

South Dakota State University Extension South Dakota Agricultural Experiment Station at SDSU

2023 South Dakota Winter Wheat Variety Trial Results Wall

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Location: 44.062778°, -102.128056° **Soil Type:** Savo silt loam, 0-2% slopes

Previous crop: Fallow

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

Herbicide:

- Burndown: 32 oz/acre Roundup RT3

- Post: none **Fungicide:** none

Date seeded: 9/28/2022 **Date harvested:** 8/14/2023



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Table 1. 2023 winter 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 bold and shaded light blue.

Variety	Height	Lodging*	Test Wt	Protein %	2021 (bu/a)#	2022 (bu/a)	2023	2-year (bu/a)	3-year
SD Andes	(inches)	(-5) not	(Ibs) 55.8	14.0	79.2	(Bu/a) 68.2	(bu/a) 85.0	76.6	(bu/a) 77.4
CP7909	reported	reported	53.5	13.8	86.3	66.2	68.9	67.6	77.4
Ideal	•	reported	53.8	15.1	80.8	68.8	65.3	67.0	73.6 71.6
Winner	-	_	54.9	15.1	74.8	70.1	67.2	68.6	70.7
	-	-							
SD Midland	_	_	53.1	14.1	83.6	62.6	64.6	63.6	70.3
SY Wolverine	-	-	56.1	15.3	77.1	69.8	63.9	66.8	70.3
Redfield	_	-	54.3	15.2	72.9	68.9	68.8	68.9	70.2
LCS Helix AX	-	-	56.7	14.4	78.4	56.0	72.9	64.5	69.1
Draper	-	-	54.4	15.5	73.9	64.4	69.0	66.7	69.1
WB4309	-	-	54.4	15.1	75.1	60.4	69.2	64.8	68.2
CP7869	_	-	54.9	14.5	74.0	59.7	70.4	65.0	68.0
CP7017AX	-	-	56.2	14.1	67.8	66.6	68.2	67.4	67.5
AP Bigfoot	-	-	55.9	14.7	71.6	60.8	69.2	65.0	67.2
LCS Steel AX	_	-	55.6	13.4	73.0	52.5	75.9	64.2	67.1
LCS Chrome	_	-	55.1	15.1	75.6	55.9	64.7	60.3	65.4
AP Clair	-	-	52.9	14.9	77.6	63.7	49.9	56.8	63.7
Crescent AX	_	_	56.1	15.3	74.4	56.4	58.3	57.4	63.0
AP 18AX	_	_	53.2	15.3	66.6	69.4	46.7	58.1	60.9
Expedition	_	-	54.9	15.4	69.1	54.9	51.7	53.3	58.6
Kivari AX	_	_	55.8	13.5	_	72.2	70.9	71.5	_
WB4422	_	_	55.8	16.1	_	67.1	70.9	69.0	_
Byrd CL Plus	_	-	54.7	13.7	-	67.3	69.9	68.6	-
WB4510CLP	_	_	56.6	14.2	_	58.7	77.2	68.0	_
MS Maverick	_	_	53.8	15.8	_	63.6	68.0	65.8	_
CP7266AX	_	-	53.9	14.6	-	59.3	49.4	54.4	-
CP7220	_	_	56.4	15.2	_	_	74.0	_	_
MS Sundown	_	_	54.4	14.9	_	_	56.5	_	_
LCS Runner	_	_	55.7	14.3	_	_	54.2	_	_
SY Wolf	_	_	53.9	15.5	_	_	53.8	_	_
Trial Average	_	_	55.1	14.8	75.4	63.6	67.3	64.8	68.0
LSD (0.05)§	_	_	1.0	0.7	8.1	9.7	9.2		
C.V. %‡			1.0		7.6	10.9	9.8	<u>-</u>	
O.V. 70Ŧ		_	-	-	0.1	10.9	უ.ნ	_	_

^{*} 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 (≥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.