

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

Variety Name <i>*HDWH Italicized</i>	2010			YIELD (BU/A)	TEST WT (LBS/BU)	PROTEIN (%)	LODGING (%)	PLANT HT	HEAD DATE
	5 YEAR AVERAGE (BU/A)	3 YEAR AVERAGE (BU/A)	2 YEAR AVERAGE (BU/A)						
WA008120				77	58.7	8.7	0	36	146
WA008119				72	58.8	8.9	0	36	145
ELTAN (SWW check)	57	56	70	68	57.4	7.9	0	36	146
PEREGRINE		48	60	64	59.5	8.5	0	43	142
FARNUM	50	50	60	62	57.8	8.8	0	43	149
BAUERMEISTER	51	51	61	62	57.7	8.7	0	37	147
<i>MDM</i>	52	51	62	62	58.0	8.4	0	36	147
WA008095			61	62	60.8	9.1	0	42	144
<i>WA008096</i>			61	61	58.3	8.5	0	35	148
BAU-RT1				59	58.6	9.0	0	36	148
<i>WA008097</i>			60	58	58.1	8.7	0	34	148
BOUNDARY	50	46	53	56	59.9	9.0	0	33	144
WA008070		49	57	55	59.3	8.3	0	41	148
ACCIPITER			52	55	59.2	8.9	0	38	146
FINLEY	47	48	56	53	61.3	9.4	0	41	144
<i>UT SILVER</i>			58	53	60.7	9.2	0	37	144
<i>OR2080229H</i>				52	61.3	9.2	0	36	147
HATTON	46	44	52	49	61.0	8.3	0	41	145
NORWEST 553	41	40	46	49	60.6	10.4	0	31	144
IDO683			51	48	59.8	10.0	0	37	144
WHETSTONE	41	42	51	47	62.0	10.2	0	34	140
WA008118				45	60.3	10.8	0	36	140
WB-RIMROCK		40	48	44	59.2	9.6	0	36	143
WA008121				44	60.0	11.1	0	40	140
AGRIPRO PALADIN	42	42	47	43	61.4	11.4	0	34	145
<i>UICF GRACE</i>			48	43	60.1	9.8	0	43	142
<i>OR2080156H</i>				43	59.3	10.7	0	33	146
EDDY	42	39	45	41	60.6	10.8	0	33	140
DECLO		28	32	29	60.2	10.9	0	31	144
ESPERIA									
C.V. %	12	11	11	10	0.7	5.2	--	4	1
LSD @ .10'	3	4	6	7	0.6	0.7	--	2	1
Average	47	45	53	52	59.6	9.6	0	37	145
Highest	57	56	70	77	62.0	11.4	0	43	149
Lowest	41	28	32	29	57.4	7.9	0	31	140

Ritzville Hard Winter Wheat – Preliminary Data

1. Grain yield in the Ritzville hard winter wheat trial averaged 52 bushels/acre, 5 bushels/acre higher than the 5-year average. Higher yields were enabled by favorable spring precipitation and temperatures. The Ritzville nursery was located about four miles west of Ritzville, WA (R. Jirava farm).
2. This nursery was seeded on 1 September, 2009 following summer fallow. Seed was placed at a 45#/acre seeding rate using a deep furrow plot drill set on 15-inch spacing. Base fertilizer was 40#N and a spring soil test analysis showed an additional 99#N available that should have been adequate for hard protein levels at projected average yield levels. Fall seeding conditions were dry, but emergence and stand establishment were adequate.
3. Yields ranged from 29 bu/ac to 77 bu/ac. All yield values within the 10% LSD range of the highest yield are shown in bold. Of the 60 entries in the trial two cultivars were within the top LSD range. Stripe rust was epidemic, but this location incurred less impact from stripe rust than many locations. The lattice RCBD experimental design improved variation allocation during statistical analysis and the CV by 47% for yield.
4. Test weights were good with an average of 59.6 lb/bu and a range of 57.4 to 62.0 lb/bu. Good test weights also show that stripe rust did not have a large impact and moisture conditions were favorable. Grain protein was low and averaged 9.6% with a range of 7.9 to 11.4%. The N fertilizer applied was calculated to be adequate for protein at an average yield level but yields exceeded expectations. Furthermore, because the high yield conditions came late in the season, it did not favor N uptake that occurs predominantly in earlier stages of plant growth. Both these factors can contribute to lower proteins. Plant height averaged 37 inches.