## 2006 WSU EXTENSION HARD WINTER WHEAT NURSERY AT ALMIRA, 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
IDO621				145.6	62.9	10.7	0.0	32.0	154.6
ELTAN		113.4	113.0	136.4	60.4	9.3	22.5	38.3	160.6
MDM		113.7	115.4	135.6	61.2	8.8	31.3	40.3	160.6
WA007976			128.8	134.2	61.3	9.4	0.0	38.3	158.0
WA008003				133.8	63.2	10.5	0.0	45.0	159.1
BOUNDARY		109.7	116.1	133.4	62.1	10.8	0.0	34.3	157.6
DW		107.8	119.4	131.2	62.7	11.2	0.0	37.8	157.3
ORN98-0995				128.3	58.9	10.9	0.0	30.8	157.6
WA007977			123.3	127.7	60.1	10.0	0.0	39.0	161.0
BAUERMEISTER		107.8	112.8	121.5	60.4	10.1	42.5	38.5	160.6
WA008002				120.4	63.4	10.5	0.0	39.5	158.8
WA008001				117.0	60.4	10.0	0.0	41.0	159.5
W98-344			104.0	116.8	62.9	11.2	0.0	34.3	149.4
WA007975			103.8	116.2	60.5	10.4	43.8	45.3	161.0
ORN00B553				113.8	61.7	11.6	0.0	28.0	156.1
EDDY		97.0	103.3	113.1	64.0	11.4	0.0	33.5	152.8
AGRIPRO PALAD	DIN	96.8	103.9	113.1	63.6	11.5	0.0	33.3	155.4
BUCHANAN		98.4	96.8	112.4	60.1	9.2	51.3	46.0	161.0
IDO641				111.7	63.3	10.2	0.0	34.8	153.9
W96-359W				111.5	62.8	12.2	0.0	32.0	150.9
JUNIPER				107.9	62.7	11.5	2.5	49.8	156.9
WA008004				107.1	62.9	10.1	3.8	40.8	157.3
FINLEY		102.0		106.4	63.0	10.3	33.8	46.3	154.3
UI DARWIN				106.3	63.8	11.2	16.3	43.8	156.9
WESTON		96.6	96.6	96.8	63.0	11.7	16.3	45.8	152.0
ELTAN*2/MACON	ı ––			93.8	64.1	10.5	61.3	44.8	151.6
ORN00B507				87.3	61.5	11.5	0.0	26.0	152.4
WANSER		78.0	78.1	84.5	59.3	10.9	7.5	45.5	154.6
ACS 51084				62.6	61.3	12.3	0.0	26.8	154.3
HATTON		69.2	59.7	62.5	58.4	11.3	5.0	46.5	158.0
C.V. %		10.5	11.1	9.5	1.0	6.4			
LSD '@ .10'		7.4	9.8	12.6	0.8	0.8			
Average		99.2	105.0	113.0	61.9	10.7	11.3	38.6	156.5
Highest		113.7	128.8	145.6	64.1	12.3	61.3	49.8	161.0
Lowest		69.2	59.7	62.5	58.4	8.8	0.0	26.0	149.4

## ALMIRA HARD WINTER WHEAT - 2006 WSU VARIETY TESTING DATA

- 1. 2006 Hard Winter Wheat **YIELD DATA** from the WSU Variety Testing nursery at the Almira, WA location averaged 113.0 bu/ac that was 13.9% higher than the 3-year historical average (99.2 bu/ac). *NOTE: The Almira nursery was located 10 miles north of Almira, WA on Sorensen Rd (D. McKay farm).*
- 2. This nursery was **seeded early** on 7 September2005 on summer fallow ground using a plot drill with hoe openers into soil moisture that was about 3-inches below the surface. This nursery had good emergence that resulted in a very even and uniform stand with fairly large wheat (6-8 inches tall) going into the winter.
- 3. **Stripe rust** was not a significant factor in the 2006 nursery even though stripe rust could be observed on varieties. Very susceptible varieties such as Hatton and Wanser had slight but fairly severe stripe rust infections that contributed them having the lowest yield averages in the nursery
- 4. This nursery survived the hits from the up-and-down weather patterns during the 2005-2006 growing season. Exceptions were ORN00B507 and ACS 51084 that suffered considerable cold injury during the 17-19 Feb 2006 cold snap. Yield averages for these two lines were also at the low end of the yield data. The late season precipitation and cooler weather during kernel development seemed to enhance test weight values for many varieties.
- 5. **Yield average rankings** once again tracked closely with historical 2-yr and 3-yr averages. The highest yielding line was an experimental line from the University of Idaho (IDO 621) that is being developed as a Boundary replacement. Eltan is included in the hard winter nurseries for yield comparisons with a soft white winter wheat variety that is adapted to hard winter wheat production regions.
- 6. Average **Test Weight** value was 61.9 lb/bu suggesting that late May precipitation and June rainfall patterns coupled with cool weather was extremely favorable to kernel development and fill. In part, the heavy test weight values probably contributed to lower grain protein values.
- 7. **Percent grain protein** had a range of 8.8% to 12.3% with most varieties on the bubble to hit the 11.5% protein requirement for the HRW market class. It is worth noting that this nursery was fertilized for an expected yield of 90 bu/ac based on historical estimates and existing soil moisture conditions for the growing season. Yield averages higher than estimated would have required additional nitrogen and sulfur fertilizer that would have contributed to higher protein values for all varieties/experimental lines in our opinion.