



**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 Frankfort

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**Cooperator:** Brian Johnson  
**Location:** 44.823107°, -98.281240°  
**Soil Type:** Great Bend-Beotia silt loams, 0-2% slopes  
**Previous crop:** soybeans  
**Tillage:** no-till  
**Row spacing:** 7"  
**Seeding Rate:** 1.8 million PLS/acre  
**Fertilizer:**  
-Starter: 90 lb/acre 30-10-10  
-Other: 330lb/acre 46-0-0 + 54 lb/acre 21-0-0-24  
**Herbicide:**  
-Burndown: NR  
-Post: 1.5 pt/acre Bromac  
**Fungicide:** none  
**Date seeded:** 5/2/2023  
**Date harvested:** 8/11/2023

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Table 1. 2023 spring wheat variety performance trial results (average of 4 replications) at Frankfort, 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 Trigger	29	1.0	59.3	13.2	<b>73.9</b>	<b>52.1</b>	<b>79.9</b>	<b>66.0</b>	<b>68.6</b>
Ascend-SD	30	1.0	60.2	14.7	63.9	<b>53.2</b>	<b>80.5</b>	<b>66.9</b>	<b>65.9</b>
LCS Cannon	27	1.0	61.1	14.9	61.3	<b>57.4</b>	<b>78.7</b>	<b>68.0</b>	<b>65.8</b>
AP Gunsmoke CL2	27	1.0	59.0	16.2	65.0	48.3	75.2	61.7	<b>62.8</b>
Driver	30	1.0	59.7	14.6	<b>69.2</b>	44.8	74.4	59.6	<b>62.8</b>
WB9606	30	1.0	59.7	13.9	<b>69.5</b>	42.0	<b>76.6</b>	59.3	<b>62.7</b>
LCS Buster	29	1.0	56.3	13.5	<b>68.9</b>	43.1	73.4	58.2	61.8
WB9719	28	1.0	60.7	14.7	57.4	50.5	76.1	63.3	61.3
SY Valda	27	1.0	58.7	14.7	63.7	42.3	<b>77.9</b>	60.1	61.3
AP Murdock	26	1.0	59.5	15.2	55.2	<b>52.8</b>	75.4	<b>64.1</b>	61.1
Brawn-SD	28	1.0	60.1	14.1	<b>66.4</b>	42.7	71.4	57.0	60.2
AP Revolution	26	1.0	60.2	15.2	54.0	<b>52.8</b>	72.4	62.6	59.7
MS Cobra	27	1.0	59.4	15.3	57.4	45.9	75.4	60.7	59.6
Surpass	29	1.0	59.2	15.7	53.5	43.0	<b>76.3</b>	59.7	57.6
Prevail	27	1.0	58.5	15.0	54.9	44.9	71.4	58.2	57.1
MN-Rothsay	27	1.0	58.9	14.6	54.5	35.1	72.4	53.7	54.0
CP3099A	32	1.0	55.6	12.3	<b>69.3</b>	20.2	67.3	43.8	52.3
CAG Justify	31	1.0	57.8	14.2	-	45.3	<b>85.1</b>	<b>65.2</b>	-
CAG Reckless	28	1.0	59.7	15.1	-	<b>56.4</b>	73.7	<b>65.1</b>	-
LCS Ascent	27	1.0	60.2	14.7	-	<b>55.1</b>	74.4	<b>64.7</b>	-
MS Charger	28	1.0	58.7	13.7	-	50.8	<b>78.3</b>	<b>64.6</b>	-
LCS Dual	28	1.0	59.8	14.9	-	<b>55.9</b>	69.0	62.4	-
LCS Boom	26	1.0	61.2	15.7	-	47.0	<b>77.5</b>	62.3	-
LCS Hammer AX	27	1.0	58.2	14.9	-	42.6	71.8	57.2	-
MN-Torgy	27	1.0	59.7	15.1	-	-	<b>82.6</b>	-	-
ND Heron	29	1.0	60.9	15.4	-	-	73.9	-	-
WB9590	25	1.0	58.4	16.2	-	-	68.9	-	-
CAG Recoil	27	1.0	57.1	15.5	-	-	68.0	-	-
CP3188	28	1.0	57.6	13.9	-	-	60.2	-	-
PFS Buns	29	1.0	53.3	15.3	-	-	58.0	-	-
AP Venom	26	1.0	54.9	14.9	-	-	54.5	-	-
<b>Trial Average#</b>	28	1.0	59.0	14.9	60.7	44.3	73.6	61.0	60.9
<b>LSD (0.05)†</b>	-	-	59	0.8	6.5	7.9	6	-	-
<b>C.V. %‡</b>	-	-	-	-	7.6	12.8	5.8	-	-

\* 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 ( $\geq$ 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.