



# 2022 South Dakota Winter Wheat Variety Trial Results Pierre

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:** Dakota Lakes Research Farm, Sam Ireland, manager  
**Location:** 44.292747°, -99.995847°  
**Soil Type:** Dorna silt loam  
**Previous crop:** flax  
**Tillage:** no-till  
**Row spacing:** 8"  
**Seeding Rate:** 1.2 million PLS/acre  
**Fertilizer:**  
- Starter: 10 gal/acre 10-34-0  
- Other: 50 GPA 27.2-0-0-2.6S streambar applied on 4/28/2022  
**Herbicide:**  
- Burndown: 22 oz/acre RT3 + 12 oz/acre 2,4-D + 0.1 oz/acre express on 8/30/2021  
- Post: 2 pts/acre Brox 2EC  
**Fungicide:** none  
**Date seeded:** 9/28/2021  
**Date harvested:** 7/19/2022  
**Notes:** Yields were affected by heat during flowering and grain fill.



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**SOUTH DAKOTA STATE  
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Table 1. 2022 winter wheat variety performance trial results (average of 4 replications) at Pierre, SD.

Entries are sorted by overall 3-year yield. Varieties yielding in the top 1/3 of the trial are bolded and shaded light blue.

Variety	Height (in)	Lodging* (1-5)	Test Wt (lbs)	Protein (%)#	2020 (bu/a)#	2021 (bu/a)	2022 (bu/a)	2-year (bu/a)	3-year (bu/a)
CP7017AX	26	1.0	57.1	14.8	<b>105.8</b>	<b>114.4</b>	<b>58.4</b>	<b>86.4</b>	<b>92.8</b>
SY Wolverine	26	1.0	56.3	15.5	<b>102.9</b>	<b>113.4</b>	<b>62.1</b>	<b>87.7</b>	<b>92.8</b>
WB4309	31	1.0	54.0	16.0	<b>104.5</b>	<b>112.3</b>	53.9	<b>83.1</b>	<b>90.2</b>
LCS Helix AX	33	1.0	59.1	14.1	<b>104.1</b>	99.2	<b>64.7</b>	81.9	<b>89.3</b>
Draper	29	1.0	53.5	15.3	99.0	<b>112.0</b>	54.3	<b>83.1</b>	<b>88.4</b>
AP 18AX	29	1.0	55.5	14.7	99.5	107.4	<b>56.9</b>	<b>82.1</b>	87.9
Winner	29	1.0	53.8	15.1	<b>101.6</b>	<b>111.6</b>	50.3	80.9	87.8
SD Andes	31	1.0	54.6	15.0	98.8	109.8	<b>54.7</b>	<b>82.2</b>	87.8
Crescent AX	30	1.0	56.1	14.1	98.0	96.7	<b>66.2</b>	81.4	87.0
CP7909	28	1.0	53.0	15.2	100.1	103.9	48.3	76.1	84.1
Ideal	27	1.0	54.2	15.9	93.6	<b>112.6</b>	44.8	78.7	83.7
Expedition	26	1.0	52.5	15.5	95.4	104.4	43.6	74.0	81.1
CP7050AX	29	1.0	57.5	15.3	92.4	96.1	52.8	74.5	80.4
Redfield	28	1.0	48.5	16.5	96.3	92.8	46.3	69.5	78.4
AP Bigfoot	28	1.0	54.7	15.3	-	<b>114.6</b>	<b>55.3</b>	<b>85.0</b>	-
LCS Steel AX	32	1.0	55.9	14.6	-	108.2	<b>56.1</b>	<b>82.2</b>	-
AP Clair	29	1.0	52.8	16.0	-	<b>110.6</b>	49.0	79.8	-
CP7869	26	1.0	54.4	15.0	-	104.5	50.5	77.5	-
LCS Julep	30	1.0	54.7	15.6	-	100.8	52.7	76.7	-
LCS Chrome	31	1.0	54.1	15.9	-	100.6	49.4	75.0	-
MS Iceman	30	1.0	55.8	16.4	-	103.6	43.4	73.5	-
LCS Photon AX	29	1.0	57.8	15.2	-	85.8	54.6	70.2	-
WB4422	30	1.0	55.8	16.2	-	-	<b>56.5</b>	-	-
Viking 211	29	1.0	53.8	15.7	-	-	<b>54.7</b>	-	-
MS Maverick	30	1.0	53.1	15.8	-	-	54.0	-	-
Kivari AX	31	1.0	55.7	13.8	-	-	53.9	-	-
SD Midland	31	1.0	53.9	15.6	-	-	52.0	-	-
Byrd CL Plus	29	1.0	53.7	14.7	-	-	49.2	-	-
WB4510CLP	31	1.0	53.6	16.0	-	-	43.5	-	-
CPX72166AX	30	1.0	50.2	14.5	-	-	42.1	-	-
<b>Trial Average#</b>	29	1	54.2	15.4	96.6	106.7	50.7	79.2	86.6
<b>LSD (0.05)†</b>	-	-	-	-	6.0	10.2	5.2	-	-
<b>C.V. %‡</b>	-	-	-	-	4.5	6.8	7.3	-	-

\* Lodging score: 1, perfectly standing; to 5, completely flat.

# Corrected to 13% moisture. Note: 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.