South Dakota State University
College of Agriculture, Food and Environmental Sciences

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

2022 South Dakota Winter Wheat Variety Trial Results South Shore

Jonathan Kleinjan | SDSU Extension Agronomist
Kevin Kirby | Agricultural Research Manager
Shawn Hawks | Agricultural Research Manager

Cooperator:	SDSU Northeast Research Farm, Al Heuer, Manager
Location:	45.105888°, -97.097064°
Soil Type:	Kranzburg-Brookings silty clay loams, 0-2% slopes
Previous crop:	oats
Tillage:	no-till
Row spacing:	8”
Seeding Rate:	1.2 million PLS/acre
Fertilizer:	
- Starter:	90 lbs/acre 30-10-10
- Other:	200-0-50 broadcast early spring
Herbicide:	
- Burndown:	32 oz Roundup Powermax
- Post:	.5 pt Parity + 1.5 pt WildCard Xtra
Fungicide:	none
Date seeded:	9/17/2021
Date harvested:	8/2/2022

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S-0002-01

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Table 1. 2022 winter wheat variety performance trial results (average of 4 replications) at South Shore, 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 (in)	Lodging* (1-5)	Test Wt (lbs)	Protein (%)#	2020 (bu/a)#	2021 (bu/a)	2022 (bu/a)	2-year (bu/a)	3-year (bu/a)
SD Andes	29	1.5	59.1	13.1	**81.1**	**63.0**	**70.8**	**66.9**	**71.6**
SD Midland	31	1.3	58.5	13.9	**74.2**	**64.3**	**66.6**	**65.5**	**68.4**
Ideal	29	1.0	58.9	14.1	**73.7**	**61.6**	**67.7**	**64.6**	**67.7**
Redfield	28	1.8	59.3	14.8	71.5	59.2	**68.5**	**63.8**	**66.4**
Winner	30	1.0	58.8	15.5	**75.1**	58.6	**63.5**	**61.0**	**65.7**
LCS Helix AX	27	1.0	59.9	13.7	73.5	55.7	**61.7**	58.7	63.6
CP7017AX	26	1.3	58.9	13.2	71.6	**60.0**	58.8	**59.4**	63.5
Draper	29	1.0	57.8	14.7	73.4	55.4	60.3	57.8	63.0
WB4309	26	1.0	55.3	15.2	71.1	**64.6**	52.5	58.5	62.7
SY Wolverine	27	1.3	58.2	14.8	**74.5**	**63.5**	49.7	56.6	62.6
Crescent AX	28	1.3	59.0	14.5	69.6	51.7	56.7	54.2	59.3
AP 18AX	26	1.0	58.4	14.8	67.3	53.8	55.5	54.7	58.9
Expedition	29	1.3	59.9	15.5	57.8	47.5	58.8	53.2	54.7
CP7909	26	1.3	58.7	14.3	67.2	50.7	44.8	47.7	54.2
CP7050AX	28	1.0	58.3	14.8	58.9	46.0	45.6	45.8	50.2
LCS Julep	29	1.0	60.0	14.7	-	**59.7**	59.3	**59.5**	-
CP7869	29	1.3	59.0	13.3	-	56.2	**61.3**	**58.8**	-
LCS Steel AX	30	1.0	57.9	13.8	-	**60.1**	56.9	58.5	-
AP Bigfoot	28	1.0	59.3	13.6	-	53.8	**62.7**	58.3	-
LCS Chrome	29	1.3	58.7	15.7	-	54.5	59.2	56.8	-
AP Clair	28	1.0	57.6	14.3	-	**59.7**	50.1	54.9	-
MS Iceman	28	1.0	57.4	16.6	-	51.8	49.6	50.7	-
LCS Photon AX	30	1.0	59.8	15.9	-	40.8	56.0	48.4	-
MS Maverick	27	1.0	59.6	14.6	-	-	**64.3**	-	-
Viking 211	27	1.0	59.6	14.3	-	-	**63.9**	-	-
WB4510CLP	30	1.0	59.2	14.3	-	-	58.8	-	-
Byrd CL Plus	29	1.0	57.2	13.7	-	-	55.8	-	-
WB4422	29	1.0	58.0	14.6	-	-	53.9	-	-
Kivari AX	25	1.5	57.4	14.0	-	-	51.3	-	-
CPX72166AX	26	1.0	57.9	15.6	-	-	49.0	-	-
Trial Average#	28	1.1	58.7	14.5	70.9	57.7	60.3	57.1	62.2
LSD (0.05)†	-	-	-	-	4.5	4.3	5.9	-	-
C.V. %‡	-	-	-	-	4.5	5.4	7.0	-	-

* Lodging score: 1, perfectly standing; to 5, completely flat.
# 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.

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