



UNIVERSITY of NEBRASKA
LINCOLN

Cheyenne County Rainfed 2023 Winter Wheat Variety Trial

Name	Company	Yield (bu/ac) ¹	Test Weight (lb/bu)	Protein (%) ²	Plant Height (in)	Seed Weight (1000 seeds/lb)	Sawfly Damage Score ³
WB4595	WestBred	76.5	59.3	11.5	31.1	17.4	6.1
Kivari AX	PlainsGold	74.0	56.9	10.7	30.2	16.7	5.0
NE17544	UNL-Experimental	72.9	58.2	12.5	31.7	15.3	5.5
LCS Steel AX	Limagrain	72.5	57.1	11.6	31.6	18.3	4.8
MS Maverick	Meridian Seeds	72.4	58.8	13.1	30.4	14.3	6.5
WB4483	WestBred	72.0	55.4	12.4	30.5	20.2	5.3
ARMOR EXP55	ARMOR	69.7	58.4	12.4	27.4	13.7	6.0
NHH17612	UNL-Experimental	69.2	58.6	12.9	30.0	17.4	5.0
Whistler	PlainsGold	69.1	57.4	12.9	31.9	17.4	6.0
NE16562	UNL-Experimental	68.9	56.8	13.4	29.0	18.1	4.1
NE19619	UNL-Experimental	68.2	56.5	13.4	32.7	14.9	6.1
WB4510CLP	WestBred	68.1	59.5	12.1	31.3	16.4	5.5
Wesley	Husker Genetics	67.9	57.0	13.7	28.8	14.7	4.0
AAC Goldrush	North Dakota Crop Improvement	66.8	58.6	13.7	32.2	17.4	5.8
MS Sundown	Meridian Seeds	65.9	58.3	12.6	29.8	17.3	5.9
NW15443	UNL-Experimental	65.4	56.5	13.0	31.6	15.1	6.0
WB4733CLP	WestBred	65.3	56.5	12.8	29.1	17.2	4.5
ARMOR EXP65AX	ARMOR	65.2	56.4	12.5	29.4	17.6	4.9
Robidoux	Husker Genetics	65.1	55.4	12.2	30.9	17.2	6.0
NHH19668	UNL-Experimental	64.8	57.8	12.9	28.7	17.8	6.3
Amplify SF	PlainsGold	64.7	57.6	12.3	29.7	16.4	4.7
Freeman	Husker Genetics	64.6	54.9	12.6	29.5	17.3	5.5
Fortify SF	PlainsGold	64.3	56.2	11.1	29.8	17.8	4.6

¹ Yield values corrected to 12% moisture. Bolded values indicate highest LSD grouping.

² Protein corrected to 14% moisture, the correction factor used in analytical standards.

³ Sawfly damage rated where 1 indicates little to no cutting of stems/lodging while 9 indicates a plot that is completely cut/lodged.

Settler CL	NuPride Genetics	64.3	58.5	12.9	29.9	14.4	5.5
WB4418	WestBred	64.1	56.1	12.2	26.0	19.0	4.8
WB4422	WestBred	64.1	58.7	13.3	28.7	17.7	6.0
SY Legend CL2	AgriPro	63.7	57.2	12.7	28.1	17.5	5.6
Steamboat	Crop Research Foundation of WY, Inc.	62.9	57.0	11.7	31.2	16.4	5.3
NE17441	UNL-Experimental	62.2	58.0	13.5	30.3	15.5	5.7
AP Bigfoot	AgriPro	62.1	57.1	13.3	28.9	18.6	5.7
CP7017AX	CROPLAN	61.4	58.9	11.6	27.0	16.6	5.7
CP7266AX	CROPLAN	61.3	57.1	12.8	29.3	18.0	5.2
LCS Julep	Limagrain	61.2	57.9	13.6	27.8	16.6	5.0
WB4792	WestBred	61.2	57.9	12.6	28.4	17.6	5.2
Canvas	PlainsGold	61.1	57.5	12.7	29.1	18.3	6.0
LCS Valiant	Limagrain	60.8	55.3	13.7	28.1	17.4	6.0
Langin	PlainsGold	60.3	54.6	12.0	27.9	18.1	5.7
SY Wolverine	AgriPro	59.8	56.5	13.9	27.7	16.4	4.8
NE18455	UNL-Experimental	59.6	56.3	12.7	28.5	20.2	6.0
Crescent AX	PlainsGold	59.6	58.0	12.8	29.3	15.1	5.6
NHH17450	UNL-Experimental	58.6	57.5	12.4	30.0	17.7	6.6
Turkey	Check	57.7	57.1	13.8	39.1	16.1	7.0
Ruth	Husker Genetics	57.5	56.6	13.0	29.0	18.3	6.0
AP Solid	AgriPro	56.5	59.0	13.2	26.6	18.0	5.1
Pronghorn	Husker Genetics	56.3	58.9	13.6	33.9	15.3	6.5
AP 18AX	AgriPro	53.8	55.3	13.0	28.8	16.8	4.5
CP7050AX	CROPLAN	51.0	57.1	14.0	27.3	19.5	4.9
LCS Atomic AX	Limagrain	49.3	55.5	13.1	27.4	18.1	5.2
Scout 66	Check	47.9	55.6	14.3	37.8	17.3	7.0

	Standard Error	5.4	0.9	0.5	1.3	1.4	0.5
	LSD⁴	9.0	1.5	0.9	2.2	2.4	0.8
	Mean⁵	63.2	57.1	12.8	29.8	17.2	5.5
	CV⁶	8.6	1.6	4.0	4.4	8.4	NA
	Reps	4	4	2	4	2	4

SITE INFORMATION

Collaborator: Jake Hansen, High Plains Ag Lab, Sidney, NE
 Planting Date: September 20, 2022
 Seeding Rate: 900,000 seeds/acre
 Harvest Date: July 31, 2023
 Fertility: 30 lb/a 32-0-0 streamed in August; 30 lb/a P as 40 Rock in-furrow at planting; 10 lb N/a with 2.4-D in April
 Herbicide/Fungicides: 32 oz RoundUp, 8 oz 2,4-D LV6 and 1% Class Act preplant; 2 pt Prowl H2O and 6 oz 2,4-D LV6 in early May
 Soil Type: Alliance loam
 GPS: 41.235923, -103.002828
 Planting Info: Drilled 1-1.25" into no-till fallowed corn stubble with double disk no-till drill on 10" centers
 Notes on Trial: Dusted into fairly dry soil in fall, decent fall stand and winter survival. Tillered well in spring and had rains during pollination and grain filling, helping to increase yields. Late season rains decreased test weight. Scab (FHB) observed in trial as well as in the area along with some stem rust. Leaf rust pressure moderately low and very little WSMV observed. Surrounding field was planted with Ruth and yielded approximately 60 bu/a.

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⁴ For differences between varieties that are equal to or greater than the LSD value, the chance that the difference is significant is 90%.

⁵ Mean performance of all entries in the trial.

⁶ Coefficient of Variation (CV) indicates the quality of a trial, and lower than 15 indicates a high quality trial. For CV>15, there was higher than expected variability in the field or the data and the results should be used with caution.