## 2006 WSU EXTENSION SPRING BARLEY NURSERY AT ST. JOHN, WA.

AVERAGE AVERAGE (LBS/A) (LBS/A) (LBS/A) (LBS/A) (LBS/B) (LBS/A) (LBS/B) (LBS/A) (LBS/B) (LBS/A) (LBS/B) (LBS/A) (LBS/B) (LBS/A) (LBS/B) (LBS/B) (LBS/A) (LBS/B) (LBS/B	Variety Name				2006			
SSNZB88								
FARNINGTON 4287.4 4683.5 4553.5 5342.5 50.2 26.0 175.5 SPAULDING 4431.5 5337.0 53.3 30.0 175.5 SPAULDING 4431.5 5337.0 53.3 30.0 175.5 SPAULDING 4431.5 5337.0 53.3 30.0 175.5 SPAULDING 173.5	02WNZ-1095			5436.0	5854.5	51.7	31.0	174.5
SPAULDING	03NZ885				5380.5	48.7	29.3	175.0
12000   1200	FARMINGTON	4287.4	4663.5	4553.5	5342.5	50.2	26.0	175.5
## ## ## ## ## ## ## ## ## ## ## ## ##	SPAULDING			4431.5	5337.0	53.3	30.0	173.5
SARONESSE   4519.7   4826.5   4708.0   5201.5   51.3   28.3   175.0	02WA-7052.9				5281.0	51.8	28.7	175.0
APPLICATION	HE-8805				5275.5	50.5	24.7	176.0
BURTON 4807.8 5162.5 51.3 32.3 175.5   AARRINGTON 397.4 4132.3 4119.5 5151.0 50.5 30.0 176.0   303N2199	BARONESSE	4519.7	4826.5	4708.0	5201.5	51.3	28.3	175.0
ARRINGTON   397.4   4132.3   4119.5   5151.0   50.5   30.0   175.0	02WNZ-1015			4704.0	5185.5	50.5	27.0	175.0
17.5   17.5	BURTON			4807.8	5162.5	51.3	32.3	175.5
STATE   STAT	HARRINGTON	3977.4	4132.3	4119.5	5151.0	50.5	30.0	175.0
NA 15279-00	03NZ199				5151.0	49.2	24.3	177.5
202WA-7028.9   5033.0   51.2   32.7   173.0			4916.0	5064.8	5095.5	49.5	29.3	175.0
175.5   175.	02WA-7028.9							
A								
175.5   176.0   176.5   176.0   176.5   176.0   176.5   176.0   176.	BOB	4541.9	4741.3	4740.0				
RADIANT 4479.0 4798.3 4598.8 4953.0 51.3 28.0 176.0 YU-501-385N 4947.5 51.3 33.0 174.5 YU-501-385N 4947.5 51.3 33.0 174.5 YU-501-385N 4943.0 52.8 30.3 173.5 D2WNZ-1100 4662.3 4871.0 50.7 29.0 174.5 NA 7330-00 4648.8 4639.5 4858.0 50.8 28.0 175.0 NA 10701-99 4666.3 4598.0 4857.5 51.1 29.3 174.5 D2WAZ-7018.13 4837.0 51.7 31.0 174.0 A2C METCALFE 4106.5 4050.5 4769.5 50.7 32.3 174.0 D2WAZ-7029.7 4769.5 50.7 32.3 174.0 D2WAZ-7029.7 4769.5 50.7 32.3 174.0 D2WAZ-7029.7 4769.5 4769.5 50.7 32.3 177.0 D2WAZ-3338 4252.2 4119.0 4719.5 47.1 31.3 175.5 D3NAZ-164 4249.5 4153.5 4539.5 53.6 31.3 173.0 D3NAZ-164 4478.0 50.9 29.3 175.0 D3NAZ-164 4478.0 50.9 29.3 176.0 D3NAZ-164 4478.0 50.9 29.0 176.5 D3NAZ-164 4478.0 50.9 49.2 29.0 176.5 D3NAZ-164 4478.0 50.1 28.7 176								
YU-501-385N         4947.5         51.3         33.0         174.5           YU-501-385D         4943.0         52.8         30.3         173.5           D2WNZ-1100         4668.3         4871.0         50.7         29.0         174.5           NA 7330-00         4648.8         4639.5         4858.0         50.8         28.0         175.0           NA 10701-99         4666.3         4598.0         4857.5         51.1         29.3         174.5           D2WA-7018.13         4106.5         4050.5         4769.5         50.7         32.3         174.0           AC METCALFE         4106.5         4050.5         4769.5         50.7         32.3         174.0           D2WA-7029.7         4765.5         49.8         29.7         175.5         175.5         177.0           LEGACY         3853.9         3920.2         3842.3         4722.0         47.9         35.3         172.0           D1NZ311         4668.2         4503.3         4725.0         47.9         35.3         172.0           LEGACY         3853.9         3920.2         3842.3         4722.0         47.9         35.3         172.0           D1NZ338         4252.2         4119.0		4479.0	4798.3	4598 8				
Age		1110.0	1700.0	1000.0				
174.5   175.0   174.5   175.0   174.5   175.0   174.5   175.0   174.5   175.0   174.5   175.0   174.5   175.0   174.5   175.0   174.5   175.0   174.5   175.0   174.5   175.0   174.5   175.0   174.5   175.0   174.5   175.0   174.5   175.0   174.5   175.0   174.5   175.0   174.5   175.0   174.5   175.0   174.0   175.5   175.								
NA 7330-00				4662.3				
NA 10701-99			1619 9					
AC METCALFE								
AC METCALFE  4106.5  4050.5  4769.5  50.7  32.3  174.0  20WA-7029.7  4755.5  49.8  29.7  175.5  201NZ111  4668.2  4503.3  4723.0  52.7  25.3  177.0  26GCY  3853.9  3920.2  3842.3  4722.0  47.9  35.3  172.0  201NZ338  4252.2  4119.0  4719.5  4439.5  4539.5  303  31.3  175.5  201NZ166  4498.0  4498.0  49.1  29.7  176.5  202WA-7047.24  4469.5  202WA-7047.24  4469.5  202WA-7047.24  4469.5  203WA-7047.24  4469.5  203WA-7047.24  4469.5  4478.0  4498.0  49.1  29.7  176.5  202WA-7047.24  4469.5  203WA-7047.24  4469.5  204.0  47.0  31.3  174.0  205WA-7047.24  4369.0  49.2  29.0  176.5  201NZ384  4218.3  4434.5  47.3  31.3  174.0  205WA-704.7  205WA-704.7  4369.0  49.2  29.0  176.5  201NZ366  4113.7  4031.0  4264.0  47.0  32.3  174.5  201NZ362  4188.0  50.1  28.7  175.0  201NZ392  4053.2  3753.5  3848.0  47.4  31.0  174.0  201NZ392  4053.2  3753.5  3848.0  47.4  31.0  174.0  201NZ392  4053.2  3753.5  3848.0  47.4  31.0  174.0  201NZ392  4053.2  4053.3  4053.5  368.0  47.0			4000.3	4596.0				
175.5   175.			4106 F	40E0 E				
DINZ111			4100.5	4050.5				
LEGACY       3853.9       3920.2       3842.3       4722.0       47.9       35.3       172.0         DINZ338       4252.2       4119.0       4719.5       47.1       31.3       175.5         BOULDER       4249.5       4153.5       4539.5       53.6       31.3       173.0         D3GNZ-716       4498.0       49.1       29.7       176.5         D3WNZ-164       4478.0       50.9       29.3       175.0         D2WA-7047.24       469.5       50.7       30.3       176.0         D1NZ384       4218.3       4434.5       47.3       31.3       174.0         D3GNZ-722       4369.0       49.2       29.0       176.5         WA 9820-98       4272.0       59.3       26.0       176.0         D1NZ706       4113.7       4031.0       4264.0       47.0       32.3       174.5         D3WNZ-262       4053.2       3753.5       3848.0       50.1       28.7       175.0         D1NZ392       4053.2       3753.5       3848.0       47.4       31.0       174.0         D1NZ392       4053.2       3753.5       3848.0       47.4       31.0       174.0         D1NZ392       4			4000.0	4500.0				
### Page 12		2052.0						
BOULDER 4249.5 4153.5 4539.5 53.6 31.3 173.0  D3GNZ-716 4498.0 49.1 29.7 176.5  D3WNZ-164 50.9 29.3 175.0  D2WA-7047.24 4469.5 50.7 30.3 176.0  D1NZ384 4218.3 4434.5 47.3 31.3 174.0  D3GNZ-722 4369.0 49.2 29.0 176.5  D1NZ706 4113.7 4031.0 4264.0 47.0 32.3 174.5  D3WNZ-262 4183 4134.5 48.9 37.3 170.0  D1NZ706 320.7 3262.5 3841.3 4134.5 48.9 37.3 170.0  D1NZ392 4053.2 3753.5 3848.0 47.4 31.0 174.0  D1NZ392 4053.2 3753.5 3848.0 47.4 31.0 174.0  DERESSE 3466.5 60.2 27.7 172.5  C.V. % 9.4 10.9 11.9 10.7 0.9  LSD '@.10' 249.0 381.8 512.5 698.0 0.7  Average 4122.9 4376.2 4435.3 4808.0 50.8 29.7 174.7  Highest 4541.9 4916.0 5436.0 5854.5 60.2 37.3 177.5		3853.9						
176.5   176.								
175.0   175.			4249.5	4153.5				
176.0   176.								
Mail								
A369.0   A9.2   29.0   176.5     MA 9820-98     4272.0   59.3   26.0   176.0     DINZ706								
NA 9820-98       4272.0       59.3       26.0       176.0         O1NZ706       4113.7       4031.0       4264.0       47.0       32.3       174.5         D3WNZ-262       4188.0       50.1       28.7       175.0         MOREX       3200.7       3262.5       3841.3       4134.5       48.9       37.3       170.0         D1NZ392       4053.2       3753.5       3848.0       47.4       31.0       174.0         MERESSE       3466.5       60.2       27.7       172.5         C.V.%       9.4       10.9       11.9       10.7       0.9           LSD '@.10'       249.0       381.8       512.5       698.0       0.7           Average       4122.9       4376.2       4435.3       4808.0       50.8       29.7       174.7         Highest       4541.9       4916.0       5436.0       5854.5       60.2       37.3       177.5				4218.3				
D1NZ706       4113.7       4031.0       4264.0       47.0       32.3       174.5         D3WNZ-262       4188.0       50.1       28.7       175.0         MOREX       3200.7       3262.5       3841.3       4134.5       48.9       37.3       170.0         D1NZ392       4053.2       3753.5       3848.0       47.4       31.0       174.0         MERESSE       3466.5       60.2       27.7       172.5         C.V.%       9.4       10.9       11.9       10.7       0.9           LSD '@.10'       249.0       381.8       512.5       698.0       0.7           Average       4122.9       4376.2       4435.3       4808.0       50.8       29.7       174.7         Highest       4541.9       4916.0       5436.0       5854.5       60.2       37.3       177.5								
MOREX   3200.7   3262.5   3841.3   4134.5   48.9   37.3   170.0     MOREX   3200.7   3262.5   3841.3   4134.5   48.9   37.3   170.0     MINIOR   240.0   240.0   381.8   512.5   698.0   0.7         Average   4122.9   4376.2   4435.3   4808.0   50.8   29.7   174.7     Highest   4541.9   4916.0   5436.0   5854.5   60.2   37.3   177.5     MOREX   3200.7   3262.5   3841.3   4134.5   48.9   37.3   37.3   377.5     4188.0   50.1   28.7   175.0     4188.0   50.1   28.7   175.0     48.9   37.3   37.3   37.3     4188.0   50.1   28.7   37.3     4188.0   50.1   28.7   37.3     4188.0   50.1   28.7   37.3     4188.0   50.1   28.7   37.3     4188.0   50.1   28.7   37.3     4188.0   50.1   28.7   37.3     4188.0   50.1   28.7     4188.0   50.1   28.7     4188.0   50.1   28.7     4188.0   50.1   28.7     4188.0   50.1   28.7     4188.0   50.1   28.7     4188.0   50.1   28.7     4188.0   50.1   28.7     4188.0   50.1   28.7     4188.0   50.1   28.7     4198.0   37.3     4198.0	WA 9820-98							
MOREX       3200.7       3262.5       3841.3       4134.5       48.9       37.3       170.0         D1NZ392       4053.2       3753.5       3848.0       47.4       31.0       174.0         MERESSE       3466.5       60.2       27.7       172.5         C.V.%       9.4       10.9       11.9       10.7       0.9           LSD '@ .10'       249.0       381.8       512.5       698.0       0.7           Average       4122.9       4376.2       4435.3       4808.0       50.8       29.7       174.7         Highest       4541.9       4916.0       5436.0       5854.5       60.2       37.3       177.5	01NZ706		4113.7	4031.0				
DINZ392     4053.2     3753.5     3848.0     47.4     31.0     174.0       MERESSE     3466.5     60.2     27.7     172.5       C.V.%     9.4     10.9     11.9     10.7     0.9         LSD '@ .10'     249.0     381.8     512.5     698.0     0.7         Average     4122.9     4376.2     4435.3     4808.0     50.8     29.7     174.7       Highest     4541.9     4916.0     5436.0     5854.5     60.2     37.3     177.5	03WNZ-262							
MERESSE         3466.5         60.2         27.7         172.5           C.V.%         9.4         10.9         11.9         10.7         0.9             LSD '@ .10'         249.0         381.8         512.5         698.0         0.7             Average         4122.9         4376.2         4435.3         4808.0         50.8         29.7         174.7           Highest         4541.9         4916.0         5436.0         5854.5         60.2         37.3         177.5	MOREX	3200.7	3262.5	3841.3	4134.5			
C.V.% 9.4 10.9 11.9 10.7 0.9 LSD '@ .10' 249.0 381.8 512.5 698.0 0.7 Average 4122.9 4376.2 4435.3 4808.0 50.8 29.7 174.7 Highest 4541.9 4916.0 5436.0 5854.5 60.2 37.3 177.5	01NZ392		4053.2	3753.5	3848.0	47.4		174.0
LSD '@ .10'       249.0       381.8       512.5       698.0       0.7           Average       4122.9       4376.2       4435.3       4808.0       50.8       29.7       174.7         Highest       4541.9       4916.0       5436.0       5854.5       60.2       37.3       177.5	MERESSE				3466.5	60.2	27.7	172.5
Average       4122.9       4376.2       4435.3       4808.0       50.8       29.7       174.7         Highest       4541.9       4916.0       5436.0       5854.5       60.2       37.3       177.5	C.V.%	9.4	10.9	11.9	10.7	0.9		
Highest 4541.9 4916.0 5436.0 5854.5 60.2 37.3 177.5	LSD '@ .10'	249.0	381.8	512.5	698.0	0.7		
· ·	Average	4122.9	4376.2	4435.3	4808.0	50.8	29.7	174.7
<b>LOWEST</b> 3200.7 3262.5 3753.5 3466.5 47.0 24.3 170.0	Highest	4541.9	4916.0	5436.0	5854.5	60.2	37.3	177.5
	Lowest	3200.7	3262.5	3753.5	3466.5	47.0	24.3	170.0

## ST JOHN SPRING BARLEY - 2006 WSU VARIETY TESTING DATA

- 2006 Spring Barley yield data from the WSU Variety Testing nursery at the St John location averaged 4808 lbs/ac that was higher than the 3-year average yield by 9.8% (432 lbs/ac). This yield increase above historical yields is a function of excellent soil moisture at planting (26 April 2006) and above normal precipitation during end of May and first part of June that enhanced tiller production and development. NOTE: This nursery was located, approximately 8 miles east of St John, WA on Ingram Rd (M. Mills's farm).
- 2. A few newer varieties/experimental lines had average YIELD RANKINGS higher than Baronesse; however, Baronesse continues to play a dominant role especially from a statistical standpoint, it was 'statistically-equal' to 28 of the 40 varieties/experimental lines in the trial. Yield rankings bounced around a little bit in 2006 compared to the historical 3-yr and 5-yr historical rankings. Six-row varieties/lines (listed in italics in the data set) continued to be at the lower end of the yield rankings. This is fairly typical since 6-row types tend to produce few tillers and could have been more sensitive to the early May 2006 frost.
- 3. **TEST WEIGHT** average values were good at 50.8 lbs/bu; with a range among feed barley-types of 47.0 (01NZ706) to 53.6 lbs/bu (Boulder) –heavy barley at this location.
- 4. Two hull-less, waxy barleys were included in the trial (WA9820-98 (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 were 59.3 lbs/bu and 60.2 lbs/bu, respectively. 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.