

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

2022 South Dakota Winter Wheat Variety Trial Results Hayes

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Location: 44.346420°, -101.071454° **Soil Type:** Promise clay, 0-3% 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: 29 gal/acre UAN spring-applied

Herbicide:

- Burndown: not reported

- Post: 32 oz/acre Brox 2EC

Fungicide: none

Date seeded: 9/16/2021

Date harvested: 7/29/2022

Notes: Very dry weather throughout the growing season. Stands were reduced in some

plots by dry conditions in the fall of 2021.



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Table 1. 2022 winter wheat variety performance trial results (average of 4 replications) at Hayes, 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	24	1.0	59.0	15.3	114.7	64.7	40.4	52.5	73.2
CP7017AX	23	1.0	57.7	14.9	110.1	62.2	38.5	50.3	70.3
Draper	23	1.0	58.2	15.7	106.0	63.2	40.9	52.1	70.1
SY Wolverine	24	1.0	56.6	15.6	103.0	71.0	31.5	51.2	68.5
SD Midland	26	1.0	58.3	15.6	104.4	63.9	35.8	49.9	68.0
CP7909	22	1.0	58.2	15.4	107.5	64.0	30.9	47.5	67.5
AP 18AX	24	1.0	57.1	15.2	106.8	61.4	32.8	47.1	67.0
LCS Helix AX	24	1.0	58.9	14.9	106.7	61.4	30.8	46.1	66.3
Ideal	25	1.0	58.6	15.5	103.5	61.2	34.2	47.7	66.3
WB4309	24	1.0	57.0	15.4	97.8	62.7	37.9	50.3	66.1
CP7050AX	24	1.0	59.6	14.9	101.5	63.0	33.4	48.2	66.0
Redfield	25	1.0	57.9	16.2	102.1	54.2	37.0	45.6	64.4
SD Andes	24	1.0	59.7	15.6	95.3	59.6	33.3	46.4	62.7
Crescent AX	26	1.0	58.4	15.0	109.0	54.8	24.3	39.6	62.7
Expedition	24	1.0	58.8	15.9	97.7	56.7	32.5	44.6	62.3
AP Clair	23	1.0	58.4	15.2	-	67.8	34.5	51.2	-
CP7869	23	1.0	58.0	15.4	_	62.9	37.4	50.1	_
AP Bigfoot	23	1.0	57.8	15.5	_	64.1	32.3	48.2	_
LCS Chrome	26	1.0	57.3	15.8	-	63.4	33.0	48.2	-
LCS Steel AX	26	1.0	56.9	15.1	_	63.6	32.1	47.8	_
MS Iceman	24	1.0	58.9	15.5	-	63.3	29.2	46.3	_
LCS Julep	24	1.0	59.9	15.7	-	62.9	27.6	45.2	-
LCS Photon AX	23	1.0	59.7	15.6	_	60.0	26.5	43.3	_
Viking 211	25	1.0	57.2	15.9	_	_	36.2	_	_
CPX72166AX	24	1.0	59.3	14.7	-	-	35.4	-	-
WB4422	25	1.0	58.8	15.9	_	_	35.4	_	_
Byrd CL Plus	26	1.0	57.0	15.3	-	_	32.5	-	_
Kivari AX	24	1.0	58.6	14.0	-	-	31.7	-	-
MS Maverick	27	1.0	57.0	15.5	_	_	31.1	_	_
WB4510CLP	26	1.0	59.0	16.0	_	_	27.0	_	_
Trial Average#	24	1	58.2	15.5	87.1	60.8	33.7	47.8	65.8
LSD (0.05)†	_	_	-	_	7.0	4.8	5.8	_	_
C.V. %‡	-	-	-	-	5.8	5.6	12.3	-	-

^{*} 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.