

2006 WSU EXTENSION HARD WINTER WHEAT NURSERY AT ST. ANDREWS, 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
ELTAN	68.2	76.5	85.8	83.8	58.5	9.6	0.0	36.8	157.5
WA007977			82.9	73.0	57.8	10.6	0.0	38.3	159.4
MDM		74.7	80.7	69.9	58.9	9.2	0.0	35.5	157.9
BOUNDARY	67.2	71.9	78.8	69.1	60.3	10.8	0.0	32.0	155.3
IDO641				68.5	62.9	10.6	0.0	34.5	155.3
BAUERMEISTER		71.6	72.8	66.9	58.3	9.9	6.3	38.0	158.3
WESTON	58.7	64.8	70.1	66.3	61.9	12.2	0.0	43.0	152.3
FINLEY	56.8	61.4		65.4	62.2	10.9	7.5	44.8	154.9
ELTAN*2/MACON				65.2	59.6	11.3	17.5	41.0	153.0
WA008003				61.6	60.4	10.9	0.0	40.3	157.1
IDO621				61.4	61.2	10.0	0.0	29.5	155.3
BUCHANAN	57.8	60.2	65.8	61.0	57.6	9.4	12.5	40.8	158.3
WA007975			71.0	61.0	58.2	10.7	12.5	41.8	159.0
WANSER	55.8	58.8	62.7	60.3	61.8	11.3	0.0	39.5	153.0
WA008001				59.6	58.1	10.2	0.0	38.0	157.5
HATTON	60.0	60.3	59.3	57.0	62.2	11.5	0.0	42.0	156.4
EDDY		69.4	72.2	56.9	62.5	11.3	0.0	33.0	153.4
DW	60.0	62.4	62.7	56.5	60.4	11.2	0.0	33.3	155.6
UI DARWIN				56.0	62.6	11.8	6.3	41.5	156.0
AGRIPRO PALADIN		53.7	58.8	55.4	61.1	11.5	0.0	31.5	154.5
W96-359W				54.7	62.4	11.3	0.0	31.0	152.6
WA007976			75.6	52.6	58.1	10.3	0.0	35.8	157.5
JUNIPER				52.6	60.3	12.0	0.0	44.3	155.3
WA008002				52.3	60.7	11.1	0.0	38.0	156.8
WA008004				50.8	59.7	11.0	0.0	38.0	156.0
ORN98-0995				50.1	54.7	10.9	0.0	28.8	157.5
W98-344			61.0	47.6	61.5	11.7	0.0	32.5	152.6
ORN00B553				46.3	55.5	10.9	0.0	27.5	156.4
ORN00B507									
ACS 51084									
C.V. %	14.6	16.1	15.0	17.4	2.0	9.3	--	--	--
LSD '@. 10'	4.8	7.0	8.3	12.3	1.4	1.2	--	--	--
Average	60.5	65.5	70.7	60.0	60.0	10.9	2.2	36.8	155.9
Highest	68.2	76.5	85.8	83.8	62.9	12.2	17.5	44.8	159.4
Lowest	55.8	53.7	58.8	46.3	54.7	9.2	0.0	27.5	152.3

ST ANDREWS HARD WINTER WHEAT – 2006 WSU VARIETY TESTING DATA

1. 2006 Hard Winter Wheat **YIELD DATA** from the WSU Variety Testing nursery at the St Andrews (Douglas County) location averaged 60.0 bu/ac that was 8.3% lower than the 3-year historical average (65.5 bu/ac). *NOTE: The St Andrews nursery was located 5 miles northwest of Coulee City, WA off Highway 2 on the St. Andrews South Road NE (L. Tanneberg farm).*
2. This nursery was **seeded early** on 27 August 2005 on summer fallow ground using a deep furrow plot drill with split packer double disc openers into soil moisture that was about 5-inches below the surface. This nursery had good emergence that resulted in a very even and uniform stand with fairly large wheat going into the winter. .
3. **Stripe rust** was not a significant factor in the 2006 nursery even though traces of stripe rust could be observed on susceptible varieties.
4. **Snow mold** had a substantial impact on many varieties/experimental lines in the 2006 nursery. Snow mold injury/death was not as severe as in other areas of Douglas County in 2006; however, it was a major contributor to a yield range of zero bu/ac (ORN00B507, ACS 51084) to 83.8 bu/ac (Eltan) in the hard winter nursery. (*Eltan is used as a check comparison variety*). Field evaluations on 23 March 2006 showed a wide variation of snow mold damage with many varieties already exhibiting considerable regrowth. (**See attached photos depicting snow mold symptoms on leaf tissue and variation in plot recovery**). Eltan continues as the most snow mold tolerant variety and topped the nursery at 83.8 bu/ac. The majority of varieties/experimental lines in the top third of the nursery had pedigrees that included crosses to varieties classified with moderate resistance to snow mold.
5. In addition to snow mold, this nursery also took some hits from the up-and-down weather patterns during the 2005-2006 growing season that included the extreme dry weather pattern from mid-April (following Easter) to mid May with no precipitation followed at the end of this period (16-19 May 2006) with temperatures that soared into the 90's. Roots and crowns were sitting in extremely dry soil. The late May and early June helped plants recover, however, early June 2006 field evaluations showed considerable drought stress on all varieties. The late season precipitation and cooler weather during kernel development seemed to enhance test weight values for many varieties.
6. **Percent grain protein** had a range of 9.2% to 12.2% putting most varieties on the bubble to hit the 11.5% protein requirement for the HRW market class.
7. Average **Test Weight** value was 60.0 lb/bu.

