2023 Dryland Winter Wheat
Variety Performance Trial at Orchard

Variety	Brand/Source	Market Class	Grain Yield[a] bu/ac	Test Weight lb/bu	Lodging scale (1-9)[b]	Heading days from trial avg[c]	Plant Height in	Protein percent
Snowmass 2.0	PlainsGold	**HWW**	**103.0**	56	3	0	29	11.3
CO18D007W	Colorado State University exp.	**HWW**	**102.0**	**57**	2	2	28	11.1
CO18D297R	Colorado State University exp.	HRW	**100.0**	**57**	5	0	34	11.0
AP Solid	AgriPro	HRW	98.0	53	1	0	26	11.7
Crescent AX	PlainsGold	HRW	97.5	**57**	7	0	32	11.2
Monarch	PlainsGold	**HWW**	97.5	55	2	0	30	11.1
CO19D087R	Colorado State University exp.	HRW	96.0	54	7	1	28	11.1
CP7017AX	CROPLAN	HRW	96.0	**58**	5	1	29	11.5
Fortify SF	PlainsGold	HRW	96.0	56	4	0	30	11.7
Avery	PlainsGold	HRW	95.0	56	6	1	30	10.5
CO19393R	Colorado State University exp.	HRW	95.0	55	3	-1	32	11.2
CO19410R	Colorado State University exp.	HRW	95.0	55	5	3	27	12.6
CO19S085W	Colorado State University exp.	**HWW**	95.0	56	1	1	33	12.6
Langin	PlainsGold	HRW	94.5	55	6	1	30	11.4
CO19S135W	Colorado State University exp.	**HWW**	94.0	56	5	-1	29	10.7
Guardian	PlainsGold	HRW	94.0	**57**	5	-1	28	11.5
Byrd	PlainsGold	HRW	93.5	56	3	0	28	11.2
Byrd CL Plus	PlainsGold	HRW	92.5	55	3	-1	32	11.8
CO19S053R	Colorado State University exp.	HRW	92.0	56	4	2	30	11.0
PSB13NEDH-14-83W	University of Nebraska-Lincoln exp.	**HWW**	92.0	56	2	1	33	11.0
Valley	Frenchman Valley Coop	**HWW**	92.0	**57**	1	0	31	11.1
Breck	PlainsGold	**HWW**	91.5	**57**	4	1	29	11.2
CO19D304R	Colorado State University exp.	HRW	91.5	53	7	0	33	10.9
Steamboat	Crop Research Foundation of WY	HRW	91.5	**57**	4	3	32	11.4
Brawl CL Plus	PlainsGold	HRW	90.5	**57**	2	0	27	12.3
CO20D108R	Colorado State University exp.	HRW	90.5	55	4	0	27	12.9
KS Territory	Kansas Wheat Alliance	HRW	90.0	55	2	2	29	13.0
Amplify SF	PlainsGold	HRW	89.0	56	4	0	30	12.5
MS Maverick	Meridian Seeds	HRW	89.0	56	7	-1	29	11.8
Whistler	PlainsGold	HRW	89.0	54	7	0	29	11.9
CO18035RA	Colorado State University exp.	HRW	88.5	54	7	0	28	12.4
AP Bigfoot	AgriPro	HRW	88.0	56	1	0	28	11.8
CO19S129W	Colorado State University exp.	**HWW**	88.0	55	2	-1	32	12.2
LCS Steel AX	Limagrain	HRW	88.0	**58**	2	0	27	11.6
CO200037R	Colorado State University exp.	HRW	87.0	55	3	1	27	11.2
Sunshine	PlainsGold	**HWW**	87.0	56	2	-1	26	11.5
Canvas	PlainsGold	HRW	86.5	55	3	1	27	12.7
Kivari AX	PlainsGold	HRW	85.5	54	7	1	30	11.2
AP Roadrunner	AgriPro	HRW	85.0	55	1	0	32	12.1
CO18042RA	Colorado State University exp.	HRW	84.5	55	8	3	27	12.0
LCS Atomic AX	Limagrain	HRW	84.5	56	6	-1	32	11.6
NHH17450	University of Nebraska-Lincoln exp.	HRW	84.0	56	5	0	31	12.3
Hatcher	PlainsGold	HRW	83.0	53	4	-1	27	12.2
Ray	PlainsGold	HRW	77.5	51	4	0	36	12.1
Windom SF	PlainsGold	**HWW**	72.5	55	9	0	28	12.1
		Average	**91.0**	**56**	**4**	**May 25, 2023**	**30**	**11.7**
		[d]LSD (0.30)	4.0	1				
		[d]LSD (0.05)	7.0	1				
		Coefecient of Variation (CV)	4.6					

[a]Yield adjusted to 12% moisture and varieties ranked by yield (highest to lowest). Variety yields in bold are in the top LSD group (0.30).

[b]Lodging score: 1 equals no lodging and 9 is severe lodging. Scores are averaged across three replicates.

[c]Varieties with positive values headed later than the trial average and varieties with negative values headed earlier than the trial average.

[d]Farmers selecting a variety based on yield should use the LSD (.30) to protect themselves from false negative conclusions (concluding varieties are the same when they are actually different). Companies or researchers may use the LSD (.05) to avoid false positive conclusions (concluding varieties are different when they are actually the same).

Site Information

Collaborator: Wickstrom Farms
Harvest date: July 29, 2023
Planting date: September 27, 2022
Soil Type: Platner sandy loam
GPS Coordinates: 40.481426,-104.07898
Trial Comments: Planted about 2" deep into good moisture and millet residue. Very good fall emergence, although field was dry in mid-October. Trial had lush spring growth. Wheat stem sawfly was present at low levels, but lodging was due to high yield. Radar estimates showed the trial received 19.1" of precipitation and 3,749 growing degree-days (GDD) (base 32°F) from January 1st through July 28th.