



**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 Spring Wheat Variety Trial Results Miller

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**Cooperator:** Lee Lichty  
**Location:** 44.524030°, -98.781479°  
**Soil Type:** Houdek-Prosper loams, 0-2% slopes  
**Previous crop:** soybeans  
**Tillage:** no-till  
**Row spacing:** 8"  
**Seeding Rate:** 1.8 million PLS/acre  
**Fertilizer:**  
-Starter: 90 lb/acre 30-10-10  
-Other: 243 lb/acre 46-0-0 + 2 gal/acre Coron (applied with herbicide)  
**Herbicide:**  
-Burndown: none  
-Post: 16 oz/acre WideMatch  
**Fungicide:** 2 oz/acre Quilt (applied with herbicide) + 8 oz/acre Prosaro (at flowering)  
**Date seeded:** 4/26/2023  
**Date harvested:** 8/17/2023



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Table 1. 2023 spring wheat variety performance trial results (average of 4 replications) at Miller, SD.

Entries are sorted by overall 3-year yield. Varieties yielding in the top 1/3 of the trial are boldfaced and shaded light blue.

Variety	Height (in)	Lodging* (1-5)	Test Wt (lbs)	Protein %	2021 (bu/a)#	2022 (bu/a)	2023 (bu/a)	2-year (bu/a)	3-year (bu/a)
LCS Buster	25	1.3	57.6	13.3	<b>22.8</b>	<b>58.6</b>	<b>66.0</b>	<b>62.3</b>	<b>49.1</b>
Brawn-SD	24	1.8	59.7	13.9	<b>24.0</b>	<b>59.1</b>	<b>63.5</b>	<b>61.3</b>	<b>48.9</b>
LCS Trigger	25	2.5	59.6	12.9	<b>24.2</b>	53.9	<b>66.7</b>	<b>60.3</b>	<b>48.3</b>
Driver	27	2.3	58.7	14.9	<b>28.0</b>	52.3	<b>61.6</b>	<b>56.9</b>	<b>47.3</b>
SY Valda	24	2.3	58.2	15.2	<b>26.6</b>	<b>55.4</b>	57.9	<b>56.7</b>	<b>46.6</b>
Ascend-SD	27	2.8	58.0	15.3	21.5	<b>56.6</b>	58.0	<b>57.3</b>	<b>45.4</b>
LCS Cannon	23	1.5	59.9	16.1	21.7	<b>60.0</b>	54.1	<b>57.0</b>	45.2
CP3099A	29	1.3	57.6	13.1	<b>22.8</b>	42.0	<b>66.6</b>	54.3	43.8
MS Cobra	25	2.5	58.5	13.9	21.5	53.3	56.3	54.8	43.7
WB9606	25	2.3	58.3	14.6	22.4	50.6	57.7	54.2	43.6
MN-Rothsay	24	2.0	58.8	14.5	22.2	49.0	58.2	53.6	43.1
AP Gunsmoke CL2	24	2.3	58.3	16.9	21.0	52.5	53.3	52.9	42.3
AP Murdock	23	2.3	58.0	14.9	18.6	52.9	51.9	52.4	41.1
WB9719	27	1.0	58.5	16.2	17.4	50.9	55.0	52.9	41.1
Surpass	25	2.3	58.1	16.0	20.7	53.8	48.2	51.0	40.9
AP Revolution	23	1.5	59.0	16.4	21.0	52.9	48.1	50.5	40.7
Prevail	25	2.0	57.9	16.5	17.4	<b>55.0</b>	47.8	51.4	40.1
MS Charger	24	2.3	58.7	13.7	-	53.6	<b>60.0</b>	<b>56.8</b>	-
LCS Boom	23	2.3	59.6	16.0	-	<b>55.4</b>	54.5	55.0	-
LCS Ascent	26	2.5	58.5	15.5	-	<b>54.6</b>	55.2	54.9	-
LCS Hammer AX	22	2.5	57.2	15.7	-	54.4	55.3	54.9	-
CAG Justify	24	2.5	56.5	13.2	-	53.8	55.7	54.7	-
CAG Reckless	25	2.3	58.8	14.9	-	54.4	52.9	53.7	-
LCS Dual	24	2.0	58.4	15.4	-	50.1	50.9	50.5	-
PFS Buns	26	1.0	56.9	12.8	-	-	<b>73.6</b>	-	-
MN-Torgy	24	2.5	58.6	14.6	-	-	<b>64.8</b>	-	-
CAG Recoil	23	1.3	57.8	14.0	-	-	<b>59.8</b>	-	-
CP3188	26	3.0	57.8	13.3	-	-	<b>58.4</b>	-	-
ND Heron	27	2.5	58.4	16.8	-	-	48.8	-	-
WB9590	22	1.0	57.3	17.7	-	-	47.4	-	-
AP Venom	22	1.3	55.0	15.2	-	-	42.6	-	-
<b>Trial Average#</b>	25	2.1	58.2	15.0	21.2	52.6	55.7	55.0	44.2
<b>LSD (0.05)†</b>	-	-	0.6	1.4	3.2	2.8	3.6	-	-
<b>C.V. %‡</b>	-	-	-	-	10.7	3.9	4.6	-	-

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

# Trial averages may include values from experimental lines that are not reported, yield is reported @13%M, protein is @12%M.

† 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.