2009 WSU EXTENSION HARD WINTER WHEAT NURSERY AT ST. ANDREWS, WA.

Variety Name *HDWH Italicized	5 YEAR AVERAGE (BU/A)	3 YEAR AVERAGE (BU/A)	2 YEAR AVERAGE (BU/A)	2009 YIELD (BU/A)	2009 TEST WT (LBS/BU)	2009 PROTEIN (%)	2009 LODGING (%)	2009 PLANT HT	2009 HEAD DATE
ACCIPITER				**38**	60.0	10.4	0	27	157
WA008095				34	59.4	11.4	0	28	156
NORWEST 553		27	31	32	61.1	11.1	0	24	154
PEREGRINE			38	31	60.8	9.7	0	35	153
FARNUM	54	43	42	30	57.5	10.5	0	33	160
WA008068			37	30	60.6	10.1	0	35	154
BAUERMEISTER	53	40	41	29	58.8	10.1	0	30	158
ML9W05-2506			32	29	60.9	11.0	0	25	154
WA008097				29	59.1	10.4	0	27	159
WA008061			38	28	60.2	11.4	0	32	155
BC002-2			35	28	60.5	11.6	0	27	151
WA008070			36	28	59.8	10.7	0	31	159
NUDAKOTA			36	28	60.7	11.6	0	26	150
IDO658				28	60.8	10.9	0	31	154
ML9W04-2543W				28	60.0	10.8	0	29	154
WA008098				28	58.9	11.1	0	29	159
ELTAN	59	41	41	27	58.2	9.7	0	31	158
IDO651				27	58.9	9.6	0	39	151
HATTON	45	36	33	26	**62.6**	10.3	0	29	157
DECLO		25	25	26	61.0	11.4	0	25	154
ACS 52025		39	35	26	61.0	10.5	0	30	151
NORRIS				26	61.5	10.8	0	28	151
FINLEY		40	36	25	61.5	10.6	0	32	153
BOUNDARY	58	43	43	25	59.4	10.4	0	27	154
WHETSTONE	45	34	32	25	61.4	11.3	0	27	150
WA008022		37	33	25	58.6	10.6	0	28	156
UI DARWIN		31	30	24	**61.9**	10.5	0	34	154
PALOMINO		31	30	24	60.9	12.4	0	26	151
IDO683				24	**62.1**	11.2	0	29	154
MDM	56	40	41	22	59.7	9.5	0	30	158
AGRIPRO PALADIN	43	32	31	21	61.5	12.8	0	27	155
MOL				21	60.1	15.5	0	19	153
WA008096				20	57.8	10.3	0	27	159
EDDY	47	30	27	19	59.9	12.9	0	26	153
ESPERIA				19	59.9	12.7	0	25	150
MIETI				18	58.3	13.8	0	18	153
C.V. %	19	17	17	12	0.9	5.6	- -	6	1
LSD '@ .10'	4	4	5	4	0.8	0.9	- -	3	1
Average	51	36	35	26	60.2	11.1	0	29	155
Highest	59	43	43	38	62.6	15.5	0	39	160
Lowest	43	25	25	18	57.5	9.5	0	18	150

1. Grain yield in the St. Andrews hard winter wheat trial averaged 26 bu/ac, 25 bu/ac less than the 5-year average. In the week prior to harvest, a hail storm struck the area and caused significant crop loss. The study site incurred hail loss that is hard to quantify, but was probably greater than 20%. Reported field losses from hail in the area were 20% to 50%. There is also the strong possibility that cultivars were impacted by hail differently based on head type, orientation, size, awns, etc. The St. Andrews nursery was located about 7 miles west of Coulee City, WA (Larry Tanneberg, cooperator).
2. This nursery was seeded on 5 September, 2008 following summer fallow. Seed was placed at a 45#/acre seeding rate using a deep furrow plot drill with split packer openers set on 15-inch spacing. Base fertilizer was 65#N and 8#S. Based on spring soil test results, there was no additional nitrogen fertilizer needed according to WSU fertilizer guidelines. Growing conditions caused some gaps in individual plots. When appropriate, gaps were subtracted from the plot areas to maintain equivalent comparisons. Alpha lattice experimental designs improved variation allocation during statistical analysis and the CV by 13% compared to previously used designs.
3. Yields ranged from 18 bu/ac to 38 bu/ac, with a CV of 12%. All yield values within the LSD range of the highest yield are shown in bold. Hard white variety names are designated by italicized print.
4. Test weights were good with an average of 60.2 lb/bu. Grain protein averaged 11.1% with a range of 9.5 to 15.5%. Average plant height was 29 inches.