

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

2024 South Dakota Winter Wheat Variety Trial Results Winner

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Cooperator: Jorgensen Land and Cattle Location: 43.5436079°, -99.9028659°
Soil Type: Millboro silty clay, 0-3% slopes

Previous crop: oats

Tillage: no-till Row spacing: 7.5"

Seeding Rate: 1.2 million PLS/acre

Fertilizer:

Starter: 10 gal/acre 10-34-0Other: 113 lbs of N/acre as UAN

Herbicide:

Burndown: not reportedPost: 1.5 pt/acre Bison

Fungicide:

Date seeded: 10/2/2023 **Date harvested:** 7/24/2024

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Table 1. Performance trial results for winter wheat varieties (average of 4 replications) conducted in 2024 at Winner, 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 Midland	34.8	2.3	61.9	12.3	92.3	50.4	80.5	65.4	74.4
SD Andes	32.8	2.5	62.8	12.5	95.2	40.5	85.7	63.1	73.8
Winner	35.3	2.8	61.3	12.9	95.5	44.5	80.4	62.5	73.5
Draper	35.0	3.5	60.5	13.1	88.6	42.2	80.3	61.2	70.3
WB4422	33.8	3.5	60.6	13.1	97.7	39.1	71.3	55.2	69.3
LCS Helix AX	37.5	2.8	60.8	12.5	91.2	40.8	73.9	57.3	68.6
CP7869	33.0	3.3	62.0	12.6	81.9	42.0	82.0	62.0	68.6
CP7017AX	33.0	3.3	59.5	12.1	94.2	40.4	71.0	55.7	68.5
MS Maverick	36.0	3.0	61.0	13.7	81.6	49.1	74.1	61.6	68.3
Byrd CL Plus	37.5	2.8	59.4	12.1	89.7	41.2	73.4	57.3	68.1
WB4309	36.8	1.8	60.7	13.0	87.5	37.5	79.0	58.2	68.0
CP7266AX	35.0	2.8	59.9	13.2	84.0	38.2	78.9	58.5	67.0
AP Bigfoot	35.5	4.0	59.8	12.1	89.7	37.6	68.9	53.2	65.4
AP Clair	34.5	3.0	61.1	11.7	92.1	34.5	67.9	51.2	64.8
LCS Chrome	35.5	3.0	59.8	13.9	81.1	43.1	69.8	56.4	64.7
Kivari AX	35.0	3.5	58.4	11.4	80.7	46.8	65.8	56.3	64.4
WB4510CLP	35.3	2.0	61.0	13.6	78.4	39.3	73.7	56.5	63.8
SD Pheasant	35.0	4.0	59.1	12.3	88.2	46.4	56.2	51.3	63.6
SY Wolverine	33.8	3.8	59.2	12.1	85.5	40.5	62.1	51.3	62.7
CP7909	34.8	3.8	60.1	12.2	82.2	38.2	66.4	52.3	62.3
Crescent AX	36.8	3.0	60.9	12.0	80.1	34.8	69.3	52.1	61.4
Ideal	34.5	4.0	60.1	12.3	83.4	45.7	53.1	49.4	60.7
Expedition	36.0	3.0	59.7	13.2	85.2	42.0	54.3	48.2	60.5
MS Sundown	39.8	3.3	60.8	12.3	_	39.6	81.8	60.7	_
SY Wolf	34.5	3.0	60.2	13.2	_	35.8	64.1	50.0	_
AP 24AX	36.8	2.0	60.7	12.0	_	_	83.8	_	_
LCS Warbird AX	34.8	3.0	61.4	13.1	_	_	80.4	_	_
LCS Julep	35.5	2.8	60.5	13.1	82.5	_	72.8	_	_
LCS Missile	30.8	1.3	58.9	13.1	-	-	62.9	-	-
LCS Jet	27.8	1.0	57.4	13.5	_	=	61.7	<u>-</u>	-
CO18042RA	33.8	3.8	56.0	12.6	_	=	60.5	_	-
21Nord-160	34.3	3.8	56.7	13.1	_	_	52.1	_	_
Trial Average#	34.9	3.0	59.9	12.7	86.2	41.4	69.1	56.3	66.7
LSD (0.05)†	2.2	0.7	1.2	0.6	8.2	7.9	7.6	_	-
C.V. %‡	4.5	16.4	1.5	3.4	6.8	13.5	7.9	_	-

^{*} 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.