



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

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

# 2024 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
- Other: 120 lbs of N/acre as UAN

**Herbicide:**

- Burndown: 4 oz/acre Sharpen + 32 oz/acre Roundup + 20 oz/acre Hot MES (adjuvant)
- Post: 16 oz/acre Perfectmatch

**Fungicide:** None

**Date seeded:** 9/20/2023

**Date harvested:** 7/22/2024



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Table 1. Performance trial results for winter wheat varieties (average of 4 replications) conducted in 2024 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* (1-5)	Test Wt (lbs)	Protein %	2022 (bu/a)#	2023 (bu/a)	2024 (bu/a)	2-year (bu/a)	3-year (bu/a)
SD Andes	not reported	not reported	62.7	12.8	<b>51.3</b>	<b>84.2</b>	65.2	<b>74.7</b>	<b>66.9</b>
SD Midland	reported	reported	62.8	12.8	<b>46.7</b>	<b>80.6</b>	65.0	<b>72.8</b>	<b>64.1</b>
Winner	-	-	63.2	12.7	43.3	<b>81.5</b>	<b>66.7</b>	<b>74.1</b>	<b>63.8</b>
SD Pheasant	-	-	61.5	13.1	<b>47.9</b>	<b>77.8</b>	65.6	<b>71.7</b>	<b>63.8</b>
CP7869	-	-	63.2	12.7	<b>47.3</b>	<b>75.0</b>	<b>68.2</b>	<b>71.6</b>	<b>63.5</b>
Draper	-	-	62.1	13.0	<b>47.3</b>	<b>74.9</b>	<b>66.6</b>	<b>70.7</b>	<b>62.9</b>
Kivari AX	-	-	60.0	11.5	<b>49.0</b>	<b>74.5</b>	63.9	69.2	<b>62.5</b>
CP7266AX	-	-	60.7	12.5	43.7	72.2	<b>69.9</b>	<b>71.0</b>	61.9
MS Maverick	-	-	61.2	13.3	<b>47.5</b>	71.9	65.9	68.9	61.8
WB4510CLP	-	-	62.1	12.5	37.6	<b>83.8</b>	63.2	<b>73.5</b>	61.5
Byrd CL Plus	-	-	61.6	12.0	<b>48.2</b>	66.4	69.3	67.8	61.3
SY Wolverine	-	-	61.0	12.7	44.4	74.3	62.6	68.4	60.4
WB4422	-	-	61.6	13.1	44.2	72.4	64.2	68.3	60.3
LCS Chrome	-	-	61.8	13.8	45.1	72.7	60.0	66.3	59.3
Ideal	-	-	61.7	12.9	43.3	70.9	63.5	67.2	59.2
CP7017AX	-	-	62.2	11.8	46.3	62.1	<b>67.8</b>	65.0	58.7
WB4309	-	-	61.9	13.3	44.3	60.5	64.2	62.3	56.3
CP7909	-	-	62.6	12.7	45.9	51.2	<b>66.1</b>	58.6	54.4
Expedition	-	-	61.7	13.1	41.3	60.4	60.5	60.5	54.1
LCS Helix AX	-	-	61.5	12.9	40.4	62.9	58.0	60.5	53.8
AP Bigfoot	-	-	62.3	12.5	37.8	55.8	63.9	59.9	52.5
AP Clair	-	-	55.5	13.0	44.0	43.8	62.3	53.1	50.0
Crescent AX	-	-	60.9	12.9	38.9	54.1	55.5	54.8	49.5
MS Sundown	-	-	62.5	13.1	-	56.8	65.0	60.9	-
SY Wolf	-	-	59.3	13.3	-	49.5	57.5	53.5	-
AP 24AX	-	-	60.0	12.1	-	-	<b>71.3</b>	-	-
CO18042RA	-	-	62.1	11.7	-	-	<b>69.3</b>	-	-
LCS Warbird AX	-	-	62.1	12.9	-	-	<b>66.5</b>	-	-
21Nord-160	-	-	59.1	12.6	-	-	64.4	-	-
LCS Julep	-	-	61.9	13.6	43.7	-	57.0	-	-
LCS Missile	-	-	11.5	13.8	-	-	23.8	-	-
LCS Jet	-	-	12.1	-	-	-	18.8	-	-
<b>Trial Average#</b>	-	-	59.1	12.8	44.5	66.8	62.4	65.6	59.1
<b>LSD (0.05) †</b>	-	-	-	-	4.9	8.1	7.6	-	-
<b>C.V. %‡</b>	-	-	9.2	2.2	7.9	8.6	8.8	-	-

\* 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.