UNIVERSITY of NEBRASKA
LINCOLN

Cheyenne County Rainfed
2025 Winter Wheat Variety Trial

Name	Company	Yield (bu/ac)[1]	Test Weight (lb/bu)	Protein (%)[2]	Plant Height (in)	Grain Weight (1000 seeds/lb)
Whistler	PlainsGold	**73.3**	**59.2**	10.6	32.5	15.72
CO21SF191RA	CSU-Experimental	**70.4**	58.0	11.9	32.1	17.59
CO21SF263RA	CSU-Experimental	65.3	56.6	11.4	30.7	15.74
Canvas	PlainsGold	62.6	**60.3**	11.7	29.9	16.27
Telluride	PlainsGold	61.9	**59.6**	11.5	29.5	13.94
AP Solid	AgriPro	61.1	**59.4**	11.9	28.5	15.79
CO19D087R	CSU-Experimental	61.1	58.1	11.5	27.2	15.74
MS Maverick	Meridian Seeds	59.9	**59.3**	11.7	30.7	14.12
WB4347	WestBred	59.8	**59.8**	12.0	30.0	13.91
LCS Steel AX	Limagrain Cereal Seeds	59.5	58.5	10.9	31.9	17.27
NE19455	UNL-Experimental	59.4	56.1	**12.7**	31.2	15.59
XH4033	WestBred-Experimental	59.1	57.6	11.0	28.7	17.10
AP24 AX	AgriPro	59.0	57.5	10.5	30.6	13.84
Sheridan	PlainsGold	58.8	**59.3**	12.0	29.2	16.79
FVC Valley	FVC	58.0	57.8	11.2	30.2	17.68
Crescent AX	PlainsGold	57.8	58.4	11.8	31.6	13.46
NE22284	UNL-Experimental	56.8	**59.7**	11.9	33.4	13.75
Amplify SF	PlainsGold	56.4	58.6	11.7	22.0	13.72
NHH19651	UNL-Experimental	56.3	58.9	11.8	31.9	15.58
NSF23324	UNL-Experimental	55.9	58.3	11.8	31.9	15.02
NE20620	UNL-Experimental	55.9	58.6	11.8	29.9	16.00
AP Sunbird	AgriPro	55.7	58.2	11.6	27.9	15.11
NE22252	UNL-Experimental	55.6	**59.6**	11.7	31.4	13.54
CO200037R	CSU-Experimental	55.1	**59.3**	11.3	29.2	17.07
NE21579	UNL-Experimental	55.0	58.8	**13.1**	29.8	15.82
WB4444	WestBred	54.8	52.2	**13.4**	29.0	17.40
NE22212	UNL-Experimental	53.4	57.8	11.9	29.0	15.78
WB4733CLP	WestBred	52.9	56.7	**12.8**	28.4	16.40
Settler CL	Nu Horizon Genetics	52.6	58.4	10.2	32.0	19.88
WB4510CLP	WestBred	52.3	**61.0**	11.8	31.5	14.85
CP7869	Croplan	52.1	58.4	12.1	29.3	12.34
Robidoux	Nu Horizon Genetics	51.3	**59.2**	11.8	31.6	15.48
WB4595	WestBred	51.1	**59.8**	10.8	29.2	15.46

[1] Yield values corrected to 12% moisture content. Bolded values indicate highest LSD grouping.
[2] Protein corrected to 14% moisture content, the correction factor used in analytical standards. Turkey and Scout 66 excluded from protein LSD groups due to known high protein contents.

Name	Company	Yield (bu/ac)	Test Weight (lb/bu)	Protein (%)	Plant Height (in)	Grain Weight (1000 seeds/lb)
NSF22115	UNL-Experimental	50.4	**59.2**	11.8	29.6	15.72
AR Turret 25	Armor	50.3	58.6	11.6	29.0	13.47
Pronghorn	Nu Horizon Genetics	50.1	**59.1**	12.6	33.2	14.91
NSF22101	UNL-Experimental	49.6	58.7	**12.8**	32.9	15.89
WB4422	WestBred	49.5	**59.3**	12.4	29.4	14.18
WB4445CLP	WestBred	49.3	**59.1**	12.6	29.4	14.57
NE18445	UNL-Experimental	49.3	57.7	12.4	31.5	14.54
CP7017AX	Croplan	48.3	**59.2**	11.0	29.4	19.28
NE18435	UNL-Experimental	48.2	**60.2**	11.9	30.3	14.88
AR Iron Eagle 22AX	Armor	48.1	**59.9**	11.3	27.9	15.94
LCS Atomic AX	Limagrain Cereal Seeds	47.4	**59.2**	12.6	27.8	13.85
NE19619	UNL-Experimental	47.2	57.8	**12.9**	33.9	14.55
NHH19668	UNL-Experimental	46.9	**59.3**	12.4	31.0	15.39
NSF23312	UNL-Experimental	45.9	59.0	12.4	27.1	16.04
Wesley	NuHorizon Genetics	45.8	57.5	**13.6**	30.0	13.09
NE18455	UNL-Experimental	44.9	58.3	11.8	29.1	15.68
NSF23323	UNL-Experimental	44.6	**59.4**	12.0	29.5	16.57
Turkey	Check	44.1	57.9	**12.8**	38.8	15.57
LCS Valiant	Limagrain Cereal Seeds	43.7	57.7	12.6	29.6	14.57
Ruth	Nu Horizon Genetics	43.4	58.6	**12.7**	30.6	15.98
Scout 66	Check	42.9	57.9	13.9	35.2	13.29
NE Prism CLP	Nu Horizon Genetics	38.8	58.4	12.3	31.0	16.43
Summary Statistics						
Standard Error		2.8	1.1	0.5	2.0	1.12
LSD[3]		4.7	1.9	0.9	3.3	1.88
Mean[4]		53.4	58.6	12.0	30.3	15.42
CV[5]		5.3	2.0	4.3	6.6	7.2
Reps		4	4	2	4	2

[3] For differences between varieties that are equal to or greater than the LSD value, the chance that the difference is significant is 90%.
[4] Mean performance of all plots in the trial.
[5] 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.

SITE INFORMATION

Collaborator:	UNL High Plains Ag Lab, Jake Hansen
Planting Date:	9/19/2024
Seeding Rate:	900,000 s/a
Harvest Date:	7/21/2025
Fertility:	50 lb/a 40 Rock applied in-furrow with planting; 10 lb/a N applied as 32-0-0 with LV6 application
Herbicide/Fungicides:	8 oz/a 2,4D LV6; 1 pt/a Prowl H2O + 24 oz/a glyphosate + AMS applied to clean alleys; 2.4 pt/a Prowl H2O with 4 oz/a 2,4D LV6 applied a week later to entire field for general weed control.
Soil Type:	Rosebud, Alliance, and Duroc loams
GPS:	41.233694, -103.001000
Planting Info:	Planted 1.5” into very dry soil, tilled millet fallow.
Notes on Trial:	Surrounding field averaged about 40 bu/a and was planted to Ruth, but did not receive starter fertilizer. Plot area was in best part of the field, so achieved greater relative moisture and less harsh conditions. Yields were benefitted by rains in June, and plot averages were typical of other fields in the region. Exceedingly harsh dry fall conditions impacted fall emergence and much of the field did not emerge until green up in March. Slight hail damage from storms in early July, but less than 5% estimated yield loss. Test weights and proteins in line with rest of the field and surrounding area. Plant heights reflected optimal field placement of plot area.