

## 2007 WSU EXTENSION SPRING BARLEY NURSERY AT DAYTON, 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
CHAMPION		4284.2	5440.4	5521.7	51.3	27.3	170.5
SPAULDING		3933.7	5247.8	5474.5	51.5	27.0	171.0
RADIANT	4536.9	4232.6	5308.7	5357.4	48.9	28.0	173.5
02WA-7052.9			5121.9	5338.7	50.2	26.0	175.5
BOULDER	4387.2	4041.4	5031.6	5149.7	51.3	28.0	172.5
02WNZ-1821				5134.3	49.3	27.3	172.5
02WNZ-1015		4118.7	5066.8	5071.1	49.1	25.3	175.5
04WNZ-90				5060.8	51.4	28.7	175.0
02WA-7028.9			4987.0	5048.0	50.6	27.7	173.5
BURTON		3783.7	4634.8	5025.0	49.6	27.3	174.0
BOB	4245.2	3810.6	4854.7	5022.9	50.4	28.7	173.0
01NZ384		3937.8	4926.7	4930.4	47.5	31.3	173.0
HE-8805			4938.6	4922.8	49.3	26.0	178.0
04WNZ-286				4874.7	51.6	28.3	174.5
BARONESSE	4537.3	4080.0	5027.2	4804.4	49.4	26.0	173.0
03NZ199			4666.4	4801.9	47.2	24.0	177.5
HARRINGTON	4091.4	3620.1	4490.4	4696.3	48.7	29.0	173.0
04WNZ-55				4672.8	49.6	26.3	174.5
01NZ111		4138.9	4893.0	4611.1	51.7	25.0	177.5
FARMINGTON	4450.7	4013.9	4850.3	4603.7	49.0	25.3	178.0
01NZ706	4244.4	3751.4	4823.4	4596.8	46.6	30.0	174.5
02WNZ-1095		4128.8	5149.9	4468.3	49.8	26.3	175.0
01NZ392		3664.4	4527.2	4440.3	47.0	30.7	173.5
LEGACY	3884.5	3376.7	4453.8	4421.0	47.1	31.7	170.0
02WNZ-1990				4407.6	49.1	27.3	175.0
03WA-192.4				4351.1	45.8	30.0	173.0
AC METCALFE	4013.9	3387.3	4322.4	4302.9	49.5	30.3	173.5
01WA-13860.5				4261.0	56.0	29.3	172.5
02WNZ-1100		3893.1	4681.0	4144.4	49.9	26.7	175.0
HAXBY				4096.3	52.1	26.7	172.5
MOREX	3373.4	3109.4	3997.4	4072.8	48.5	36.0	170.0
03WNZ-045				4056.6	50.3	28.0	175.5
WA 9820-98			4088.8	3921.6	56.0	24.0	177.5
02WA-7037.25				3905.8	54.2	26.0	172.5
MERESSE			3657.7	3851.5	58.3	25.3	172.5
02WA-7018.13			4167.1	3808.6	50.0	27.0	173.0
C.V. %	8.4	9.0	8.3	6.0	1.0	--	--
LSD '@ .10'	215.7	283.0	371.4	379.0	0.7	--	--
Average	4176.5	3858.3	4744.4	4645.2	50.2	27.7	173.9
Highest	4537.3	4284.2	5440.4	5521.7	58.3	36.0	178.0
Lowest	3373.4	3109.4	3657.7	3808.6	45.8	24.0	170.0

## DAYTON SPRING BARLEY – 2007 WSU VARIETY TESTING DATA

1. 2007 Spring barley **yield data** from the WSU Variety Testing nursery at the Dayton, WA location averaged 4645 lbs/ac. This is about 5.7% above a historical 3-yr average yield. *NOTE: This nursery was located, approximately 10 miles east of Dayton, WA off the Lewis Gulch/King Rd at 2894' elevation – basically underneath a bunch of the new windmills (J. Takemura farm).*
2. This nursery was planted (12 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 10.73 inches moisture in the top 4-feet. Base fertilizer was 90#N and 10#S.
3. Slightly higher than average **yield levels** in these nurseries were probably supported most by the cool June 2007 temperatures and June precipitation in spite of cool, dry spring conditions and below normal precipitation from Mar through May. Early July precipitation probably helped the plants finish, particularly at this late location. Yield rankings bounced around a little compared with historical 3-yr average yield rankings.
4. **Test weight** average values were good at 50.2 lbs/bu, with a range among feed barley-types of 45.8 lbs/bu (03WA-192.4) to 51.7 lbs/bu (01NZ111).
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 54.2 lbs/ac to 58.3 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.