

## 2012 WSU Variety Testing Hard Winter Wheat Trial, Connell

Variety Name <i>*Hard White Italized</i>	5 YEAR AVERAGE (BU/A)	3 YEAR AVERAGE (BU/A)	2 YEAR AVERAGE (BU/A)	2012				
				YIELD (BU/A)	TEST WT (LBS/BU)	PROTEIN (%)	PLANT HT	HEAD DATE
<b>WA 8156</b>				<b>39</b>	58.2	13.9	28	144
<b>Farnum</b>	44	50	46	<b>36</b>	58.4	14.3	32	142
<i>OR2080236H</i>				<b>35</b>	57.8	13.7	26	144
<i>WA 8158</i>				33	59.4	13.7	30	142
<i>WA 8159</i>				33	58.8	13.9	31	142
<b>Bauermeister</b>	46	48	44	31	59.0	13.9	29	142
<b>Eltan (SWW Check)</b>	47	48	44	28	59.6	13.6	29	143
<i>UI Silver</i>		46	43	28	<b>61.0</b>	14.2	28	140
<i>OR2080229H</i>		33		28	58.7	14.6	26	143
<b>IDO816</b>				28	58.6	14.2	28	142
<b>Boundary</b>	41	43	36	27	58.0	14.7	27	143
<i>OR2080227H</i>				27	58.5	13.9	24	141
<i>MDM</i>	44	48	41	26	59.9	14.3	29	143
<b>WA 8119</b>		54	51	26	57.9	13.4	28	145
<b>WA 8157</b>				25	59.9	14.7	27	140
<i>UICF-Grace</i>		40	39	24	58.4	15.9	34	140
<i>OR2080156H</i>		37	37	24	57.6	16.2	26	141
<b>Finley</b>	43	45	42	23	59.2	15.6	32	140
<b>Norwest 553</b>	44	43	48	20	59.4	15.6	25	143
<b>UI SRG</b>			41	20	57.5	15.9	32	140
<b>Altigo</b>			30	17	54.3	13.9	24	142
<b>Azimut</b>			41	15	56.9	16.0	20	143
<b>Eddy</b>	36	35	30	14	59.5	16.6	28	140
<b>WA 8118</b>		37	39	13	58.4	18.3	29	140
<b>C.V. %</b>	13	9	10	14	1.1	4.1	8	1
<b>LSD (.10)</b>	2	2	3	4	0.7	0.7	2	2
<b>Average</b>	43	43	41	26	58.5	14.8	28	142
<b>Highest</b>	47	54	51	39	61.0	18.3	34	145
<b>Lowest</b>	36	33	30	13	54.3	13.4	20	140

### Connell Hard Winter Wheat - Preliminary Data

1. Grain yield in the Connell hard winter wheat trial averaged 26 bushels/acre, 17 bushels/acre lower than the 5-year average. The Connell nursery was located about 6 miles east of Connell, WA (D. Bauermeister, cooperator).
2. This nursery was seeded on 12 September, 2011 following fallow. Seed was placed at a 45#/acre seeding rate using a deep-furrow plot drill set on 15-inch spacing. Fall seeding conditions were favorable and emergence and stand establishment were good. Base fertilizer was 70#N/acre. Based on a spring soil test showing 259 lbs./acre available N, no additional N was applied for hard wheat protein based on expected yields.
3. Yields ranged from 13 bu/ac to 39 bu/ac. Farnum 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 3 of the 24 entries. Bauermeister was the top yielding hard entry across five years of results at this location. Some plants at this site experienced damaging frost at the beginning of heading. The early varieties were damaged the most and later varieties showed little or no injury. This variable frost injury increased CV values for this trial, but are important responses to evaluate. There was a low amount of stripe rust potential at this location and no fungicide was applied. This is the one site selected out of four in the <12" rainfall zone that did not receive fungicides for stripe rust control in 2012.
4. Test weights averaged 58.5 lbs./bu and ranged from 54.3 to 61.0 lbs./bu. Grain protein averaged 14.8% with a range of 13.4 to 18.3%. Plant height averaged 28 inches with no lodging. Late season water stress and the frost at heading increased protein levels and lowered test weights.