2010 WSU EXTENSION HARD WINTER WHEAT NURSERY AT WALLA WALLA, 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	- -	132	136	**139**	**61.7**	12.8	37	39	141
OR2080229H	- -			**138**	**61.9**	11.3	75	42	144
OR2080156H	- -			**120**	60.1	12.7	87	42	143
AGRIPRO PALADIN	- -	119	112	104	57.8	12.4	67	41	140
BOUNDARY	- -	112	100	90	58.5	11.9	96	41	142
WA008120	- -			86	57.6	12.0	99	41	145
ACCIPITER	- -		100	82	**60.9**	11.9	93	46	142
WA008121	- -			82	60.4	13.6	99	43	138
UI SILVER	- -		97	81	60.3	11.4	99	43	144
WHETSTONE	- -	112	101	78	59.8	13.3	95	40	138
ESPERIA	- -		105	78	59.5	13.6	95	32	137
EDDY	- -	111	99	77	**61.1**	12.6	98	39	141
WA008118	- -			72	58.7	14.1	98	42	139
BAUERMEISTER	- -	99	90	71	59.0	12.5	99	45	146
WA008119	- -			70	58.3	12.0	99	43	145
PEREGRINE	- -	98	87	69	**60.6**	12.2	99	49	140
UICF GRACE	- -		78	67	58.6	13.1	99	52	141
WA008070	- -	93	83	66	60.0	11.8	99	50	147
WB-RIMROCK	- -	103	92	63	57.9	12.3	99	41	139
DECLO	- -	102	90	62	52.4	13.1	50	41	144
WA008095	- -		73	62	59.9	13.1	99	47	145
FINLEY	- -	73	65	58	**60.7**	12.9	99	47	145
WA008097	- -		81	58	58.5	12.2	99	39	145
IDO683	- -		70	58	58.4	13.6	99	43	143
ELTAN(SWW check)	- -	94	80	57	58.4	11.9	99	42	146
MDM	- -	91	81	57	59.1	11.9	99	44	146
WA008096	- -		84	56	58.3	12.3	98	44	147
BAU-RT1	- -			48	59.1	12.8	99	42	146
HATTON	- -	80	68	47	57.3	12.5	98	47	147
FARNUM	- -	76	65	42	57.9	13.7	99	45	147
C.V. %	- -	12	14	21	1.8	3.4	14	5	1
LSD '@ .10'	- -	9	12	22	1.4	0.6	18	3	1
Average	- -	100	89	75	59.1	12.6	92	43	143
Highest	- -	132	136	139	61.9	14.1	99	52	147
Lowest	- -	73	65	42	52.4	11.3	37	32	137

Walla Walla Hard Winter Wheat – Preliminary Data

1. Grain yield in the Walla Walla hard winter wheat trial averaged 75 bushels/acre, 25 bushels/acre lower than the 5-year average. Yields were impacted by severe lodging that occurred very early during vegetative stages and severe stripe rust The Walla Walla nursery was located about nine miles southwest of Waitsburg about mid-way between Waitsburg and Walla Walla, WA (T. Beechinor farm).
2. This nursery was seeded on 17 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 120#N and a spring soil test analysis showed an additional 180#N available. Based on average yield levels, an additional 42#N was applied to the hard trail to facilitate protein levels. Fall seeding conditions were good and average high overwinter temperatures produced high amounts of vegetative growth. Lodging was noticed in some plot areas before stem elongation and increased during crop development. All plots experienced high levels of lodging and most plots were severely lodged during most of the reproductive growth stages.
3. Yields ranged from 42 bu/ac to 139 bu/ac. All yield values within the 10% LSD range of the highest yield are shown in bold. Norwest 553 was the highest yielding entry in the trial and had the lowest lodging rating. Stripe rust was epidemic at this location and occurred early with a large impact on performance. The lattice RCBD experimental design improved variation allocation during statistical analysis and the CV by 23% for yield. The CV was 21% and because of the high CV, lodging, and stripe rust, the results from this trial should be cautiously used with appropriate interpretation.
4. Test weights were okay with an average of 59.1 lb/bu and ranged from 52.4 to 61.9 lb/bu. These test weights are good considering the levels of lodging and stripe rust in this trial.
5. Grain protein averaged 12.6% with a range of 11.3 to 14.1%. Plant length averaged 43 inches.