



2022 South Dakota Winter Wheat Variety Trial Results Selby

Jonathan Kleinjan | SDSU Extension Agronomist
Sunish Sehgal | SDSU Winter Wheat Breeder
Kevin Kirby | Agricultural Research Manager
Shawn Hawks | Agricultural Research Manager
Cody Hall | Agricultural Research Assistant

Cooperator: Mark Stiegelmeier
Location: 45.421499°, -100.076139°
Soil Type: Highmore silt loam, cool, 2-6% slopes
Previous crop: flax
Tillage: no-till
Row spacing: 8"
Seeding Rate: 1.2 million PLS/acre
Fertilizer:
- Starter: 10 gal/acre 10-34-0
- Other: 250 lb/acre urea + 50 lb/acre AMS broadcast
Herbicide:
- Burndown: not reported
- Post: 24 oz/acre Hat Trick
Fungicide: 3 oz/acre Headline (applied with herbicide)
Date seeded: 9/15/2021
Date harvested: 7/26/2022
Notes: Results were not published in 2021 due to high variability. The three-year average is actually an average of yields from 2020 and 2022.



2022 South Dakota Winter Wheat Variety Trial Results Selby

**SOUTH DAKOTA STATE
UNIVERSITY EXTENSION**

Table 1. 2022 winter wheat variety performance trial results (average of 4 replications) at Selby, 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	35	1.0	61.5	14.2	71.4	not published	106.4	not available	88.9
Ideal	37	1.0	61.8	14.1	73.7	published	99.6	available	86.7
Crescent AX	38	1.5	63.1	13.3	68.8	-	100.9	-	84.9
CP7017AX	34	1.3	62.7	13.7	73.4	-	92.8	-	83.1
CP7909	35	1.8	63.4	12.7	64.7	-	99.4	-	82.1
SY Wolverine	34	1.0	63.8	14.1	72.8	-	90.3	-	81.5
Draper	36	1.0	61.2	14.4	71.2	-	90.8	-	81.0
SD Midland	36	1.0	61.4	15.3	74.5	-	85.7	-	80.1
Redfield	35	1.0	62.6	14.9	68.3	-	90.1	-	79.2
AP 18AX	36	1.0	62.9	13.5	74.3	-	83.1	-	78.7
WB4309	37	1.0	63.0	14.4	67.0	-	88.9	-	78.0
LCS Helix AX	34	1.2	62.1	14.0	64.6	-	87.7	-	76.1
Winner	37	1.0	62.2	15.7	68.4	-	81.4	-	74.9
Expedition	38	1.3	62.1	14.4	63.3	-	86.0	-	74.6
CP7050AX	36	1.2	61.7	14.9	53.5	-	74.3	-	63.9
WB4422	37	1.0	62.4	14.3	-	-	97.9	-	-
LCS Steel AX	35	1.0	60.0	13.6	-	-	95.2	-	-
MS Maverick	36	1.3	62.9	14.3	-	-	93.8	-	-
Kivari AX	36	1.8	61.9	12.6	-	-	92.4	-	-
AP Bigfoot	35	1.0	62.1	13.8	-	-	91.8	-	-
Byrd CL Plus	36	1.2	62.1	12.7	-	-	91.1	-	-
AP Clair	34	1.0	63.7	14.2	-	-	89.1	-	-
LCS Chrome	36	1.3	61.3	15.3	-	-	88.4	-	-
WB4510CLP	35	1.0	63.5	13.5	-	-	86.4	-	-
LCS Julep	35	1.0	63.4	14.6	-	-	85.7	-	-
Viking 211	36	1.5	61.9	14.9	-	-	83.6	-	-
CP7869	36	1.7	62.8	14.5	-	-	83.0	-	-
MS Iceman	33	1.0	62.7	15.4	-	-	80.3	-	-
CPX72166AX	36	1.0	62.3	13.6	-	-	79.9	-	-
LCS Photon AX	38	1.0	61.8	15.5	-	-	74.9	-	-
Trial Average#	36	1.2	62.1	14.3	68.5	-	89.2	-	79.6
LSD (0.05)†	-	-	-	-	8.9	-	8.9	-	-
C.V. %‡	-	-	-	-	9.2	-	7.2	-	-

* 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.

§ Data was not published in 2021 due to high variability. The 3-year average is actually an average of 2020 & 2022.

† 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.