

2009 WSU EXTENSION HARD WINTER WHEAT NURSERY AT DAYTON, WA.

Variety Name <i>*HDWH Italicized</i>	5 YEAR	3 YEAR	2 YEAR	2009					
	AVERAGE (BU/A)	AVERAGE (BU/A)	AVERAGE (BU/A)	YIELD (BU/A)	TEST WT (LBS/BU)	PROTEIN (%)	LODGING (%)	PLANT HT	HEAD DATE
<i>NUDAKOTA</i>	--		134	154	62.2	10.8	0	35	146
<i>ACS 52025</i>	--	141	135	149	61.5	11.4	0	33	148
<i>NORWEST 553</i>	--	121	126	145	61.8	11.4	0	32	150
<i>BC002-2</i>	--		121	137	62.2	12.0	0	35	149
<i>ML9W04-2543W</i>	--			133	59.8	11.3	0	42	152
<i>ESPERIA</i>	--			130	60.2	12.2	0	32	146
<i>ML9W05-2506</i>	--		117	128	63.1	11.7	0	34	151
<i>UT DARWIN</i>	--	99	108	127	63.0	10.8	20	44	153
<i>NORRIS</i>	--			127	63.3	11.5	0	41	147
<i>WHETSTONE</i>	--	115	114	124	61.6	11.8	0	35	146
<i>PALOMINO</i>	--	109	114	123	61.6	11.9	0	32	147
<i>AGRIPRO PALADIN</i>	--	112	115	122	61.9	12.0	0	35	152
<i>DECLO</i>	--	107	109	119	60.8	11.9	0	32	152
<i>BOUNDARY</i>	--	110	106	118	61.1	11.4	0	37	152
<i>WA008022</i>	--	109	104	118	61.4	11.7	3	43	153
<i>IDO658</i>	--			117	62.6	10.2	30	40	153
<i>EDDY</i>	--	108	106	116	62.9	11.7	0	37	148
<i>WA008068</i>	--		108	115	62.8	12.8	13	41	154
<i>PEREGRINE</i>	--		101	115	62.8	11.4	0	44	153
<i>ACCIPITER</i>	--			113	61.3	11.7	0	35	154
<i>MOL</i>	--			113	63.1	13.5	0	30	148
<i>IDO651</i>	--			109	61.1	11.6	13	51	151
<i>BAUERMEISTER</i>	--	110	103	108	60.2	11.7	63	38	157
<i>WA008095</i>	--			106	61.5	12.2	37	44	154
<i>FINLEY</i>	--	97	96	105	63.2	12.0	57	43	152
<i>WA008096</i>	--			104	59.8	11.1	23	39	156
<i>WA008097</i>	--			103	58.1	11.9	77	36	154
<i>WA008098</i>	--			101	62.4	12.2	77	42	155
<i>MDM</i>	--	108	100	99	60.1	11.6	63	35	156
<i>MIETI</i>	--			97	60.5	11.9	0	29	147
<i>IDO683</i>	--			96	63.9	12.4	47	38	152
<i>HATTON</i>	--	96	89	94	63.3	10.9	3	46	154
<i>FARNUM</i>	--	91	89	93	60.0	12.6	33	43	157
<i>WA008070</i>	--		89	92	61.4	11.9	3	45	158
<i>ELTAN</i>	--	108	98	91	58.0	11.9	92	36	156
<i>WA008061</i>	--		79	82	62.8	13.3	73	45	154
C.V. %	--	9	8	9	1.1	3.3	65	4	1
LSD ' @ .10'	--	7	8	15	0.9	0.9	18	2	1
Average	--	109	107	114	61.6	11.8	20	38	152
Highest	--	141	135	154	63.9	13.5	92	51	158
Lowest	--	91	79	82	58.0	10.2	0	29	146

1. Grain yield in the Dayton hard winter wheat trial averaged 114 bu/ac, 5% higher than the 3-year average for this site. The Dayton nursery was located about 6 miles north of Dayton, WA (Jay Penner, cooperater).
2. This nursery was seeded on 24 September, 2008 following summer fallow. Seed was placed at an 85#/acre seeding rate using a double disc drill set on 6-inch spacing. Base fertilizer was 144#N, 10#P, 15#S, and 10#CI applied in the fall. Spring soil test showed an additional 70#N and 10#S was needed for the hard nursery and that was applied 24 March, 2009. Seeding conditions produced good stands that overwintered well. Alpha lattice experimental designs did not improve variation allocation during statistical analysis. At this site a significant stripe rust infestation was observed in the middle of June. Susceptible cultivars, and some cultivars with high-temperature adult plant resistance (HTAP) were showing extensive leaf cover by stripe rust. The cool temperatures of early June had not allowed the HTAP to 'kick in', but later warmer temperatures the last week of June allowed expression of HTAP resistance. Dr. Chen rated the nursery for stripe rust. Susceptible varieties should have expressed yield loss from stripe rust.
3. Yields ranged from 82 bu/ac to 154 bu/ac, with a CV of 9%. Yield values within the LSD range of the highest yield are shown in bold and included three cultivars. Hard white variety names are designated by italicized print.
4. Test weights were good with an average of 61.6 lb/bu. Grain protein averaged 11.8% with a range of 10.2 to 13.5%. Despite additional spring fertilization, the hard trial did not average higher protein than the soft trial. The average plant height was 38 inches.