

## 2007 WSU EXTENSION SPRING BARLEY NURSERY AT ST. JOHN, WA.

Variety Name <i>*6-Row Italized</i>	5 YEAR AVERAGE (LBS/A)	3 YEAR AVERAGE (LBS/A)	2 YEAR AVERAGE (LBS/A)	2007			
				YIELD (LBS/A)	TEST WT. (LBS/BU)	PLANT HT	HEAD DATE
SPAULDING		4602.5	5140.8	4944.5	52.1	28.0	166.5
BOB	4741.1	4796.3	4936.6	4908.8	50.4	29.3	165.5
CHAMPION		4918.9	4897.6	4852.2	51.6	30.7	164.5
HAXBY				4814.5	51.9	27.7	166.5
BARONESSE	4727.0	4694.7	4934.9	4668.2	48.1	27.0	167.5
RADIANT	4655.5	4617.6	4804.1	4655.3	47.4	27.0	167.5
02WA-7052.9			4961.8	4642.6	49.2	25.3	167.5
02WNZ-1095		5169.1	5244.9	4635.2	48.3	26.7	168.0
BOULDER	4292.8	4302.4	4569.9	4600.2	51.1	29.7	166.5
02WNZ-1821				4527.3	48.3	29.0	168.0
02WNZ-1015		4644.3	4855.1	4524.8	48.6	25.7	168.0
02WA-7028.9			4771.7	4510.4	49.6	29.0	166.0
03WNZ-045				4460.5	49.5	28.3	167.5
04WNZ-286				4452.2	50.8	26.7	167.5
HE-8805			4845.9	4416.4	46.8	23.3	171.0
02WA-7018.13			4620.1	4403.3	48.9	28.7	166.0
FARMINGTON	4412.8	4485.8	4846.4	4350.3	48.8	25.7	171.0
02WNZ-1100		4555.7	4606.9	4342.7	48.9	26.3	168.5
04WNZ-55				4323.4	48.4	27.7	168.0
BURTON		4636.1	4727.7	4292.9	48.3	28.7	168.0
LEGACY	3990.3	3980.1	4488.9	4255.7	46.1	30.7	167.5
04WNZ-90				4236.1	49.8	28.3	167.5
03NZ199			4686.2	4221.4	45.9	23.7	171.0
01NZ111		4395.9	4452.2	4181.3	50.7	22.3	170.0
HARRINGTON	4083.6	4115.4	4629.1	4107.3	45.8	28.3	168.5
01NZ384		4177.0	4264.5	4094.5	45.4	30.7	169.0
02WNZ-1990				4068.3	47.1	27.7	168.5
01NZ706	4037.9	4039.8	4160.7	4057.4	45.0	30.3	169.0
AC METCALFE	4037.3	4051.3	4411.2	4052.9	47.9	29.7	168.5
MOREX	3463.8	3893.6	4066.4	3998.2	47.7	35.0	165.0
01NZ392		3833.7	3921.1	3994.2	45.5	29.0	168.0
03WA-192.4				3884.7	44.6	28.0	169.0
01WA-13860.5				3699.9	55.0	29.0	168.5
02WA-7037.25				3507.3	50.4	28.0	167.5
MERESSE			3394.4	3322.4	55.6	26.0	164.5
WA 9820-98			3776.2	3280.4	52.3	24.7	171.5
C.V. %	9.4	10.6	9.1	6.4	2.4	--	--
LSD '@ .10'	247.9	362.8	393.9	375.9	1.6	--	--
Average	4244.2	4416.3	4577.5	4285.8	48.9	27.8	167.9
Highest	4741.1	5169.1	5244.9	4944.5	55.6	35.0	171.5
Lowest	3463.8	3833.7	3394.4	3280.4	44.6	22.3	164.5

## ST JOHN SPRING BARLEY – 2007 WSU VARIETY TESTING DATA

1. 2007 Spring barley **yield data** from the WSU Variety Testing nursery at the St John, WA (location averaged 4285 lbs/ac. This is slightly (2%) below a historical 3-yr average yield for this location. *NOTE: This nursery was located, approximately 8 miles east of St John, WA on Ingram Rd (Mac and Rod Mills's farm).*
2. This nursery was planted (13 April 2007) on re-crop ground following winter wheat with a double disc plot drill (6-inch spacing) at a 90#/acre seeding rate. A March 2007 soil test showed 8.9 inches moisture in the top 4-feet. Base fertilizer was 70#N and 10#S. A March 2007 soil test showed 8.2 inches moisture in the top 4-feet.
3. This nursery had good emergence and showed minimal impact from the dry, cool spring growing conditions this year, particularly the 3-month period (Mar-May) of below normal precipitation. The 2-week June 2007 period of cool temperatures coupled with June precipitation enable this nursery to achieve average yields for this location. As has been noted at many of the other spring barley nurseries, some newer varieties/lines are continuing to nudge Baronesse out of the limelight in both **yield** and test weight rankings, both in 2007 and in 3-yr yield rankings. However, yield rankings in among varieties in 2007 bounced around a little compared to historical 3-yr average yield rankings.
4. **Test weight** average values were 48.9 lbs/bu, with a range among feed barley-types of 41.6 lbs/bu (03WA-192.4) to 52.1 lbs/bu (Spaulding).
5. **Four hull-less, waxy barleys** were included in the trial (02WA-7037.25, 01WA-13860.5, WA 9820-98 (WSU) and MERESSE (Westbred, LLC) that had exceedingly high test weight values due to the kernel characteristic with no 'hull'. Test weight values for these varieties had a range of 50.4 lbs/ac to 55.6 lb/ac. Waxy barley is a type of specialty barley that has several quality traits that make it adaptable to many end uses. Most notably, waxy barley has a modified starch profile and increased levels of beta-glucans. Varieties with waxy starch are ideal for many food and industrial applications.  
**Limitations of Waxy barley:** Generally waxy barley varieties have reduced yield between 20 and 30% compared to normal feed barley varieties. This yield reduction is in part due to the fact that most waxy barley varieties are also hull-less thus reducing their production per acre on a weight basis. The four hullless barley entries at this location had the lowest yields.