



**SOUTH DAKOTA  
STATE UNIVERSITY**  
College of Agriculture, Food  
and Environmental Sciences

South Dakota State University Extension  
South Dakota Agricultural Experiment Station at SDSU

# 2023 South Dakota Winter Wheat Variety Trial Results Winner

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**Cooperator:** Jorgensen Land and Cattle

**Location:** 43.5351766°, -99.8415697°

**Soil Type:** Millboro silty clay, 0-3% slopes

**Previous crop:** oats

**Tillage:** no-till

**Row spacing:** 8"

**Seeding Rate:** 1.2 million PLS/acre

**Fertilizer:**

- Starter: 10 gal/acre 10-34-0
- Other: 39 gal/acre 28-0-0 spring topdress

**Herbicide:**

- Burndown: not reported
- Post: 1.5 pt/acre Bison + 0.66 pt/acre Double Check

**Fungicide:** none

**Date seeded:** 9/30/2022

**Date harvested:** 7/25/2023



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Table 1. 2023 winter wheat variety performance trial results (average of 4 replications) at Winner, SD. Entries are sorted by overall 3-year yield. Varieties yielding in the top 1/3 of the trial are bold and shaded light blue.

Variety	Height (inches)	Lodging* (-5)	Test Wt (lbs)	Protein %	2021 (bu/a)#	2022 (bu/a)	2023 (bu/a)	2-year (bu/a)	3-year (bu/a)
Winner	25	1.0	62.4	13.6	<b>80.9</b>	<b>95.5</b>	<b>44.5</b>	<b>70.0</b>	<b>73.6</b>
SD Andes	25	1.0	63.4	13.8	<b>78.1</b>	<b>95.2</b>	40.5	<b>67.8</b>	<b>71.2</b>
SD Midland	27	1.0	62.2	13.0	71.0	<b>92.3</b>	<b>50.4</b>	<b>71.4</b>	<b>71.2</b>
Redfield	26	1.0	63.3	14.0	76.4	87.8	<b>49.2</b>	<b>68.5</b>	<b>71.1</b>
LCS Steel AX	25	1.0	61.3	12.9	<b>78.3</b>	88.4	<b>43.4</b>	<b>65.9</b>	<b>70.0</b>
AP Clair	21	1.0	62.2	13.9	<b>82.0</b>	<b>92.1</b>	34.5	63.3	<b>69.5</b>
Draper	24	1.0	61.9	14.1	77.0	88.6	<b>42.2</b>	65.4	69.3
Ideal	25	1.0	63.4	13.4	<b>77.4</b>	83.4	<b>45.7</b>	64.5	68.8
SY Wolverine	22	1.0	61.4	13.1	<b>77.8</b>	85.5	40.5	63.0	68.0
CP7017AX	23	1.0	60.8	13.3	69.0	<b>94.2</b>	40.4	<b>67.3</b>	67.9
LCS Helix AX	23	1.0	62.2	13.3	70.8	<b>91.2</b>	40.8	<b>66.0</b>	67.6
WB4309	23	1.0	60.8	13.9	76.6	87.5	37.5	62.5	67.2
AP Bigfoot	22	1.0	60.5	13.3	74.2	89.7	37.6	63.7	67.2
CP7869	24	1.0	62.9	12.7	70.3	81.9	<b>42.0</b>	61.9	64.7
Expedition	26	1.0	63.0	14.8	65.3	85.2	<b>42.0</b>	63.6	64.2
LCS Chrome	25	1.0	62.0	14.1	66.9	81.1	<b>43.1</b>	62.1	63.7
AP 18AX	20	1.0	60.6	13.6	70.9	80.3	38.8	59.6	63.4
CP7909	23	1.0	60.5	12.7	66.1	82.2	38.2	60.2	62.2
Crescent AX	23	1.1	61.1	13.1	67.5	80.1	34.8	57.4	60.8
WB4422	22	1.0	62.4	13.9	-	<b>97.7</b>	39.1	<b>68.4</b>	-
Byrd CL Plus	25	1.0	61.9	13.2	-	<b>89.7</b>	41.2	65.5	-
MS Maverick	26	1.0	62.9	13.7	-	81.6	<b>49.1</b>	65.4	-
Kivari AX	24	1.8	63.5	12.4	-	80.7	<b>46.8</b>	63.8	-
CP7266AX	23	1.0	61.4	13.4	-	84.0	38.2	61.1	-
WB4510CLP	26	1.0	64.4	13.6	-	78.4	39.3	58.9	-
MS Sundown	25	1.0	61.4	13.4	-	-	39.6	-	-
CP7220	25	1.0	63.0	13.9	-	-	39.0	-	-
LCS Runner	23	1.0	62.8	12.5	-	-	36.6	-	-
SY Wolf	22	1.0	61.5	14.2	-	-	35.8	-	-
<b>Trial Average</b>	24	1.0	62.3	13.7	73.7	86.2	41.4	64.3	67.5
<b>LSD (0.05)\$</b>	-	-	0.9	0.6	8.7	8.3	7.9	-	-
<b>C.V. %‡</b>	-	-	-	-	8.4	6.9	13.5	-	-

\* 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.