



# 2022 South Dakota Winter Wheat Variety Trial Results Mount Vernon

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**Cooperator:** Edinger Brothers  
**Location:** 43.778410°, -98.546903°  
**Soil Type:** Houdek-Dudley complex, 0-2% slopes  
**Previous crop:** soybeans  
**Tillage:** no-till  
**Row spacing:** 8"  
**Seeding Rate:** 1.2 million PLS/acre  
**Fertilizer:**  
- Starter: 90 lbs/acre 30-10-10  
- Other: 120-0-0 as urea broadcast-applied + 12.5 gal 28-0-0 on 4/27/2022  
**Herbicide:**  
- Burndown: none  
- Post: 6 oz LV6 + 0.6 oz Affinity TankMix + 0.6 oz Affinity TankMix + 3 oz Asoxy 2SC  
+ 8 oz/acre Stark Ultra  
**Fungicide:** 2 oz Prop 41.8% (applied with herbicide); 3 oz Tigris Lamda  
+ 6.7 oz Prosaro 421 EC (at flowering)  
**Date seeded:** 9/28/2021  
**Date harvested:** 7/20/2022  
**Notes:** Trial was affected by heat during pollination 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 Mount Vernon, 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)
CP7909	34	3.0	59.3	13.9	70.2	<b>58.6</b>	<b>67.6</b>	<b>63.1</b>	<b>65.5</b>
SY Wolverine	31	2.3	57.3	14.4	<b>76.4</b>	55.1	<b>60.1</b>	57.6	<b>63.8</b>
Ideal	38	3.8	57.1	15.0	<b>72.9</b>	<b>59.5</b>	57.8	<b>58.6</b>	<b>63.4</b>
SD Andes	37	2.5	57.2	14.8	<b>72.6</b>	<b>58.2</b>	55.2	56.7	<b>62.0</b>
CP7017AX	35	3.0	55.9	14.1	69.8	52.8	<b>62.6</b>	<b>57.7</b>	<b>61.7</b>
Draper	35	3.3	54.5	15.3	<b>70.8</b>	<b>58.6</b>	55.0	56.8	61.5
SD Midland	38	2.3	57.0	14.9	67.3	<b>60.2</b>	56.0	<b>58.1</b>	61.2
WB4309	32	3.0	56.7	14.5	65.2	<b>60.0</b>	57.9	<b>58.9</b>	61.0
LCS Helix AX	35	2.8	55.8	14.3	<b>71.0</b>	54.3	57.6	56.0	61.0
Redfield	35	3.8	55.7	15.5	70.8	<b>58.0</b>	54.0	56.0	61.0
Winner	34	3.0	55.4	14.4	70.3	56.7	54.1	55.4	60.3
AP 18AX	36	2.8	55.8	14.1	65.1	56.0	55.7	55.9	59.0
Crescent AX	36	3.5	55.7	14.4	66.5	54.4	52.5	53.4	57.8
Expedition	39	3.0	57.4	15.3	59.8	48.5	<b>59.3</b>	53.9	55.9
CP7050AX	34	2.5	57.9	14.5	51.2	52.0	<b>61.9</b>	56.9	55.0
CP7869	34	4.0	56.5	14.2	-	<b>59.3</b>	<b>61.8</b>	<b>60.6</b>	-
AP Bigfoot	34	2.0	56.0	14.6	-	57.5	<b>60.6</b>	<b>59.1</b>	-
AP Clair	33	2.5	57.0	14.8	-	56.3	<b>60.6</b>	<b>58.5</b>	-
LCS Photon AX	34	3.0	58.6	14.5	-	47.8	<b>64.5</b>	56.1	-
LCS Steel AX	36	2.0	55.8	14.2	-	51.7	54.0	52.9	-
LCS Julep	34	3.0	57.1	15.6	-	50.3	54.9	52.6	-
MS Iceman	30	1.8	58.8	15.7	-	46.0	55.7	50.8	-
LCS Chrome	37	2.8	54.6	15.5	-	47.4	46.9	47.1	-
WB4422	36	2.8	57.6	15.4	-	-	<b>64.8</b>	-	-
Byrd CL Plus	36	3.3	55.2	14.5	-	-	55.5	-	-
Kivari AX	34	3.3	54.4	13.7	-	-	54.0	-	-
Viking 211	34	3.8	54.7	15.3	-	-	49.8	-	-
CPX72166AX	35	3.0	55.1	14.2	-	-	49.1	-	-
MS Maverick	35	3.5	54.9	15.3	-	-	47.7	-	-
WB4510CLP	35	2.3	53.8	15.7	-	-	44.6	-	-
<b>Trial Average#</b>	35	2.9	56.3	14.9	66.1	55.7	56.5	56.2	60.7
<b>LSD (0.05)†</b>	-	-	-	-	4.3	5.6	2.8	-	-
<b>C.V. %‡</b>	-	-	-	-	4.7	7.2	3.5	-	-

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

# 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.