

## 2006 WSU EXTENSION SOFT WHITE SPRING 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 (%)	PLANT HT	HEAD DATE
LOUISE	--	27.4	28.7	25.6	56.5	9.0	26.3	179.0
WA008007	--			25.2	53.0	9.8	24.7	180.0
ALTURAS	--	26.1	26.1	24.0	56.6	9.6	21.3	179.5
ZAK	--	24.5	24.8	22.4	57.7	10.5	22.3	180.0
WAWAWAI	--	23.7	24.6	21.2	58.7	9.9	25.3	179.0
EDEN	--	25.1	24.3	20.9	58.7	10.0	20.0	179.0
WAKANZ	--	24.2	25.2	20.6	55.9	10.2	23.3	181.0
FIELDER	--	20.6	19.0	20.1	52.2	10.5	22.0	181.0
WA007986	--		21.9	18.7	56.8	11.1	18.7	179.5
UI PETTIT	--		26.6	18.5	58.7	9.5	19.3	172.5
WA007987	--		20.8	17.9	57.1	11.3	20.0	180.0
EDWALL	--	21.4	20.5	17.3	55.1	10.3	22.7	178.0
UI CATALDO	--			17.2	55.3	9.8	22.0	173.0
WA008008	--			16.5	56.7	10.3	21.3	177.5
WA007988	--			16.4	56.6	10.0	18.3	180.0
NICK	--	23.1	22.8	16.3	57.7	9.2	20.3	176.0
WA007964	--	22.9	22.0	15.7	53.1	9.3	25.3	182.5
ALPOWA	--	25.5	25.0	15.1	57.4	9.3	23.9	180.5
C.V. %	--	16.5	16.2	22.5	1.2	4.6	--	--
LSD '@ .10'	--	3.0	3.6	6.0	1.0	0.6	--	--
Average	--	24.0	23.7	19.4	56.3	10.0	22.1	178.8
Highest	--	27.4	28.7	25.6	58.7	11.3	26.3	182.5
Lowest	--	20.6	19.0	15.1	52.2	9.0	18.3	172.5

**2006 WSU EXTENSION HARD WHITE SPRING 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 (%)	PLANT HT	HEAD DATE
MACON	--	25.7	24.3	24.4	58.5	10.4	25.0	176.0
WQL9HDALP	--			22.3	56.9	9.6	23.0	179.5
IDO377S	--	22.4	21.6	22.0	59.7	11.0	24.7	177.5
WAIKEA	--		23.1	21.9	58.2	10.7	24.0	174.5
LOLO	--	23.5	21.9	21.8	59.3	10.9	24.0	178.0
ALTA BLANCA	--			20.9	59.1	11.1	23.7	178.0
BLANCA GRANDE	--	23.6	22.4	20.4	60.8	11.1	22.0	170.5
BZ903-455WP-d	--			20.1	58.0	10.7	22.0	178.0
OTIS	--	23.5	21.9	19.3	60.0	11.0	26.7	178.5
WA008010	--			19.1	58.5	11.2	21.7	178.0
WA008012	--			17.6	59.9	10.7	24.0	175.0
WA007990	--			16.1	57.4	11.7	25.0	178.5
C.V. %	--	17.4	12.8	15.0	1.2	4.1	--	--
LSD '@ .10'	--	3.1	2.7	4.3	1.0	0.6	--	--
Average	--	23.7	22.5	20.5	58.9	10.8	23.8	176.8
Highest	--	25.7	24.3	24.4	60.8	11.7	26.7	179.5
Lowest	--	22.4	21.6	16.1	56.9	9.6	21.7	170.5

**2006 WSU EXTENSION HARD RED SPRING 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 (%)	PLANT HT	HEAD DATE
WESTBRED 926	--	29.9	30.7	38.9	57.7	14.4	28.7	173.5
BZ999-339	--		30.4	36.0	56.7	14.5	29.3	174.0
JEROME	--	29.9	30.2	34.9	57.7	13.4	28.3	172.5
HOLLIS	--	30.7	31.0	34.7	58.1	14.1	34.0	177.0
JEFFERSON	--	27.0	27.3	33.1	57.1	14.6	28.3	175.5
TARA 2002	--	29.4	29.3	32.8	58.1	14.3	30.0	173.5
JEFF/PRONTO	--			32.7	57.7	14.0	27.7	173.5
WA007998	--		26.8	32.6	57.3	15.1	29.7	175.5
WA008018	--			31.6	57.1	13.9	28.0	178.5
SCARLET	--	26.2	25.6	30.4	56.7	14.5	29.0	179.0
WA008016	--			29.9	56.8	14.4	27.7	179.5
UI WINCHESTER	--			29.5	56.7	14.1	25.3	175.5
WA008015	--			28.7	56.2	14.2	27.3	179.5
WA007953	--			27.4	58.5	15.2	32.0	179.5
BUCK PRONTO	--	26.3	25.8	26.3	57.7	15.7	27.0	173.0
WA008017	--			25.6	56.8	15.3	28.0	175.0
BZ9M03-1044	--			25.3	57.5	14.0	25.0	176.0
WA007954	--			24.7	56.9	15.9	27.0	179.0
ACS52610	--			24.3	58.6	14.9	24.3	180.0
HANK	--	25.8	25.4	23.9	56.2	14.5	25.7	175.0
C.V. %	--	17.4	19.4	20.6	1.9	6.2	--	--
LSD '@.10'	--	3.8	5.3	8.6	1.5	1.2	--	--
Average	--	28.2	28.2	30.2	57.3	14.6	28.1	176.2
Highest	--	30.7	31.0	38.9	58.6	15.9	34.0	180.0
Lowest	--	25.8	25.4	23.9	56.2	13.4	24.3	172.5

## **ST ANDREWS SPRING WHEAT – 2006 WSU VARIETY TESTING DATA**

1. 2006 Spring Wheat **yield data** from the WSU Variety Testing nursery at the St Andrews, WA location (Douglas County) averaged 19.4, 20.5, and 30.2 bu/ac for soft white spring, hard white spring and hard red spring wheat, respectively. The 2006 spring wheat **average YIELDS were lower** by (19.2%), (15.0%) and higher by 7.1% for soft white, hard white and hard red spring market classes, respectively. *NOTE: This nursery was located, approximately 10 miles north of Coulee City, WA off SR #17 on Mold Rd (Dean & Bill McLean ranch).*
2. The nursery was **no-till seeded** on 4 May 2006 on re-crop ground following a spring (2005) wheat crop using a no-till drill with cross-slot openers. There was good soil moisture at seeding with the moisture level just one-inch below the soil surface. Germination and emergence was good and the stand was uniform.
3. **YIELD RANKINGS** among varieties within market classes were fairly consistent with 2-yr and 3-yr historical yield rank patterns. The coefficient of variation percentage (C.V. %) as an indicator of nursery variation was higher than preferred for the nurseries (prefer CV of 15% or lower); however, this is fairly typical of this location. Fairly shallow soils with a lot of environmental variation in this area of eastern Washington can contribute to wide swings in plant growth responses in a given year. Hard red spring wheat varieties had yields greater than the 3-yr average and are appearing better adapted to this location. Part of the explanation for this in 2006 appears to be related to maturity (heading date) where the highest yield HRS wheat varieties/lines had noticeably earlier heading dates. This may have allowed the HRS varieties to adapt better to the drought/heat stresses experienced throughout the growing season
4. **TEST WEIGHT** average values across all three market classes were low and had a range of 56.3 to 58.9 lbs/bu. Invariably, the heat stress periods in June and July undoubtedly had a negative impact on test weight at the St Andrews location. Some of the later maturing varieties/lines seemed more severely impacted in test weight as well as yield.
5. **GRAIN PROTEIN** values averaged 10.0%, 10.8% and 14.6% for the soft white, hard white and hard red spring market classes, respectively. Only the hard red spring nursery required increased nitrogen application at seeding (additional 23#N on top of a 66#N base level) determined by a spring soil test. The additional nitrogen on the HRS nursery was sufficient in all but one variety/line (Jerome) to attain a minimum 14% grain protein level for the HRS market class