

## 2012 WSU Variety Testing Hard Winter Irr Wheat Trial, Moses Lake

Variety Name <i>*Hard White Italicized</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	LODGING (%)
<i>OR2080229H</i>		165		140	58.4	12.6	42	146	25
<b>Genesis</b>			164	138	58.5	12.1	36	141	25
<b>Altigo</b>			168	137	52.5	12.6	38	142	
<b>WA 8061-10</b>				137	56.3	14.0	41	144	
<b>WA 8115</b>			171	136	56.3	13.0	37	142	45
<b>Norwest 553</b>	163	160	161	135	58.3	13.4	37	145	25
<b>Esperia</b>		160	152	132	58.9	12.9	34	141	27
<b>Finley</b>				131	62.1	13.4	51	145	23
<b>WA 8156</b>				126	58.1	13.8	49	146	47
<i>OR2080227H</i>				125	54.3	13.5	40	145	70
<b>Azimut</b>			157	124	51.7	13.3	33	142	25
<i>OR2080156H</i>		161	158	123	57.8	13.9	41	145	
<b>Boundary</b>	153	145	142	122	56.8	13.8	41	146	43
<b>Eddy</b>	162	158	155	118	58.8	13.4	39	143	57
<i>UICF-Grace</i>	151	146	145	111	59.3	14.9	50	145	52
<b>WA 8157</b>				110	55.7	13.6	39	142	65
<b>WA 8119</b>				110	53.0	13.8	43	147	68
<b>UI SRG</b>				109	57.1	14.0	45	144	62
<i>WA 8158</i>				106	55.2	13.6	43	146	62
<i>WA 8159</i>				105	54.4	14.6	42	147	75
<i>UI Silver</i>		151	143	104	58.5	12.9	43	145	85
<i>OR2080236H</i>				103	52.4	15.0	40	147	22
<b>WA 8139</b>			152	99	58.1	15.0	40	143	65
<b>IDO816</b>				95	58.7	13.6	40	147	70
<i>DH02-18-69</i>				94	61.7	14.0	51	147	42
<i>MDM</i>				92	56.0	14.9	40	147	75
<b>Bauermeister</b>	142	133	134	90	54.8	14.5	38	148	92
<i>DH02-18-88</i>				86	57.2	11.9	46	146	83
<b>Farnum</b>				85	56.4	16.0	39	148	67
<b>WA 8118</b>			145	78	57.6	15.6	39	141	62
<b>C.V. %</b>	8	9	9	12	2.8	5.4	4	1	58
<b>LSD (.10)</b>	5	8	9	15	1.7	0.8	2	1	30
<b>Average</b>	154	153	154	113	56.8	13.8	41	145	49
<b>Highest</b>	163	165	171	140	62.1	16.0	51	148	92
<b>Lowest</b>	142	133	134	78	51.7	11.9	33	141	0

## Moses Lake Irrigated Hard Winter Wheat – Preliminary Data

1. Grain yield in the 2012 irrigated Moses Lake hard winter wheat trial averaged 113 bushels/acre, 41 bushels/acre lower than the 5-year average. The Moses Lake nursery was located about 7 miles south of Moses Lake, WA (J. Heilig, cooperator).
2. This nursery was seeded on 18 September, 2011 following potatoes. Seed was placed at an 85#/acre seeding rate using a double-disc plot drill set on 6-inch spacing. Base fertilizer was 200#N/acre applied pre-plant. Based on a spring soil test showing 347 lbs./acre available N, 48#N/acre additional fertilizer was applied for hard wheat protein based on expected yields. Fall seeding conditions were good as were emergence and stand establishment.
3. Yields ranged from 78 bu/ac to 140 bu/ac. 'Genesis' 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 10 of the 30 entries. 'Norwest 553' was the top yielding hard entry across five years of results at this location. Stripe rust potential at this location was low/moderate and fungicide was applied with the herbicide on 20 April and again on 24 May. Soil and water variability at this site was high. This influenced grain filling, maturity, and lodging. We also believe that heat stress affected later maturity tillers.
4. Test weights were highly variable averaging 56.8 lbs./bu and ranged from 51.7 to 62.1 lbs./bu. Grain protein also was variable averaging 13.8% with a range of 11.9 to 16.0%. Plant height averaged 41 inches. Lodging was highly variable in this trial, averaged 49%, ranged from 0% to 92%, and influenced performance.