

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

2022 South Dakota Winter Wheat Variety Trial Results Winner

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Cooperator: Jorgensen Land and Cattle **Location:** 43.544242°, -99.997412°

Soil Type: Reliance silty clay loam, 3-6% slopes

Previous crop: oats
Tillage: no-till
Row spacing: 8"

Seeding Rate: 1.2 million PLS/acre

Fertilizer:

- Starter: 10 gal/acre 10-34-0

- Other: 35 gal/acre 28-0-0 spring topdress

Herbicide:

- Burndown: not reported

- Post: 1.5 pt/acre Brox 2EC

Fungicide: none

Date seeded: 9/25/2021

Date harvested: 7/15/2022



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Table 1. 2022 winter wheat variety performance trial results (average of 4 replications) at Winner, SD. Entries are sorted by overall 3-year yield. Varieties yielding in the top 1/3 of the trial are bolded and shaded light blue.

Variety	Height	Lodging*	Test Wt	Protein	2020	2021	2022	2-year	3-year
	(in)	(1-5)	(lbs)	(%)#	(bu/a)#	(bu/a)	(bu/a)	(bu/a)	(bu/a)
Winner	35	1.7	62.5	12.9	94.6	80.9	95.5	88.2	90.4
SD Andes	37	1.0	63.7	12.4	89.9	78.1	95.2	86.6	87.7
WB4309	33	1.5	61.7	12.8	98.5	76.6	87.5	82.0	87.5
Draper	36	2.0	61.3	12.9	90.8	77.0	88.6	82.8	85.5
Redfield	36	1.5	62.6	13.1	89.5	76.4	87.8	82.1	84.6
SY Wolverine	32	1.2	63.0	12.8	88.7	77.8	85.5	81.7	84.0
SD Midland	38	1.0	63.0	12.8	87.4	71.0	92.3	81.7	83.6
Ideal	37	2.3	62.6	13.0	88.8	77.4	83.4	80.4	83.2
CP7017AX	33	3.0	61.6	12.2	85.3	69.0	94.2	81.6	82.8
LCS Helix AX	36	2.0	62.9	12.5	86.2	70.8	91.2	81.0	82.7
CP7909	32	1.8	62.1	13.2	90.2	66.1	82.2	74.2	79.5
AP 18AX	35	2.0	60.9	12.5	84.1	70.9	80.3	75.6	78.4
Expedition	37	2.2	62.7	13.7	83.4	65.3	85.2	75.3	78.0
Crescent AX	36	2.8	61.9	13.2	86.3	67.5	80.1	73.8	78.0
CP7050AX	35	1.0	62.7	14.2	78.6	51.0	82.4	66.7	70.6
AP Clair	34	1.0	62.6	13.3	-	82.0	92.1	87.0	-
LCS Steel AX	38	1.5	61.1	11.6	_	78.3	88.4	83.4	-
AP Bigfoot	34	1.0	62.0	13.0	_	74.2	89.7	81.9	-
MS Iceman	33	1.0	63.2	13.7	-	75.0	81.7	78.3	-
LCS Julep	35	1.0	62.9	13.8	_	71.3	82.5	76.9	-
CP7869	32	1.5	62.1	12.6	_	70.3	81.9	76.1	-
LCS Chrome	37	1.5	61.1	14.2	-	66.9	81.1	74.0	-
LCS Photon AX	35	1.2	62.4	14.2	_	60.9	82.3	71.6	-
WB4422	37	1.0	64.2	13.0	_	_	97.7	_	-
Byrd CL Plus	36	1.8	61.2	11.7	-	-	89.7	-	-
CPX72166AX	35	2.2	61.7	12.0	-	_	84.0	-	-
MS Maverick	35	3.0	61.7	13.1	-	_	81.6	_	-
Kivari AX	35	3.5	61.2	11.8	-	-	80.7	-	-
WB4510CLP	36	1.5	62.8	12.9	_	_	78.4	_	-
Viking 211	34	3.3	61.2	13.4	-	_	77.8	-	-
Trial Average#	35	1.8	62.2	13.0	87.1	73.7	86.2	79.3	82.4
LSD (0.05)†	_	_	0.7	0.7	7.0	8.7	8.3	_	-
C.V. %‡	-	_	0.8	3.8	5.8	8.4	6.9	_	-

^{*} 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.