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 Wall

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Cooperator:	Tyler Eisenbraun
Location:	44.038056°, -102.375278°
Soil Type:	Santanta loam, 0-2% slopes
Previous crop:	sunflowers
Tillage:	no-till
Row spacing:	10"
Seeding Rate:	1.2 million PLS/acre
Fertilizer:	
-Starter:	6 gal/acre 10-25-0-5S-.25Z
-Other:	40 gal.acre 28-0-0 mid-row banded
Herbicide:	
-Burndown:	5 oz/acre Banvel + 32 oz/acre Roundup
-Post:	none
Fungicide:	none
Date seeded:	4/17/2023
Date harvested:	8/21/2023

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Wall

Table 1. 2023 spring wheat variety performance trial results (average of 4 replications) at Wall, 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	not	not	56.2	16.0	**53.9**	51.1	**54.1**	**52.6**	**53.0**
LCS Cannon	reported	reported	59.2	15.9	**54.8**	**61.2**	42.3	**51.7**	**52.7**
SY Valda	-	-	55.7	16.2	52.6	**56.7**	47.0	**51.9**	**52.1**
MN-Rothsay	-	-	56.7	15.5	**53.5**	53.6	**49.0**	**51.3**	**52.1**
Brawn-SD	-	-	59.0	15.6	**57.7**	52.0	44.4	48.2	**51.4**
Ascend-SD	-	-	57.2	16.0	50.8	52.1	**49.0**	**50.6**	**50.7**
LCS Buster	-	-	53.6	15.8	50.0	51.7	**48.3**	**50.0**	50.0
WB9606	-	-	57.5	16.2	**54.4**	**54.6**	39.1	46.9	49.4
MS Cobra	-	-	57.4	16.3	49.0	47.4	**50.9**	49.2	49.1
Surpass	-	-	56.8	16.6	50.7	**54.1**	41.3	47.7	48.7
AP Gunsmoke CL2	-	-	57.4	16.3	45.7	53.1	47.2	**50.1**	48.7
AP Murdock	-	-	57.1	16.5	46.5	**56.2**	42.2	49.2	48.3
Prevail	-	-	57.5	15.4	**53.0**	42.3	46.7	44.5	47.3
Driver	-	-	56.7	15.8	41.1	51.3	**47.5**	49.4	46.6
WB9719	-	-	57.9	15.7	39.0	**55.1**	40.5	47.8	44.8
AP Revolution	-	-	58.3	15.8	40.6	42.3	30.8	36.6	37.9
CP3099A	-	-	56.1	16.6	48.3	52.4	6.0	29.2	35.6
LCS Boom	-	-	58.7	15.8	-	**54.7**	**54.9**	**54.8**	-
MS Charger	-	-	57.0	16.2	-	49.1	**48.6**	48.8	-
CAG Justify	-	-	54.4	16.8	-	**54.8**	39.7	47.3	-
LCS Hammer AX	-	-	56.5	15.4	-	49.8	41.6	45.7	-
LCS Ascent	-	-	57.8	15.2	-	51.4	38.7	45.1	-
CAG Reckless	-	-	57.7	15.8	-	45.8	42.1	43.9	-
LCS Dual	-	-	57.1	15.5	-	48.2	24.4	36.3	-
MN-Torgy	-	-	58.1	15.7	-	-	**50.1**	-	-
ND Heron	-	-	58.4	15.8	-	-	**49.2**	-	-
PFS Buns	-	-	51.7	15.9	-	-	44.6	-	-
CAG Recoil	-	-	54.2	15.7	-	-	43.8	-	-
AP Venom	-	-	52.8	16.5	-	-	43.4	-	-
CP3188	-	-	55.7	15.8	-	-	39.7	-	-
WB9590	-	-	56.8	16.2	-	-	37.3	-	-
Trial Average#	-	-	56.7	15.9	48.9	51.3	41.4	47.0	48.1
LSD (0.05)†	-	-	0.5	1.2	5.3	8.5	5	-	-
C.V. %‡	-	-	-	-	7.7	11.9	8.8	-	-

* 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 (≥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.