

2009 WSU EXTENSION SPRING BARLEY NURSERY AT DAYTON, WA.

Variety Name <i>*6-Row Italicized</i>	5 YEAR AVERAGE (LBS/A)	3 YEAR AVERAGE (LBS/A)	2 YEAR AVERAGE (LBS/A)	2009						
				YIELD (LBS/A)	TEST WT (LBS/BU)	PROTEIN (%)	PLUMP (%)	THIN (%)	PLANT HEAD HT	DATE
BOB	3540	3760	3120	3340	49.2	13.2	87	5	21	166
<i>05WA-325.18</i>				3270	46.9	13.1	80	7	21	168
TETONIA				3260	48.2	12.7	64	14	20	169
LENETAH			3200	3240	49.3	13.2	77	9	21	168
<i>05WA-329.49</i>				3180	49.1	13.3	85	4	21	167
BARONESSE	3680	3660	3090	3170	48.3	13.3	78	8	21	168
<i>04WNZ-286</i>		3590	2950	3140	50.2	13.5	84	6	21	166
RADIANT	3820	3910	3190	3120	48.4	12.5	67	12	21	167
<i>05WA-357.14</i>				3120	49.7	13.9	87	4	21	167
KENT		3710	3100	3050	47.9	12.6	78	8	19	168
RWA 1758			3040	2990	49.6	13.3	84	6	19	167
CHAMPION	3830	3930	3140	2940	50.1	13.3	76	8	21	167
<i>05WA-316.K</i>				2940	48.7	13.5	85	5	21	165
HAXBY		3440	3110	2860	51.2	13.0	81	8	20	166
<i>2004NZ160</i>				2860	49.9	13.6	82	6	18	168
<i>05WA-360.24</i>				2860	48.1	13.4	81	7	20	167
<i>2004NZ170</i>				2770	48.0	13.0	79	7	19	168
<i>2004NZ223</i>				2750	51.0	13.3	86	5	19	169
<i>04WNZ-124</i>			2620	2700	48.5	14.2	81	6	21	169
<i>04WA-113.22</i>			2840	2640	49.5	13.9	80	6	20	167
<i>04WA-122.9</i>			2730	2610	49.0	13.3	78	7	22	167
<i>04WA-102.49</i>			2580	2570	48.9	13.6	84	5	19	168
SPAULDING	3470	3670	2770	2520	49.9	12.6	78	8	21	168
HARRINGTON	3210	3290	2580	2440	46.6	13.4	74	10	21	168
<i>05WA-316.99</i>				2410	47.2	13.1	77	7	20	167
<i>03WA-204.22H (Hulless)</i>				2270	55.5	14.2	59	18	18	167
<i>2004NZ052</i>				2250	49.5	14.0	89	4	17	169
<i>LEGACY</i>	2970	3050	2370	2200	48.0	12.6	72	10	25	167
<i>01WA-13860.5 (Hulless)</i>		2890	2200	2170	56.9	14.9	46	20	20	168
CDC COPELAND			2390	2150	45.8	13.5	73	10	23	169
AC METCALFE	2900	2870	2160	2110	47.9	13.7	81	7	22	168
<i>WA 9820-98 (Hulless)</i>		2790	2230	1980	56.6	14.5	23	33	18	168
MERESSE (Hulless)		2700	2130	1960	56.0	15.1	61	12	21	166
<i>CLEARWATER(Hulless)</i>				1930	55.5	13.6	40	25	22	168
PINNACLE				1810	50.0	12.4	89	4	20	167
<i>05WA-328.8</i>				1640	48.2	13.7	80	6	21	166
C.V. %	11	9	11	11	1.4	2.9	6	25	6	0
LSD '@ .10'	200	220	270	400	0.9	0.5	6	3	2	1
Average	3430	3380	2740	2650	49.8	13.4	75	9	20	167
Highest	3830	3930	3200	3340	56.9	15.1	89	33	25	169
Lowest	2900	2700	2130	1640	45.8	12.4	23	4	17	165

1. Grain yield in the Dayton spring Barley trial averaged 2650 lb/ac, 23% lower than the average 5-year yield for this location. The low yields at this site indicate below average conditions that were evident from emergence through harvest. Soil compaction is suspected to have contributed to limiting yield potential. The Dayton nursery was located about 6 miles north of Dayton, WA (Jay Penner, cooperator).
2. This nursery was seeded on 16 April, 2009 following winter wheat. Seed was placed at a 90#/acre seeding rate using a double disc plot drill set on 6-inch spacing. Base fertilizer was applied at 137#N, 10#P and 15#S per acre, and a spring soil test showed adequate available nutrients. Spring seeding conditions were good with moisture rated 6 out of 10 and spring rain made the early outlook good for the spring crop. For grain yield, the alpha lattice experimental design improved variation allocation during statistical analysis and the CV by 12% compared to an RCBD design.
3. Yields ranged from 1640 lb/ac to 3340 lb/ac, with a CV of 11%. Yield values within the LSD range of the highest yield are shown in bold and 12 of the 36 entries are in this group. Six-row entries are listed in italicized print and the hulless cultivars are designated.
4. Average test weights were good at 49.8 lb/bu. Plump grain (>6/64" screen) averaged 75%. Grain protein was high and averaged 13.4%. The average plant height was 20 inches, showing the limited plant growth at this site. No lodging occurred.