

2014 WSU Variety Testing Hard Winter Wheat Trial, Ritzville

Variety Name <i>Hard White Italicized</i>	2014			YIELD (BU/A)	TEST WT (LBS/BU)	PROTEIN (%)	PLANT HT	HEAD DATE	SPRING STAND*
	5 YEAR AVERAGE (BU/A)	3 YEAR AVERAGE (BU/A)	2 YEAR AVERAGE (BU/A)						
Boundary	63	62	57	67	61.8	8.3	33	142	9
WB-Arrowhead			52	65	64.1	9.0	36	141	9
Eltan (SWW Check)	67	63	62	64	60.5	7.7	33	146	9
UI SRG		59	57	64	62.0	8.8	39	143	9
AP503 CL2			48	63	64.0	9.5	33	138	9
Keldin			53	61	63.1	9.8	31	141	9
WA 8181			55	60	60.9	8.2	35	148	9
<i>WA 8158</i>		57	56	60	62.2	10.2	34	146	9
<i>IDO1101</i>			55	60	63.3	8.5	29	141	9
DAS 1			49	59	61.4	8.9	34	139	9
Whetstone			47	58	62.7	9.1	34	138	9
IDO1103			49	58	63.0	9.8	32	143	9
<i>UI Silver</i>	58	56	50	57	62.7	8.6	34	142	9
WA 8179			50	57	62.5	9.7	36	142	9
IDO816		52	51	56	61.6	9.3	35	146	9
LCS-Azimut		57	55	56	59.5	8.9	26	140	9
Finley	54	54	49	55	63.6	9.2	38	143	9
WA 8207				54	61.1	8.6	37	147	9
Farnum	56	52	48	53	60.6	9.4	37	147	9
WA 8178			47	52	60.6	9.9	35	147	9
WA 8197				51	61.6	8.6	35	144	9
Bauermeister	58	55	51	51	61.4	8.6	33	147	9
WA 8180			50	50	61.9	9.8	37	147	9
WA 8208				46	59.2	9.7	35	149	7
<i>OR2100061H</i>				44	62.2	9.5	31	142	7
DAS 2			45	44	62.8	9.5	29	140	9
Sprinter (WA 8118)	48	46	42	42	61.8	10.1	34	138	8
NSA10-7208				41	60.4	9.5	24	143	6
LCS Colonia			52	41	60.0	10.5	28	149	6
<i>WA 8184</i>				38	61.7	11.9	30	145	6
<i>OR2080156H</i>	51	46	41	35	61.8	10.4	27	148	6
LCS Evina	-----	-----	-----	Low Stand, No Data	-----	-----	-----	-----	2
LCS Allezy	-----	-----	-----	Low Stand, No Data	-----	-----	-----	-----	0
<i>OR2080236H</i>	-----	-----	-----	Low Stand, No Data	-----	-----	-----	-----	0
Norwest 553	-----	-----	-----	Low Stand, No Data	-----	-----	-----	-----	0
<i>OR2100081H</i>	-----	-----	-----	Low Stand, No Data	-----	-----	-----	-----	0
C.V. %	11	10	8	9	0.9	9.0	4	1	15
LSD (.10)	3	3	3	5	0.6	0.9	1	2	1
Average	57	54	50	50	61.7	9.6	32	144	7
Highest	67	63	62	67	64.1	13.4	39	150	9
Lowest	48	46	41	35	59.2	7.7	24	138	0

*Spring Stand Rating: 0 (no plants) - 9 (full stand)

Ritzville Hard Winter Wheat

1. Grain yield in the 2014 Ritzville hard winter wheat trial averaged 50 bushels/acre, less than the 2013 average of 57 bushels/acre. The Ritzville nursery was located four miles west of Ritzville, WA (R. Jirava, Cooperator).
2. This nursery was seeded on 10 September, 2013 following fallow. Seed was placed at a 50#/acre seeding rate using a deep-furrow plot drill set on 15-inch spacing. Base fertilizer was 60#N/acre spring applied. Based on a spring soil test showing 142 #/acre available N, 17#/acre of additional N was applied for hard wheat protein based on expected yields. Fall seeding conditions were adequate and initial emergence and stand establishment were good especially for deep emerging varieties. The crop emerged before fall dormancy and was vulnerable to the December and later cold conditions that contributed to winter injury on many varieties. Ratings of spring stands are presented in the data table as an estimate range from 1 (nearly all dead) to 9 (full survival). Fall establishment, cold tolerance and winter survival were factors in the spring stand values. Five varieties with the lowest survival did not have adequate stands to evaluate further in the trial. The statistical CV of 9% is good historically for this location.
3. Yields ranged from 35 bushels/acre to 67 bushels/acre. 'Boundary', was the highest yielding named entry in this trial. All yield values within the 10% LSD range of the highest yield are shown in bold and this included 9 of the 36 entries. There was no stripe rust at this location and no fungicide was applied.
4. Test weights averaged 61.7 lbs/bu and ranged from 59.2 to 64.1 lbs/bu. Grain protein averaged 9.6% with a range of 7.7 to 13.4% and was much lower than the 12.3% average protein in 2013. Plant height averaged 32 inches with no lodging.