

**2005 VARIETY TESTING  
WASHINGTON STATE UNIVERSITY  
ST. JOHN SOFT WHITE/CLUB SPRING 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 (%)
ALPOWA	61.6 ( 1)	58.7 ( 4)	62.3 ( 4)	54.3 ( 5)	60.0	12.1
EDEN	60.5 ( 2)	59.8 ( 3)	62.4 ( 2)	48.6 ( 8)	59.7	12.7
NICK	59.9 ( 3)	60.6 ( 2)	61.9 ( 5)	54.4 ( 4)	59.6	13.9
WAWAWAI	55.5 ( 4)	52.7 ( 7)	55.5 ( 8)	47.3 (10)	58.4	13.1
ZAK	55.1 ( 5)	50.8 ( 8)	53.0 (10)	39.6 (16)	58.9	13.2
ALTURAS	53.1 ( 6)	54.5 ( 6)	58.7 ( 7)	45.0 (12)	58.1	13.3
EDWALL	52.7 ( 7)	48.0 ( 9)	46.3 (12)	31.0 (18)	52.1	13.6
FIELDER	49.6 ( 8)	42.7 (11)	41.4 (13)	26.9 (20)	54.8	13.7
PENAWAWA	49.0 ( 9)	47.2 (10)	47.7 (11)	35.2 (17)	57.0	14.2
LOUISE	---	63.5 ( 1)	67.7 ( 1)	55.6 ( 2)	58.5	12.7
WAKANZ	---	57.4 ( 5)	62.4 ( 3)	56.6 ( 1)	58.0	13.5
WA7964	---	---	61.2 ( 6)	46.2 (11)	57.5	13.0
WA7952	---	---	55.1 ( 9)	42.8 (14)	58.9	13.1
ID632	---	---	---	55.0 ( 3)	60.9	12.4
WA7963	---	---	---	53.2 ( 6)	59.0	13.1
WA7983	---	---	---	53.1 ( 7)	58.1	13.3
WA7960	---	---	---	47.8 ( 9)	58.7	12.9
WA7987	---	---	---	43.5 (13)	58.5	14.1
WA7986	---	---	---	41.0 (15)	58.4	14.5
WQL7PENWX-2	---	---	---	29.9 (19)	57.1	13.7
NURSERY MEAN	55.2	54.2	56.6	45.3	58.1	13.3
CV %	9.3	8.6	10.2	10.7	1.2	3.3
LSD @ .10	3.1	3.7	5.6	6.7	1.0	0.6

**2005 VARIETY TESTING  
WASHINGTON STATE UNIVERSITY  
ST. JOHN HARD WHITE SPRING 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 (%)
LOLO	61.9 ( 1)	58.5 ( 1)	62.2 ( 1)	53.5 ( 5)	59.8	13.2
ID377S	56.8 ( 2)	54.5 ( 4)	56.7 ( 5)	48.3 ( 8)	58.2	14.3
MACON	56.6 ( 3)	53.4 ( 5)	55.0 ( 6)	43.8 ( 9)	57.4	12.6
OTIS	---	58.0 ( 2)	62.0 ( 2)	56.3 ( 3)	59.6	13.6
BLANCA GRANDE	---	57.7 ( 3)	59.8 ( 4)	48.8 ( 7)	61.3	14.3
ID597	---	---	60.7 ( 3)	54.6 ( 4)	58.5	13.6
BZ98-447W	---	---	---	60.4 ( 1)	58.1	13.1
WA7991	---	---	---	56.6 ( 2)	60.3	13.6
WA7957	---	---	---	52.2 ( 6)	57.8	13.8
WINSOME	---	---	---	39.0 (10)	55.8	12.9
NURSERY MEAN	58.5	56.4	59.4	51.3	58.7	13.5
CV %	5.4	5.5	5.2	8.3	1.0	4.1
LSD @ .10	2	2.5	3.1	6.1	0.8	0.8

**2005 VARIETY TESTING  
WASHINGTON STATE UNIVERSITY  
ST. JOHN HARD RED SPRING 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 (%)
HANK	63.0 ( 1)	57.2 ( 4)	58.8 ( 5)	53.3 ( 6)	59.3	14.7
JEFFERSON	62.1 ( 2)	58.6 ( 2)	60.7 ( 2)	51.6 ( 8)	60.1	15.1
SCARLET	61.4 ( 3)	55.7 ( 6)	56.1 ( 8)	44.3 (16)	59.2	14.3
TARA 2002	60.7 ( 4)	57.9 ( 3)	60.6 ( 3)	51.2 ( 9)	59.7	14.6

<b>HOLLIS</b>	59.2 ( 5)	56.3 ( 5)	58.5 ( 6)	53.8 ( 5)	58.7	16.0
<b>WESTBRED 926</b>	57.6 ( 6)	54.8 ( 7)	57.4 ( 7)	49.6 (11)	59.3	15.1
<b>JEROME</b>	---	59.0 ( 1)	63.2 ( 1)	58.5 ( 2)	59.7	14.3
<b>GMG BUCK PRONTO</b>	---	---	59.4 ( 4)	52.4 ( 7)	59.3	16.4
<b>ID593</b>	---	---	55.5 ( 9)	45.7 (14)	58.3	14.0
<b>BZ999-339</b>	---	---	---	61.8 ( 1)	59.4	15.2
<b>SX1504B</b>	---	---	---	57.9 ( 3)	60.0	14.1
<b>WA7998</b>	---	---	---	56.9 ( 4)	58.5	15.0
<b>BZ999-592</b>	---	---	---	50.4 (10)	59.7	14.3
<b>WA7997</b>	---	---	---	46.8 (12)	59.4	14.3
<b>WA7994</b>	---	---	---	46.5 (13)	58.6	15.2
<b>WA7995</b>	---	---	---	45.6 (15)	58.3	15.2
<b>NURSERY MEAN</b>	60.7	57.1	58.9	51.7	59.2	14.9
<b>CV %</b>	8.0	8.9	9.2	12.9	1.1	4.1
<b>LSD @ .10</b>	3.0	4.0	5.3	9.2	0.9	0.9

### **ST JOHN SPRING WHEAT – 2005 WSU VARIETY TESTING DATA**

1. 2005 Spring Wheat data from the WSU Variety Testing nursery at the St John location averaged 45.3, 51.3, and 51.7 bu/ac for soft white spring, hard white spring and hard red spring wheat, respectively. The 2005 spring wheat average yields were nearly 25% lower for all market classes compared to the previous 3-year average yields. Two significant factors contributed to the yield drop in 2005: abnormal spring growing conditions and stripe rust.
2. GRAIN YIELD averages were heavily influenced by the spring growing conditions (cold and dry in early spring, favorable moisture in May/June 2005, limited root development into the lower soil profile caused by plants supported by late season spring precipitation that kept the upper soil profile wet. Late season hot and dry conditions forced plants to fill with root systems sitting in dry soil in the upper soil profile. Also, the previous crop year (2004) was an ideal year for spring wheat production at the St John location. For example Louise and Alpowa had 2004 yields of 79.8 and 70.3 bu/ac, respectively compared to 2005 average yields of 55.6 bu/ac (Louise) and 54.3 bu/ac (Alpowa).
3. STRIPE RUST evaluations taken on 12 June 2005 showed high infection levels. Susceptible varieties such as Fielder had 90% infection levels (type 9 = very severe). Other examples of severity were: Winsome (70%, type 7) and Scarlet (90%, type 5). In general, yield rankings in the 2005 nurseries tracked with stripe rust resistant characteristics of individual varieties.
4. TEST WEIGHT values were also influenced, particularly in the soft white spring wheat nursery, by stripe rust. Edwall and Fielder, both highly susceptible varieties, had very low test weight averages.
5. YIELD COMPARISONS at this location should focus on historical yield rankings with particular attention paid to stripe rust resistance characteristics. Normally, the St John location experiences limited stripe rust infections and the infections have normally appeared late enough that yield reductions were fairly negligible except in high susceptible varieties. This was not the case in 2005.