



2021 Dryland Winter Wheat Variety
Performance Trial at Orchard

Variety	Brand/Source	Market Class	Grain Yield ^a bu/ac	Test Weight lb/bu	Wheat Stem Sawfly Cutting avg score (1-9) ^b	Heading days from trial avg ^c	Plant Height in	Protein percent
Langin	PlainsGold	HRW	60	57	5	-3	34	12.3
KS Dallas	Kansas Wheat Alliance	HRW	59	57	3	1	31	12.8
EXP 301	Allegiant	HRW	58	57	5	-2	33	13.3
KS Silverado	Kansas Wheat Alliance	HWW	58	60	4	-3	30	13.2
Snowmass 2.0	PlainsGold	HWW	56	55	5	-1	29	12.6
CO18D007W	Colorado State University exp.	HWW	55	56	6	0	34	12.1
CO18D076W	Colorado State University exp.	HWW	55	57	4	0	33	13.4
Byrd	PlainsGold	HRW	55	58	6	-1	35	12.6
KS Hamilton	Kansas Wheat Alliance	HRW	55	56	3	0	28	14.2
LCS Atomic AX	Limagrain Cereal Seeds	HRW	54	57	7	-4	33	13.1
Fortify SF	PlainsGold	HRW	54	59	2	-1	39	12.5
LCS Julep	Limagrain Cereal Seeds	HRW	54	59	5	0	35	13.6
AP Solid	AgriPro	HRW	53	58	2	4	30	13.5
Avery	PlainsGold	HRW	53	56	6	0	34	12.7
CO13007-F6R	Colorado State University exp.	HRW	53	58	6	0	33	12.9
*Langin Trt 2	Indigo Ag	HRW	53	56	5	-2	30	12.4
CO16D402W	Colorado State University exp.	HWW	53	55	5	-1	32	13.3
CO16D1487	Colorado State University exp.	HRW	53	58	3	1	34	12.8
LCS Helix AX	Limagrain Cereal Seeds	HRW	52	57	5	-1	34	12.9
CP7050AX	CROPLAN by WinField United	HRW	52	59	5	-4	33	14.8
Kivari AX	PlainsGold	HRW	52	56	6	0	32	12.7
Crescent AX	PlainsGold	HRW	51	57	4	-1	35	14.2
WB4418	WestBred	HRW	51	58	2	-1	31	13.8
Canvas	PlainsGold	HRW	51	56	3	0	32	11.9
CO18D297R	Colorado State University exp.	HRW	50	57	6	1	30	14.8
WB4595	WestBred	HRW	50	57	4	2	33	13.2
CO16SF027	Colorado State University exp.	HRW	50	57	1	1	39	14.1
CO16SF067	Colorado State University exp.	HRW	50	57	2	1	32	14.2
Monarch	PlainsGold	HWW	50	56	3	1	28	13.2
Brawl CL Plus	PlainsGold	HRW	49	58	4	-2	35	14.4
CO16SF032	Colorado State University exp.	HRW	49	57	2	2	34	14.0
EXP 303	Allegiant	HRW	49	58	3	1	31	12.8
Whistler	PlainsGold	HRW	49	54	6	3	33	12.7
CP7017AX	CROPLAN by WinField United	HRW	49	57	7	-1	32	13.2
*Langin Trt 1	Indigo Ag	HRW	49	56	5	-3	31	14.5
Guardian	PlainsGold	HRW	48	57	5	0	30	12.8
Byrd CL Plus	PlainsGold	HRW	48	56	2	0	33	12.9
Denali	PlainsGold	HRW	47	57	5	2	35	13.8
Hatcher	PlainsGold	HRW	47	56	4	0	34	12.8
CO16SF070	Colorado State University exp.	HRW	47	54	2	0	41	13.4
Breck	PlainsGold	HWW	45	58	5	1	41	13.9
AP Roadrunner	AgriPro	HRW	44	55	6	1	30	14.0
Lonerider	Oklahoma Genetics Inc.	HRW	41	56	6	3	25	15.9
Warhorse	Montana State University	HRW	37	54	1	5	30	14.7
Average			51	57	4	May 30, 2021	33	13.4
^d LSD (0.30)			3	1				
^d LSD (0.05)			6	2				

^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).

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

^dFarmers 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.

*The Langin seed used in the Indigo Ag treatment was from a different source than the Langin seed by PlainsGold.

Site Information

Collaborator: Wickstrom Farms

Harvest date: July 6, 2021

Planting date: September 16, 2020

Soil Type: Platner sandy loam

GPS Coordinates: 40.45125, -104.07003

Trial Comments: Planted 2.25" deep into moisture and proso millet stubble. Excellent stands and average growth in fall. Great moisture down to 4" from snow in early February, good moisture throughout most of spring. Heavy wheat stem sawfly pressure. Radar estimates showed the trial received 11" of precipitation and 3119 growing degree-days (GDD) (base 32°F) from Jan. 1st through July 6th, which was 1.2" above and 125 GDD below the 10-year average, respectively.

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