



**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 Winter Wheat Variety Trial Results South Shore

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Location: 45.105934°, -97.101184°

Soil Type: Kranzburg-Brookings silty clay loams, 0-2% slopes

Previous crop: oats

Tillage: no-till

Row spacing: 8"

Seeding Rate: 1.2 million PLS/acre

Fertilizer:

- Starter: 90 lbs/acre 30-10-10
- Other: 2000-0-100 broadcast early spring

Herbicide:

- Burndown: 32 oz Roundup Powermax
- Post: .5 pt Parity + 1.5 pt Bronate

Fungicide: None

Date seeded: 9/21/2022

Date harvested: 7/27/2023



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Table 1. 2023 winter wheat variety performance trial results (average of 4 replications) at South Shore, 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 (inches)	Lodging* (-5)	Test Wt (lbs)	Protein %	2021 (bu/a)#	2022 (bu/a)	2023 (bu/a)	2-year (bu/a)	3-year (bu/a)
SD Andes	25	1.0	61.5	13.8	63.0	70.8	56.4	63.6	63.4
SD Midland	24	1.0	60.4	13.4	64.3	66.6	54.9	60.8	61.9
Redfield	23	1.0	60.6	13.8	59.2	68.5	51.8	60.1	59.8
Ideal	21	1.0	60.3	14.2	61.6	67.7	48.0	57.8	59.1
LCS Steel AX	24	1.0	61.0	14.0	60.1	56.9	57.2	57.0	58.1
Draper	23	1.0	60.9	14.2	55.4	60.3	55.8	58.0	57.2
CP7017AX	20	1.0	59.5	13.3	60.0	58.8	52.4	55.6	57.1
Winner	22	1.0	60.6	15.2	58.6	63.5	48.6	56.0	56.9
CP7869	21	1.0	58.4	13.8	56.2	61.3	49.5	55.4	55.7
LCS Helix AX	21	1.0	60.4	13.8	55.7	61.7	49.2	55.4	55.5
SY Wolverine	18	1.0	59.6	14.5	63.5	49.7	50.4	50.0	54.5
WB4309	20	1.0	56.9	15.8	64.6	52.5	45.8	49.1	54.3
LCS Chrome	24	1.0	59.9	15.8	54.5	59.2	46.8	53.0	53.5
AP Bigfoot	18	1.0	57.5	14.5	53.8	62.7	42.3	52.5	52.9
AP Clair	20	1.0	59.9	14.8	59.7	50.1	46.5	48.3	52.1
AP 18AX	20	1.0	56.8	15.0	53.8	55.5	44.2	49.9	51.2
Crescent AX	22	1.0	56.8	15.1	51.7	56.7	41.4	49.1	49.9
Expedition	22	1.0	58.3	15.5	47.5	58.8	37.8	48.3	48.1
CP7909	21	1.0	57.3	14.0	50.7	44.8	45.5	45.2	47.0
WB4510CLP	26	1.0	62.5	12.7	-	58.8	57.4	58.1	-
MS Maverick	22	1.0	60.0	14.7	-	64.3	50.9	57.6	-
Byrd CL Plus	23	1.0	61.4	13.4	-	55.8	51.2	53.5	-
Kivari AX	21	1.0	59.4	14.0	-	51.3	50.1	50.7	-
WB4422	22	1.0	60.3	15.8	-	53.9	47.2	50.6	-
CP7266AX	21	1.0	56.7	15.0	-	49.0	42.8	45.9	-
CP7220	22	1.0	61.8	14.8	-	-	50.2	-	-
MS Sundown	23	1.0	59.4	13.9	-	-	46.6	-	-
SY Wolf	20	1.0	57.5	15.6	-	-	45.6	-	-
LCS Runner	21	1.0	60.5	14.4	-	-	44.4	-	-
Trial Average	22	1.0	59.7	14.6	57.7	60.3	49.0	53.7	55.2
LSD (0.05)\$	-	-	3.1	1.1	4.3	5.9	6.9	-	-
C.V. %‡	-	-	-	-	5.4	7.0	7.0	-	-

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

Trial averages may include values from experimental lines that are not reported.

† 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.