



**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 Northville

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**Cooperator:** Nutrien Ag Solutions - Northville, SD  
**Location:** 45.158559°, -98.570436°  
**Soil Type:** Harmony-Aberdeen silty clay 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: 30 gal/acre 28-0-0 steambar applied 5/31/2023  
**Herbicide:**  
-Burndown: none  
-Post: 1 pt/acre PerfectMatch applied 5/29/2023  
**Fungicide:** 6 oz/acre Priaxor applied with herbicide  
**Date seeded:** 5/2/2023  
**Date harvested:** 8/9/2023



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Table 1. 2023 spring wheat variety performance trial results (average of 4 replications) at Northville, 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	24	1.5	59.8	13.4	<b>59.2</b>	<b>51.8</b>	<b>60.4</b>	<b>56.1</b>	<b>57.1</b>
LCS Buster	23	2.0	56.6	13.2	<b>74.3</b>	40.8	55.5	<b>48.2</b>	<b>56.9</b>
SY Valda	23	1.5	58.5	14.7	<b>63.2</b>	<b>43.4</b>	<b>59.7</b>	<b>51.5</b>	<b>55.4</b>
Brawn-SD	26	1.8	60.2	14.1	58.2	<b>42.1</b>	<b>61.2</b>	<b>51.7</b>	<b>53.8</b>
CP3099A	24	1.0	57.2	13.0	<b>62.6</b>	35.6	<b>59.8</b>	47.7	<b>52.6</b>
Driver	25	2.3	58.9	14.9	55.4	<b>43.0</b>	<b>57.6</b>	<b>50.3</b>	<b>52.0</b>
WB9606	25	1.5	58.8	14.2	<b>58.5</b>	38.1	<b>59.0</b>	<b>48.6</b>	51.9
Ascend-SD	25	2.5	59.2	15.2	54.5	<b>45.7</b>	54.6	<b>50.2</b>	51.6
AP Gunsmoke CL2	25	2.5	59.3	16.0	<b>60.6</b>	37.6	55.5	46.5	51.2
MN-Rothsay	23	1.5	59.6	14.8	54.2	38.5	<b>60.2</b>	<b>49.3</b>	51.0
LCS Cannon	24	2.3	59.8	15.2	58.1	34.2	55.5	44.8	49.2
WB9719	24	1.0	58.9	14.8	53.4	38.0	55.5	46.8	49.0
Prevail	28	2.8	58.4	15.3	52.5	39.5	54.5	47.0	48.8
AP Revolution	25	1.8	59.3	15.9	53.7	38.8	51.4	45.1	48.0
AP Murdock	24	1.3	57.3	15.6	52.1	<b>41.3</b>	49.5	45.4	47.7
Surpass	27	2.5	58.2	15.4	46.0	40.0	52.0	46.0	46.0
MS Cobra	26	1.5	58.5	15.7	50.5	34.4	52.1	43.3	45.7
MS Charger	25	2.8	58.8	14.1	-	40.3	55.7	48.0	-
LCS Dual	25	1.8	59.1	14.1	-	35.7	<b>57.9</b>	46.8	-
CAG Reckless	23	1.8	58.4	15.7	-	<b>41.3</b>	49.5	45.4	-
CAG Justify	26	1.5	56.7	15.1	-	<b>41.5</b>	48.0	44.8	-
LCS Ascent	26	2.3	58.9	15.5	-	32.4	55.7	44.1	-
LCS Hammer AX	22	1.3	58.2	15.6	-	33.3	48.4	40.9	-
LCS Boom	24	2.3	59.6	16.2	-	30.6	50.4	40.5	-
MN-Torgy	25	1.5	59.5	15.2	-	-	<b>61.0</b>	-	-
CP3188	23	2.5	57.5	14.2	-	-	<b>55.8</b>	-	-
WB9590	21	1.0	58.0	16.1	-	-	53.1	-	-
ND Heron	28	2.8	59.3	16.5	-	-	51.7	-	-
CAG Recoil	24	1.3	56.9	15.7	-	-	50.6	-	-
AP Venom	20	1.0	55.7	14.6	-	-	45.0	-	-
PFS Buns	26	1.0	56.6	13.6	-	-	44.1	-	-
<b>Trial Average#</b>	25	1.9	58.6	15.0	55.5	39.2	54.8	47.0	51.1
<b>LSD (0.05)†</b>	-	-	0.9	0.9	3.5	2.3	7.0	-	-
<b>C.V. %‡</b>	-	-	-	-	3.9	4.3	9.1	-	-

\* 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.