

2007 WSU EXTENSION SPRING BARLEY NURSERY AT LAMONT, 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
02WNZ-1015		4457.8	4185.2	3127.4	46.8	24.0	167.0
CHAMPION		4801.6	4531.2	2905.9	48.9	27.3	164.0
BURTON		4468.4	4014.1	2864.8	47.2	26.7	166.0
02WNZ-1100		4255.4	3811.6	2777.7	46.1	26.3	166.0
BARONESSE	3937.4	4783.6	4196.1	2770.2	47.7	25.0	164.0
02WNZ-1095		4595.0	4124.5	2764.5	46.8	27.0	166.0
HAXBY				2729.7	50.5	25.3	165.0
HE-8805			4014.5	2713.0	45.2	24.7	167.0
04WNZ-90				2711.1	48.0	26.3	165.5
SPAULDING		4339.8	4078.8	2670.5	49.7	24.7	164.5
HARRINGTON	3128.5	3911.8	3652.9	2556.4	46.0	25.0	165.5
02WA-7052.9			3683.2	2524.3	46.9	24.7	168.5
RADIANT	3825.1	4826.7	4137.3	2519.1	46.4	25.3	166.5
AC METCALFE	3107.6	4002.5	3561.7	2509.4	45.6	27.0	166.5
FARMINGTON	3360.1	4060.4	3615.6	2496.2	44.8	25.3	167.5
04WNZ-286				2489.1	47.9	26.3	166.0
01NZ111		3966.3	3805.2	2482.4	48.8	24.7	169.5
BOB	3632.5	4527.0	3867.0	2433.9	46.9	26.3	165.0
02WA-7028.9			3831.4	2428.7	46.1	26.7	165.0
02WA-7018.13			3698.9	2392.3	46.8	29.3	164.0
02WNZ-1821				2372.7	47.3	25.3	166.0
03WNZ-045				2337.2	46.4	26.0	167.0
MOREX	2738.6	3523.7	3522.6	2324.1	45.0	32.0	163.5
LEGACY	3076.2	3766.8	3690.2	2302.4	44.9	30.7	163.5
BOULDER	3196.1	3962.9	3631.8	2301.1	46.5	25.7	165.5
02WNZ-1990				2139.2	45.8	26.0	168.0
01NZ384		3877.3	3725.3	2037.5	43.5	28.3	166.5
01NZ706	2888.8	3714.3	3216.7	1941.3	43.0	25.7	167.5
WA 9820-98			3233.5	1939.6	54.0	25.3	170.5
03NZ199			3409.5	1870.5	43.1	23.0	169.0
04WNZ-55				1800.5	44.8	25.3	166.5
01NZ392		3544.3	3034.6	1730.3	43.7	28.0	167.5
01WA-13860.5				1689.8	52.3	26.0	166.5
03WA-192.4				1677.0	42.3	26.3	168.0
02WA-7037.25				1602.9	47.9	22.3	168.0
MERESSE			2420.1	1601.3	48.5	24.3	165.0
C.V. %	12.1	12.5	10.0	13.1	2.5	--	--
LSD '@ .10'	248.7	369.4	332.6	420.5	2.8	--	--
Average	3289.1	4178.2	3719.0	2348.2	46.7	26.1	166.3
Highest	3937.4	4826.7	4531.2	3127.4	54.0	32.0	170.5
Lowest	2738.6	3523.7	2420.1	1601.3	42.3	22.3	163.5

LAMONT SPRING BARLEY – 2007 WSU VARIETY TESTING DATA

1. 2007 Spring barley **yield data** from the WSU Variety Testing nursery at the Lamont, WA (location averaged 2348 lbs/ac. This is -41.2% below a historical 3-yr average yield for this location. *NOTE: The Lamont nursery was located ten miles south of Lamont, WA (G. White farm) off SR 23 and Old State Hwy road.*
2. This nursery was planted (2 April 2007) on re-crop ground following winter wheat with a double disc plot drill (6-inch spacing) at a 80#/acre seeding rate. A March 2007 soil test showed 8.9 inches moisture in the top 4-feet. Base fertilizer was 65#N and 10#S.
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 stress during the first part of June had severe negative impacts on spring barley growth and development at this location. Another factor at this location compared to previous years is that the 2007 spring barley crop was grown on winter wheat re-crop ground compared to previous years where the nursery was planted on re-crop spring barley/wheat ground.
4. **Test weight** average values were low (average 46.7 lbs/bu), with a range among feed barley-types of 43.0 lbs/bu (01NZ706) to 50.5 lbs/bu (Haxby). Heat and drought stress at the end of June and early July 2007 during kernel fill undoubtedly contributed to lower test weights.
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.