)†</b>	-	-	1.0	0.7	7.2	7.0	4.8	-	-
<b>C.V. %‡</b>	-	-	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.