

2006 WSU EXTENSION HARD WINTER WHEAT NURSERY AT CONNELL, WA.

Variety Name	5 YEAR AVERAGE (BU/A)	3 YEAR AVERAGE (BU/A)	2 YEAR AVERAGE (BU/A)	2006					
				YIELD (BU/A)	TEST WT (LBS/BU)	PROTEIN (%)	LODGING (%)	PLANT HT	HEAD DATE
WA007976	--	--	69.9	75.2	61.8	10.7	0	26.0	141.8
WA007977	--	--	63.7	72.7	58.8	11.4	0	28.5	145.9
WA008003	--	--		72.7	62.9	11.5	0	30.3	141.4
BOUNDARY	--	--	57.3	72.2	62.1	11.8	0	27.3	139.5
IDO621	--	--		69.5	62.7	11.6	0	24.8	139.1
BUCHANAN	--	--	55.6	69.3	61.8	10.8	0	33.0	143.3
WA007975	--	--	58.8	69.1	60.3	11.5	0	33.5	145.9
EDDY	--	--	57.6	68.3	63.7	12.0	0	25.0	138.4
WA008001	--	--		67.1	60.7	11.4	0	27.5	141.4
BAUERMEISTER	--	--	58.4	66.7	61.5	11.8	0	31.8	144.0
ELTAN*2/MACON	--	--		66.2	64.2	11.1	0	34.0	137.3
FINLEY	--	--		65.1	64.0	12.0	0	31.3	138.0
ELTAN	--	--	59.6	64.9	61.4	11.6	0	30.3	144.4
JUNIPER	--	--		63.2	63.3	12.1	0	35.5	138.8
WANSER	--	--	51.1	63.1	63.9	12.2	0	31.5	138.0
WA008002	--	--		62.3	63.4	11.6	0	27.5	141.0
MDM	--	--	52.0	61.7	61.5	11.2	0	30.5	143.6
HATTON	--	--	42.3	61.2	64.7	11.7	0	29.5	139.5
UI DARWIN	--	--		60.9	63.9	11.9	0	33.3	136.9
AGRIPRO PALADIN	--	--	54.1	60.6	64.1	12.2	0	25.0	138.4
ORN00B553	--	--		60.3	63.6	12.4	0	24.0	140.3
ORN98-0995	--	--		60.0	59.9	11.4	0	24.3	141.4
WA008004	--	--		57.1	61.3	12.4	0	30.0	140.3
IDO641	--	--		56.4	63.9	11.2	0	26.5	138.8
DW	--	--	51.9	55.5	63.2	12.1	0	28.3	138.4
ORN00B507	--	--		55.1	62.9	12.1	0	21.8	139.5
WESTON	--	--	46.8	50.3	63.7	13.2	0	31.8	138.0
W98-344	--	--	50.4	49.1	63.8	12.7	0	26.8	138.4
W96-359W	--	--		49.0	62.8	12.7	0	25.5	139.1
ACS 51084	--	--		44.8	62.6	12.8	0	24.3	138.8
C.V. %	--	--	7.7	7.1	0.9	2.9	--	--	--
LSD '@. 10'	--	--	3.6	5.2	0.7	0.4	--	--	--
Average	--	--	55.3	62.3	62.6	11.8	0	28.7	140.3
Highest	--	--	69.9	75.2	64.7	13.2	0	35.5	145.9
Lowest	--	--	42.3	44.8	58.8	10.7	0	21.8	136.9

CONNELL HARD WINTER WHEAT – 2006 WSU VARIETY TESTING DATA

1. 2006 Hard Winter Wheat **YIELD DATA** from the WSU Variety Testing nursery at the Connell location averaged 62.3 bu/ac and was 12.6% higher than the 2-year historical average of 55.3 bu/ac. **YIELD RANKING** trends among varieties at this location remained fairly consistent with 2-year averages. *NOTE: The Connell nursery was located five miles east of Connell on Blackburn Rd (D. Bauermeister farm).*
2. This nursery was **seeded late** on 12 October 2005 on summer fallow ground using a plot drill with double disc openers. The late 2005 seeding was a result of dry August/September 2005 soil moisture levels where sub-surface moisture was well below the depth of seeding for even deep furrow (split packer drills). Precipitation during the first week of October 2005 provided enough surface moisture that double disc openers were able to place seed into moisture. Depth to soil moisture at seeding was 1/2-inch depth on October 12th. This nursery had even emergence and withstood the mid-February 2006 cold snap with little problem.
3. **Stripe rust** was not a factor in the 2006 nursery even though traces of stripe rust could be observed on susceptible varieties.
4. **Yield differences** among many varieties were very slight. There appears to be somewhat of a trend (similar in soft white winter wheat) that shows **later maturing (later heading dates) varieties with higher yield averages** at this location. This could be explained in part by the extreme dry weather pattern from mid-April (following Easter) to mid May where there was no precipitation and at the end of this period (16-19 May 2006) temperatures soared into the 90's. A field evaluation on 11 May 2006 showed the soil was completely dry to the 6-inch level and a probe could not penetrate any deeper. Roots and crowns were sitting in this extremely dry soil zone. Earlier/faster growing varieties were probably more negatively impacted by this weather/moisture pattern. Late May and early June precipitation seemed to make the 2006 crop, particularly for varieties that had growth and development patterns that dovetailed with these precipitation events. The two highest yielding lines in 2006 trial were WA007976 and WA007977. Both are Estica/Finley crosses developed by the WSU Winter Wheat Breeding Program.
5. Average **Test Weight** values (62.6 lb/bu) were extremely high at this location, undoubtedly influenced by above average, late May/early June precipitation during critical periods of grain fill.
6. **Percent grain protein** range was 10.7%-13.2%. The majority of varieties exceeded the 11.5% minimum protein requirement for HRW market class. Fertility management was based on 3 pounds of nitrogen per expected bushel of production.