



2021 Dryland Winter Wheat Variety Performance Trial at Burlington

Variety	Brand/Source	Market Class	Grain Yield <sup>a</sup>	Test Weight	Lodging	Plant Height	Protein
			bu/ac	lb/bu	avg score (1-9) <sup>b</sup>	in	percent
CP7017AX	CROPLAN by WinField United	HRW	69	52	6	39	13.7
KS Silverado	Kansas Wheat Alliance	HWW	69	57	1	37	14.9
EXP 303	Allegiant	HRW	69	55	2	37	13.3
EXP 301	Allegiant	HRW	67	57	3	36	13.5
LCS Atomic AX	Limagrain Cereal Seeds	HRW	66	54	2	38	13.4
Langin	PlainsGold	HRW	65	52	6	37	14.2
WB4595	WestBred	HRW	63	50	1	41	14.4
*Langin Trt 1	Indigo Ag	HRW	63	52	9	35	14.3
Snowmass 2.0	PlainsGold	HWW	63	51	1	36	15.2
CP7050AX	CROPLAN by WinField United	HRW	62	59	1	38	15.2
LCS Helix AX	Limagrain Cereal Seeds	HRW	61	52	5	38	13.5
Monarch	PlainsGold	HWW	59	51	5	35	13.9
CO13007-F6R	Colorado State University exp.	HRW	59	51	1	39	13.7
AP Solid	AgriPro	HRW	58	52	1	37	15.1
CO18D007W	Colorado State University exp.	HWW	58	48	1	36	16.5
AP Roadrunner	AgriPro	HRW	57	44	2	38	16.1
CO18D297R	Colorado State University exp.	HRW	56	50	6	42	15.6
CO16D402W	Colorado State University exp.	HWW	56	51	1	33	15.3
Brawl CL Plus	PlainsGold	HRW	56	53	1	36	15.0
*Langin Trt 2	Indigo Ag	HRW	55	49	7	37	14.8
KS Dallas	Kansas Wheat Alliance	HRW	55	49	3	32	16.3
KS Hamilton	Kansas Wheat Alliance	HRW	54	49	5	37	15.6
Byrd	PlainsGold	HRW	54	51	5	38	14.7
Lonerider	Oklahoma Genetics Inc.	HRW	53	52	4	34	16.3
Breck	PlainsGold	HWW	53	50	3	35	16.5
CO16SF027	Colorado State University exp.	HRW	53	52	4	40	14.7
Canvas	PlainsGold	HRW	53	46	4	37	16.0
Denali	PlainsGold	HRW	52	48	1	40	14.5
LCS Julep	Limagrain Cereal Seeds	HRW	52	48	4	38	16.6
Fortify SF	PlainsGold	HRW	52	52	3	38	13.7
CO16SF070	Colorado State University exp.	HRW	50	45	5	36	15.8
CO16D1487	Colorado State University exp.	HRW	50	49	2	40	13.9
CO16SF032	Colorado State University exp.	HRW	50	49	3	40	15.0
Avery	PlainsGold	HRW	49	47	6	41	15.7
WB4418	WestBred	HRW	48	48	1	33	15.8
CO18D076W	Colorado State University exp.	HWW	47	48	3	37	14.8
Kivari AX	PlainsGold	HRW	47	47	3	38	14.1
Crescent AX	PlainsGold	HRW	46	52	6	39	14.3
Byrd CL Plus	PlainsGold	HRW	45	47	1	38	15.6
Hatcher	PlainsGold	HRW	43	44	3	37	15.1
Whistler	PlainsGold	HRW	41	46	6	40	15.4
CO16SF067	Colorado State University exp.	HRW	37	47	6	39	16.1
Guardian	PlainsGold	HRW	35	51	6	37	15.2
Warhorse	Montana State University	HRW	34	45	1	37	18.5
	Average		54	50	3	37	15.0
	<sup>c</sup> LSD (0.30)		5	2			
	<sup>c</sup> LSD (0.05)		9	3			

<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 (0.30).

<sup>b</sup>Lodging score: 1 equals no lodging and 9 is severe lodging.

<sup>c</sup>Farmers 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:
 Hinkhouse Farms

 Harvest date:
 July 8, 2021

 Planting date:
 September 14, 2020

 Soil Type:
 Kuma-Keith silt loams

 GPS Coordinates:
 39.29944, -102.29777

 Trial Comments:
 Planted 1.75" deep into good moisture and tilled corn residue. Visited mid-winter and moisture plentiful down to 4". Average fall growth but acceptable stands. A little hail damage in mid-May, <5% yield loss estimated. The first replicate of the trial had</td>

growth but acceptable stands. A little hail damage in mid-May, <5% yield loss estimated. The first replicate of the trial had compaction and resulted in poorer stands. Trial received good precipitation in May but conditions became hot and dry in June during grain-fill, resulting in shriveled grain and low test weights. Radar estimates showed the trial received 12.5" of precipitation and 3422 growing degree-days (GDD) (base 32°F) from Jan. 1st through July 6th, which was .75" above and 184 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)