



**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 Sturgis

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**Cooperator:** SDSU Sturgis Research Farm, Christopher Graham, manager

**Location:** 44.424167°, -103.376111°

**Soil Type:** Nunn clay loam, 0-2% slopes

**Previous crop:** field peas

**Tillage:** no-till

**Row spacing:** 10"

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

**Fertilizer:**

- Starter: 10 lbs/acre 10-25-0.25S
- Other: 40 gal/acre 28-0-0 mid-row banded

**Herbicide:**

- Burndown: 4 oz/acre Sharpen + 32 oz/acre Roundup + 20 oz/acre Hot MES (adjuvant)
- Post: none

**Fungicide:** None

**Date seeded:** 9/21/2022

**Date harvested:** 8/3/2023



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Table 1. 2023 winter wheat variety performance trial results (average of 4 replications) at Sturgis, 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)
SD Andes	not reported	not reported	60.1	12.4	not published	<b>51.3</b>	<b>84.2</b>	<b>67.8</b>	not available
SD Midland	not reported	not reported	61.8	12.4	published	<b>46.7</b>	<b>80.6</b>	<b>63.7</b>	available
LCS Steel AX	-	-	60.4	12.0	-	<b>49.1</b>	<b>76.5</b>	<b>62.8</b>	-
Winner	-	-	61.0	13.2	-	43.3	<b>81.5</b>	<b>62.4</b>	-
Kivari AX	-	-	59.8	11.4	-	<b>49.0</b>	<b>74.5</b>	<b>61.8</b>	-
CP7869	-	-	60.9	12.5	-	<b>47.3</b>	<b>75.0</b>	<b>61.1</b>	-
Draper	-	-	60.3	13.1	-	<b>47.3</b>	<b>74.9</b>	<b>61.1</b>	-
WB4510CLP	-	-	62.4	12.5	-	37.6	<b>83.8</b>	<b>60.7</b>	-
MS Maverick	-	-	59.5	13.8	-	<b>47.5</b>	71.9	59.7	-
SY Wolverine	-	-	59.9	13.1	-	44.4	<b>74.3</b>	59.3	-
LCS Chrome	-	-	60.4	13.7	-	45.1	72.7	58.9	-
WB4422	-	-	59.6	14.2	-	44.2	72.4	58.3	-
CP7266AX	-	-	59.7	12.5	-	43.7	72.2	58.0	-
Byrd CL Plus	-	-	58.9	12.2	-	<b>48.2</b>	66.4	57.3	-
Ideal	-	-	60.4	12.7	-	43.3	70.9	57.1	-
Redfield	-	-	58.9	13.3	-	44.4	68.9	56.6	-
AP 18AX	-	-	59.6	12.8	-	44.2	68.3	56.2	-
CP7017AX	-	-	59.8	12.4	-	46.3	62.1	54.2	-
WB4309	-	-	58.2	13.4	-	44.3	60.5	52.4	-
LCS Helix AX	-	-	60.6	12.9	-	40.4	62.9	51.6	-
Expedition	-	-	59.3	13.4	-	41.3	60.4	50.8	-
CP7909	-	-	60.6	12.4	-	45.9	51.2	48.5	-
AP Bigfoot	-	-	60.1	12.8	-	37.8	55.8	46.8	-
Crescent AX	-	-	59.7	13.1	-	38.9	54.1	46.5	-
AP Clair	-	-	58.8	13.2	-	44.0	43.8	43.9	-
LCS Runner	-	-	61.8	12.1	-	-	<b>73.2</b>	-	-
CP7220	-	-	60.6	13.6	-	-	69.2	-	-
MS Sundown	-	-	60.4	12.9	-	-	56.8	-	-
SY Wolf	-	-	57.3	13.8	-	-	49.5	-	-
<b>Trial Average</b>	-	-	59.6	13.1	-	44.3	66.8	56.7	-
<b>LSD (0.05)\$</b>	-	-	1.7	0.4	-	5.0	8.1	-	-
<b>C.V. %‡</b>	-	-	-	-	-	8.0	8.6	-	-

\* 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.