

SUMMARY - SPRING BARLEY – 2006 WSU VARIETY TESTING DATA

1. Attached are **SUMMARIES** for yield and test weight and percent grain protein from the twelve (12) Spring Barley nurseries in the 2006 Variety Testing Program. Three (3) locations are not listed in the 2006 data set (Dusty, Bickleton and Walla Walla) since field variation (CV %) in these nurseries was outside the limits for providing accurate performance evaluations among the varieties/experimental lines. Most of the locations listed are within the vicinity of the towns listed; however, Mayview is a location in Garfield County approximately 25 NE of Pomeroy, WA. If you have questions about locations please don't hesitate to let us know.
2. Across all locations, 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 each of the varieties/experimental lines with higher overall rankings in the trial except for YU-501-385D that happens to be an improved Baronesse-type line (Westbred, LLC). Yield rankings bounced around a little bit in 2006 compared to the historical 3-yr and 5-yr historical rankings; however, in spite of the up and down weather patterns during the 2006 growing season, spring barley yields **across all locations averaged 15.1% higher** than the previous 3-year (2003, 2004 and 2005) average. . Many of the 6-row varieties/lines (six entries are 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**; that is 5.2% higher than the previous 3-year average across all locations of 48.3 lbs/bu. In general, barley quality in terms of test weight appeared to be close to 2 lbs/bu higher than normal.
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'. 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.
5. **IMPORTANT: AVERAGE Yield and Test Weight rank** comparisons can only fairly be judged within a given location. Each of the data sets attached have varieties sorted high-to-low on the **average of ALL 12 locations** that is only calculated to give a quick **snapshot** of all varieties across all locations.

2006 SPRING BARLEY VARIETY TRIAL SUMMARY

YIELD (LBS/A)

VARIETY NAME <i>(6-Row in italics)</i>	RITZVILLE	MAYVIEW	ANATONE	FAIRFIELD	REARDAN	DAYTON	ST. JOHN	ALMIRA	LAMONT	MOSES LAKE <i>(irrigated)</i>	PULLMAN	FARMINGTON	AVERAGE YIELD (LBS/A)
YU-501-385D	2500	3596	4016	5062	5645	5359	4943	5073	6157	6290	5995	6846	5123
02WNZ-1095	1976	2881	3769	4130	5191	5832	5855	5430	5485	5337	5769	5273	4744
SPAULDING	1789	3061	3735	3998	5478	5021	5337	5204	5487	6257	5377	6039	4732
02WNZ-1015	2397	3311	3484	3957	5186	5063	5186	5319	5243	5467	5530	5850	4666
RADIANT	1977	3433	3208	4072	5416	5260	4953	4860	5756	5057	5435	6062	4624
02WA-7028.9	2596	2936	3618	4142	4621	4926	5033	5392	5234	5313	5527	5921	4605
02WNZ-1100	1978	3204	3644	4226	4847	5218	4871	5142	4846	6437	6203	4562	4598
HE-8805	2280	3103	3032	3907	5343	4955	5276	5043	5316	5670	5757	5457	4595
BOULDER	2449	3260	3751	3841	4921	4914	4540	4618	4963	4935	6201	6354	4562
BARONESSE	1843	3279	3444	4701	5212	5250	5202	4972	5622	4420	5698	5048	4557
02WA-7052.9	1965	3177	3271	4491	4884	4905	5281	5306	4842	5040	5955	5495	4551
03NZ199	1588	3151	3082	4020	4557	4531	5151	4956	4949	6146	5554	6141	4485
02WA-7018.13	2234	3824	3293	4340	4637	4526	4837	4845	5006	5440	5492	5211	4474
01NZ111	2024	2999	3125	3500	4406	5175	4723	5032	5128	6471	5234	5861	4473
FARMINGTON	2006	2649	3166	2971	4836	5097	5343	4918	4735	6119	5326	6063	4436
BOB	2328	3416	3550	3704	4832	4687	4965	5279	5300	4864	4986	5271	4432
03WNZ-262	1653	2855	3564	4502	4662	4777	4188	5030	4984	5596	5769	5330	4409
01NZ384	2222	2823	3241	3284	4246	4923	4435	4650	5413	5337	5945	6012	4377
WA 10701-99	2178	3056	3308	3900	4411	5136	4858	5161	5324	4495	5288	5287	4367
03WNZ-249	2065	3096	3153	3333	4020	5153	5023	5149	5658	5190	5134	5274	4354
03NZ885	1787	3548	3129	3443	4991	4682	5381	4956	5358	4352	4904	5645	4348
WA 7330-00	2087	3378	3361	4266	4638	4757	4858	5034	4896	4075	5354	5438	4345
BURTON	2274	3172	3199	3454	4620	4245	5163	4703	5164	5052	4972	5822	4320
02WA-7047.24	2020	3453	3296	4452	4507	4322	4470	4839	4868	4406	5018	6095	4312
WA 15279-00	1859	2940	3173	3245	4665	5249	5096	5162	4663	4906	5106	5542	4300
02WA-7029.7	2078	3054	3291	3850	4506	5193	4756	4794	4581	4368	4922	5615	4250
01NZ392	2202	2729	2983	3570	4342	4614	3848	4378	4339	5338	5807	6234	4199
03WNZ-164	2021	2925	3199	2939	3721	4706	4478	4829	5136	4988	5360	5360	4139
HARRINGTON	1592	2793	3048	3301	4436	4285	5151	4697	4750	4902	4816	5569	4112
03GNZ-722	1811	2701	2884	3286	4103	4477	4369	4462	4823	5687	5351	5383	4111
LEGACY	1967	2819	3066	3119	3854	4487	4722	4708	5078	4845	4519	5947	4094
AC METCALFE	2103	2557	3147	3851	4570	4342	4770	4723	4614	3958	4704	5275	4051
YU-501-385N	1818	2497	2703	3322	4915	4751	4948	4918	5314	3903	4566	4726	4032
01NZ338	1990	2730	2909	2808	3962	4445	4720	4701	4707	4374	5590	5336	4023
03GNZ-834	1231	2647	3113	3652	3892	4891	4965	4639	4118	4764	4786	5366	4005
01NZ706	2400	2325	2692	3174	4192	5050	4264	4683	4492	4628	5466	4599	3997
03GNZ-716	1407	2867	2857	3623	3912	4594	4498	4605	4077	4372	4725	5620	3930
WA 9820-98	1539	2813	2672	3126	3694	4256	4272	4345	4528	5524	4370	4985	3844
MOREX	2330	2518	3182	3352	4075	3922	4135	4201	4721	3374	4586	4562	3746
MERESSE	1665	2523	3099	3416	2423	3464	3467	4001	3239	4293	4510	4306	3367
C.V.	15.7	11.3	7.7	16.6	7.1	9.9	10.7	6.2	7.7	18.9	7.8	9.9	11.3
LSD	427	460	338	841	438	645	698	407	522	1298	563	746	190
Average	2006	3002	3236	3733	4534	4786	4808	4869	4973	5050	5290	5519	4317
Highest	2596	3824	4016	5062	5645	5832	5855	5430	6157	6471	6203	6846	5123
Lowest	1231	2325	2672	2808	2423	3464	3467	4001	3239	3374	4370	4306	3367

2006 SPRING BARLEY VARIETY TRIAL SUMMARY

TEST WEIGHT (LBS/BU)

VARIETY NAME (6-Row in italics)	ANATONE	RITZVILLE	MAYVIEW	FARMINGTON	REARDAN	LAMONT	ST. JOHN	DAYTON	ALMIRA	PULLMAN	FAIRFIELD	MOSES LAKE (irrigated)	AVERAGE TEST WEIGHT (LBS/BU)
MERESSE	59.9	55.4	59.9	59.1	55.3	59.9	60.2	62.6	61.3	61.4	61.2	60.6	59.7
WA 9820-98	55.2	55.0	58.2	58.0	59.4	59.4	59.3	59.2	61.0	59.5	59.2	60.6	58.7
BOULDER	50.5	48.3	52.0	52.6	52.3	52.5	53.6	54.5	54.2	55.8	55.3	55.3	53.1
SPAULDING	49.8	49.6	51.1	52.7	52.7	52.6	53.3	53.5	54.1	55.0	55.6	56.5	53.0
YU-501-385D	50.0	48.7	51.9	52.0	52.0	52.8	52.8	54.7	53.8	54.8	54.8	55.8	52.8
01NZ111	48.4	49.7	51.2	51.9	51.7	52.8	52.7	53.9	53.7	53.8	54.0	55.9	52.5
02WA-7028.9	48.6	50.7	50.6	50.4	49.6	51.1	51.2	52.7	53.7	54.2	54.1	55.1	51.8
02WNZ-1095	49.7	47.8	49.4	51.0	51.5	50.8	51.7	52.6	53.3	54.2	53.2	54.2	51.6
02WA-7018.13	49.2	48.8	51.0	50.6	50.7	50.7	51.7	51.9	53.3	53.5	52.2	55.5	51.6
BOB	48.0	47.9	50.4	50.1	50.8	51.0	51.7	52.1	53.4	52.6	53.8	55.3	51.4
02WNZ-1100	47.6	48.9	50.0	49.9	50.7	49.9	50.7	51.7	51.0	54.3	54.4	56.5	51.3
BURTON	46.3	47.5	49.3	50.9	50.2	50.3	51.3	51.9	52.7	52.9	52.7	55.0	50.9
RADIANT	45.0	46.8	50.0	49.7	50.5	50.9	51.3	51.7	52.7	52.9	52.5	56.0	50.8
02WNZ-1015	45.5	48.8	49.6	49.8	50.3	50.7	50.5	52.4	53.6	51.6	52.2	54.6	50.8
02WA-7047.24	48.0	46.6	49.6	49.7	50.5	50.8	50.7	52.6	52.1	52.1	51.6	54.9	50.8
02WA-7052.9	46.3	46.5	49.1	50.4	50.1	50.7	51.8	50.3	53.9	53.5	53.0	53.8	50.8
03WNZ-164	47.2	48.3	50.2	49.7	48.8	50.7	50.9	51.6	50.9	52.8	52.7	55.5	50.8
03WNZ-249	47.1	45.3	49.5	50.5	49.7	50.4	50.9	51.5	51.9	53.3	53.0	55.6	50.7
AC METCALFE	46.5	48.7	49.6	50.2	50.0	50.5	50.7	52.4	52.0	51.5	51.5	53.7	50.6
BARONESSE	45.1	44.9	49.8	49.9	50.0	50.7	51.3	51.9	52.1	52.0	53.5	54.4	50.5
FARMINGTON	46.7	49.7	48.1	48.6	49.4	50.6	50.2	52.3	50.9	51.8	51.6	55.8	50.5
WA 10701-99	45.2	49.4	50.1	49.2	50.7	50.7	51.1	51.4	52.9	50.2	52.2	53.3	50.5
YU-501-385N	44.7	46.6	48.9	49.7	50.0	50.6	51.3	51.7	52.7	52.4	52.7	54.3	50.5
WA 7330-00	45.7	47.2	49.8	49.7	49.7	49.6	50.8	51.0	51.9	52.4	53.3	53.9	50.4
03WNZ-262	45.2	46.2	48.7	48.9	49.6	50.2	50.1	50.9	50.9	52.1	52.4	54.7	50.0
HARRINGTON	44.6	47.9	49.2	48.5	49.1	50.2	50.5	51.4	50.0	50.5	51.9	54.9	49.9
02WA-7029.7	45.0	48.3	49.0	48.4	48.2	49.2	49.8	50.6	51.3	51.5	52.1	54.4	49.8
03GNZ-834	47.7	48.8	48.2	48.7	48.0	49.0	49.1	50.9	49.8	51.2	52.2	54.1	49.8
HE-8805	43.8	46.6	48.5	47.9	48.4	50.6	50.5	50.7	51.3	52.7	52.1	53.5	49.7
MOREX	45.5	47.7	48.8	49.2	48.7	49.7	48.9	51.1	49.0	50.9	50.8	52.5	49.4
03GNZ-716	45.4	47.7	48.7	48.4	47.9	49.1	49.1	49.2	50.5	50.9	51.9	53.7	49.4
WA 15279-00	44.9	45.5	48.8	48.4	48.8	48.8	49.5	50.4	51.8	49.2	50.8	54.6	49.3
03NZ199	44.8	47.0	48.2	48.2	47.8	49.2	49.2	49.9	48.5	52.4	52.5	54.1	49.3
03GNZ-722	46.1	47.4	48.2	48.3	48.7	49.1	49.2	49.6	49.7	50.1	51.0	54.0	49.3
LEGACY	43.2	48.9	47.8	47.8	47.9	49.1	47.9	49.2	49.8	51.6	51.8	54.7	49.1
03NZ885	43.3	45.2	48.7	48.6	49.5	49.4	48.7	49.9	49.4	49.6	49.7	53.3	48.8
01NZ392	42.3	46.3	46.3	47.7	47.3	48.2	47.4	48.5	49.3	51.1	49.3	52.5	48.0
01NZ384	44.3	47.2	46.7	46.2	46.5	48.2	47.3	48.7	50.2	50.1	50.1	51.0	48.0
01NZ706	42.6	46.4	46.5	46.8	46.0	46.3	47.0	49.3	49.6	50.1	49.9	51.3	47.7
01NZ338	43.0	46.3	46.1	46.0	46.2	47.6	47.1	48.9	48.7	50.5	49.1	50.7	47.5
C.V.	3.0	4.0	1.0	1.5	1.4	1.1	0.9	2.1	2.8	1.3	1.9	2.0	2.1
LSD	1.9	2.6	0.7	1.0	1.0	0.8	0.7	1.5	2.0	0.9	1.4	1.5	0.4
Average	46.7	48.0	49.7	49.9	49.9	50.6	50.8	51.8	52.1	52.6	52.7	54.7	50.8
Highest	59.9	55.4	59.9	59.1	59.4	59.9	60.2	62.6	61.3	61.4	61.2	60.6	59.7
Lowest	42.3	44.9	46.1	46.0	46.0	46.3	47.0	48.5	48.5	49.2	49.1	50.7	47.5