

## 2023 Dryland Winter Wheat Variety Performance Trial at New Raymer



		Market	Grain	Test	Sawfly	
Variety	Brand/Source	Class	Yielda	Weight	Cutting	Heading
			bu/ac	lb/bu	scale (1-9) <sup>b</sup>	days from trial avg <sup>c</sup>
Whistler	PlainsGold	HRW	90.0	56	4	2
CO19D304R	Colorado State University exp.	HRW	90.0	57	5	2
Windom SF	PlainsGold	HWW	87.5	60	2	-1
CO19S053R	Colorado State University exp.	HRW	87.0	57	4	-1
CO19410R	Colorado State University exp.	HRW	85.5	58	4	0
Canvas	PlainsGold	HRW	83.5	58	4	1
CO19393R	Colorado State University exp.	HRW	83.0	57	4	1
CO19S129W	Colorado State University exp.	HWW	82.5	57	2	2
KS Territory	Kansas Wheat Alliance	HRW	82.5	57	3	1
CO20D108R	Colorado State University exp.	HRW	82.0	57	4	2
Avery	PlainsGold	HRW	81.5	55	4	0
CP7017AX	CROPLAN	HRW	81.5	59	6	0
Monarch	PlainsGold	HWW	81.0	58	3	1
Kivari AX	PlainsGold	HRW	81.0	55	4	2
Sunshine	PlainsGold	HWW	80.5	58	5	-1
Amplify SF	PlainsGold	HRW	80.0	59	1	1
Guardian	PlainsGold	HRW	79.5	57	4	0
CO18035RA	Colorado State University exp.	HRW	79.0	54	3	-2
CO19S085W	Colorado State University exp.	HWW	78.5	58	3	1
Byrd	PlainsGold	HRW	78.0	56	3	0
AP Roadrunner	AgriPro	HRW	78.0	58	2	3
Steamboat	Crop Research Foundation of WY	HRW	77.5	57	4	0
Crescent AX	PlainsGold	HRW	77.5	57	6	-1
CO19S135W	Colorado State University exp.	HWW	77.0	57	4	0
Byrd CL Plus	PlainsGold	HRW	77.0	56	3	0
CO19D087R	Colorado State University exp.	HRW	76.5	54	4	-2
MS Maverick	Meridian Seeds	HRW	76.0	58	5	1
Fortify SF	PlainsGold	HRW	76.0	57	2	0
CO200037R	Colorado State University exp.	HRW	76.0	58	5	2
AP Solid	AgriPro	HRW	75.5	59	2	3
Valley	Frenchman Valley Coop	HWW	75.0	57	2	0
CO18042RA	Colorado State University exp.	HRW	74.5	56	5	-1
Hatcher	PlainsGold	HRW	74.0	56	5	1
Breck	PlainsGold	HWW	74.0	60	6	0
AP Bigfoot	AgriPro	HRW	72.5	58	5	-1
Brawl CL Plus	PlainsGold	HRW	71.5	56	3	-2
Snowmass 2.0	PlainsGold	HWW	71.0	58	4	-2
Langin	PlainsGold	HRW	71.0	55	5	-3
CO18D007W	Colorado State University exp.	HWW	70.0	58	4	0
Ray	PlainsGold	HRW	68.0	57	4	10
PSB13NEDH-14-83W	University of Nebraska-Lincoln exp.	HWW	67.0	57	4	-1
CO18D297R	Colorado State University exp.	HRW	67.0	58	3	0
LCS Steel AX	Limagrain	HRW	65.5	56	5	-3
NHH17450	University of Nebraska-Lincoln exp.	HRW	60.5	57	5	0
LCS Atomic AX	Limagrain	HRW	57.5	56	3	0
		Average	77.0	57	4	May 31, 2023
		<sup>d</sup> LSD (0.30)	3.0	1		

dLSD (0.30) 3.0
dLSD (0.05) 6.0
Coeffecient of Variation (CV) 6.3

## Site Information

Collaborator: Mertens Bros. Inc.
Harvest date: July 31, 2023
Planting date: September 26, 2022
Soil Type: Olney fine sandy loam
GPS Coordinates: 40.57115, -103.8973

Trial Comments: Planted about 1.5" deep into good moisture. Very good fall emergence, although field was dry in mid-October. Wheat stem sawfly was present at moderate levels. Trial had minor hail damage in mid-July. Radar estimates showed the trial received 18.7" of precipitation and 3,795 growing degree-days (GDD) (base 32°F)

from January 1st through July 30th.

<sup>&</sup>lt;sup>a</sup>Yield adjusted to 12% moisture and varieties ranked by yield (highest to lowest). Variety yields in bold are in the top LSD group

<sup>&</sup>lt;sup>b</sup>Wheat Stem Sawfly cutting score: 1 equals no cutting and 9 is severe cutting. Scores are averaged across three replicates.

<sup>&</sup>lt;sup>c</sup>Varieties with positive values headed later than the trial average and varieties with negative values headed earlier than the trial average.

<sup>d</sup>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).