



# 2022 South Dakota Winter Wheat Variety Trial Results Vivian

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**Cooperator:** Ryan Larson c/o Logan Reuman  
**Location:** 44.006944°, -100.101111°  
**Soil Type:** Millboro silty clay, 0-3% slopes  
**Previous crop:** oats  
**Tillage:** no-till  
**Row spacing:** 10"  
**Seeding Rate:** 1.2 million PLS/acre  
**Fertilizer:**  
- Starter: 10 gal/acre 10-25-0-.25S  
- Other: 40 gal/acre 28-0-0 mid-row banded + 37 gal/acre 28-0-0 (4/19/2022)  
+ 1 gal/acre Coron (6/10/2022)  
**Herbicide:**  
- Burndown: 32 oz/acre RT3 (9/16/2021)  
- Post: 16 oz/acre PerfectMatch (5/16/2022)  
**Fungicide:** 4 oz propiconazole (applied with herbicide); 4 oz propiconazole (6/10/2022)  
**Date seeded:** 9/22/2021  
**Date harvested:** 7/21/2022



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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 Vivian, 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)
SY Wolverine	39	1.0	59.5	11.6	<b>73.1</b>	<b>54.3</b>	<b>104.5</b>	<b>79.4</b>	<b>77.3</b>
WB4309	38	1.0	58.5	12.0	<b>70.3</b>	<b>55.8</b>	<b>96.2</b>	<b>76.0</b>	<b>74.1</b>
Winner	37	1.0	58.5	11.8	<b>69.0</b>	<b>57.9</b>	86.9	<b>72.4</b>	<b>71.3</b>
CP7909	36	1.5	60.2	11.5	62.9	<b>50.0</b>	<b>100.2</b>	<b>75.1</b>	<b>71.0</b>
CP7017AX	34	3.5	58.4	11.1	<b>68.4</b>	49.8	91.1	70.5	<b>69.8</b>
AP 18AX	38	1.0	58.1	11.7	68.3	42.6	<b>95.5</b>	69.0	68.8
LCS Helix AX	34	1.5	58.0	11.5	67.2	46.9	89.6	68.3	67.9
SD Midland	39	1.0	60.1	12.1	65.4	49.1	87.0	68.1	67.2
Ideal	36	4.5	58.9	11.9	<b>73.9</b>	48.3	79.1	63.7	67.1
CP7050AX	36	1.0	60.2	12.4	62.1	47.9	<b>91.3</b>	69.6	67.1
Draper	36	3.5	57.8	12.1	65.7	49.4	86.1	67.8	67.1
Crescent AX	35	1.0	58.2	11.7	66.8	40.9	89.3	65.1	65.6
SD Andes	36	1.0	59.3	12.0	60.6	48.9	84.0	66.5	64.5
Redfield	38	2.0	58.7	12.2	61.7	46.8	84.2	65.5	64.2
Expedition	41	1.0	59.1	13.2	58.1	45.1	86.6	65.9	63.3
AP Clair	35	1.5	60.7	11.7	-	<b>50.9</b>	<b>103.4</b>	<b>77.1</b>	-
LCS Julep	36	1.0	60.1	12.2	-	<b>52.1</b>	<b>99.1</b>	<b>75.6</b>	-
MS Iceman	34	1.0	61.0	12.7	-	46.8	<b>101.3</b>	<b>74.1</b>	-
LCS Photon AX	34	1.0	59.8	12.4	-	48.7	<b>92.3</b>	<b>70.5</b>	-
AP Bigfoot	34	1.0	58.0	11.8	-	<b>51.9</b>	88.8	70.3	-
LCS Steel AX	37	2.5	56.7	11.7	-	<b>53.7</b>	83.8	68.8	-
LCS Chrome	39	1.5	58.3	12.6	-	49.5	87.3	68.4	-
CP7869	34	4.0	57.9	11.8	-	48.4	84.5	66.5	-
WB4422	37	1.0	59.7	12.3	-	-	<b>105.9</b>	-	-
Byrd CL Plus	37	1.0	57.1	11.4	-	-	89.3	-	-
Viking 211	35	2.5	58.0	12.3	-	-	88.7	-	-
CPX72166AX	36	1.0	58.2	11.9	-	-	86.5	-	-
Kivari AX	35	1.0	55.9	11.0	-	-	84.2	-	-
MS Maverick	34	2.5	58.2	12.2	-	-	79.9	-	-
WB4510CLP	34	4.0	58.9	12.0	-	-	74.2	-	-
<b>Trial Average#</b>	36	-	58.9	12.0	65.5	47.7	89.5	70.2	68.4
<b>LSD (0.05)†</b>	-	-	-	-	7.7	8.9	9.1	-	-
<b>C.V. %‡</b>	-	-	-	-	8.4	13.3	7.3	-	-

\* 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 ( $\geq$ 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.