South Dakota State University
College of Agriculture, Food and Environmental Sciences

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

2024 South Dakota Winter Wheat Variety Trial Results South Shore

Sunish Sehgal | SDSU Winter Wheat Breeder
Shawn Hawks | Agricultural Research Manager
Kevin Kirby | Agricultural Research Manager

Cooperator: SDSU Northeast Research Farm, Al Heuer, manager
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: 200 lbs of N/acre and 50 lbs of K/acre broadcast early spring

Herbicide:

- Burndown: none
- Post: 1.5 pt Bronate, 15 oz Axial Bold

Fungicide: None
Date seeded: 9/20/2023
Date harvested: 8/9/2024

S-0002-2024-01-WW-South Shore

South Dakota State University Extension

2024 South Dakota Winter Wheat Variety Trial Results South Shore

Table 1. Performance trial results for winter wheat varieties (average of 4 replications) conducted in 2024 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* (1-5)	Test Wt (lbs)	Protein %	2022 (bu/a)#	2023 (bu/a)	2024 (bu/a)	2-year (bu/a)	3-year (bu/a)
SD Andes	34.0	1.8	55.8	14.3	**70.8**	**56.4**	**65.8**	**61.1**	**64.3**
WB4510CLP	35.5	2.0	57.3	13.5	58.8	**57.4**	**74.7**	**66.1**	**63.7**
SD Midland	35.8	2.0	54.6	13.4	**66.6**	**54.9**	59.5	**57.2**	**60.3**
CP7869	30.3	3.8	54.9	13.8	61.3	49.5	**68.3**	**58.9**	**59.7**
Draper	31.8	2.0	55.2	14.5	60.3	**55.8**	**63.0**	**59.4**	**59.7**
SD Pheasant	35.5	4.5	52.0	12.6	**73.6**	**59.4**	45.6	52.5	**59.5**
MS Maverick	30.3	3.8	55.5	13.6	**64.3**	**50.9**	**59.5**	**55.2**	**58.2**
CP7017AX	30.3	3.5	55.4	13.2	58.8	**52.4**	**59.7**	**56.1**	57.0
Winner	32.8	2.3	55.8	14.0	**63.5**	48.6	58.0	53.3	56.7
LCS Helix AX	32.8	2.8	54.7	13.3	**61.7**	49.2	54.7	51.9	55.2
Byrd CL Plus	35.0	4.3	54.0	12.9	55.8	**51.2**	56.9	54.0	54.6
LCS Chrome	32.3	3.5	54.6	14.1	59.2	46.8	55.1	50.9	53.7
CP7266AX	34.0	2.8	56.1	13.8	49.0	42.8	**67.0**	54.9	52.9
Ideal	32.8	3.5	52.3	13.3	**67.7**	48.0	42.8	45.4	52.8
Kivari AX	32.8	4.5	52.5	12.2	51.3	50.1	55.3	52.7	52.2
AP Bigfoot	31.5	4.3	52.0	12.8	**62.7**	42.3	51.0	46.7	52.0
WB4422	32.0	4.5	51.6	14.5	53.9	47.2	50.8	49.0	50.6
WB4309	34.0	2.3	53.2	15.8	52.5	45.8	50.6	48.2	49.6
Crescent AX	33.5	3.0	55.1	13.2	56.7	41.4	50.6	46.0	49.6
SY Wolverine	29.5	3.8	49.9	13.2	49.7	50.4	47.2	48.8	49.1
CP7909	32.5	4.5	53.2	12.8	44.8	45.5	52.8	49.2	47.7
Expedition	34.0	3.5	50.6	12.5	58.8	37.8	44.9	41.4	47.2
AP Clair	30.3	2.5	50.7	13.5	50.1	46.5	39.2	42.8	45.2
MS Sundown	33.3	3.3	55.3	13.4	-	46.6	**63.6**	**55.1**	-
SY Wolf	31.5	3.0	48.9	13.7	-	45.6	41.5	43.5	-
LCS Warbird AX	31.5	2.8	56.6	14.3	-	-	**72.4**	-	-
AP 24AX	35.0	1.8	53.5	12.8	-	-	**61.6**	-	-
CO18042RA	32.0	5.0	53.3	12.9	-	-	58.3	-	-
LCS Julep	32.5	2.5	53.6	13.6	59.3	-	54.3	-	-
21Nord-160	35.3	3.3	48.2	13.1	-	-	40.7	-	-
LCS Missile	31.5	1.5	45.9	14.7	-	-	39.4	-	-
LCS Jet	29.0	1.5	44.5	14.2	-	-	38.0	-	-
Trial Average#	32.7	3.1	52.9	13.5	59.9	49.0	53.5	52.1	54.3
LSD (0.05) †	1.8	-	1.3	0.6	5.9	3.9	6.2	-	-
C.V. %‡	3.8	-	1.8	3.4	7.1	5.7	8.7	-	-

* Lodging score: 1, perfectly standing; to 5, completely flat.
# Corrected to 13% moisture.
† 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.