

## 2014 WSU Variety Testing Hard Winter Wheat Trial, Walla Walla

Variety Name <i>Hard White Italicized</i>				2014					
	5 YEAR AVERAGE (BU/A)	3 YEAR AVERAGE (BU/A)	2 YEAR AVERAGE (BU/A)	YIELD (BU/A)	TEST WT (LBS/BU)	PROTEIN (%)	PLANT HT	HEAD DATE	LODGING (%)
<i>OR2080236H</i>		115	112	<b>146</b>	61.5	11.9	41	148	0
<i>OR2100061H</i>				<b>143</b>	61.5	11.0	41	141	0
<b>WB-Arrowhead</b>			110	<b>142</b>	62.7	11.5	45	139	8
<b>Whetstone</b>			105	<b>141</b>	62.5	11.9	43	138	15
<b>Keldin</b>			109	<b>138</b>	63.2	11.5	41	141	21
<b>LCS Colonia</b>			113	<b>137</b>	59.1	11.4	40	145	0
<b>NSA10-7208</b>				<b>135</b>	62.3	11.7	38	139	0
<b>Norwest 553</b>	123	112	107	<b>134</b>	61.9	12.4	38	142	0
<b>WA 8209</b>				128	61.6	12.0	41	146	24
<i>OR2080156H</i>	119	109	108	127	61.7	12.0	40	140	0
<i>OR2100081H</i>				126	61.4	11.1	39	141	0
<b>LCS Evina</b>				125	61.7	13.0	49	144	1
<b>WA 8186</b>			95	124	61.3	11.6	42	146	29
<b>SAS 4B</b>				123	59.7	12.6	45	146	23
<b>LCS Allezy</b>				123	59.9	11.1	36	144	0
<b>SAS W7</b>				122	61.2	11.5	48	144	10
<i>IDO1101</i>			101	122	62.5	11.6	40	139	48
<b>LCS-Azimut</b>		105	102	121	59.3	11.1	33	138	0
<b>WB-Rimrock</b>			96	118	61.1	11.3	43	141	60
<b>Eltan (SWW Check)</b>	87	91	95	117	61.5	11.2	43	149	43
<i>WA 8184</i>			96	117	60.9	12.1	40	140	39
<b>Boundary</b>	92	85	96	115	61.6	11.2	42	145	4
<b>SAS W4</b>				112	59.7	12.0	49	147	40
<b>DAS 2</b>			96	112	62.8	12.3	45	139	36
<b>AP503 CL2</b>			91	112	<b>64.8</b>	11.6	40	138	51
<b>WA 8189</b>				111	<b>64.3</b>	11.0	38	140	6
<b>IDO1103</b>			86	111	62.3	12.3	42	144	54
<b>SAS W3</b>				110	60.3	11.7	48	146	2
<b>WA 8210</b>				105	60.5	11.6	41	145	49
<b>DAS 1</b>			88	105	61.3	11.9	43	137	81
<b>Genesis</b>			95	101	62.0	12.1	35	137	38
<b>Sprinter</b>	77	73	73	98	61.6	13.5	46	136	85
<b>Bauermeister</b>	79	76	78	92	61.2	11.4	46	148	88
<b>Farnum</b>	63	69	72	91	60.0	13.7	53	148	93
<b>Finley</b>	69	70	69	84	62.2	12.2	53	142	97
<b>WA 8211</b>				73	63.0	14.7	38	146	0
<b>C.V. %</b>	12	10	10	10	1.1	3.3	5	1	66
<b>LSD (.10)</b>	6	6	8	12	0.7	0.4	2	2	20
<b>Average</b>	89	90	95	118	61.6	11.9	42	142	29
<b>Highest</b>	123	115	113	146	64.8	14.7	53	149	97
<b>Lowest</b>	63	69	69	73	59.1	11.0	33	136	0

### Walla Walla Hard Winter Wheat

1. Grain yield in the 2014 Walla Walla hard winter wheat trial averaged 118 bushels/acre, higher than the five-year average of 89 bushels/acre. The Walla Walla nursery was located six miles north of Walla Walla, WA (J. Beechinor, Cooperator).
2. This nursery was seeded on 23 September, 2013 following chem-fallow. Seed was placed at an 85#/acre seeding rate using a no-till plot drill equipped with cross-slot openers on 12-inch spacing. Base fertilizer was 114#N/acre applied at planting. Based on a spring soil test showing 391 lbs./acre available N, no additional N was applied for hard wheat protein based on expected yields. Fall seeding and emergence were adequate. The entries survived cold December temperatures better in this trial than at many locations with only minor reduced stands evident in the spring.
3. Yields ranged from 73 bushels/acre to 146 bushels/acre. 'WB-Arrowhead', was the highest yielding named entry in this trial. 'Norwest 553' had the highest overall yield across five-years. All yield values within the 10% LSD range of the highest yield are shown in bold and this included 8 of the 36 entries. There was minor incidence of stripe rust observed at flag-leaf and fungicide was applied that protected from stripe rust losses to productivity.
4. Test weights averaged 61.6 lbs/bu and ranged from 59.1 to 64.8 lbs/bu. Grain protein averaged 11.9% with a range of 11.0 to 14.7% and was close to the 12.1% average protein in 2013. Plant height averaged 42 inches with lodging occurring on many entries up to 97% lodged.