



2022 Irrigated Winter Wheat Variety Performance Trial at Wiggins

Variety	Brand/Source	Market Class	Grain	Test	Plant	Wheat Stem	Protein
			Yield ^a	Weight	Height	Sawfly Cutting	
			bu/ac	lb/bu	in	avg score (1-9) ^b	percent
CO18SFD009W	Colorado State University exp.	HWW	75.5	62	16	1	14.5
Breck	PlainsGold	HWW	72.0	63	16	2	15.0
CO13D1479	Colorado State University exp.	HWW	71.5	60	22	3	14.5
Fortify SF	PlainsGold	HRW	71.5	61	22	2	14.2
Ray	PlainsGold	HRW	71.0	53	26	2	15.7
Canvas	PlainsGold	HRW	69.5	61	20	5	14.8
CO18D297R	Colorado State University exp.	HRW	68.5	60	20	7	14.3
Crescent AX	PlainsGold	HRW	68.0	61	19	8	14.5
Kivari AX	PlainsGold	HRW	68.0	61	24	8	12.8
CO17449R	Colorado State University exp.	HRW	66.5	62	25	5	14.2
KS Silverado	Kansas Wheat Alliance	HWW	66.0	62	16	3	14.7
Breakthrough	Oklahoma Genetics, Inc.	HRW	65.5	61	17	2	14.6
CO18D007W	Colorado State University exp.	HWW	64.5	61	17	7	15.1
CP7017AX	CROPLAN	HRW	64.5	61	18	8	14.7
Monarch	PlainsGold	HWW	64.5	60	25	3	13.7
Byrd CL Plus	PlainsGold	HRW	63.0	60	20	8	14.6
CO18042RA	Colorado State University exp.	HRW	63.0	59	21	9	15.0
CO18035RA	Colorado State University exp.	HRW	62.5	59	20	7	14.3
CP7266AX	CROPLAN	HRW	59.5	62	21	7	14.6
Brawl CL Plus	PlainsGold	HRW	59.0	61	20	9	15.7
Snowmass 2.0	PlainsGold	HWW	56.5	61	20	8	14.3
Guardian	PlainsGold	HRW	53.5	61	22	8	15.6
Average			65.5	60	20	5	14.6
°LSD (0.30)			4.5	1			
°LSD (0.05)			9.0	1			
Coefficient of Variation (CV)			8.8				

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

^bWheat Stem Sawfly Cutting score: 1 equals no damage/cutting and 9 is severe damage/cutting, averaged across three replicates.

^cFarmers selecting a variety based on yield should use the LSD (0.30) to protect from false negative decisions. Companies or researchers may be interested in the LSD (0.05) to avoid false positive conclusions.

Site Information

Collaborator: Cooksey Farms LLC

Harvest date: July 12, 2022

Planting date: October 4, 2021

Soil Type: Truckton sandy loam

GPS Coordinates: 40.0004, -104.10129

Trial Comments: Planted into tilled corn residue. Good fall emergence and some growth. In late-April cosmetic freeze damage was noted on the leaves. In mid-May trial had more growth but was later in maturing due to Oct. planting date. Wheat stem sawfly was present and caused severe lodging in some varieties. Radar estimates showed the trial received 6.9" of precipitation and 3540 growing degree-days (GDD) (base 32°F) from Jan. 1st through July 11th, which was 3.7" below and 59 GDD below the 10-year average, respectively. Trial was irrigated in fall and again in spring and early summer as water was available.

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