

2023 Dryland Winter Wheat Variety Performance Trial at Akron

Variety	Brand/Source	Market Class	Grain	Test	Lodging	Heading	Stripe Rust	Protein
			Yield ^a	Weight				
			bu/ac	lb/bu	scale (1-9) ^b	days from trial avg ^c	scale (1-9) ^d	percent
PSB13NEDH-14-83W	University of Nebraska-Lincoln exp.	HWW	101.5	55	7	-1	2	11.5
Monarch	PlainsGold	HWW	101.5	54	5	0	2	11.3
Valley	Frenchman Valley Coop	HWW	99.0	53	6	-1	2	11.6
MS Maverick	Meridian Seeds	HRW	98.5	55	8	1	2	12.9
CO19410R	Colorado State University exp.	HRW	98.0	53	8	0	2	11.4
AP Bigfoot	AgriPro	HRW	97.5	55	4	-2	3	11.7
Sunshine	PlainsGold	HWW	97.5	53	6	-2	3	12.2
CO18D007W	Colorado State University exp.	HWW	97.0	54	8	-1	4	11.6
CO19S135W	Colorado State University exp.	HWW	96.5	54	6	-1	2	11.7
CO19S129W	Colorado State University exp.	HWW	96.5	54	3	-1	2	12.1
Brawl CL Plus	PlainsGold	HRW	96.0	55	7	-1	3	12.4
Snowmass 2.0	PlainsGold	HWW	96.0	54	5	-1	3	11.8
Steamboat	Crop Research Foundation of WY	HRW	95.0	55	7	0	1	11.6
CO18D297R	Colorado State University exp.	HRW	94.5	55	8	0	1	12.4
KS Territory	Kansas Wheat Alliance	HRW	93.5	54	5	0	1	12.3
CP7017AX	CROPLAN	HRW	93.0	54	8	-1	2	11.5
CO19393R	Colorado State University exp.	HRW	92.0	54	7	0	1	11.8
CO18035RA	Colorado State University exp.	HRW	91.5	54	7	-2	2	11.4
Crescent AX	PlainsGold	HRW	90.5	55	9	-2	3	11.5
CO19S085W	Colorado State University exp.	HWW	90.0	52	5	-1	3	11.6
AP Solid	AgriPro	HRW	90.0	51	2	1	4	11.9
Byrd CL Plus	PlainsGold	HRW	89.0	53	7	-1	3	11.1
CO18042RA	Colorado State University exp.	HRW	88.5	53	8	-1	3	12.2
Amplify SF	PlainsGold	HRW	88.0	52	5	-1	4	11.9
CO20D108R	Colorado State University exp.	HRW	86.5	54	6	1	3	11.2
CO19D087R	Colorado State University exp.	HRW	86.5	53	8	-3	2	12.0
Avery	PlainsGold	HRW	86.5	53	8	0	3	11.0
NHH17450	University of Nebraska-Lincoln exp.	HRW	85.5	54	8	0	2	12.2
Kivari AX	PlainsGold	HRW	85.5	50	7	-1	3	11.0
Byrd	PlainsGold	HRW	84.5	54	8	-2	3	11.1
LCS Steel AX	Limagrain	HRW	84.0	55	7	-4	1	11.6
Windom SF	PlainsGold	HWW	84.0	52	8	-1	3	11.9
CO19D304R	Colorado State University exp.	HRW	84.0	50	8	1	1	11.7
CO200037R	Colorado State University exp.	HRW	83.5	52	8	0	2	12.2
Breck	PlainsGold	HWW	82.5	55	8	-1	5	11.7
LCS Atomic AX	Limagrain	HRW	80.0	54	7	-1	2	11.6
Hatcher	PlainsGold	HRW	78.0	52	7	-1	2	11.8
CO19S053R	Colorado State University exp.	HRW	77.5	52	8	-1	2	11.6
Langin	PlainsGold	HRW	77.0	53	8	-3	2	11.8
Guardian	PlainsGold	HRW	76.5	54	7	0	2	12.2
Canvas	PlainsGold	HRW	76.0	52	7	0	3	12.1
Whistler	PlainsGold	HRW	76.0	51	8	1	2	11.4
AP Roadrunner	AgriPro	HRW	74.5	51	3	2	4	12.0
Fortify SF	PlainsGold	HRW	73.5	53	8	-1	4	11.2
Ray	PlainsGold	HRW	58.5	44	7	9	2	12.2
Average			88.0	53	7	May 31, 2023	2	11.8
			^e LSD (0.30)	5.0	1			
			^e LSD (0.05)	9.5	1			
			Coefficient of Variation (CV)	6.5				

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

^bLodging score: 1 equals no lodging and 9 is severe lodging. Scores are averaged across three replicates.

^cVarieties with positive values headed later than the trial average and varieties with negative values headed earlier than the trial average.

^dStripe rust score reflects overall reaction (1=resistant to 9=susceptible) to stripe rust infection.

^eFarmers 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: USDA-ARS Central Great Plains Research Station

Harvest date: August 5, 2023

Planting date: September 29, 2022

Soil Type: Rago silt loam

GPS Coordinates: 40.151038, -103.141808

Trial Comments: Planted about 2" deep into excellent moisture and proso millet residue. Excellent fall emergence and stands, although field was dry in mid-October. Wheat stem sawfly was present at moderate levels, but lodging was due to high yield. Stripe rust was observed at low levels late in the season and trial was not sprayed. Radar estimates showed the trial received 19.2" of precipitation and 4,014 growing degree-days (GDD) (base 32°F) from January 1st through August 4th.

*The data included in this table may not be republished without permission.
Contact Sally Jones-Diamond (sally.jones@colostate.edu)*