



**SOUTH DAKOTA
STATE UNIVERSITY**

College of Agriculture, Food and Environmental Sciences |
SDSU Extension | South Dakota Agricultural Experiment Station

2025 South Dakota Winter Wheat Variety Trial Results - Brookings

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Location: 44.330794, -96.828044

Soil type: Barnes clay loams, 2-6% slopes

Previous crop: Spring Wheat

Tillage: No-till

Row spacing: 8"

Seeding rate: 1.2 million PLS/acre

Fertilizer:

- Starter: 90 lbs/acre 30-10-10
- Other: 50 lbs/acre of N as UAN in fall and 90 lbs/acre of N as UAN in spring applied as liquid broadcast

Herbicide:

- Burndown: 36 oz/acre Tomahawk + 27 oz/acre 2,4-D
- Post: 1pt Perfectmatch

Fungicide: 8 oz/acre Prosaro at flowering (Feekes 10.5.1)

Date seeded: 10/3/2024

Date harvested: 7/25/2025

Notes:

- This trial location is set up with a split-plot design. All varieties are tested without (Table 1) and with (Table 2) fungicide.



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Table 1. Performance trial results for winter wheat varieties (average of 4 replications) conducted in 2025 at Brookings, 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 (in)	Lodging* (1-5)	Test Wt (lbs)	Protein %	2023 (bu/a)	2024 (bu/a)	2025 (bu/a)	2-year (bu/a)	3-year (bu/a)
Winner	34	3	53.7	12.8	72.0	89.8	71.0	80.4	78.3
SDMidland	37	3	54.5	13.1	75.3	86.8	62.9	74.9	75.0
SDAndes	35	3	55.8	13.2	75.7	89.1	57.2	73.2	73.8
Draper	31	4	53.9	13.3	66.1	85.9	58.1	72.0	70.5
CP7266AX	35	4	51.6	13.0	67.9	88.8	45.5	67.2	67.4
MSMaverick	35	4	53.4	14.1	74.3	75.3	53.0	64.1	66.7
CP7869	31	5	51.6	13.5	65.0	86.9	47.2	67.0	66.5
APBigfoot	32	3	52.2	13.0	67.6	67.2	64.9	66.1	66.5
APClair	31	4	51.8	13.7	71.0	69.5	57.9	63.7	65.5
WB4422	33	3	53.4	13.4	75.7	62.6	60.6	61.6	65.1
Ideal	35	4	55.3	13.0	69.4	63.9	62.8	63.3	64.8
LCSHelixAX	34	4	51.5	13.4	69.1	73.8	52.8	63.3	64.7
CrescentAX	34	4	52.3	13.0	69.8	72.7	51.0	61.8	63.8
SDPheasant	34	4	55.4	13.2	80.1	53.8	61.4	57.6	63.2
CP7017AX	31	4	51.8	13.0	64.6	67.6	56.8	62.2	62.8
CP7909	31	5	53.5	13.1	73.1	61.3	49.7	55.5	59.9
Expedition	34	4	54.1	13.4	64.9	52.9	53.3	53.1	56.1
KivariAX	34	5	49.6	12.7	67.7	57.5	34.7	46.1	51.5
AP24AX	35	3	49.8	13.1	-	87.8	50.9	69.3	-
LCSJulep	33	4	55.4	13.8	-	67.8	61.9	64.9	-
LCSWarbirdAX	33	5	53.6	13.4	-	90.7	51.4	71.1	-
AACVortex	35	2	55.0	14.0	-	-	59.1	-	-
APSunbird	32	4	52.5	13.6	-	-	59.1	-	-
CO19D087R	29	5	50.2	13.2	-	-	50.1	-	-
CP7050AX	31	4	52.1	14.3	-	-	49.8	-	-
CP7319AX	31	5	53.4	14.1	-	-	58.4	-	-
CP7462	29	4	47.7	13.8	-	-	51.9	-	-
LCSAries	32	5	52.4	13.2	-	-	59.7	-	-
LCSMojo	35	3	52.8	13.4	-	-	58.1	-	-
LCSRadar	32	4	53.6	13.9	-	-	58.4	-	-
LCSSteelAX	35	3	54.6	12.6	-	-	60.8	-	-
WB4540	33	3	52.1	13.1	-	-	61.3	-	-
Trial Average#	33.5	3.4	53.1	13.4	72.0	71.0	57.7	64.7	65.5
LSD (0.05)†	2.2	0.7	1.4	0.7	-	-	5.2	-	-
C.V. %‡	4.8	15.3	1.9	3.9	-	-	6.4	-	-

* 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 (\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.



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Table 2. 2025 winter wheat variety performance trial results with fungicide (average of 4 replications) at Brookings, 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 (in)	Lodging* (1-5)	Test Wt (lbs)	Protein %	2023 (bu/a)	2024 (bu/a)	2025 (bu/a)	2-year (bu/a)	3-year (bu/a)
Winner	not reported	4	56.0	13.2	86.5	93.3	80.1	89.9	86.6
SDMidland		3	56.3	13.5	74.4	96.1	74.6	85.3	81.7
SDAndes		3	56.8	13.1	83.3	91.9	65.8	87.6	80.3
Draper		4	54.9	13.9	73.4	93.1	72.9	83.2	79.8
WB4422	-	3	56.4	14.0	81.6	76.5	72.0	79.0	76.7
SDPheasant	-	4	55.8	13.8	84.6	70.7	69.3	77.7	74.9
Ideal	-	4	56.0	13.3	71.5	77.5	71.3	74.5	73.4
APClair	-	3	55.1	13.5	76.0	76.6	65.4	76.3	72.7
CP7869	-	5	52.6	13.8	73.7	89.9	54.3	81.8	72.6
CP7017AX	-	4	54.5	12.4	74.5	78.7	63.9	76.6	72.4
CP7266AX	-	4	53.7	12.7	78.8	88.4	49.4	83.6	72.2
LCSHelixAX	-	3	55.7	12.6	68.1	85.0	61.0	76.5	71.4
APBigfoot	-	3	54.7	13.1	64.3	74.8	74.5	69.6	71.2
MSMaverick	-	4	55.7	14.0	74.8	74.9	63.3	74.9	71.0
CrescentAX	-	4	54.5	13.0	71.3	79.2	60.0	75.3	70.2
CP7909	-	5	54.0	13.2	79.1	73.6	57.8	76.4	70.2
KivariAX	-	5	50.0	13.1	79.8	66.2	51.5	73.0	65.8
Expedition	-	4	54.8	13.8	66.8	63.8	62.4	65.3	64.4
AP24AX	-	3	53.8	13.0	-	92.7	67.7	80.2	-
LCSJulep	-	4	56.8	14.1	-	82.4	76.2	79.3	-
LCSWarbirdAX	-	4	54.5	13.6	-	92.7	60.1	76.4	-
AACVortex	-	2	55.5	14.0	-	-	61.5	-	-
APSunbird	-	4	53.9	13.3	-	-	64.6	-	-
CO19D087R	-	5	51.9	13.1	-	-	60.4	-	-
CP7050AX	-	4	53.9	13.7	-	-	58.2	-	-
CP7319AX	-	4	55.4	13.9	-	-	65.6	-	-
CP7462	-	4	50.3	13.8	-	-	61.0	-	-
LCSAries	-	4	54.9	12.9	-	-	62.6	-	-
LCSMojo	-	4	55.1	13.3	-	-	74.1	-	-
LCSRadar	-	4	55.5	13.9	-	-	74.3	-	-
LCSSteelAX	-	3	55.9	12.7	-	-	71.9	-	-
WB4540	-	2	54.3	13.6	-	-	73.0	-	-
Trial Average#	-	3.4	55.0	13.4	77.0	79.8	67.4	78.2	73.8
LSD (0.05)†	-	0.7	1.4	0.7	-	-	7.0	-	-
C.V. %‡	-	14.8	1.8	3.9	-	-	7.4	-	-

* 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 (\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.