

2007 WSU EXTENSION SPRING BARLEY NURSERY AT FAIRFIELD, WA.

Variety Name *6-Row Italized	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		3918.2	4053.1	4108.5	50.3	23.0	176.5
RADIANT	4189.4	4106.4	4059.6	4047.6	47.7	25.3	178.0
02WZN-1095		3813.7	4021.5	3913.4	48.4	23.7	177.5
CHAMPION		4250.0	4475.8	3889.6	49.0	25.7	175.5
BOB	4065.6	3857.3	3788.5	3873.0	48.1	27.0	176.5
02WA-7028.9			3994.6	3846.8	48.1	25.7	177.5
02WA-7052.9			4163.5	3835.7	47.7	24.7	178.0
HAXBY				3729.9	48.9	24.3	175.5
02WZN-1015		3764.8	3836.0	3714.6	46.9	22.3	179.0
HARRINGTON	3504.4	3403.0	3500.9	3700.7	46.6	25.7	177.0
04WZN-286				3647.4	48.9	27.3	177.5
03WZN-045				3639.3	47.0	25.7	178.5
BARONESSE	4113.9	4189.5	4159.3	3617.8	47.2	25.0	177.5
HE-8805			3747.2	3587.1	46.7	20.7	179.0
FARMINGTON	3556.5	3405.5	3273.5	3575.8	46.3	23.0	179.5
04WZN-55				3569.8	46.6	25.3	178.0
02WZN-1100		3841.1	3865.3	3504.9	47.7	23.0	177.5
04WZN-90				3499.4	48.3	25.0	177.5
AC METCALFE	3574.3	3504.9	3673.8	3496.4	47.1	26.7	178.0
02WA-7018.13			3911.4	3483.2	47.3	25.3	176.0
BOULDER	3724.4	3758.0	3639.2	3437.5	49.3	22.3	177.0
BURTON		3563.1	3445.8	3437.2	47.1	26.0	177.5
01NZ111		3263.2	3433.2	3366.3	49.0	22.0	180.0
01NZ706	3347.5	3386.4	3237.9	3301.7	44.1	26.7	179.0
02WZN-1990				3278.4	47.4	23.3	177.5
03WA-192.4				3275.3	42.4	25.0	178.0
02WZN-1821				3232.5	46.3	23.3	177.5
03NZ199			3468.4	2916.9	45.4	21.3	180.0
01NZ384		3225.8	3096.9	2910.1	44.4	23.7	179.0
LEGACY	3075.2	3078.1	3007.5	2896.3	45.3	24.7	176.0
01NZ392		3173.8	3195.7	2821.5	44.6	27.0	179.0
02WA-7037.25				2783.3	52.0	24.0	178.0
WA 9820-98			2944.5	2762.6	53.1	23.3	180.0
01WA-13860.5				2660.9	53.6	23.0	178.0
MOREX	2470.0	2768.5	2994.3	2636.6	46.0	29.0	174.5
MERESSE			2865.5	2315.0	54.1	22.7	175.5
C.V. %	13.6	12.8	13.3	7.7	0.7	--	--
LSD '@ .10'	294.7	353.8	455.0	360.2	0.5	--	--
Average	3562.1	3593.2	3609.7	3397.6	47.8	24.5	177.7
Highest	4189.4	4250.0	4475.8	4108.5	54.1	29.0	180.0
Lowest	2470.0	2768.5	2865.5	2315.0	42.4	20.7	174.5

FAIRFIELD SPRING BARLEY – 2007 WSU VARIETY TESTING DATA

1. 2007 Spring Barley **yield data** from the WSU Variety Testing nursery at the Fairfield, WA location averaged 3397 lbs/ac that were about 11.8% below a historical 3-yr average yield in this area. *NOTE: This nursery was located, approximately 4 miles northwest of Fairfield, WA near the Rattlers Run/Darknell Rd intersection (L. Green farm).*
2. This nursery was planted (16 April 2007) on re-crop ground following winter wheat with a double disc plot drill (6-inch spacing) at an 90#/acre seeding rate. A March 2007 soil test showed 10.14 inches moisture in the top 4-feet. Soil test showed 104#N, 22#P and 11#S in the top four feet. A base fertilizer rate of 40#N and 6#S were applied to the nursery.
3. Lower average **yield levels** were invariably a function of the cool, dry spring conditions and below normal precipitation from March through May. In addition, a heat, drought stresses later in the season had negative impacts on spring barley growth and development at this location. It continues to be interesting to note that there are a number of newer entries that seem to be forcing Baronesse down the list in average yield rankings.
4. **Test weight** average values were 46.8 lbs/bu with a range among feed barley-types of 42.4 lbs/bu (03WA-192.4) to 50.3 lbs/bu (Spaulding). Heat and drought stress at the end of June and early July 2007 during kernel fill undoubtedly contributed to lower test weights for many of the entries.
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 52.0 lbs/ac to 54.1 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.