

2007 WSU EXTENSION HARD WINTER WHEAT NURSERY AT HORSE HEAVEN, WA.

Variety Name *HDWH Italized	5 YEAR AVERAGE (BU/A)	3 YEAR AVERAGE (BU/A)	2 YEAR AVERAGE (BU/A)	2007					
				YIELD (BU/A)	TEST WT (LBS/BU)	PROTEIN (%)	LODGING (%)	PLANT HT	HEAD DATE
WA008023				55.1	59.7	11.7	0	31.3	139.0
WA007976		49.8	52.4	53.7	61.3	11.2	0	27.8	139.4
ELTAN	37.8	45.4	48.4	53.2	61.3	11.0	0	29.3	138.3
BAUERMEISTER		43.5	44.9	50.5	62.1	11.6	0	29.8	139.0
<i>MDM</i>		43.4	43.3	50.4	61.8	11.3	0	29.5	139.0
ORN00B553			45.0	47.6	62.6	12.4	0	25.3	138.3
<i>OR2052046H</i>				47.6	63.0	10.6	0	25.8	137.5
FINLEY	33.4		43.1	45.0	62.6	11.9	0	33.8	137.5
WA008024				44.6	60.2	12.0	0	28.5	139.0
TX97F4-33-1B				44.3	63.4	11.9	0	26.3	132.6
WA008003			47.0	44.0	61.4	11.9	0	30.5	139.0
ACS 52035				43.8	62.0	13.4	0	32.3	139.0
WA008022				43.7	60.7	11.6	0	31.3	138.6
BOUNDARY	35.0	45.0	47.0	42.7	60.6	12.5	0	25.5	127.0
WA007975		43.5	47.2	42.3	60.5	12.1	0	30.3	139.4
<i>WA008019</i>			44.2	41.0	63.4	12.0	0	34.0	135.6
ACS 52025				39.9	62.2	12.5	0	29.3	135.3
IDO621			46.6	39.2	60.8	12.5	0	25.5	137.1
JUNIPER			42.6	38.4	62.2	12.8	0	35.0	137.9
EDDY		41.6	41.4	38.2	61.6	12.9	0	25.8	139.4
HATTON	35.1	37.2	41.3	37.5	63.2	11.6	0	32.5	139.0
W98-344		40.4	40.3	37.2	62.1	13.6	0	27.5	133.4
<i>UI DARWIN</i>			40.0	36.5	63.2	12.9	0	31.5	137.9
BZ9W02-2032				36.0	62.0	13.6	0	26.3	132.3
AGRIPRO PALADIN		39.4	38.3	33.9	62.2	13.7	0	27.3	135.6
DECLO				33.0	61.3	14.5	0	24.0	139.8
<i>PALOMINO</i>			37.6	32.9	61.5	13.6	0	24.3	133.0
<i>WA008025</i>				28.8	60.7	12.6	0	24.0	141.3
FINEWAY				27.7	62.0	13.3	0	32.8	139.0
C.V. %	9.0	8.4	8.8	9.4	0.7	3.2	--	--	--
LSD '@ .10'	1.9	2.4	3.1	4.6	0.5	0.5	--	--	--
Average	35.3	42.9	43.9	41.7	61.8	12.4	0	28.9	137.2
Highest	37.8	49.8	52.4	55.1	63.4	14.5	0	35.0	141.3
Lowest	33.4	37.2	37.6	27.7	59.7	10.6	0	24.0	127.0

HORSE HEAVEN HARD WINTER WHEAT – 2007 WSU VARIETY TESTING DATA

1. 2007 Hard Winter Wheat **YIELD DATA** from the WSU Variety Testing nursery at the Horse Heaven location averaged 41.7 bu/ac that was nearly equal to a 3-year average of 42.9 bu/ac. *NOTE: The Horse Heaven nursery was located on Cemetery Rd (D. Roseberry farm).* This nursery was seeded fairly late on 10 October 2006 on summer fallow ground using a deep furrow plot drill with split packer double disc openers. Seeding rate was 45# per acre and a base fertilizer rate of 25# nitrogen per acre was applied to this nursery. A 6 March 2007 soil test showed 164#N, 15#P and 12#S and 22# CI (top 2-feet) availability.
2. This nursery had good emergence that resulted in an even and uniform stand. In general, the cold snap at the end of October 2006 and the 10-day cold-snap in mid-January (11-21 Jan 2007) had minimal winter injury impact.
3. **Stripe rust** did not appear to be a significant factor in the 2007 nursery; however, susceptible varieties such as Hatton and Finley showed fairly high percent of infection. Stripe rust on the more susceptible varieties appeared to “idle” along throughout the growing season without causing significant yield losses in this nursery. Many commercial fields in the area were sprayed with a fungicide. Stripe rust infection summary evaluations conducted by Dr. Xianming Chen, Plant Pathologist, USDA/ARS, Pullman, WA for all varieties included in the WSU Variety Testing Program winter wheat nurseries at six locations are available on the WSU Extension Uniform Cereal Variety Web site under the Agronomy Updates section of the web site – *posted 7-25-07.* (<http://variety.wsu.edu/>).
4. **Yield differences** had a range of 27.7 to 55.1 bushels per acre and it appears a trend continues in the 2007 low rainfall hard winter nurseries that historical adapted varieties in a given region are having the best yield performance. At Horse Heaven for example, the four varieties that are statistically equal to the highest yielding line (WA008023) have Eltan, Finley or a combination of both varieties in their pedigree.
5. Wheat quality in terms of **test weight** was exceptionally good at this location with an average test weight value of 61.8 lbs/bu. Even with the cold, dry 3-month spring growing conditions, this area received nearly 0.75 inches of precipitation on 5 June 2007 that was timely for kernel fill.
6. **Percent grain protein** averaged 12.5% in this nursery and generally all varieties met or exceeded the 11.5% protein requirement for the HRW market class.