



**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 Mount Vernon

Sunish Sehagal | SDSU Winter Wheat Breeder  
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**Cooperator:** Edinger Brothers

**Location:** 43.832029°, -98.558902°

**Soil Type:** Houdek-Dudley complex, 0-2% slopes

**Previous crop:** sunflower

**Tillage:** no-till

**Row spacing:** 8"

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

**Fertilizer:**

- Starter: 90 lbs/acre 30-10-10
- Other: 125 lbs N/acre as urea broadcast applied

**Herbicide:**

- Burndown: none
- Post: 5 oz/acre LV6, 8 oz Starane, 3 oz/acre Azoxo, 2 oz/acre Propi

**Fungicide:** 8 oz/acre Nexicor @ flag leaf with 2.5 oz/acre Warrior

**Date seeded:** 10/4/2023

**Date harvested:** 7/25/2024



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Table 1. Performance trial results for winter wheat varieties (average of 4 replications) conducted in 2024 at Mount Vernon, 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 Pheasant	34.0	1.5	59.7	11.8	<b>63.2</b>	-	<b>94.1</b>	-	<b>78.7</b>
WB4422	31.5	1.0	60.6	12.8	<b>64.8</b>	-	<b>91.0</b>	-	<b>77.9</b>
CP7909	29.8	1.3	59.2	12.3	<b>67.6</b>	-	<b>85.6</b>	-	<b>76.6</b>
SY Wolverine	28.8	1.0	59.7	12.3	<b>60.1</b>	-	<b>89.5</b>	-	<b>74.8</b>
Winner	31.8	1.3	59.4	12.0	54.1	-	<b>93.5</b>	-	<b>73.8</b>
Ideal	33.0	1.0	59.6	11.9	57.8	-	<b>88.8</b>	-	<b>73.3</b>
CP7869	29.8	2.0	59.7	12.2	<b>61.8</b>	-	83.3	-	<b>72.6</b>
CP7017AX	29.0	1.3	59.6	11.9	<b>62.6</b>	-	80.5	-	<b>71.5</b>
AP Clair	29.5	1.0	59.7	12.5	<b>60.6</b>	-	82.3	-	71.5
AP Bigfoot	29.8	1.0	59.1	12.4	<b>60.6</b>	-	81.2	-	70.9
SD Andes	32.3	1.0	60.4	11.5	55.2	-	<b>85.4</b>	-	70.3
Draper	31.5	1.0	58.6	12.6	55.0	-	<b>85.3</b>	-	70.2
SD Midland	33.5	1.0	59.2	11.5	56.0	-	83.2	-	69.6
WB4309	31.3	1.3	58.3	12.7	57.9	-	81.2	-	69.6
LCS Julep	30.0	1.0	60.4	12.7	54.9	-	82.3	-	68.6
Byrd CL Plus	33.3	1.3	58.9	11.8	55.5	-	81.1	-	68.3
Kivari AX	31.5	2.0	57.5	11.3	54.0	-	81.1	-	67.6
Expedition	30.3	1.5	59.7	13.1	59.3	-	75.7	-	67.5
Crescent AX	31.3	1.8	58.9	12.4	52.5	-	80.2	-	66.4
MS Maverick	32.5	1.3	59.4	12.2	47.7	-	84.4	-	66.1
LCS Helix AX	30.8	1.5	59.2	12.4	57.6	-	73.2	-	65.4
WB4510CLP	33.5	1.0	60.3	11.7	44.6	-	<b>85.4</b>	-	65.0
CP7266AX	30.3	1.5	57.9	12.5	49.1	-	80.1	-	64.6
LCS Chrome	32.5	1.0	59.7	12.7	46.9	-	80.6	-	63.7
CO18042RA	29.5	2.3	58.5	12.1	-	-	<b>85.1</b>	-	-
MS Sundown	33.8	1.5	59.1	12.2	-	-	83.4	-	-
AP 24AX	31.0	1.0	57.4	12.1	-	-	83.0	-	-
21Nord-160	34.3	1.0	57.6	12.0	-	-	81.2	-	-
LCS Warbird AX	30.5	2.0	59.5	12.6	-	-	80.5	-	-
SY Wolf	29.8	1.0	58.0	12.6	-	-	79.5	-	-
LCS Jet	26.0	1.0	50.3	14.1	-	-	46.7	-	-
LCS Missile	27.0	1.0	50.1	13.9	-	-	44.0	-	-
<b>Trial Average#</b>	31.3	1.2	58.7	12.2	56.5	-	82.4	-	70.1
<b>LSD (0.05)†</b>	1.6	-	0.7	0.8	2.8	-	7.8	-	-
<b>C.V. %‡</b>	3.7	-	0.9	4.6	3.5	-	6.7	-	-

\* 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.