2010 WSU EXTENSION HARD WINTER WHEAT NURSERY AT DAYTON, WA.

Variety Name *HDWH Italicized	5 YEAR AVERAGE (BU/A)	3 YEAR AVERAGE (BU/A)	2 YEAR AVERAGE (BU/A)	2010 YIELD (BU/A)	2010 TEST WT (LBS/BU)	2010 PROTEIN (%)	2010 LODGING (%)	2010 PLANT HT	2010 HEAD DATE
NORWEST 553	- -	139	155	**166**	**62.5**	12.2	0	38	154
WA008120	- -			**166**	57.3	11.9	7	47	160
WA008119	- -			**162**	57.3	11.9	3	46	159
OR2080229H	- -			159	**62.3**	11.5	0	46	158
UI SILVER	- -		134	151	**62.3**	11.5	37	46	158
OR2080156H	- -			143	60.0	12.6	0	44	156
WA008118	- -			136	59.8	13.8	45	48	152
ESPERIA	- -		133	135	60.7	12.6	0	34	151
BAUERMEISTER	- -	110	116	124	55.7	12.4	12	47	161
BOUNDARY	- -	112	120	123	57.8	11.6	0	44	156
ELTAN(SWW check)	- -	106	106	122	55.7	11.8	33	44	161
MDM	- -	107	110	122	56.4	12.1	23	45	161
WA008096	- -		112	121	54.3	12.6	23	46	161
WA008097	- -		110	118	54.6	12.7	43	44	160
BAU-RT1	- -			115	55.2	12.5	27	46	160
WHETSTONE	- -	113	118	112	58.2	12.7	0	44	151
WA008095	- -		109	112	59.2	13.1	37	56	158
FINLEY	- -	101	108	111	**61.8**	13.1	70	55	156
FARNUM	- -	96	102	111	59.0	13.3	43	53	162
WA008070	- -	96	100	109	59.0	12.6	10	54	162
UICF GRACE	- -		108	107	56.7	13.1	47	55	153
WA008121	- -			107	60.6	13.5	10	54	151
EDDY	- -	102	106	96	57.0	12.9	0	45	153
ACCIPITER	- -		99	86	53.8	12.6	0	45	154
WB-RIMROCK	- -	117	116	83	51.3	12.5	0	42	152
PEREGRINE	- -	95	98	82	52.1	12.7	0	54	154
IDO683	- -		88	80	60.1	13.3	90	49	154
AGRIPRO PALADIN	- -	97	92	62	50.0	13.8	0	39	155
HATTON	- -	78	75	56	54.0	12.9	3	55	159
DECLO	- -	83	75	32	40.9	14.8	0	38	157
C.V. %	- -	8	8	7	1.7	3.6	86	4	1
LSD '@ .10'	- -	6	9	10	1.3	0.6	22	2	1
Average	- -	104	108	114	56.9	12.7	19	47	157
Highest	- -	139	155	166	62.5	14.8	90	56	162
Lowest	- -	78	75	32	40.9	11.5	0	34	151

Dayton Hard Winter Wheat – Preliminary Data

1. Grain yield in the Dayton hard winter wheat trial averaged 114 bushels/acre, 10 bushels/acre higher than the 5-year average. The Dayton nursery was located about five miles north of Dayton, WA (Jay Penner, cooperator).
2. This nursery was seeded on 24 September, 2009 following summer fallow. Seed was placed at an 85#/acre seeding rate using a double-disc plot drill set on 6-inch spacing. Base fertilizer was 110#N/acre and a spring soil test analysis showed 234#N/acre in a four-foot sample. Based on average yield levels, an additional 93#N was applied to the hard trail to facilitate protein levels. Fall seeding conditions were dry and plants emerged after rainfall.
3. Yields ranged from 32 bu/ac to 166 bu/ac. All yield values within the 10% LSD range of the highest yield are shown in bold and 3 of the 30 entries in this trial are in the top group. Norwest 553 was the highest yielding entry in the trial. Stripe rust was epidemic at this location and caused a large impact on performance for susceptible cultivars. The lattice RCBD experimental design improved variation allocation during statistical analysis and the CV by 41% for yield.
4. Test weights were highly variable probably due to stripe rust with an average of 56.9 lb/bu and ranged from 40.9 to 62.5 lb/bu.
5. Grain protein averaged 12.7% with a range of 11.5 to 14.8%. Plant height averaged 47 inches. Lodging was also variable in this trial, but mostly not severe with a range of 0 to 90% lodged.