



# 2022 South Dakota Winter Wheat Variety Trial Results Onida

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**Cooperator:** Yackley Ranches  
**Location:** 44.677861°, -100.323837°  
**Soil Type:** Agar silt loam, 0-2% slopes  
**Previous crop:** spring wheat  
**Tillage:** no-till  
**Row spacing:** 8"  
**Seeding Rate:** 1.2 million PLS/acre  
**Fertilizer:**  
- Starter: 10 gal/acre 10-34-0  
- Other: 25 gallons 26-0-0-2.8S liquid topdress on 4/9/2022  
**Herbicide:**  
- Burndown: not reported  
- Post: 16 oz/acre PerfectMatch  
**Fungicide:** none  
**Date seeded:** 9/16/2021  
**Date harvested:** 7/21/2022  
**Notes:** Yields were affected by heat during flowering and grain fill.



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Table 1. 2022 winter wheat variety performance trial results (average of 4 replications) at Onida, 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)
CP7017AX	29	2.7	57.3	13.7	<b>110.9</b>	<b>62.3</b>	<b>53.2</b>	<b>57.7</b>	<b>75.5</b>
CP7909	30	3.3	56.7	14.0	<b>104.5</b>	<b>62.5</b>	<b>52.8</b>	<b>57.7</b>	<b>73.3</b>
LCS Helix AX	30	1.5	60.1	13.8	<b>108.8</b>	54.2	<b>52.9</b>	53.5	<b>71.9</b>
WB4309	31	2.2	56.1	13.9	99.5	<b>59.9</b>	<b>52.1</b>	<b>56.0</b>	<b>70.5</b>
CP7050AX	31	1.0	60.6	15.1	103.7	55.2	49.8	52.5	<b>69.6</b>
SY Wolverine	27	1.0	58.6	14.0	89.3	<b>65.1</b>	<b>54.0</b>	<b>59.6</b>	69.5
SD Andes	27	1.0	61.3	14.5	96.1	<b>62.6</b>	48.8	<b>55.7</b>	69.2
SD Midland	30	1.0	59.9	14.6	100.1	56.9	50.5	53.7	69.2
Draper	30	1.3	57.6	15.0	100.1	<b>60.0</b>	47.1	53.6	69.1
Crescent AX	31	3.2	58.2	14.1	<b>104.9</b>	51.7	50.6	51.2	69.1
AP 18AX	29	1.2	58.1	14.2	96.3	56.7	50.6	53.6	67.9
Redfield	29	1.0	59.5	14.5	98.1	50.5	<b>53.2</b>	51.9	67.3
Ideal	28	1.0	60.3	15.6	98.3	<b>61.6</b>	41.3	51.5	67.1
Winner	29	1.0	59.7	15.9	<b>106.6</b>	57.0	33.8	45.4	65.8
Expedition	28	2.8	59.0	14.9	92.2	53.3	45.4	49.3	63.6
LCS Steel AX	30	1.0	60.9	13.6	-	59.6	<b>56.7</b>	<b>58.1</b>	-
LCS Julep	28	1.3	60.6	14.7	-	59.6	<b>54.7</b>	<b>57.2</b>	-
AP Bigfoot	28	1.0	58.1	14.5	-	<b>59.7</b>	51.8	<b>55.8</b>	-
MS Iceman	29	1.0	59.5	14.5	-	57.3	<b>52.0</b>	54.7	-
AP Clair	29	2.2	58.4	14.4	-	55.8	51.0	53.4	-
LCS Photon AX	30	1.8	60.9	15.4	-	54.7	47.2	50.9	-
LCS Chrome	31	1.3	56.3	15.3	-	54.8	45.7	50.2	-
CP7869	27	1.0	59.9	14.8	-	50.1	47.0	48.5	-
WB4422	26	1.0	60.1	14.9	-	-	<b>51.9</b>	-	-
Viking 211	29	2.7	59.0	13.4	-	-	51.7	-	-
Kivari AX	29	3.0	57.1	12.8	-	-	50.0	-	-
MS Maverick	29	2.7	58.5	14.0	-	-	48.5	-	-
CPX72166AX	30	3.2	58.3	13.7	-	-	48.2	-	-
Byrd CL Plus	28	2.7	56.3	14.4	-	-	47.8	-	-
WB4510CLP	27	1.3	60.2	14.7	-	-	41.9	-	-
<b>Trial Average#</b>	29	1.7	59.1	14.5	98.1	57.4	48.7	53.5	69.2
<b>LSD (0.05)†</b>	-	-	-	-	5.6	6	4.9	-	-
<b>C.V. %‡</b>	-	-	-	-	4.1	7.5	7.3	-	-

\* 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.