

[Notes](#)

**2005 VARIETY TESTING  
WASHINGTON STATE UNIVERSITY  
ST. ANDREWS HARD WINTER WHEAT NURSERY**

VARIETY NAME	5 YEAR AVERAGE (BU/A)	3 YEAR AVERAGE (BU/A)	2 YEAR AVERAGE (BU/A)	2005 YIELD (BU/A)	2005 TEST WT. (LBS/BU)	2005 PROTEIN (%)
ELTAN	66.4 ( 1)	69.8 ( 4)	72.8 ( 5)	87.7 ( 5)	60.3	8.5
BOUNDARY	66.0 ( 2)	73.5 ( 2)	73.3 ( 4)	88.4 ( 4)	62.0	9.1
Q. HYB 542	62.6 ( 3)	68.2 ( 5)	68.9 ( 6)	77.1 (11)	62.5	10.5
MORELAND	59.7 ( 4)	66.4 ( 7)	62.2 (10)	71.4 (16)	62.1	9.1
BUCHANAN	58.6 ( 5)	58.4 ( 9)	59.8 (12)	70.6 (17)	60.7	8.5
WESTON	56.0 ( 6)	61.3 ( 8)	64.1 ( 9)	73.9 (15)	63.3	9.9
RESIDENCE	52.4 ( 7)	54.0 (11)	54.0 (14)	80.6 ( 9)	59.9	8.4
WANSER	51.9 ( 8)	57.4 (10)	58.1 (13)	65.0 (20)	62.6	9.7
MDM	---	75.1 ( 1)	77.0 ( 1)	91.5 ( 3)	60.9	7.9
BAUERMEISTER	---	70.4 ( 3)	73.9 ( 3)	78.7 (10)	61.3	8.4
DW	---	66.9 ( 6)	65.3 ( 8)	68.9 (18)	62.5	9.3
PALADIN	---	52.7 (12)	52.9 (15)	62.3 (22)	63.1	11.2
BZ9W96-788-E	---	---	75.7 ( 2)	87.4 ( 6)	62.7	10.0
CDC FALCON	---	---	65.6 ( 7)	74.2 (14)	62.8	11.1
HATTON	---	---	62.0 (11)	61.5 (23)	62.3	8.4
WA7976	---	---	---	98.6 ( 1)	60.9	8.3
WA7977	---	---	---	92.9 ( 2)	60.2	8.3
WA7975	---	---	---	81.1 ( 7)	60.4	10.3
WA7980	---	---	---	80.7 ( 8)	62.0	9.5
WA7979	---	---	---	76.8 (12)	59.8	8.3
W98-344	---	---	---	74.4 (13)	63.5	10.5
W98-263	---	---	---	66.3 (19)	61.7	10.0
WA7978	---	---	---	62.4 (21)	59.7	9.3
W98-157	---	---	---	55.7 (24)	62.0	10.1
<b>NURSERY MEAN</b>	59.2	64.5	65.7	76.2	61.6	9.4
<b>CV %</b>	15.3	15.5	16.7	12.5	0.8	7.6
<b>LSD @ .10</b>	4.7	6.8	9.1	11.2	0.6	0.8

**ST. ANDREWS (Douglas County) HARD WINTER WHEAT – 2005 WSU VARIETY TESTING DATA**

- 2005 Soft Winter Wheat YIELD DATA from the WSU Variety Testing nursery at the St Andrews location averaged 76.2bu/ac and represented a 20 bu/ac increase over historical average yields at this location. *NOTE: The St Andrews nursery was located approximately 5 miles west of Coulee City, WA (L. Tannenber farm).*
- This nursery was planted on 31 August 2004 into excellent soil moisture. Fall 2004 GROWING CONDITIONS coupled with timely precipitation patterns in spring 2005 undoubtedly were ideal for winter wheat development in this region for the 2005 crop.
- STRIPE RUST was generally not an issue in this soft white winter wheat nursery except in susceptible varieties such as Hatton that exhibited over 70% infection on a 2 June 2005 evaluation that probably contributed to its substantially lower yield in 2005.
- Protein values averaged 9.4% for this nursery. Total available nitrogen measured in February 2005 showed 305#N. Plant growth and precipitation patterns in this nursery was typical of many locations in eastern Washington in 2005 (excellent fall 2004 emergence and growing conditions, mild winter, dry/cold spring soil conditions until May 2005, above average precipitation in May 2005, overcast conditions during June 2005 followed by hot, dry weather before harvest. Most of the root/crown systems survived on the surface precipitation in late May/June and as a result were somewhat 'lazy'. Roots were not forced to grow to normal soil depths in search of moisture and subsequently did not have the capacity to extract nitrogen lower in the soil profile. About the only explanation for the lower protein levels since there was sufficient nitrogen available for 12.5% HRW protein.
- Eltan is included in the nursery as a yield check variety because it continues to be highly adapted variety in St Andrews area based on its winter hardiness and snow mold resistance. Many of the newer HRW experimental lines show promise, both in terms of higher yield averages and stripe rust resistance.
- PLANT HEIGHT values above normal are similar to the soft white winter wheat nursery at this location and also indicative of the high yield values in 2005. Average plant height of the HRW varieties in the 2005 nursery was 42.0 inches compared to an average plant height of 33.2 inches in the 2004 nursery – nearly 8-9 inches taller in 2005.
- YIELD RANKING trends among varieties at this location remained fairly consistent with the historical yield rankings. Three varieties averaged over 90 bu/ac in the nursery: WA7976 and WA7977 (Estica x Finley pedigrees); MDM (hard white Eltan pedigree). All will be evaluated in 2006 nurseries.

