



**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 Onida

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Location: 44.8818685°, -100.1434164°

Soil Type: Agar silt loam, 0-2% slopes

Previous crop: spring wheat

Tillage: no-till

Row spacing: 7.5"

Seeding Rate: 1.2 million PLS/acre

Fertilizer:

- Starter: 10 lbs/acre 10-34-0
- Other: 250 lbs/acre urea at Feekes 6

Herbicide:

- Burndown: not reported
- Post: 3.5 oz/acre of Nexicor with 16 oz/acre HUSKY FX at Feekes 5

Fungicide: 13.7 oz/acre Miravis Ace at Feekes 10.5.1

Date seeded: 9/14/2023

Date harvested: 7/25/2024



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Table 1. Performance trial results for winter wheat varieties (average of 4 replications) conducted in 2024 at Onida, 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)
WB4422	33.5	3.0	62.6	13.3	51.9	-	98.1	-	75.0
SD Pheasant	33.3	4.0	61.6	13.5	50.2	-	95.1	-	72.6
AP Clair	31.5	3.0	62.9	13.1	51.0	-	89.9	-	70.5
LCS Julep	32.5	3.3	62.2	13.7	54.7	-	84.7	-	69.7
SD Midland	33.5	1.8	62.2	13.2	50.5	-	87.5	-	69.0
SY Wolverine	31.3	3.3	61.7	13.0	54.0	-	81.5	-	67.7
Byrd CL Plus	33.3	3.5	61.6	13.0	47.8	-	86.6	-	67.2
CP7266AX	34.8	3.8	60.4	12.5	48.2	-	85.0	-	66.6
WB4309	34.0	2.8	61.2	13.9	52.1	-	80.9	-	66.5
LCS Helix AX	34.0	3.8	61.3	13.1	52.9	-	79.6	-	66.2
Kivari AX	32.0	4.0	60.9	12.2	50.0	-	79.0	-	64.5
AP Bigfoot	32.8	2.8	61.7	13.2	51.8	-	77.2	-	64.5
Draper	31.3	3.3	60.1	13.5	47.1	-	79.9	-	63.5
Crescent AX	33.3	4.5	61.0	13.1	50.6	-	75.3	-	63.0
CP7869	32.3	4.0	60.7	13.1	47.0	-	78.1	-	62.5
MS Maverick	31.8	4.3	61.8	13.6	48.5	-	76.4	-	62.5
SD Andes	31.8	1.5	63.3	14.1	48.8	-	75.9	-	62.3
LCS Chrome	32.5	3.3	61.4	13.8	45.7	-	78.1	-	61.9
CP7909	35.3	4.5	59.6	13.3	52.8	-	69.5	-	61.2
WB4510CLP	32.3	2.5	63.3	13.1	41.9	-	80.3	-	61.1
CP7017AX	32.5	4.3	59.9	13.3	53.2	-	66.3	-	59.7
Ideal	31.3	4.3	61.3	13.5	41.3	-	77.9	-	59.6
Expedition	35.3	3.3	61.4	13.2	45.4	-	72.9	-	59.1
Winner	32.0	3.5	61.4	13.0	33.8	-	83.8	-	58.8
AP 24AX	33.8	1.8	60.9	12.8	-	-	95.8	-	-
CO18042RA	33.0	4.0	60.6	12.6	-	-	94.1	-	-
LCS Missile	30.8	1.0	61.1	13.8	-	-	84.1	-	-
SY Wolf	31.0	1.3	62.2	13.8	-	-	79.9	-	-
LCS Warbird AX	32.3	4.0	61.7	13.0	-	-	79.1	-	-
LCS Jet	30.3	1.0	60.4	14.2	-	-	77.6	-	-
21Nord-160	31.3	2.0	61.4	13.6	-	-	76.2	-	-
MS Sundown	35.5	4.3	61.0	13.8	-	-	70.5	-	-
Trial Average #	32.5	3.1	61.3	13.3	48.9	-	81.6	-	65.0
LSD (0.05) †	2.0	-	1.1	0.9	4.9	-	17.5	-	-
C.V. %‡	4.5	-	1.3	4.8	7.3	-	15.3	-	-

* 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.

§Reported 3-year yields are actually an average of 2022 and 2024 as the location was not harvested in 2023.