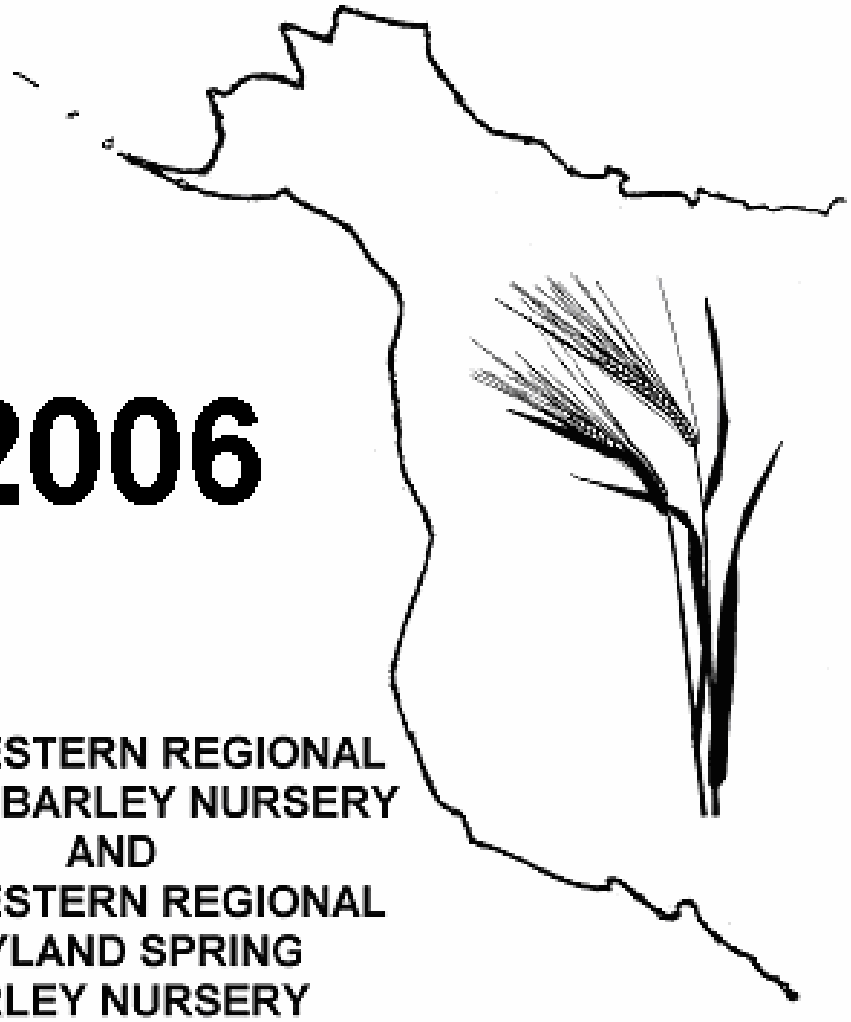

2006

THE WESTERN REGIONAL SPRING BARLEY NURSERY AND THE WESTERN REGIONAL DRYLAND SPRING BARLEY NURSERY

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
NORTHERN PLAINS AND PACIFIC WEST REGIONS
in cooperation with
State Agricultural Experiment Stations

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USDA

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WESTERN REGIONAL SPRING BARLEY NURSERY
and the
WESTERN REGIONAL DRYLAND SPRING BARLEY NURSERY

2006

Compiled by C. A. Erickson, Agronomist, USDA-ARS

This report is compiled in electronic format intended for transmittal to the nursery cooperators. The files and their contents are as follows:

2006WRBNREPORT.doc: WORD© document explaining the contents of the report with the following sections:

- Cover Page and Contents Page
- Location of Experiments and Personnel
- Western Regional Spring Barley Nursery Narrative
  - Nursery contents and locations
  - General Information
  - Data Analysis
  - Data Highlights
  - Data Tables
- Western Regional Dryland Spring Barley Nursery Narrative
  - Nursery contents and locations
  - General Information
  - Data Analysis
  - Data Highlights
  - Data Tables

2006WRSBNDATA.xls: Excel© files containing data for the 2006 Western Regional Spring Barley Nursery in both English and metric format.
2006WRDSBNDATA.xls: Excel© files containing data for the 2006 Western Regional Dryland Spring Barley Nursery in both English and metric format.

This is a joint progress report of cooperative investigations underway in the State Agricultural Experiment Stations and the Agricultural Research Service of the U.S. Department of Agriculture. This report contains preliminary data which have not been sufficiently confirmed to justify general release; interpretations may be modified with additional experimentation. Confirmed results will be published through established channels. This report is primarily a tool for use by cooperators, their official staffs and those persons having direct and special interest in the development of agricultural research programs.

This report includes data furnished by the State Agricultural Experiment Stations as well as by the Agricultural Research Service and was compiled in the Northern Plains Area and the Pacific West Area, Agricultural Research Service, U.S. Department of Agriculture. The report is not intended for publication and should not be referred to in literature citations nor quoted in publicity or advertising. Use of the data may be granted for certain purposes upon written request to the agency or agencies involved.

National Small Grains Germplasm Research Facility, Aberdeen, Idaho, 2007

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LOCATION OF EXPERIMENTS AND PERSONNEL

Malting Quality (separate report) http://www.ars.usda.gov/mwa/madison/ccru

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Wyoming

Powell (WRSBN)	Michael Killen, mkillen@uwyo.edu, Wyoming Agricultural Research Station

2006 WESTERN REGIONAL SPRING BARLEY NURSERY

This nursery is intended to be grown under irrigation, or in areas of high rainfall. It contains both 2- and 6-rowed feed and malting barley.

2006 nursery sites that were harvested and summarized for yield from 14 locations are:

(1) Tulelake, CA
(2) Aberdeen, ID
(3) Idaho Falls, ID
(4) Twin Falls, ID
(5) Bozeman, MT
(6) Fairfield, MT
(7) Fargo, ND
(8) Langdon, ND
(9) Williston, ND
(10) Klamath Falls, OR
(11) Logan, UT
(12) Pullman, WA
(13) Powell, WY
(14) Saskatoon, SK, Canada

Data from an observation nursery at Tammany, ID is included in the appropriate tables.

General Information

The entry list for the 2006 Western Regional Spring Barley Nursery is shown in Table 1. In 2006, commercial cultivars were again entered into the nursery, including those from: Busch Agricultural Resources (4 lines), and Western Plant Breeders (3 lines + 1 check).

There were 36 entries in this nursery in 2006. Eleven of the 30 entries (besides checks) in the 2005 test were dropped in 2006. These were: 98Ab11993, YU 597-432, Stellar (ND16301), ND19854, PB1-97-2R-7010, and WA 8569-99, all tested 2 years; 2B99-2039, 2B99-2771-1, 96RWA1222, YU501-163, and WA 10429-00, all tested 1 year. New entries in the test were: 01Ab10055, 01Ab10062, 00ID1550, 01ID435H (hull-less), 01ID451H (hull-less), YU501-312, BZ502-532, ND22927, ND22996, 02WNZ-1015, and 02WNZ-1821.

Data Analysis

Computer software, in Excel© format, was used to obtain the cultivar means and period of years summary for all characteristics. With this software, we were also able to calculate the coefficient of variation (C.V.) and the Least Significant Difference (LSD) at the .05 level for grain yield. These two statistics are included to provide some indication of the variability in the individual test locations and an indication of cultivar rank at each location and the overall average.

Data Highlights

Seasonal measurements for the check cultivars Baronesse, Morex, Stander, Steptoe, and Harrington (Table 2), for 2001 through 2006, show that the checks mean yield value for the 2006 season was lower than the three previous years and was slightly lower than average for the years tested. Test weight was above average, plant height was 3.9 cm shorter than average, heading date was 1.1 days earlier than average, and percent plump barley was slightly higher than average.

In 2006 the two highest yielding lines over all locations were the check varieties Steptoe and Baronesse at 5.79 Mg ha^{-1} (Table 3). The highest yielding non-check entry was 01ST1758, a 2-rowed feed barley at 5.69 Mg ha^{-1}, the next highest was UT99B1670-3458, a 6-rowed feed type, at

5.68 Mg ha^{-1}, and the third highest experimental line was 02WNZ-1015, a two-rowed feed barley at 5.66 Mg ha^{-1}. The highest yielding malting type barley was 2B99-2771-1, ranked 12^{th} at 5.49 Mg ha^{-1}. The top 12 entries had statistically equal yields at the 95% confidence level. Other than the hull-less entries, MT000138 once again had the highest test weight at 685.5 kg m^{-3}. The hull-less entries had test weights of 741.7 and 739.3 kg m^{-3}. ND22996 had the highest percent plump barley at 97.4%.

In the period of years summary for 2002 through 2006 (Table 4), 99NZ102, a six-row feed type, was the highest yielding at 6.212 Mg ha^{-1} over the last 3 years. 2B99-2657, a two-row malting type, yielded slightly less at 6.108 Mg ha^{-1}. Of the lines tested at least 2 years, 99Ab11073 had the highest yield at 6.001 Mg ha^{-1}, MT000138 had the highest test weight at 686.2 kg m^{-3}, and ND21863 had the highest percent plump barley at 96.8%.

Tables 5 through 13 present the 2006 WRSBN data summarized over locations for grain yield, test weight, height, heading date, plump barley, thin barley, lodging, percent protein, and disease ratings, respectively.

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Table 1: 2006 Western Regional Spring Barley Nursery, Entry List

Seed Source	Entry Number		Entry	Type	Parentage	Grade
WSU	1		Steptoe	6 row	CI 15229	feed
WPB	2		Baronesse	2 row	PI 568246	feed
USDA-ARS	3		Morex	6 row	CI 15773	malting
USDA-ARS	4		Stander	6 row	PI 564743	malting
USDA-ARS	5		Harrington	2 row		malting
BARI	6		2B99-2316	2 row	2B91-4947//2B91-4947/2B95-8129	malting
BARI	7		2B99-2657	2 row	2B91-4947//2B91-4947/2B94-5744	malting
BARI	8		2B99-2763-10	2 row	MERIT/2B92-5065	malting
BARI	9		2B99-2771-1	2 row	MERIT // MERIT / 2B95-8129	malting
USDA-ARS	10		99Ab11073	2 row	Colter/M75	malting
USDA-ARS	11	*	01Ab10055	2 row	86Ab2617/2B91-4947	malting
USDA-ARS	12	*	01Ab10062	2 row	86Ab2617/2B91-4947	malting
USDA-ARS	13	*	00ID1550	2 row	Colter*2/pmut422	feed, low PA
USDA-ARS	14	*	01ID435H	2 row	Baronesse*2/pmut882//HB317	feed, low PA, hull-less
USDA-ARS	15	*	01ID451H	2 row	Baronesse*2/pmut882//HB317	feed, low PA, hull-less
USDA-ARS	16		01ST1587	2 row	Baronesse*4/STARS 9301B	feed, RWA resistant
USDA-ARS	17		01ST1758	2 row	Baronesse*4/STARS 9577B	feed, RWA resistant
WPB	18	*	YU501-312	2 row	Heran/Camas	feed
WPB	19		YU501-385	2 row	Baronesse/Camas	feed
WPB	20	*	BZ502-532	2 row	Nishino Hoshi/Xena	feed
MSU	21		MT000047	2 row	Chinook/MT920161	feed/malting
MSU	22		MT000125	2 row	MT910189/Lewis	feed/malting
MSU	23		MT000138	2 row	MT920041/Stark	feed/malting
NDSU	24		ND21863	2 row	ND19119-1/ND19931	malting
NDSU	25	*	ND22927	2 row	ND19119-1/ND19931	malting
NDSU	26	*	ND22996	2 row	ND19922/ND18172-1	malting
USU	27		UT99B1669-3243	6 row	UT91B706-A-259 X BU585-82	feed
USU	28		UT99B1670-3458	6 row	UT91B706-A-259 X DA587-170	feed
WSU	29		WA 10701-99	2 row	Clivia/9448-83(WA 7758-89)//Logan	feed/malting
WSU	30		WA 7330-00	2 row	WA 7642-92/Baronesse	feed
WSU	31		WA 15279-00	2 row	WA 9361-94/Baronesse	feed
WSU	32	*	02WNZ-1015	2 row	Camas/Baronesse	feed
WSU	33	*	02WNZ-1821	2 row	WA7478-97/Baronesse	feed
WSU	34		99NZ102	6 row	12697-94/*ant*643//939331-91	feed/malting
WSU	35		01NZ392	6 row	16230-95/*ant*643//BA6B-95-8253	feed/malting
WSU	36		01NZ706	6 row	*ant*643/9130-87//BA6B-95-8253	feed/malting

* new entries

Table 2: Check Seasonal Measurements (2001-2006) of the Western Regional Spring Barley Nursery

Average of adjusted means of checks Baronesse, Morex, Stander, Steptoe, and Harrington

Yield		
Year	Station Years	Mg ha^{-1}
2004	13	6.631
2003	13	5.876
2005	12	5.674
2006	14	5.336
2001	13	5.255
2002	11	4.434
Adj. Mean	76	5.559

Test Weight		
Year	Station Years	kg m^{-3}
2001	13	657.8
2004	13	657.2
2006	11	656.4
2003	13	656.2
2002	11	653.2
2005	12	649.9
Adj. Mean	73	655.2

Plant Height		
Year	Station Years	cm
2004	11	90.5
2005	8	85.5
2003	12	78.7
2001	14	76.1
2006	11	76.0
2002	11	75.0
Adj. Mean	67	79.9

Heading Date		
Year	Station Years	Julian
2004	10	173.9
2006	10	176.4
2001	9	176.5
2002	10	177.2
2003	9	179.1
2005	9	181.5
Adj. Mean	47	177.5

Percent Plump Barley		
Year	Station Years	%
2002	10	91.4
2004	13	91.3
2006	9	89.7
2003	13	88.4
2001	9	87.6
2005	11	86.7
Adj. Mean	56	89.2

Table 3: 2006 Western Regional Spring Barley Nursery, Means Summary

ENTRY NO.	CULTIVAR/ DESIGNATION	GRAIN YIELD		TEST WEIGHT	HEADING DATE	PLANT HEIGHT	PLUMP BARLEY*	THIN BARLEY**	PROTEIN
		Mg ha^{-1}	Rank	kg m^{-3}	Julian	cm	%	%	%
	Number of Locations	14		11	10	11	9	9	5
1	Steptoe, check	5.79	1	628.7	174	80.3	92.3	7.69	11.1
2	Baronesse, check	5.79	2	676.3	179	80.0	90.8	9.23	12.3
3	Morex, check	4.70	35	648.1	174	75.3	86.4	13.55	12.3
4	Stander, check	5.39	15	662.4	176	73.1	89.2	10.77	12.0
5	Harrington, check	5.01	28	666.4	179	71.4	89.6	10.39	12.4
6	2B99-2316	5.10	27	656.5	179	75.6	88.3	11.71	12.6
7	2B99-2657	5.39	14	646.4	179	74.4	85.1	14.86	12.3
8	2B99-2763-10	5.11	25	654.2	178	78.5	88.8	11.18	12.6
9	2B99-2771-1	5.49	12	669.2	179	77.5	90.2	9.75	12.3
10	99Ab11073	5.64	6	648.8	173	77.8	87.0	13.00	10.7
11	01Ab10055	4.83	33	653.9	181	79.5	88.5	11.51	13.2
12	01Ab10062	5.01	29	650.3	182	83.8	90.8	9.24	13.2
13	00ID1550	5.38	17	623.4	175	82.9	87.0	13.02	10.4
14	01ID435H	4.46	36	741.7	179	82.5	81.5	18.51	14.0
15	01ID451H	4.76	34	739.3	179	80.7	66.1	33.91	13.6
16	01ST1587	5.64	7	676.1	178	79.4	94.9	5.09	12.7
17	01ST1758	5.69	3	681.3	178	66.6	93.3	6.67	12.3
18	YU501-312	5.50	11	636.6	181	84.6	84.1	15.94	12.4
19	YU501-385	4.84	32	675.9	179	60.1	90.6	9.36	12.8
20	BZ502-532	5.25	22	672.3	180	70.8	94.7	5.29	13.0
21	MT000047	5.30	20	681.4	178	72.3	89.8	10.22	13.3
22	MT000125	5.19	24	681.7	179	80.8	93.8	6.16	12.6
23	MT000138	5.01	30	685.5	177	80.5	96.5	3.52	13.3
24	ND21863	5.36	18	678.7	175	83.7	96.7	3.26	11.3
25	ND22927	5.10	26	660.1	177	82.4	97.1	2.88	12.1
26	ND22996	4.94	31	669.7	177	80.5	97.4	2.61	12.6
27	UT99B1669-3243	5.55	10	645.0	174	77.9	93.5	6.55	11.6
28	UT99B1670-3458	5.68	4	644.2	174	72.6	93.0	6.98	11.6
29	WA 10701-99	5.20	23	662.5	179	72.8	86.4	13.59	12.1
30	WA 7330-00	5.63	8	671.8	178	79.1	89.8	10.24	12.1
31	WA 15279-00	5.27	21	654.8	179	75.1	90.0	9.99	12.6
32	02WNZ-1015	5.66	5	676.6	179	80.6	89.8	10.18	12.3
33	02WNZ-1821	5.58	9	672.3	178	82.5	92.2	7.79	12.4
34	99NZ102	5.33	19	633.0	177	86.0	84.7	15.29	11.8
35	01NZ392	5.39	16	637.8	178	74.2	86.9	13.14	11.4
36	01NZ706	5.44	13	631.3	177	79.1	91.1	8.87	12.0
	MEAN:	**5.288**		**663.7**	**177.7**	**77.6**	**89.7**	**10.3**	**12.3**
	CHECK MEAN:	**5.336**		**656.4**	**176.4**	**76.0**	**89.7**	**10.3**	**12.0**
	CV %	**9.274**		**2.23**	**0.83**	**5.91**	**7.44**	**64.60**	**6.51**
	LSD (.05)	**0.305**		**10.37**	**1.09**	**3.22**	**5.18**	**5.18**	**0.83**

* Percent over sieve, 2-rowed >2.4mm, 6-rowed >2.2mm

** Percent through 2.2mm screen

Table 4: Summary Across Locations and Years, Western Regional Spring Barley Nursery, 2002-2006.

Entry Number	CULTIVAR/ DESIGNATION	Grain Yield			Test Weight	Plant Height	Heading Date	Plump Barley*	Thin Barley**	Protein
		Station Years	Mg ha^{-1}	RANK	kg m^{-3}	cm	Julian	%	%	%
1	**Steptoe, check**	63	6.093	3	631.8	81.3	175.2	91.4	3.9	11.1
2	**Baronesse, check**	63	5.959	5	672.1	76.9	179.9	89.5	5.3	12.6
3	**Morex, check**	63	5.007	32	645.1	87.0	175.2	86.2	6.1	12.7
4	**Stander, check**	63	5.751	12	661.5	81.5	176.9	92.0	3.9	12.1
5	**Harrington, check**	63	5.297	27	662.7	77.9	179.8	88.3	5.9	12.8
6	**2B99-2316**	39	5.894	7	658.6	75.6	179.4	87.9	8.5	12.3
7	**2B99-2657**	39	6.108	2	646.9	85.1	179.4	87.5	8.7	12.0
8	**2B99-2763-10**	26	5.503	22	657.8	83.6	180.2	88.0	7.7	12.5
9	**2B99-2771-1**	26	5.783	10	668.6	86.1	181.0	89.9	6.5	12.0
10	**99Ab11073**	26	6.001	4	645.5	86.9	175.2	87.4	8.1	10.4
11	**01Ab10055**	14	4.833	34	653.9	79.5	181.0	88.5	11.5	13.2
12	**01Ab10062**	14	5.009	31	650.3	83.8	181.8	90.8	9.2	13.2
13	**00ID1550**	14	5.376	26	623.4	82.9	175.4	87.0	13.0	10.4
14	**01ID435H**	14	4.457	36	741.7	82.5	179.0	81.5	18.5	14.0
15	**01ID451H**	14	4.762	35	739.3	80.7	179.0	66.1	33.9	13.6
16	**01ST1587**	26	5.876	8	675.4	84.3	180.0	92.7	4.2	12.5
17	**01ST1758**	26	5.933	6	678.6	76.0	180.3	90.2	6.2	12.0
18	**YU501-312**	14	5.501	23	636.6	84.6	180.9	84.1	15.9	12.4
19	**YU501-385**	26	5.609	20	680.6	77.9	180.3	88.9	6.7	12.5
20	**BZ502-532**	14	5.251	29	672.3	70.8	180.1	94.7	5.3	13.0
21	**MT000047**	26	5.632	18	682.3	83.2	180.1	88.1	7.2	13.1
22	**MT000125**	26	5.468	24	681.3	87.2	180.7	90.8	5.6	12.5
23	**MT000138**	26	5.256	28	686.2	89.4	179.0	94.3	2.9	13.3
24	**ND21863**	26	5.728	13	679.2	91.8	178.3	96.8	2.2	11.1
25	**ND22927**	14	5.105	30	660.1	82.4	176.8	97.1	2.9	12.1
26	**ND22996**	14	4.937	33	669.7	80.5	177.0	97.4	2.6	12.6
27	**UT99B1669-3243**	26	5.709	14	642.4	86.1	176.1	91.9	4.5	11.6
28	**UT99B1670-3458**	26	5.789	9	639.6	82.8	176.4	92.0	4.6	11.5
29	**WA 10701-99**	26	5.414	25	657.9	81.9	180.7	84.6	10.2	11.9
30	**WA 7330-00**	26	5.781	11	666.3	82.4	179.9	86.0	8.6	11.9
31	**WA 15279-00**	26	5.614	19	653.5	81.9	180.9	88.1	8.1	12.3
32	**02WNZ-1015**	14	5.658	17	676.6	80.6	178.7	89.8	10.2	12.3
33	**02WNZ-1821**	14	5.578	21	672.3	82.5	177.5	92.2	7.8	12.4
34	**99NZ102**	39	6.212	1	632.1	89.0	177.2	85.5	7.8	11.8
35	**01NZ392**	26	5.668	16	636.9	85.7	179.8	87.0	7.8	11.5
36	**01NZ706**	26	5.669	15	631.5	89.0	178.8	89.0	5.9	11.9
	MEAN:		**5.622**		**659.5**	**82.9**	**178.5**	**89.1**	**6.8**	**12.2**
	CHECK MEAN:		**5.622**		**654.6**	**80.9**	**177.4**	**89.5**	**5.0**	**12.3**

* Percent over sieve, 2-rowed >2.4mm, 6-rowed >2.2mm

** Percent through 2.2mm screen

Table 5: 2006 Western Regional Spring Barley Nursery, Grain Yield (Mg ha^{-1})

Entry NO.	CULTIVAR/ DESIGNATION	AVERAGE Mg ha^{-1}	AVERAGE Rank	Rank Ave	Tulelake CA	Aberdeen ID	Idaho Falls ID	Twin Falls ID	Bozeman MT	Fairfield MT	Fargo ND	Langdon ND	Williston ND	Klamath Falls OR	Logan UT	Pullman WA	Powell WY	Saskatoon SK
1	Steptoe, check	5.79	1	9.6	5.28	5.90	8.15	6.99	6.29	6.34	6.20	3.40	2.50	6.61	4.59	5.54	8.49	4.834
2	Baronesse, check	5.79	2	8.1	4.36	6.18	7.50	6.58	6.96	5.92	6.08	4.37	2.78	5.76	5.57	5.86	7.97	5.132
3	Morex, check	4.70	35	29.6	3.79	4.94	6.87	6.12	4.42	5.09	5.54	2.99	2.21	4.32	4.20	5.00	5.61	4.651
4	Stander, check	5.39	15	15.4	4.54	5.89	7.49	6.36	5.96	5.90	6.21	3.01	2.10	5.21	3.84	6.13	7.56	5.238
5	Harrington, check	5.01	28	24.6	4.17	5.71	7.29	6.32	5.25	5.03	5.71	3.92	2.23	4.57	3.27	5.16	7.14	4.411
6	2B99-2316	5.10	27	21.0	3.98	5.29	7.35	6.47	5.73	5.95	6.59	4.02	2.24	5.21	2.24	4.84	6.41	5.056
7	2B99-2657	5.39	14	16.1	4.42	5.31	7.90	6.54	6.20	6.25	6.28	3.91	1.97	5.57	3.63	5.11	7.12	5.312
8	2B99-2763-10	5.11	25	19.0	4.04	5.74	7.26	6.00	6.22	5.66	6.68	4.09	2.33	5.31	1.36	4.52	7.34	5.074
9	2B99-2771-1	5.49	12	14.6	4.66	6.63	7.15	6.51	6.40	5.90	6.77	4.58	2.43	5.36	3.32	5.00	7.39	4.800
10	99Ab11073	5.64	6	11.1	5.43	6.37	7.54	6.89	6.96	5.70	6.46	3.98	2.47	5.80	3.25	4.95	8.09	5.035
11	01Ab10055	4.83	33	24.7	4.60	5.80	7.57	6.18	6.27	5.39	5.57	3.76	1.82	4.38	2.69	4.41	6.28	2.955
12	01Ab10062	5.01	29	22.0	4.84	5.40	7.98	5.98	5.99	5.11	5.39	4.28	1.54	5.31	2.63	3.39	7.46	4.839
13	00ID1550	5.38	17	19.1	5.82	5.77	7.00	5.91	5.90	5.60	6.17	3.56	2.44	4.84	4.16	5.21	7.94	4.942
14	01ID435H	4.46	36	33.3	4.01	4.38	6.06	5.14	5.47	4.78	4.90	3.67	1.16	4.26	2.76	4.84	6.67	4.307
15	01ID451H	4.76	34	30.3	3.69	4.91	6.68	5.32	5.68	4.86	5.16	3.67	1.34	4.69	4.23	5.21	6.64	4.573
16	01ST1587	5.64	7	11.6	4.43	6.05	7.47	7.13	6.51	5.89	6.41	4.88	2.48	5.51	4.46	5.48	7.52	4.696
17	01ST1758	5.69	3	8.9	4.25	5.75	7.78	6.60	6.59	6.07	6.43	4.88	2.62	6.26	3.57	5.91	8.09	4.904
18	YU501-312	5.50	11	16.6	5.92	5.60	7.53	5.49	6.33	5.59	6.24	4.62	2.32	4.48	4.59	5.43	8.06	4.807
19	YU501-385	4.84	32	28.4	3.79	5.50	6.37	5.98	5.53	4.86	5.01	3.78	2.21	4.94	4.15	5.38	5.92	4.332
20	BZ502-532	5.25	22	21.2	5.80	4.97	6.17	6.00	6.70	4.95	5.83	3.92	2.13	5.65	3.52	5.38	7.90	4.589
21	MT000047	5.30	20	19.0	4.54	5.31	6.95	5.91	6.42	5.57	5.22	3.91	2.62	5.57	3.79	5.59	7.99	4.833
22	MT000125	5.19	24	21.0	4.00	5.68	7.09	5.97	5.55	5.65	5.77	4.09	2.55	5.07	4.34	5.43	6.52	4.967
23	MT000138	5.01	30	24.2	4.34	5.25	6.97	5.81	5.88	5.26	5.44	3.10	2.87	4.65	3.42	5.64	6.66	4.824
24	ND21863	5.36	18	17.2	5.14	5.42	7.39	6.36	6.27	5.84	6.99	4.82	1.74	4.34	3.41	5.48	6.98	4.894
25	ND22927	5.10	26	20.6	4.88	5.98	6.44	5.74	6.22	5.83	6.81	3.98	2.43	4.36	2.11	5.11	6.67	4.921
26	ND22996	4.94	31	25.9	5.10	5.65	6.27	5.27	5.86	5.59	6.13	4.18	2.40	4.09	2.36	5.05	6.49	4.680
27	UT99B1669-3243	5.55	10	14.1	4.46	5.65	7.93	6.13	6.14	5.67	5.86	4.10	2.63	5.16	5.44	5.43	8.11	4.950
28	UT99B1670-3458	5.68	4	12.3	5.29	6.33	6.68	6.57	6.70	5.95	6.60	3.56	2.47	5.17	5.68	5.48	8.17	4.808
29	WA 10701-99	5.20	23	21.1	4.03	5.40	7.28	5.93	5.96	5.84	5.68	4.12	2.59	5.10	3.63	5.54	7.03	4.641
30	WA 7330-00	5.63	8	13.5	3.95	6.62	7.22	6.34	5.90	6.47	6.03	3.80	2.78	5.71	5.50	5.70	7.89	4.906
31	WA 15279-00	5.27	21	18.9	4.04	5.49	6.84	6.16	6.53	6.31	6.17	4.48	2.43	5.32	3.05	5.27	6.87	4.814
32	02WNZ-1015	5.66	5	10.7	4.25	5.70	7.65	6.67	6.90	5.93	6.33	4.05	2.60	5.77	5.77	5.59	7.01	5.027
33	02WNZ-1821	5.58	9	12.4	3.84	5.79	7.72	6.14	6.09	5.92	6.38	4.69	2.64	5.78	5.03	6.02	7.32	4.719
34	99NZ102	5.33	19	17.5	4.73	5.89	7.18	5.78	5.99	5.58	5.50	4.26	2.10	5.52	3.82	5.97	7.15	5.110
35	01NZ392	5.39	16	17.1	3.85	6.22	7.66	6.12	5.94	5.87	6.33	3.67	2.44	4.98	3.54	5.97	8.09	4.714
36	01NZ706	5.44	13	15.4	4.16	5.96	6.97	5.41	6.55	5.62	6.49	4.82	2.03	5.60	4.60	5.86	7.11	4.990
	Location Mean	5.288			4.515	5.719	7.204	6.134	6.118	5.659	6.038	4.026	2.296	5.397	3.822	5.328	7.267	4.786
	Check Mean	5.336			4.427	5.723	7.460	6.475	5.777	5.654	5.951	3.540	2.362	5.292	4.296	5.536	7.355	4.853
	C.V. (%)	9.274			14.400	7.500	6.926	5.223	8.124	6.382	5.600	14.200	6.110	50.900	12.400	6.037	9.600	9.929
	LSD $_{.05}$	0.305			1.057	0.699	0.813	0.522	0.812	0.588	0.500	0.779	0.228	3.779	0.667	0.529	1.135	0.656

Table 6: 2006 Western Regional Spring Barley Nursery, Test Weight (kg m^{-3})

Entry Number	CULTIVAR/ DESIGNATION	Average kg m^{-3}	Rank	Aberdeen ID	Idaho Falls ID	Twin Falls ID	Bozeman MT	Fairfield MT	Williston ND	Klamath Falls OR	Logan UT	Pullman WA	Powell WY	Saskatoon SK
1	Steptoe, check	628.7	35	628.1	627.9	621.3	640.3	654.3	501.9	656.4	685.0	628.1	629.2	643.0
2	Baronesse, check	676.3	9	695.0	682.3	685.6	700.1	705.3	532.8	677.3	724.4	658.9	681.0	697.0
3	Morex, check	648.1	27	662.8	657.6	649.3	657.0	674.0	531.5	661.2	704.4	634.5	631.1	666.0
4	Stander, check	662.4	19	688.5	672.4	672.4	687.9	693.8	540.5	670.8	710.2	629.3	643.4	677.0
5	Harrington, check	666.4	17	686.0	683.9	675.7	687.3	692.2	549.5	686.9	708.8	644.8	651.7	664.0
6	2B99-2316	656.5	21	686.0	675.7	654.3	677.0	688.9	549.5	682.1	661.0	613.9	653.5	680.0
7	2B99-2657	646.4	28	665.4	654.3	637.8	665.4	675.7	516.1	674.1	701.0	613.9	639.5	667.0
8	2B99-2763-10	654.2	23	670.5	670.7	651.0	698.8	690.5	522.5	670.8	694.6	601.0	646.3	679.0
9	2B99-2771-1	669.2	16	689.8	679.0	664.1	702.7	708.6	536.7	678.9	703.6	633.2	672.1	692.0
10	99Ab11073	648.8	26	664.1	647.7	637.8	678.2	675.7	512.2	666.0	703.8	649.9	627.2	674.0
11	01Ab10055	653.9	24	668.0	659.2	636.1	689.8	682.3	548.3	674.1	697.8	625.5	642.9	669.0
12	01Ab10062	650.3	25	660.2	654.3	626.2	689.2	672.4	549.5	680.5	699.3	589.4	665.0	667.0
13	00ID1550	623.4	36	640.9	622.9	598.2	641.6	647.7	507.1	642.9	689.2	629.3	602.3	635.0
14	01ID435H	741.7	1	773.5	746.5	758.1	760.0	794.3	635.8	723.9	752.7	768.3	673.0	773.0
15	01ID451H	739.3	2	768.3	746.5	716.9	740.7	791.0	655.1	725.5	760.4	760.6	711.7	756.0
16	01ST1587	676.1	10	702.7	679.0	680.6	708.5	708.6	553.4	661.2	706.2	682.1	651.5	703.0
17	01ST1758	681.3	6	701.4	677.3	680.6	712.4	728.4	545.7	683.7	700.6	678.2	678.0	708.0
18	YU501-312	636.6	32	660.2	632.8	594.9	671.8	682.3	496.8	666.0	711.3	633.2	616.3	637.0
19	YU501-385	675.9	11	696.3	697.1	682.3	705.3	705.3	514.8	690.2	712.8	671.8	661.5	698.0
20	BZ502-532	672.3	13	684.7	675.7	657.6	706.6	716.9	553.4	667.6	701.0	691.1	655.7	685.0
21	MT000047	681.4	5	700.1	690.5	680.6	714.3	713.6	536.7	690.2	711.8	674.4	684.7	699.0
22	MT000125	681.7	4	701.4	690.5	665.8	707.2	720.2	571.4	696.6	671.1	684.7	680.8	709.0
23	MT000138	685.5	3	707.9	702.0	675.7	713.6	720.2	584.3	678.9	672.7	692.4	682.9	710.0
24	ND21863	678.7	7	695.0	683.9	682.3	709.1	716.9	561.1	693.4	681.4	683.4	648.1	711.0
25	ND22927	660.1	20	677.0	651.0	641.1	696.3	687.2	572.7	672.5	689.5	643.5	643.5	687.0
26	ND22996	669.7	15	675.7	660.8	657.6	704.6	692.2	576.6	678.9	691.9	668.0	661.3	699.0
27	UT99B1669-3243	645.0	29	653.8	632.8	632.8	673.7	674.0	517.4	638.7	705.9	679.5	628.2	658.0
28	UT99B1670-3458	644.2	30	652.5	631.2	634.5	671.8	667.4	510.9	649.9	706.5	664.1	636.7	661.0
29	WA 10701-99	662.5	18	649.9	662.5	657.6	682.8	703.7	549.5	683.7	709.9	649.9	657.0	681.0
30	WA 7330-00	671.8	14	679.5	682.3	670.7	689.8	711.9	519.9	682.1	718.7	661.5	678.8	695.0
31	WA 15279-00	654.8	22	686.0	660.8	655.9	681.5	698.8	510.9	669.2	693.6	615.2	664.6	666.0
32	02WNZ-1015	676.6	8	691.1	680.6	670.7	702.1	716.9	540.5	691.8	727.5	664.1	659.8	697.0
33	02WNZ-1821	672.3	12	684.7	682.3	667.4	695.0	711.9	547.0	678.9	715.6	664.1	661.8	687.0
34	99NZ102	633.0	33	648.6	647.7	634.5	655.1	657.6	495.5	656.4	684.3	634.5	609.1	640.0
35	01NZ392	637.8	31	660.2	655.9	646.0	644.1	660.8	483.9	666.0	687.0	639.6	627.7	644.0
36	01NZ706	631.3	34	644.8	647.7	624.6	661.5	652.6	473.6	643.5	694.3	635.8	626.1	640.0
	Location Mean	663.7		680.6	669.6	657.7	689.5	697.1	539.3	675.3	702.5	655.4	652.4	682.1
	Check Mean	656.4		672.1	664.8	660.8	674.5	683.9	531.3	670.5	706.5	639.1	647.3	669.4
	C.V. (%)	2.23							2.30	1.50		1.70	1.93	
	$LSD_{.05}$	10.4							24.5	14.2		18.3	20.5	

Table 7: 2006 Western Regional Spring Barley Nursery, Plant Height (cm)

Entry Number	CULTIVAR/ DESIGNATION	Average cm	Rank	Tulelake CA	Idaho Falls ID	Tammany ID	Twin Falls ID	Bozeman MT	Fairfield MT	Fargo ND	Williston ND	Logan UT	Pullman WA	Powell WY
1	Steptoe, check	80.3	14	99.1	76.0	83.8	80.1	90.2	81.0	84.0	48.3	71.1	82.3	74.7
2	Baronesse, check	80.0	15	99.1	69.0	71.1	77.1	85.1	67.0	77.6	48.8	66.0	78.2	76.7
3	Morex, check	75.3	25	104.1	84.0	71.1	91.9	100.3	81.0	85.8	57.2	76.2	96.3	98.4
4	Stander, check	73.1	29	101.6	83.0	88.9	86.0	96.5	76.0	83.9	54.4	66.0	84.3	86.7
5	Harrington, check	71.4	33	106.7	73.0	81.3	83.0	91.4	78.0	81.1	53.3	66.0	88.6	83.7
6	2B99-2316	75.6	24	94.0	68.0	78.7	77.1	85.1	77.0	75.8	49.8	61.0	78.0	81.7
7	2B99-2657	74.4	27	94.0	78.0	78.7	80.1	88.9	75.0	83.4	52.6	66.0	87.1	86.1
8	2B99-2763-10	78.5	20	94.0	79.0	76.2	74.1	85.1	69.0	71.6	49.3	55.9	72.4	74.7
9	2B99-2771-1	77.5	23	104.1	67.0	71.1	71.2	86.4	68.0	75.3	48.8	50.8	73.4	82.4
10	99Ab11073	77.8	22	99.1	77.0	78.7	78.1	94.0	75.0	75.7	50.3	71.1	84.3	73.7
11	01Ab10055	79.5	16	104.1	81.0	91.4	81.0	90.2	82.0	83.2	47.8	55.9	84.8	84.1
12	01Ab10062	83.8	3	104.1	82.0	91.4	93.9	88.9	82.0	84.6	49.0	66.0	77.7	86.4
13	00ID1550	82.9	5	116.8	78.0	83.8	80.1	97.8	87.0	79.0	53.6	71.1	86.6	86.4
14	01ID435H	82.5	7	104.1	72.0	83.8	83.0	90.2	84.0	78.7	56.1	61.0	87.1	85.4
15	01ID451H	80.7	10	99.1	80.0	81.3	83.0	91.4	79.0	77.7	61.0	66.0	89.4	81.1
16	01ST1587	79.4	17	91.4	63.0	73.7	74.1	86.4	70.0	74.8	45.0	66.0	76.7	74.1
17	01ST1758	66.6	35	96.5	69.0	71.1	72.1	77.5	63.0	70.8	43.4	63.5	77.0	74.7
18	YU501-312	84.6	2	78.7	55.0	63.5	62.3	63.5	60.0	56.7	45.0	55.9	61.0	60.0
19	YU501-385	60.1	36	106.7	81.0	83.8	86.0	96.5	75.0	85.1	48.0	76.2	100.1	92.4
20	BZ502-532	70.8	34	88.9	64.0	71.1	65.2	72.4	52.0	68.4	42.2	66.0	70.1	72.1
21	MT000047	72.3	32	109.2	70.0	81.3	80.1	92.7	75.0	76.2	55.9	66.0	88.1	78.7
22	MT000125	80.8	9	99.1	81.0	81.3	83.0	88.9	72.0	79.3	56.6	71.1	90.2	85.1
23	MT000138	80.5	13	106.7	81.0	86.4	83.0	99.1	78.0	84.5	57.2	55.9	89.9	85.7
24	ND21863	83.7	4	104.1	84.0	91.4	81.0	92.7	78.0	81.7	53.6	71.1	84.8	89.1
25	ND22927	82.4	8	116.8	90.0	88.9	72.1	92.7	78.0	83.1	57.7	61.0	91.4	89.7
26	ND22996	80.5	12	106.7	78.0	86.4	83.0	88.9	72.0	75.4	54.4	55.9	83.8	90.4
27	UT99B1669-3243	77.9	21	96.5	78.0	73.7	78.1	90.2	78.0	72.0	50.8	73.7	87.4	77.1
28	UT99B1670-3458	72.6	31	94.0	64.0	76.2	80.1	88.9	84.0	71.1	51.8	73.7	86.4	82.1
29	WA 10701-99	72.8	30	96.5	85.0	88.9	81.0	86.4	78.0	78.0	50.3	58.4	81.8	79.4
30	WA 7330-00	79.1	19	99.1	76.0	76.2	71.2	85.1	75.0	71.6	47.8	61.0	81.3	74.4
31	WA 15279-00	75.1	26	96.5	78.0	78.7	71.2	83.8	78.0	75.6	48.8	61.0	81.8	77.7
32	02WNZ-1015	80.6	11	91.4	75.0	73.7	62.3	81.3	69.0	70.4	48.0	63.5	75.9	74.4
33	02WNZ-1821	82.5	6	99.1	70.0	73.7	71.2	82.6	66.0	73.1	49.0	63.5	83.8	72.1
34	99NZ102	86.0	1	99.1	67.0	83.8	74.1	88.9	63.0	73.0	47.8	66.0	81.8	83.4
35	01NZ392	74.2	28	99.1	76.0	91.4	74.1	99.1	75.0	76.2	55.6	63.5	86.6	83.7
36	01NZ706	79.1	18	99.1	69.0	91.4	74.1	97.8	75.0	77.6	50.5	71.1	89.2	88.1
	Location Mean	77.6		99.1	75.0	80.5	77.7	88.8	74.3	77.0	51.1	64.8	83.3	81.3
	Check Mean	76.0		102.1	77.0	79.2	83.6	92.7	76.6	82.5	52.4	69.1	86.0	84.1
	C.V. (%)	5.91												
	LSD .05	3.2												

Table 8: 2006 Western Regional Spring Barley Nursery, Heading Date (Julian)

Entry Number	CULTIVAR/ DESIGNATION	Average Julian	Average Rank	Idaho Falls ID	Twin Falls ID	Bozeman MT	Fairfield MT	Fargo ND	Williston ND	Logan UT	Pullman WA	Powell WY	Saskatoon SK
1	Steptoe, check	174.4	32	171	172	178	179	171	170	173	173	167	190
2	Baronesse, check	178.9	10	178	174	183	183	173	177	177	178	171	195
3	Morex, check	173.8	35	167	171	177	180	170	174	172	173	165	190
4	Stander, check	176.0	29	170	174	182	182	171	175	173	176	166	191
5	Harrington, check	178.7	14	177	175	182	183	174	175	177	179	171	194
6	2B99-2316	179.4	5	178	176	182	183	174	177	180	178	172	194
7	2B99-2657	179.0	8	177	175	183	183	174	176	180	177	172	193
8	2B99-2763-10	178.1	18	177	173	181	184	173	174	180	178	168	193
9	2B99-2771-1	179.1	6	178	174	183	184	174	176	180	177	171	194
10	99Ab11073	173.3	36	166	173	178	180	168	173	169	172	163	191
11	01Ab10055	181.0	2	179	177	185	184	176	180	180	180	174	196
12	01Ab10062	181.8	1	180	178	186	185	177	181	180	180	176	196
13	00ID1550	175.4	30	172	172	178	182	171	175	172	175	167	191
14	01ID435H	179.0	7	177	175	183	182	173	179	180	178	171	193
15	01ID451H	179.0	9	177	174	183	182	174	179	180	177	171	193
16	01ST1587	178.0	19	178	173	183	183	172	175	177	177	168	194
17	01ST1758	178.3	17	178	173	183	183	172	175	180	176	168	194
18	YU501-312	180.9	3	181	179	183	185	174	178	180	178	176	196
19	YU501-385	178.8	11	180	177	182	183	173	175	176	177	173	192
20	BZ502-532	180.1	4	181	175	183	185	174	180	176	179	175	194
21	MT000047	177.9	20	179	173	180	183	174	177	176	177	168	192
22	MT000125	178.6	16	180	174	180	184	174	177	177	178	169	194
23	MT000138	176.8	26	176	171	179	183	174	174	177	176	168	191
24	ND21863	175.4	31	167	172	180	182	171	174	172	176	168	192
25	ND22927	176.8	27	172	171	183	183	172	174	177	177	168	191
26	ND22996	177.0	24	173	172	183	183	172	174	176	177	168	192
27	UT99B1669-3243	174.2	34	170	171	178	180	170	174	172	172	165	191
28	UT99B1670-3458	174.3	33	171	171	179	181	170	173	172	170	166	190
29	WA 10701-99	178.7	13	179	173	181	184	174	177	177	178	171	194
30	WA 7330-00	177.6	21	177	170	183	182	172	176	177	177	168	194
31	WA 15279-00	178.6	15	179	173	183	183	173	177	177	177	171	194
32	02WNZ-1015	178.7	12	178	174	183	184	173	176	176	177	172	194
33	02WNZ-1821	177.5	23	178	173	180	183	172	176	174	176	171	193
34	99NZ102	176.9	25	176	174	179	182	173	176	174	175	167	193
35	01NZ392	177.6	22	175	174	183	182	175	176	175	175	168	193
36	01NZ706	176.5	28	176	174	179	181	171	176	173	176	167	192
	Location Mean	177.67		175.8	173.6	181.4	182.5	172.6	175.8	176.2	176.4	169.4	192.8
	Check Mean	176.35		172.6	173.2	180.4	181.2	171.8	174.1	174.4	175.8	168.0	192.0
	C.V. (%)	0.83											
	LSD .05	1.09											

Table 9: 2006 Western Regional Spring Barley Nursery, Percent Plump Barley*

Entry Number	CULTIVAR/ DESIGNATION	Average		Aberdeen ID	Idaho Falls ID	Twin Falls ID	Bozeman MT	Fairfield MT	Klamath Falls OR	Pullman WA	Powell WY	Saskatoon SK
		%	Rank									
1	Steptoe, check	92.3	11	91.0	98.0	97.0	91.5	99.0	99.4	80.0	99.2	75.7
2	Baronesse, check	90.8	14	95.0	95.9	94.4	91.3	97.8	96.0	72.0	97.7	76.8
3	Morex, check	86.4	30	90.0	98.8	97.6	80.4	98.4	99.4	63.0	97.9	52.6
4	Stander, check	89.2	23	87.0	98.8	98.1	91.9	98.7	99.4	63.0	99.2	66.8
5	Harrington, check	89.6	22	93.0	96.4	92.7	91.8	98.0	97.8	82.0	96.9	57.8
6	2B99-2316	88.3	26	93.0	95.7	91.8	87.8	93.7	95.0	76.0	94.4	67.3
7	2B99-2657	85.1	32	87.0	90.8	85.2	79.7	93.5	94.9	78.0	92.8	64.4
8	2B99-2763-10	88.8	24	91.0	96.1	93.9	95.8	96.9	94.4	59.0	97.5	74.8
9	2B99-2771-1	90.2	17	90.0	96.8	94.1	92.0	96.3	95.9	78.0	97.8	71.4
10	99Ab11073	87.0	27	88.0	92.9	91.2	90.4	92.7	95.9	64.0	96.7	71.2
11	01Ab10055	88.5	25	88.0	96.0	91.7	91.8	94.6	95.2	80.0	93.4	65.6
12	01Ab10062	90.8	15	91.0	96.2	93.3	91.8	96.0	97.0	81.0	97.3	73.3
13	00ID1550	87.0	28	90.0	93.8	90.1	83.6	93.5	95.1	75.0	94.7	67.1
14	01ID435H	81.5	35	69.0	91.5	79.0	79.0	90.4	79.9	60.0	90.3	94.3
15	01ID451H	66.1	36	44.0	85.7	54.5	60.9	78.4	73.3	31.0	85.3	81.7
16	01ST1587	94.9	5	96.0	96.3	96.7	98.1	98.3	97.1	81.0	98.6	92.1
17	01ST1758	93.3	9	95.0	93.1	94.9	95.3	97.2	96.4	86.0	98.2	83.7
18	YU501-312	84.1	34	82.0	92.2	85.4	81.9	96.8	94.3	87.0	94.0	43.0
19	YU501-385	90.6	16	88.0	97.0	94.2	93.5	96.1	96.5	85.0	94.8	70.6
20	BZ502-532	94.7	6	95.0	96.0	94.4	96.7	98.2	96.5	93.0	98.0	84.6
21	MT000047	89.8	20	90.0	94.4	90.2	93.8	97.0	97.4	87.0	97.0	61.3
22	MT000125	93.8	7	92.0	96.7	92.8	92.9	97.9	98.3	90.0	95.7	88.2
23	MT000138	96.5	4	97.0	97.9	97.1	97.7	98.6	98.3	93.0	99.4	89.3
24	ND21863	96.7	3	97.0	98.0	96.4	98.2	98.6	98.2	92.0	99.2	93.0
25	ND22927	97.1	2	95.0	98.0	98.6	98.7	99.1	98.0	94.0	99.1	93.7
26	ND22996	97.4	1	96.0	97.0	97.9	98.9	98.9	97.2	98.0	99.3	93.3
27	UT99B1669-3243	93.5	8	89.0	94.3	91.6	93.9	97.7	99.6	97.0	99.3	78.6
28	UT99B1670-3458	93.0	10	86.0	95.9	92.1	94.4	97.2	99.4	96.0	99.3	76.7
29	WA 10701-99	86.4	31	76.0	94.9	92.0	88.4	97.0	95.8	77.0	93.9	62.7
30	WA 7330-00	89.8	21	91.0	92.7	92.1	89.7	96.2	92.9	80.0	97.5	75.9
31	WA 15279-00	90.0	18	95.0	94.3	95.4	88.9	97.3	96.4	82.0	95.3	65.5
32	02WNZ-1015	89.8	19	90.0	91.4	90.7	90.6	97.8	95.9	89.0	94.2	68.7
33	02WNZ-1821	92.2	12	94.0	95.9	94.4	93.2	97.8	96.2	82.0	98.1	78.4
34	99NZ102	84.7	33	89.0	98.1	95.0	79.7	98.3	99.1	55.0	97.4	50.8
35	01NZ392	86.9	29	91.0	99.1	97.9	75.5	98.8	99.2	60.0	99.2	61.0
36	01NZ706	91.1	13	90.0	98.8	97.4	90.2	98.6	99.3	84.0	99.5	62.3
	Location Mean	89.67		88.9	95.4	92.3	89.7	96.4	95.8	78.6	96.6	73.2
	Check Mean	89.67		91.2	97.6	96.0	89.4	98.4	98.4	72.0	98.2	66.0
	C.V. (%)	7.44										
	LSD $_{.05}$	5.18										

* Percent over sieve, 2-rowed >2.4mm, 6-rowed >2.2mm

Table 10: 2006 Western Regional Spring Barley Nursery, Percent Thin Barley*

Entry Number	CULTIVAR/ DESIGNATION	Average		Aberdeen ID	Idaho Falls ID	Twin Falls ID	Bozeman MT	Fairfield MT	Klamath Falls OR	Pullman WA	Powell WY	Saskatoon SK
		%	Rank									
1	Steptoe, check	7.69	11	9.0	2.0	3.0	8.5	1.0	0.6	20.0	0.8	24.3
2	Baronesse, check	9.23	14	5.0	4.1	5.6	8.7	2.2	4.0	28.0	2.3	23.2
3	Morex, check	13.55	30	10.0	1.2	2.4	19.6	1.6	0.6	37.0	2.1	47.4
4	Stander, check	10.77	23	13.0	1.2	1.9	8.1	1.3	0.6	37.0	0.8	33.2
5	Harrington, check	10.39	22	7.0	3.6	7.3	8.2	2.0	2.2	18.0	3.1	42.2
6	2B99-2316	11.71	26	7.0	4.3	8.2	12.2	6.3	5.0	24.0	5.6	32.7
7	2B99-2657	14.86	32	13.0	9.2	14.8	20.3	6.5	5.1	22.0	7.2	35.6
8	2B99-2763-10	11.18	24	9.0	3.9	6.1	4.2	3.1	5.6	41.0	2.5	25.2
9	2B99-2771-1	9.75	17	10.0	3.2	5.9	8.0	3.7	4.1	22.0	2.2	28.6
10	99Ab11073	13.00	27	12.0	7.1	8.8	9.6	7.3	4.1	36.0	3.3	28.8
11	01Ab10055	11.51	25	12.0	4.0	8.3	8.2	5.4	4.8	20.0	6.6	34.4
12	01Ab10062	9.24	15	9.0	3.8	6.7	8.2	4.0	3.0	19.0	2.7	26.7
13	00ID1550	13.02	28	10.0	6.2	9.9	16.4	6.5	4.9	25.0	5.3	32.9
14	01ID435H	18.51	35	31.0	8.5	21.0	21.0	9.6	20.1	40.0	9.7	5.7
15	01ID451H	33.91	36	56.0	14.3	45.5	39.1	21.6	26.7	69.0	14.7	18.3
16	01ST1587	5.09	5	4.0	3.7	3.3	1.9	1.7	2.9	19.0	1.4	7.9
17	01ST1758	6.67	9	5.0	6.9	5.1	4.7	2.8	3.6	14.0	1.8	16.3
18	YU501-312	15.94	34	18.0	7.8	14.6	18.1	3.2	5.7	13.0	6.0	57.0
19	YU501-385	9.36	16	12.0	3.0	5.8	6.5	3.9	3.5	15.0	5.2	29.4
20	BZ502-532	5.29	6	5.0	4.0	5.6	3.3	1.8	3.5	7.0	2.0	15.4
21	MT000047	10.22	20	10.0	5.6	9.8	6.2	3.0	2.6	13.0	3.0	38.7
22	MT000125	6.16	7	8.0	3.3	7.2	7.1	2.1	1.7	10.0	4.3	11.8
23	MT000138	3.52	4	3.0	2.1	2.9	2.3	1.4	1.7	7.0	0.6	10.7
24	ND21863	3.26	3	3.0	2.0	3.6	1.8	1.4	1.8	8.0	0.8	7.0
25	ND22927	2.88	2	5.0	2.0	1.4	1.3	0.9	2.0	6.0	0.9	6.3
26	ND22996	2.61	1	4.0	3.0	2.1	1.1	1.1	2.8	2.0	0.7	6.7
27	UT99B1669-3243	6.55	8	11.0	5.7	8.4	6.1	2.3	0.4	3.0	0.7	21.4
28	UT99B1670-3458	6.98	10	14.0	4.1	7.9	5.6	2.8	0.6	4.0	0.7	23.3
29	WA 10701-99	13.59	31	24.0	5.1	8.0	11.6	3.0	4.2	23.0	6.1	37.3
30	WA 7330-00	10.24	21	9.0	7.3	7.9	10.3	3.8	7.1	20.0	2.5	24.1
31	WA 15279-00	9.99	18	5.0	5.7	4.6	11.1	2.7	3.6	18.0	4.8	34.5
32	02WNZ-1015	10.18	19	10.0	8.6	9.3	9.4	2.2	4.1	11.0	5.8	31.3
33	02WNZ-1821	7.79	12	6.0	4.1	5.6	6.8	2.2	3.8	18.0	1.9	21.6
34	99NZ102	15.29	33	11.0	1.9	5.0	20.3	1.7	0.9	45.0	2.6	49.2
35	01NZ392	13.14	29	9.0	0.9	2.1	24.5	1.2	0.8	40.0	0.8	39.0
36	01NZ706	8.87	13	10.0	1.2	2.6	9.8	1.4	0.7	16.0	0.5	37.7
	Location Mean	10.33		11.1	4.6	7.7	10.3	3.6	4.2	21.4	3.4	26.8
	Check Mean	10.33		8.8	2.4	4.0	10.6	1.6	1.6	28.0	1.8	34.0
	C.V. (%)	64.60										
	$LSD_{.05}$	5.18										

* Percent through 2.2mm screen

Table 11: 2006 Western Regional Spring Barley Nursery, Lodging

Entry Number	CULTIVAR/ DESIGNATION	Tulelake CA	Idaho Falls ID	Tammany ID	Bozeman MT	Langdon ND	Pullman WA	Powell WY
		1 to 8	0-10*	0-10*	0-10*	0-10*	0-10*	0-10*
1	Steptoe, check	5.0	1.3	5.0	1.0	2.6	1.1	1.3
2	Baronesse, check	6.0	1.0	2.5	1.0	2.0	0.8	2.0
3	Morex, check	6.3	2.7	2.5	8.0	3.1	3.2	5.3
4	Stander, check	4.7	1.3	3.5	0.0	2.3	0.5	1.0
5	Harrington, check	6.7	1.3	4.0	3.0	2.4	0.0	2.3
6	2B99-2316	5.7	1.3	2.0	1.0	4.4	0.0	1.3
7	2B99-2657	5.7	1.7	2.0	5.0	3.7	0.0	1.7
8	2B99-2763-10	6.3	1.0	1.5	0.0	2.6	0.0	1.0
9	2B99-2771-1	4.0	0.8	1.0	2.0	2.7	0.0	1.0
10	99Ab11073	4.7	0.7	2.0	0.0	1.7	0.3	1.0
11	01Ab10055	3.7	1.3	1.5	0.0	3.1	0.0	1.0
12	01Ab10062	3.3	2.3	1.5	0.0	3.0	0.0	1.0
13	00ID1550	1.0	0.8	2.0	2.0	1.3	0.0	1.0
14	01ID435H	5.3	1.3	3.5	0.0	4.3	1.1	2.3
15	01ID451H	7.3	1.0	1.5	0.0	2.0	0.0	1.3
16	01ST1587	5.0	1.3	1.5	0.0	1.8	0.2	1.0
17	01ST1758	5.7	1.0	2.0	0.0	1.9	0.0	1.0
18	YU501-312	4.0	0.8	1.5	0.0	1.0	0.0	1.0
19	YU501-385	5.0	2.3	1.5	0.0	3.3	0.5	2.7
20	BZ502-532	1.0	0.4	8.0	0.0	1.4	0.0	1.0
21	MT000047	4.3	1.0	2.5	2.0	3.7	0.0	1.0
22	MT000125	6.0	2.0	3.0	4.0	2.7	0.0	2.0
23	MT000138	4.7	1.3	2.5	5.0	2.3	0.0	2.3
24	ND21863	2.7	2.0	2.5	0.0	3.3	0.0	1.0
25	ND22927	2.7	1.7	1.0	0.0	2.4	0.1	1.0
26	ND22996	3.3	1.7	1.5	0.0	1.7	0.0	1.7
27	UT99B1669-3243	3.7	1.0	4.5	0.0	3.3	0.8	1.0
28	UT99B1670-3458	3.3	0.8	4.0	0.0	4.7	0.4	1.0
29	WA 10701-99	6.7	1.7	2.0	6.0	2.9	0.8	3.0
30	WA 7330-00	7.0	0.8	3.0	3.0	2.0	0.5	1.7
31	WA 15279-00	7.0	1.0	1.0	0.0	1.1	0.8	1.0
32	02WNZ-1015	6.7	1.0	2.0	1.0	1.3	0.0	3.0
33	02WNZ-1821	7.3	1.0	1.5	3.0	1.7	0.0	1.0
34	99NZ102	5.0	0.8	1.0	0.0	2.0	0.2	3.3
35	01NZ392	5.3	1.7	4.0	3.0	2.6	0.0	3.0
36	01NZ706	4.0	1.2	2.5	0.0	3.3	0.2	2.0
	Location Mean	4.9	1.3	2.5	1.4	2.5	0.3	1.7
	Check Mean	5.7	1.5	3.5	2.6	2.5	1.1	2.4
	C.V. (%)					43.0	147.6	42.5
	LSD .05					1.5	0.76	1.15

Table 12: 2006 Western Regional Spring Barley Nursery, Percent Protein

Entry Number	CULTIVAR/ DESIGNATION	AVERAGE		Idaho Falls	Twin Falls	Fairfield	Williston	Pullman
		%	Rank	ID	ID	MT	ND	WA
1	Steptoe, check	11.1	34	11.7	10.5	9.9	12.2	11.0
2	Baronesse, check	12.3	21	12.7	10.4	11.4	15.7	11.4
3	Morex, check	12.3	18	13.6	11.5	11.4	14.4	10.8
4	Stander, check	12.0	27	12.5	10.7	11.3	14.3	11.4
5	Harrington, check	12.4	15	12.9	11.1	11.4	15.5	11.3
6	2B99-2316	12.6	12	12.8	10.8	11.1	17.3	11.1
7	2B99-2657	12.3	19	13.0	10.5	10.3	16.4	11.5
8	2B99-2763-10	12.6	10	13.0	10.7	11.9	16.0	11.6
9	2B99-2771-1	12.3	20	12.8	10.7	11.2	16.5	10.5
10	99Ab11073	10.7	35	11.3	10.4	9.7	12.1	9.8
11	01Ab10055	13.2	5	14.0	11.0	11.9	16.6	12.7
12	01Ab10062	13.2	6	13.4	11.1	11.5	17.2	13.0
13	00ID1550	10.4	36	11.7	9.9	9.9	10.8	9.8
14	01ID435H	14.0	1	14.8	12.2	13.6	18.1	11.3
15	01ID451H	13.6	2	14.3	11.3	12.0	19.2	11.4
16	01ST1587	12.7	9	13.6	11.3	11.0	15.9	11.9
17	01ST1758	12.3	22	12.2	10.5	11.7	15.8	11.1
18	YU501-312	12.4	16	12.8	10.7	10.8	15.8	12.0
19	YU501-385	12.8	8	14.3	10.8	10.7	16.9	11.3
20	BZ502-532	13.0	7	13.5	10.3	10.5	18.5	12.4
21	MT000047	13.3	3	13.4	11.1	12.7	17.3	12.1
22	MT000125	12.6	13	13.0	10.9	12.3	16.2	10.7
23	MT000138	13.3	4	13.4	12.2	12.2	16.0	12.5
24	ND21863	11.3	33	11.5	10.4	10.1	14.2	10.1
25	ND22927	12.1	24	12.3	11.0	11.5	13.7	12.1
26	ND22996	12.6	11	13.2	11.9	12.0	14.6	11.5
27	UT99B1669-3243	11.6	31	12.2	11.0	10.7	12.5	11.5
28	UT99B1670-3458	11.6	30	12.3	10.7	10.8	12.9	11.5
29	WA 10701-99	12.1	25	12.4	10.6	10.4	15.4	11.8
30	WA 7330-00	12.1	26	12.5	10.7	10.7	15.3	11.1
31	WA 15279-00	12.6	14	13.1	10.6	12.0	16.0	11.4
32	02WNZ-1015	12.3	23	12.6	10.4	11.5	16.0	10.8
33	02WNZ-1821	12.4	17	12.8	10.5	10.4	16.6	11.8
34	99NZ102	11.8	29	12.2	10.1	10.4	15.1	11.4
35	01NZ392	11.4	32	12.2	9.8	10.5	13.8	10.7
36	01NZ706	12.0	28	12.9	10.4	11.0	14.4	11.1
	Location Mean	12.33		12.9	10.8	11.2	15.4	11.4
	Check Mean	12.04		12.7	10.8	11.1	14.4	11.2
	C.V. (%)	6.51						
	$LSD_{.05}$	0.83						

Table 13: 2006 Western Regional Spring Barley Nursery, Disease and Other Ratings

Entry Number	CULTIVAR/ DESIGNATION	Tulelake CA		Idaho Falls ID			Tammany ID	Fairfield MT		Saskatoon SK		
		Stripe Rust	Shatter	Foliar Disease	Plant Worth	MATURITY NOTE	YELLOW LEAVES	Foliar Disease	Plant Worth	Visual BGR	Visual TZ	MKW
		1 to 8	1 to 8	1 to 9	1 to 9	1 to 9	% leaf area	1 to 9	1 to 9	1 to 9	1 to 9	g
1	Steptoe, check	4.0	1.0	37.2	17.0	6	25	7	5.4	1.7	3.0	48.9
2	Baronesse, check	1.0	1.0	37.6	18.1	3	25	4	4.2	6.7	6.0	49.5
3	Morex, check	2.3	1.7	37.9	17.6	2	25	4	7.1	2.3	3.3	37.8
4	Stander, check	1.0	2.3	37.5	17.1	6	3	5	3.4	5.3	6.0	39.7
5	Harrington, check	1.0	1.7	37.6	18.0	5	25	4	4.5	2.7	2.7	40.9
6	2B99-2316	1.0	1.3	37.6	18.2	4	20	4	3.1	4.3	5.3	43.5
7	2B99-2657	1.0	1.0	37.7	20.0	5	27	3	3.9	3.0	6.3	41.7
8	2B99-2763-10	1.0	1.0	37.7	18.2	3	18	4	3.6	5.7	6.7	44.0
9	2B99-2771-1	1.0	1.3	37.6	17.9	4	30	5	2.5	5.3	5.7	42.9
10	99Ab11073	3.7	1.0	37.1	18.5	7	35	7	3.6	4.3	5.0	43.3
11	01Ab10055	1.0	1.0	38.0	18.7	6	3	3	5.1	4.3	5.7	42.3
12	01Ab10062	1.0	1.0	37.8	18.3	6	3	4	4.8	3.0	3.3	46.9
13	00ID1550	1.3	1.7	37.2	18.4	4	12	5	4.2	6.3	5.3	44.1
14	01ID435H	1.0	1.0	38.3	20.5	3	25	3	5.1	2.3	4.0	42.9
15	01ID451H	1.3	1.0	38.1	22.2	3	25	3	4.5	6.3	5.7	43.8
16	01ST1587	1.0	1.0	37.9	18.4	4	20	4	3.1	4.3	7.0	52.9
17	01ST1758	1.0	1.0	37.4	18.8	4	7	3	3.6	5.7	6.7	50.6
18	YU501-312	1.0	1.0	37.6	19.4	6	3	7	5.4	3.0	5.3	39.0
19	YU501-385	1.7	1.0	38.1	18.5	3	25	4	5.4	1.3	2.7	45.7
20	BZ502-532	1.0	1.3	37.8	18.4	3	5	5	5.4	2.7	4.7	46.5
21	MT000047	1.0	1.0	37.8	18.9	5	18	7	4.2	3.7	4.7	44.9
22	MT000125	1.0	1.0	37.7	18.0	5	10	6	3.1	5.7	5.7	54.6
23	MT000138	1.0	1.7	37.8	17.8	5	35	4	3.9	3.7	4.3	53.7
24	ND21863	1.7	1.7	37.2	16.9	4	0	6	3.9	1.3	4.0	58.6
25	ND22927	1.0	1.3	37.4	17.3	7	8	5	3.9	3.3	4.0	54.9
26	ND22996	1.0	1.0	37.7	18.0	6	13	5	3.6	4.3	6.7	55.8
27	UT99B1669-3243	4.7	1.0	37.4	18.4	5	17	7	2.5	4.7	5.0	45.2
28	UT99B1670-3458	4.7	1.0	37.4	17.9	5	7	5	2.8	3.0	5.0	45.8
29	WA 10701-99	1.0	1.0	37.5	18.3	7	20	5	4.2	1.7	4.0	45.6
30	WA 7330-00	1.0	1.3	37.5	19.1	4	15	5	4.2	6.7	5.3	45.8
31	WA 15279-00	1.3	1.0	37.7	18.8	3	15	8	5.1	6.7	4.3	47.9
32	02WNZ-1015	1.0	1.0	37.5	19.6	6	5	5	4.2	5.0	5.0	47.3
33	02WNZ-1821	1.0	1.0	37.6	18.2	5	15	4	3.6	4.3	2.7	45.8
34	99NZ102	1.3	1.3	37.4	17.2	4	0	3	3.9	4.0	6.3	42.1
35	01NZ392	1.3	1.3	37.4	16.8	4	3	3	3.1	3.7	4.7	43.3
36	01NZ706	1.0	1.3	37.6	17.2	6	20	3	3.9	3.0	5.0	44.4
	Location Mean	1.50	1.20	12.86	12.86	4.67	15.61	4.69	4.12	4.04	4.92	46.18

WESTERN REGIONAL SPRING DRYLAND BARLEY NURSERY, 2006

This nursery is intended to be grown under dryland conditions. It contains both 2- and 6-rowed feed and malting barley. 2006 nursery sites that were harvested and summarized for yield from 10 locations are:

1) Potlatch, ID
2) Soda Springs, ID
3) Tetonia, ID
4) Bozeman, MT
5) Conrad, MT
6) Fargo, ND
7) Hettinger, ND
8) Minot, ND
9) Mt. Stirling, UT
10) Saskatoon, SK, Canada

The data for a replicated nursery at Williston, ND was not reported due to missing data for one of the checks. Data from an observation nursery at Tammany, ID is included on the appropriate tables.

General Information

The entry list for the 2006 Western Regional Dryland Spring Barley Nursery is shown in Table 14. In 2006, commercial cultivars were again entered into the nursery, including those from: Busch Agricultural Resources (5 lines + 1 check).

There were 25 entries in this nursery in 2006. Entries in the 2005 test that were dropped in 2006 were: 98Ab11993, tested 5 years; UT97B1480-1632, tested 3 years; 94Ab13449, 98Ab11720, 98BX27-132, ND16301 (Stellar), ND19854, and PB1-97-2R-7010, all tested 2 years; 2B99-2039, 98BX28-44B, and 98BX28-58B, all tested 1 year. Of the 25 entries in the 2006 test 8 were new. These included the lines 99Ab11073, 00ID1550, 01ID435H (hull-less), 01ID451H (hull-less), ND21867, ND22865, ND22996, and UT99B1670-3458.

Data Analysis

Computer software, in Excel© format, was used to obtain the cultivar means and period of years summary for all characteristics. With this software, we were also able to calculate the coefficient of variation (C.V.) and the Least Significant Difference (LSD) at the .05 level for grain yield. These two statistics are included to provide some indication of the variability in the individual test locations and an indication of cultivar rank at each location and the overall average.

Data Highlights

A new set of check cultivars had been initiated in 2005. Comparison of the check data is given in Table 14. Check grain yield was 29.8% higher in 2006; test weights were 7.9% higher; plant heights were 1.9 cm shorter; heading dates were similar; plump barley was up by 14.9%; and proteins were 2.3% lower.

In 2006 the highest yielding line over locations was 01ST1758, a 2-rowed RWA-resistant feed barley, at 4.79 Mg ha^{-1} (Table 15). The next two highest yielding lines were the checks Steptoe and Baronesse at 4.76 Mg ha^{-1}, followed by three BARI malting barley lines. The top 9 lines were statistically equal, of which 5 were malting barley types.

In the period of years summary for 2002 through 2006 (Table 16), 2B99-2657, a 2-rowed malting type, was the highest yielding line of the 11 grown for 2 or more years. ND21863 had the highest test weight and the highest percent plump of the non-check lines grown 2 or more years.

Tables 17 through 25 present the 2006 WRDSBN data for individual locations for grain yield, test weight, height, heading date, plump barley, thin barley, lodging, percent protein and disease ratings, respectively.

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Table 14: 2006 Western Regional Dryland Spring Barley Nursery, Entry List

Seed Source	Entry No.		Entry	Parentage	Type	Grade
WSU	1		Steptoe	CI 15229	6 row	feed
WPB	2		Baronesse	PI 568246	2 row	feed
USDA-ARS	3		Morex	CI 15773	6 row	malting
USDA-ARS	4		Harrington		2 row	malting
BARI	5		Legacy		6 row	malting
NDSU	6		Conlon		2 row	malting
BARI	7		2B99-2316	2B91-4947//2B91-4947/2B95-8129	2 row	malting
BARI	8		2B99-2657	2B91-4947//2B91-4947/2B94-5744	2 row	malting
BARI	9		2B99-2763-10	MERIT/2B92-5065	2 row	malting
BARI	10		2B99-2771-1	MERIT // MERIT / 2B95-8129	2 row	malting
USDA-ARS	11	*	99Ab11073	Colter/M75	2 row	malting
USDA-ARS	12	*	00ID1550	Colter*2/pmut422	2 row	feed, low PA
USDA-ARS	13	*	01ID435H	Baronesse*2/pmut882//HB317	2 row	feed, low PA, hull-less
USDA-ARS	14	*	01ID451H	Baronesse*2/pmut882//HB317	2 row	feed, low PA, hull-less
USDA-ARS	15		01ST1587	Baronesse*4/STARS 9301B	2 row	feed, RWA resistant
USDA-ARS	16		01ST1758	Baronesse*4/STARS 9577B	2 row	feed, RWA resistant
MSU	17		MT000047	Chinook/MT920161	2 row	feed/malting
MSU	18		MT000125	MT910189/Lewis	2 row	feed/malting
MSU	19		MT000138	MT920041/Stark	2 row	feed/malting
NDSU	20		ND21863	ND18172/ND19130	2 row	malting
NDSU	21	*	ND21867	ND18172/ND19130	2 row	malting
NDSU	22	*	ND22895	ND18370/Rawson sib	2 row	malting
NDSU	23	*	ND22996	ND19922/ND18172-1	2 row	malting
USU	24		UT99B1669-3243	UT91B706-A-259 X BU585-82	6 row	feed
USU	25	*	UT99B1670-3458	UT91B706-A-259 X DA587-170	6 row	feed

* new entries

Table 15: Check Seasonal Measurements (2005-2006) of the Western Regional Dryland Spring Barley Nursery

Variety or Selection	Grain Yield	Test Weight	Plant Height	Heading Date	Plump Barley*	Thin Barley**	Protein
	Mg ha^{-1}	kg m^{-3}	cm	Julian	%	%	%
2005							
Number of Locations	8	8	7	7	7	7	4
Steptoe	3.643	577.3	72.4	181.1	83.8	6.8	12.9
Baronesse	3.642	623.1	64.1	186.2	70.1	13	15.8
Morex	3.119	604.8	79.3	180.9	68.3	18.2	15.2
Harrington	3.171	609.8	68.4	186	64.5	14.6	15.9
Legacy	3.082	590.7	73.9	183.1	64.9	21.7	15.3
Conlon	3.646	649.1	71.8	157.5	90.1	2.2	13.9
2005 AVERAGE	**3.384**	**609.1**	**71.7**	**179.1**	**73.6**	**12.8**	**14.8**
2006							
Number of Locations	10	8	8	6	7	7	2
Steptoe	4.760	631.3	68.4	178.1	91.0	9.0	10.9
Baronesse	4.760	667.9	64.4	180.9	90.3	9.7	13.0
Morex	4.016	647.8	73.9	177.4	79.5	20.5	12.8
Harrington	4.342	665.8	69.8	180.7	89.2	10.8	12.9
Legacy	4.306	650.0	74.0	180.2	84.1	15.9	12.5
Conlon	4.176	681.1	68.0	176.7	97.2	2.8	12.8
2006 AVERAGE	**4.393**	**657.3**	**69.8**	**179.0**	**88.5**	**11.5**	**12.5**
AVERAGE							
Number of Locations	18	16	15	13	14	14	6
Steptoe	4.264	604.3	70.3	179.7	87.4	7.9	12.2
Baronesse	4.263	645.5	64.3	183.7	80.2	11.4	14.9
Morex	3.618	626.3	76.4	179.3	73.9	19.3	14.4
Harrington	3.822	637.8	69.1	183.5	76.9	12.7	14.9
Legacy	3.762	620.4	73.9	181.7	74.5	18.8	14.4
Conlon	3.940	665.1	69.8	166.4	93.6	2.5	13.5
BASE AVERAGE	**3.945**	**633.2**	**70.6**	**179.1**	**81.1**	**12.1**	**14.1**

Table 16: 2006 Western Regional Dryland Spring Barley Nursery, Means Summary

Entry No.	Variety or Selection	Grain Yield		Test Weight	Heading Date	Plant Height	Plump Barley*	Thin Barley**	Protein
		Mg ha^{-1}	Rank	kg m^{-3}	Julian	cm	%	%	%
	Number of Locations	10		8	8	6	7	7	2
1	Steptoe	4.76	2	631.3	178.1	68.4	91.0	9.0	10.9
2	Baronesse	4.76	3	667.9	180.9	64.4	90.3	9.7	13.0
3	Morex	4.02	22	647.8	177.4	73.9	79.5	20.5	12.8
4	Harrington	4.34	13	665.8	180.7	69.8	89.2	10.8	12.9
5	Legacy	4.31	18	650.0	180.2	74.0	84.1	15.9	12.5
6	Conlon	4.18	21	681.1	176.7	68.0	97.2	2.8	12.8
7	2B99-2316	4.45	10	653.4	181.4	68.8	85.6	14.4	13.4
8	2B99-2657	4.59	5	647.9	181.3	69.2	87.4	12.6	12.8
9	2B99-2763-10	4.57	6	652.9	180.7	64.4	89.9	10.1	13.2
10	2B99-2771-1	4.68	4	664.7	181.5	63.4	88.3	11.7	12.0
11	99Ab11073	4.33	14	657.4	177.0	66.3	88.9	11.1	10.4
12	00ID1550	4.25	19	614.3	179.0	70.2	89.0	11.0	10.5
13	01ID435H	3.77	24	740.4	181.8	72.1	70.0	30.0	13.3
14	01ID451H	3.92	23	732.9	182.0	68.4	59.8	40.2	13.3
15	01ST1587	4.40	11	672.6	180.9	65.1	93.7	6.3	13.9
16	01ST1758	4.79	1	676.9	180.5	64.0	90.4	9.6	12.8
17	MT000047	4.33	15	674.7	180.8	69.7	89.8	10.2	13.4
18	MT000125	4.33	16	677.3	181.3	71.1	93.2	6.8	12.7
19	MT000138	4.36	12	689.0	180.7	72.3	95.4	4.6	13.3
20	ND21863	4.52	7	679.0	179.8	71.8	96.2	3.8	11.7
21	ND21867	4.50	9	684.4	178.7	69.7	95.3	4.7	12.5
22	ND22895	3.70	25	665.9	179.5	74.7	96.3	3.7	11.9
23	ND22996	4.22	20	665.7	180.0	69.8	96.8	3.2	12.7
24	UT99B1669-3243	4.32	17	650.8	177.3	67.3	94.0	6.0	11.7
25	UT99B1670-3458	4.50	8	648.4	177.2	67.5	90.8	9.2	11.3
	LOCATION MEAN:	4.356		667.71	179.82	68.97	88.89	11.11	12.46
	CHECK MEAN:	4.393		657.32	178.99	69.75	88.55	11.45	12.50
	CV %	10.113		1.76	0.87	5.36	8.73	69.79	4.09
	LSD (.05)	0.324		9.69	1.29	3.51	6.82	6.82	0.84

* Percent over sieve, 2-rowed >2.4mm, 6-rowed >2.2mm

** Percent through 2.2mm screen

Table 17: Summary Across Locations and Years, Western Regional Dryland Spring Barley Nursery, 2002-2006.

ENTRY NO.	CULTIVAR/ DESIGNATION	STATION YEARS	GRAIN YIELD		TEST WEIGHT	PLANT HEIGHT	HEADING DATE	PLUMP BARLEY*	THIN BARLEY**	PROTIEN
			Mg ha^{-1}	Rank	kg m^{-3}	cm	julian	%	%	%
1	**Steptoe**	46	4.211	8	603.6	71.5	181.2	86.5	7.0	12.1
2	**Baronesse**	18	4.263	4	645.5	64.3	183.4	80.2	11.4	14.9
3	**Morex**	18	3.618	25	626.3	76.8	179.1	73.9	19.3	14.4
4	**Harrington**	18	3.822	21	637.8	69.0	183.2	76.9	12.7	14.9
5	**Legacy**	18	3.762	23	620.4	73.9	181.5	74.5	18.8	14.4
6	**Conlon**	18	3.940	19	665.1	70.1	167.8	93.7	2.5	13.5
7	**2B99-2316**	18	3.985	16	627.3	68.1	183.5	76.6	13.8	14.5
8	**2B99-2657**	29	4.446	2	627.1	70.9	183.9	81.5	11.7	14.3
9	**2B99-2763-10**	18	4.011	14	624.5	64.7	182.8	79.6	11.4	15.1
10	**2B99-2771-1**	18	4.157	10	643.7	64.8	183.4	78.9	11.9	14.0
11	**99Ab11073**	10	4.335	3	657.4	66.3	177.0	88.9	11.1	10.4
12	**00ID1550**	10	4.251	5	614.3	70.2	179.0	89.0	11.0	10.5
13	**01ID435H**	10	3.767	22	740.4	72.1	181.8	70.0	30.0	13.3
14	**01ID451H**	10	3.921	20	732.9	68.4	182.0	59.8	40.2	13.3
15	**01ST1587**	18	4.009	15	651.9	65.1	182.8	87.2	6.9	15.4
16	**01ST1758**	18	4.249	6	652.6	63.7	183.1	81.3	10.5	14.8
17	**MT000047**	18	3.973	17	654.4	70.1	182.4	80.0	10.6	14.9
18	**MT000125**	18	4.012	13	663.0	72.0	182.7	86.1	7.4	14.1
19	**MT000138**	18	4.014	12	669.6	72.3	181.4	89.9	5.0	15.3
20	**ND21863**	18	4.095	11	662.3	72.8	181.5	92.3	3.8	12.9
21	**ND21867**	10	4.495	1	684.4	69.7	178.7	95.3	4.7	12.5
22	**ND22895**	10	3.704	24	665.9	74.7	179.5	96.3	3.7	11.9
23	**ND22996**	10	4.220	7	665.7	69.8	180.0	96.8	3.2	12.7
24	**UT99B1669-3243**	37	4.159	9	634.9	74.4	178.3	80.8	10.3	13.0
25	**UT99B1670-3458**	18	3.947	18	621.6	69.6	178.5	85.5	8.9	12.8
	OBSERVATION MEAN:		**4.073**		**642.9**	**70.0**	**180.9**	**83.0**	**10.7**	**13.8**
	CHECK MEAN:		**3.993**		**626.4**	**71.0**	**179.7**	**82.3**	**10.8**	**13.7**

* Percent over sieve, 2-rowed >2.4mm, 6-rowed >2.2mm

** Percent through 2.2mm screen

Table 18: 2006 Western Regional Dryland Spring Barley Nursery, Grain Yield (Mg ha^{-1})

ENTRY NO.	CULTIVAR/ DESIGNATION	Average	Rank	Rank Average	Potlatch ID	Soda Springs ID	Tetonia ID	Bozeman MT	Conrad MT	Fargo ND	Hettinger ND	Minot ND	Mt. Stirling UT	Saskatoon SK
1	**Steptoe**	**4.760**	**2**	**7.6**	4.93	3.40	4.54	7.24	5.94	5.89	4.22	4.27	3.80	3.37
2	**Baronesse**	**4.760**	**3**	**6.0**	4.88	3.32	4.06	6.59	5.79	5.93	4.63	5.08	3.35	3.97
3	**Morex**	**4.016**	**22**	**17.8**	3.17	2.55	3.47	5.32	4.79	5.19	4.46	3.89	3.46	3.86
4	**Harrington**	**4.342**	**13**	**12.4**	4.43	2.83	3.75	5.94	4.81	4.57	5.32	4.25	3.64	3.89
5	**Legacy**	**4.306**	**18**	**13.2**	4.32	2.64	3.77	6.08	5.10	5.03	5.01	4.18	3.02	3.90
6	**Conlon**	**4.176**	**21**	**14.8**	3.57	2.46	4.29	5.87	5.33	5.85	4.08	2.89	3.61	3.79
7	**2B99-2316**	**4.453**	**10**	**11.2**	4.25	3.02	3.89	5.80	5.94	5.31	4.18	4.83	3.47	3.84
8	**2B99-2657**	**4.588**	**5**	**9.0**	4.65	2.86	3.81	5.53	5.88	6.06	4.74	4.65	3.34	4.34
9	**2B99-2763-10**	**4.570**	**6**	**10.4**	4.77	2.82	3.63	5.87	5.60	5.89	5.04	5.34	2.77	3.97
10	**2B99-2771-1**	**4.684**	**4**	**8.7**	4.90	2.74	4.09	5.68	5.50	6.68	5.30	4.70	3.06	4.20
11	**99Ab11073**	**4.335**	**14**	**13.2**	4.02	3.00	3.81	6.01	5.13	5.58	3.88	4.86	3.35	3.70
12	**00ID1550**	**4.251**	**19**	**14.8**	3.77	2.50	3.70	5.28	5.05	5.60	4.78	4.89	3.11	3.83
13	**01ID435H**	**3.767**	**24**	**21.3**	3.51	2.40	3.36	5.75	3.45	4.35	3.90	4.10	3.27	3.59
14	**01ID451H**	**3.921**	**23**	**20.6**	3.74	2.37	3.02	5.98	4.43	5.01	4.07	4.16	2.74	3.69
15	**01ST1587**	**4.399**	**11**	**13.4**	4.28	2.84	3.55	6.40	5.01	6.36	4.23	4.78	3.02	3.52
16	**01ST1758**	**4.789**	**1**	**5.8**	4.49	3.09	3.91	6.94	5.87	6.12	4.90	5.14	3.29	4.13
17	**MT000047**	**4.330**	**15**	**13.0**	3.81	3.28	3.83	6.51	5.65	4.81	4.23	4.49	2.89	3.81
18	**MT000125**	**4.330**	**16**	**13.1**	3.57	3.16	3.79	6.37	5.25	5.41	4.14	4.58	2.99	4.03
19	**MT000138**	**4.360**	**12**	**12.7**	3.50	3.27	3.92	6.71	5.15	5.14	4.23	4.58	3.30	3.80
20	**ND21863**	**4.524**	**7**	**12.6**	3.91	2.90	3.25	5.76	4.88	7.58	4.52	5.54	3.55	3.36
21	**ND21867**	**4.495**	**9**	**10.6**	3.62	2.55	3.74	6.00	4.84	6.70	4.39	5.56	3.66	3.90
22	**ND22895**	**3.704**	**25**	**22.5**	2.89	2.19	2.89	5.83	3.82	5.64	3.60	3.84	2.97	3.37
23	**ND22996**	**4.220**	**20**	**15.6**	3.35	2.51	3.40	6.11	4.41	6.35	4.33	5.27	3.08	3.39
24	**UT99B1669-3243**	**4.323**	**17**	**13.3**	3.37	2.21	3.57	6.85	5.42	5.92	4.27	3.90	3.85	3.87
25	**UT99B1670-3458**	**4.496**	**8**	**11.4**	3.40	2.68	3.55	7.01	5.84	5.86	4.31	4.90	3.69	3.71
	LOCATION MEAN:	**4.356**			**4.066**	**2.813**	**3.719**	**6.137**	**5.183**	**5.714**	**4.429**	**4.590**	**3.268**	**3.794**
	CHECK MEAN:	**4.393**			**4.217**	**2.867**	**3.981**	**6.175**	**5.294**	**5.409**	**4.619**	**4.094**	**3.480**	**3.798**
	CV %	**10.113**			**8.14**	**10.28**	**8.34**	**5.73**	**5.96**	**8.40**	**5.20**	**8.40**	**9.70**	**7.05**
	LSD (.05)	**0.324**			**0.54**	**0.47**	**0.51**	**0.49**	**0.50**	**0.71**	**0.38**	**0.53**	**0.45**	**0.37**

Table 19: 2006 Western Regional Dryland Spring Barley Nursery, Test Weight (kg m^{-3})

ENTRY NO.	CULTIVAR/ DESIGNATION	Average	Rank	Potlatch ID	Soda Springs ID	Tetonia ID	Hettinger ND	Bozeman MT	Conrad MT	Mt. Stirling UT	Saskatoon SK
1	Steptoe	631.3	24	646.1	611.3	626.8	617.8	621.6	631.2	657.7	638.0
2	Baronesse	667.9	11	689.8	656.4	658.9	637.1	668.0	675.7	673.1	684.0
3	Morex	647.8	23	656.4	628.1	639.6	640.9	635.3	655.9	674.2	652.0
4	Harrington	665.8	13	692.4	666.7	660.2	646.1	647.4	662.5	663.4	688.0
5	Legacy	650.0	20	669.2	649.9	642.2	622.9	640.9	652.6	668.2	654.0
6	Conlon	681.1	5	684.7	651.2	686.0	657.7	682.1	705.3	698.1	684.0
7	2B99-2316	653.4	17	682.1	658.9	652.5	608.8	628.5	657.6	660.9	678.0
8	2B99-2657	647.9	22	674.4	656.4	633.2	634.5	616.9	647.7	650.9	669.0
9	2B99-2763-10	652.9	18	674.4	649.9	655.1	610.0	641.8	664.1	656.1	672.0
10	2B99-2771-1	664.7	15	682.1	661.5	669.2	651.2	647.8	665.8	665.2	675.0
11	99Ab11073	657.4	16	684.7	655.1	637.1	640.9	642.2	657.6	670.6	671.0
12	00ID1550	614.3	25	640.9	621.6	629.3	608.8	582.2	618.0	604.7	609.0
13	01ID435H	740.4	1	761.9	729.7	745.2	736.2	749.5	744.9	717.6	738.0
14	01ID451H	732.9	2	756.8	736.2	747.7	706.6	736.6	738.3	707.9	733.0
15	01ST1587	672.6	10	695.0	646.1	668.0	646.1	689.8	690.5	673.4	672.0
16	01ST1758	676.9	8	695.0	656.4	657.7	652.5	686.0	693.8	676.3	698.0
17	MT000047	674.7	9	695.0	677.0	661.5	651.2	680.0	674.0	666.8	692.0
18	MT000125	677.3	7	697.6	683.4	670.5	655.1	678.7	664.1	669.4	700.0
19	MT000138	689.0	3	705.3	679.5	679.5	661.5	702.7	692.2	691.9	699.0
20	ND21863	679.0	6	689.8	674.4	669.2	646.1	681.3	687.2	689.3	695.0
21	ND21867	684.4	4	689.8	673.1	679.5	664.1	680.0	692.2	702.7	694.0
22	ND22895	665.9	12	671.8	658.9	677.0	640.9	682.1	649.3	677.0	670.0
23	ND22996	665.7	14	661.5	655.1	661.5	660.2	670.1	655.9	685.4	676.0
24	UT99B1669-3243	650.8	19	658.9	651.2	652.5	621.6	661.1	644.4	672.0	645.0
25	UT99B1670-3458	648.4	21	662.8	662.8	637.1	620.3	656.4	639.4	663.1	645.0
	LOCATION MEAN:	667.7		684.7	662.0	663.9	646.1	664.3	670.4	673.4	677.2
	CHECK MEAN:	657.3		673.1	643.9	652.3	637.1	649.2	663.9	672.4	666.7
	CV %	1.76						1.11			
	LSD (.05)	9.69						10.30			

Table 20: 2006 Western Regional Dryland Spring Barley Nursery, Plant Height (cm)

ENTRY NO.	CULTIVAR/ DESIGNATION	Average	Rank	Tammany ID	Tetonia ID	Fargo ND	Hettinger ND	Bozeman MT	Mt. Stirling UT
1	Steptoe	68.4	15	83.8	66.0	85.4	57.0	72.7	45.7
2	Baronesse	64.4	22	71.1	58.4	78.6	62.0	70.7	45.7
3	Morex	73.9	3	71.1	71.1	87.7	70.0	90.0	53.3
4	Harrington	69.8	10	81.3	61.0	85.8	62.0	72.7	55.9
5	Legacy	74.0	2	86.4	71.1	85.7	67.0	80.3	53.3
6	Conlon	68.0	17	76.2	63.5	77.5	62.0	75.7	53.3
7	2B99-2316	68.8	14	78.7	61.0	83.2	62.0	74.3	53.3
8	2B99-2657	69.2	13	78.7	66.0	83.2	59.0	75.0	53.3
9	2B99-2763-10	64.4	23	76.2	55.9	75.1	57.0	71.3	50.8
10	2B99-2771-1	63.4	25	71.1	53.3	77.6	59.0	68.7	50.8
11	99Ab11073	66.3	20	78.7	58.4	77.5	57.0	73.0	53.3
12	00ID1550	70.2	8	83.8	61.0	81.3	65.0	77.0	53.3
13	01ID435H	72.1	5	83.8	71.1	81.6	65.0	80.0	50.8
14	01ID451H	68.4	16	81.3	58.4	79.1	63.0	75.0	53.3
15	01ST1587	65.1	21	73.7	63.5	73.6	57.0	72.3	50.8
16	01ST1758	64.0	24	71.1	58.4	73.8	62.0	70.3	48.3
17	MT000047	69.7	12	81.3	61.0	77.9	66.0	81.0	50.8
18	MT000125	71.1	7	81.3	63.5	83.5	65.0	82.7	50.8
19	MT000138	72.3	4	86.4	66.0	85.3	62.0	80.7	53.3
20	ND21863	71.8	6	91.4	61.0	84.3	64.0	76.7	53.3
21	ND21867	69.7	11	88.9	63.5	79.6	65.0	70.3	50.8
22	ND22895	74.7	1	88.9	76.2	86.0	62.0	79.0	55.9
23	ND22996	69.8	9	86.4	58.4	80.7	67.0	73.0	53.3
24	UT99B1669-3243	67.3	19	73.7	66.0	74.7	59.0	74.3	55.9
25	UT99B1670-3458	67.5	18	76.2	66.0	74.6	58.0	74.3	55.9
	LOCATION MEAN:	69.0		80.1	63.2	80.3	62.0	75.6	52.2
	CHECK MEAN:	69.8		78.3	65.2	83.5	63.3	77.0	51.2
	CV %	5.36					4.16		
	LSD (.05)	3.5					4.4		

Table 21: 2006 Western Regional Dryland Spring Barley Nursery, Heading Date (Julian)

ENTRY NO.	CULTIVAR/ DESIGNATION	Average	Rank	Soda Springs ID	Tetonia ID	Fargo ND	Hettinger ND	Minot ND	Conrad MT	Mt. Stirling UT	Saskatoon SK
1	Steptoe	178.1	6	185	188	170	165	174	179	173	192
2	Baronesse	180.9	18	190	188	173	165	175	183	178	195
3	Morex	177.4	5	188	186	169	163	171	179	172	191
4	Harrington	180.7	14	191	188	175	166	176	183	171	194
5	Legacy	180.2	12	192	186	174	164	176	181	177	191
6	Conlon	176.7	1	186	183	167	163	171	180	174	190
7	2B99-2316	181.4	22	191	188	173	168	176	183	178	194
8	2B99-2657	181.3	21	191	193	174	167	175	183	175	193
9	2B99-2763-10	180.7	15	191	188	173	167	175	183	175	194
10	2B99-2771-1	181.5	23	191	193	174	167	175	183	177	193
11	99Ab11073	177.0	2	185	184	168	163	170	181	173	192
12	00ID1550	179.0	8	189	188	170	163	174	180	177	190
13	01ID435H	181.8	24	192	193	173	166	175	185	177	193
14	01ID451H	182.0	25	191	193	174	168	175	185	177	194
15	01ST1587	180.9	19	191	188	172	166	175	183	178	195
16	01ST1758	180.5	13	190	186	172	167	175	182	177	195
17	MT000047	180.8	17	191	188	174	165	175	182	177	194
18	MT000125	181.3	20	191	188	174	168	175	182	178	194
19	MT000138	180.7	16	190	196	173	164	174	182	175	192
20	ND21863	179.8	10	189	196	170	163	174	181	172	193
21	ND21867	178.7	7	189	186	169	164	174	182	173	192
22	ND22895	179.5	9	191	186	171	164	174	182	175	193
23	ND22996	180.0	11	190	188	172	164	175	182	175	194
24	UT99B1669-3243	177.3	4	186	184	170	165	171	180	173	190
25	UT99B1670-3458	177.2	3	185	184	170	164	172	179	172	191
	LOCATION MEAN:	179.8		189.8	171.8	171.8	165.0	174.1	181.8	175.2	192.8
	CHECK MEAN:	179.0		188.7	186.5	171.4	164.3	173.8	180.8	174.2	192.2
	CV %	0.87		0.57							0.46
	LSD (.05)	1.29		1.77							1.24

Table 22: 2006 Western Regional Dryland Spring Barley Nursery, Percent Plump Barley*

ENTRY NO.	CULTIVAR/ DESIGNATION	Average	Rank	Potlatch ID	Soda Springs ID	Tetonia ID	Hettinger ND	Bozeman MT	Conrad MT	Saskatoon SK
1	Steptoe	91.0	10	97.0	92.0	81.0	92.0	90.0	98.4	86.5
2	Baronesse	90.3	13	98.0	93.0	79.0	90.0	89.6	95.5	86.7
3	Morex	79.5	23	93.0	82.0	52.0	89.0	76.9	95.7	68.1
4	Harrington	89.2	16	97.0	92.0	78.0	88.0	90.3	95.2	84.2
5	Legacy	84.1	22	96.0	90.0	61.0	86.0	79.8	97.0	78.9
6	Conlon	97.2	1	99.0	97.0	99.0	94.0	96.1	99.2	96.0
7	2B99-2316	85.6	21	96.0	90.0	73.0	83.0	83.6	94.0	79.4
8	2B99-2657	87.4	20	94.0	92.0	76.0	90.0	83.9	91.6	84.6
9	2B99-2763-10	89.9	14	96.0	93.0	81.0	91.0	87.8	96.3	84.5
10	2B99-2771-1	88.3	19	96.0	85.0	77.0	93.0	88.9	90.6	87.8
11	99Ab11073	88.9	18	97.0	93.0	60.0	93.0	95.3	95.3	88.5
12	00ID1550	89.0	17	96.0	92.0	75.0	91.0	93.0	97.5	78.6
13	01ID435H	70.0	24	85.0	43.0	32.0	81.0	86.7	66.3	96.2
14	01ID451H	59.8	25	76.0	24.0	27.0	72.0	69.6	59.1	90.7
15	01ST1587	93.7	8	98.0	89.0	91.0	92.0	94.5	98.0	93.1
16	01ST1758	90.4	12	98.0	89.0	76.0	91.0	92.2	95.9	90.7
17	MT000047	89.8	15	98.0	95.0	77.0	91.0	91.1	92.9	83.8
18	MT000125	93.2	9	98.0	97.0	85.0	93.0	92.7	94.7	92.3
19	MT000138	95.4	5	99.0	97.0	90.0	95.0	97.9	98.2	91.1
20	ND21863	96.2	4	99.0	97.0	93.0	95.0	97.1	98.4	93.9
21	ND21867	95.3	6	99.0	97.0	95.0	92.0	95.0	98.3	90.5
22	ND22895	96.3	3	98.0	98.0	96.0	93.0	98.3	97.2	93.5
23	ND22996	96.8	2	98.0	96.0	96.0	97.0	97.3	98.4	94.8
24	UT99B1669-3243	94.0	7	99.0	97.0	82.0	94.0	94.7	99.3	91.8
25	UT99B1670-3458	90.8	11	99.0	95.0	73.0	88.0	93.6	98.2	89.0
	LOCATION MEAN:	88.89		96.0	88.2	76.2	90.0	90.2	93.6	87.8
	CHECK MEAN:	88.55		96.7	91.0	75.0	89.8	87.1	96.8	83.4
	CV %	8.73								
	LSD (.05)	6.82								

* Percent over sieve, 2-rowed >2.4mm, 6-rowed >2.2mm

Table 23: 2006 Western Regional Dryland Spring Barley Nursery, Percent Thin Barley*

ENTRY NO.	CULTIVAR/ DESIGNATION	Average	Rank	Potlatch ID	Soda Springs ID	Tetonia ID	Hettinger ND	Bozeman MT	Conrad MT	Saskatoon SK
1	Steptoe	9.0	10	3.0	8.0	19.0	8.0	10.0	1.6	13.5
2	Baronesse	9.7	13	2.0	7.0	21.0	10.0	10.4	4.5	13.3
3	Morex	20.5	23	7.0	18.0	48.0	11.0	23.1	4.3	31.9
4	Harrington	10.8	16	3.0	8.0	22.0	12.0	9.7	4.8	15.8
5	Legacy	15.9	22	4.0	10.0	39.0	14.0	20.2	3.0	21.1
6	Conlon	2.8	1	1.0	3.0	1.0	6.0	3.9	0.8	4.0
7	2B99-2316	14.4	21	4.0	10.0	27.0	17.0	16.4	6.0	20.6
8	2B99-2657	12.6	20	6.0	8.0	24.0	10.0	16.1	8.4	15.4
9	2B99-2763-10	10.1	14	4.0	7.0	19.0	9.0	12.2	3.7	15.5
10	2B99-2771-1	11.7	19	4.0	15.0	23.0	7.0	11.1	9.4	12.2
11	99Ab11073	11.1	18	3.0	7.0	40.0	7.0	4.7	4.7	11.5
12	00ID1550	11.0	17	4.0	8.0	25.0	9.0	7.0	2.5	21.4
13	01ID435H	30.0	24	15.0	57.0	68.0	19.0	13.3	33.7	3.8
14	01ID451H	40.2	25	24.0	76.0	73.0	28.0	30.4	40.9	9.3
15	01ST1587	6.3	8	2.0	11.0	9.0	8.0	5.5	2.0	6.9
16	01ST1758	9.6	12	2.0	11.0	24.0	9.0	7.8	4.1	9.3
17	MT000047	10.2	15	2.0	5.0	23.0	9.0	8.9	7.1	16.2
18	MT000125	6.8	9	2.0	3.0	15.0	7.0	7.3	5.3	7.7
19	MT000138	4.6	5	1.0	3.0	10.0	5.0	2.1	1.8	8.9
20	ND21863	3.8	4	1.0	3.0	7.0	5.0	2.9	1.6	6.1
21	ND21867	4.7	6	1.0	3.0	5.0	8.0	5.0	1.7	9.5
22	ND22895	3.7	3	2.0	2.0	4.0	7.0	1.7	2.8	6.5
23	ND22996	3.2	2	2.0	4.0	4.0	3.0	2.7	1.6	5.2
24	UT99B1669-3243	6.0	7	1.0	3.0	18.0	6.0	5.3	0.7	8.2
25	UT99B1670-3458	9.2	11	1.0	5.0	27.0	12.0	6.4	1.8	11.0
	LOCATION MEAN:	11.11		4.0	11.8	23.8	10.0	9.8	6.4	12.2
	CHECK MEAN:	11.45		3.3	9.0	25.0	10.2	12.9	3.2	16.6
	CV %	69.79								
	LSD (.05)	6.82								

*Percent through 2.2mm screen

Table 24: 2006 Western Regional Dryland Spring Barley Nursery, Lodging

ENTRY NO.	CULTIVAR/ DESIGNATION	AVERAGE		Tammany	Minot
		RATING	RANK	ID	ND
		0-10*		0-10*	0-10*
1	Steptoe	4.4	23	5.0	3.7
2	Baronesse	3.8	15	2.5	5.0
3	Morex	3.1	8	2.5	3.7
4	Harrington	5.2	24	4.0	6.3
5	Legacy	4.3	21	1.5	7.0
6	Conlon	2.0	1	2.0	2.0
7	2B99-2316	4.2	20	2.0	6.3
8	2B99-2657	3.9	16	2.0	5.7
9	2B99-2763-10	3.9	17	1.5	6.3
10	2B99-2771-1	3.2	10	1.0	5.3
11	99Ab11073	3.4	13	2.0	4.7
12	00ID1550	2.0	2	2.0	2.0
13	01ID435H	4.1	19	3.5	4.7
14	01ID451H	3.3	11	1.5	5.0
15	01ST1587	2.3	3	1.5	3.0
16	01ST1758	2.7	5	2.0	3.3
17	MT000047	3.6	14	2.5	4.7
18	MT000125	4.0	18	3.0	5.0
19	MT000138	3.1	9	2.5	3.7
20	ND21863	3.3	12	2.5	4.0
21	ND21867	2.8	6	2.5	3.0
22	ND22895	2.4	4	1.5	3.3
23	ND22996	2.8	7	1.5	4.0
24	UT99B1669-3243	4.3	22	4.5	4.0
25	UT99B1670-3458	5.4	25	4.0	6.7
	LOCATION MEAN:	3.47		2.44	4.5
	CV %	34.24			31.2
	LSD (.05)	1.95			1.9

* 0.0 to 10.0 where 0.0 = no lodging, 10.0 = complete lodging, calculated as (((% of plot area lodged)/100)*((% lodged [lean]))/100))*10

Table 25: 2006 Western Regional Dryland Spring Barley Nursery, Percent Protein

ENTRY NO.	CULTIVAR/ DESIGNATION	Average	Rank	Hettinger ND	Bozeman MT
1	Steptoe	10.9	23	11.4	10.5
2	Baronesse	13.0	8	13.8	12.2
3	Morex	12.8	13	13.4	12.1
4	Harrington	12.9	9	13.9	12.0
5	Legacy	12.5	16	13.6	11.5
6	Conlon	12.8	10	13.2	12.4
7	2B99-2316	13.4	3	14.3	12.4
8	2B99-2657	12.8	12	13.5	12.1
9	2B99-2763-10	13.2	7	14.1	12.2
10	2B99-2771-1	12.0	18	12.6	11.3
11	99Ab11073	10.4	25	10.2	10.5
12	00ID1550	10.5	24	10.4	10.5
13	01ID435H	13.3	5	13.6	13.0
14	01ID451H	13.3	6	14.1	12.5
15	01ST1587	13.9	1	15.1	12.6
16	01ST1758	12.8	11	13.6	12.0
17	MT000047	13.4	2	14.5	12.3
18	MT000125	12.7	14	13.8	11.6
19	MT000138	13.3	4	14.3	12.3
20	ND21863	11.7	20	12.0	11.4
21	ND21867	12.5	17	12.9	12.1
22	ND22895	11.9	19	12.3	11.5
23	ND22996	12.7	15	13.0	12.3
24	UT99B1669-3243	11.7	21	12.3	11.0
25	UT99B1670-3458	11.3	22	11.9	10.8
	LOCATION MEAN:	12.46		13.1	11.8
	CHECK MEAN:	12.50		13.2	11.8
	CV %	4.09			2.8
	LSD (.05)	0.84			0.5

Table 26: 2006 Western Regional Dryland Spring Barley Nursery, Disease and Other Ratings

ENTRY NO.	CULTIVAR/ DESIGNATION	Tammany ID	Saskatoon SK		
		YELLOW LEAVES	Visual BGR	Visual TZ	MKW
		% leaf area	0-8	0-8	g
1	**Steptoe**	25	1.0	3.0	57.8
2	**Baronesse**	25	6.0	6.3	51.1
3	**Morex**	25	2.3	3.3	42.5
4	**Harrington**	25	5.0	5.7	50.8
5	**Legacy**	20	6.0	6.0	41.1
6	**Conlon**	80	3.3	3.7	54.9
7	**2B99-2316**	20	6.3	6.3	50.7
8	**2B99-2657**	27	7.7	7.7	48.3
9	**2B99-2763-10**	18	7.0	6.7	48.9
10	**2B99-2771-1**	30	6.0	5.7	48.1
11	**99Ab11073**	35	4.0	5.3	47.9
12	**00ID1550**	12	3.7	5.0	47.0
13	**01ID435H**	25	3.7	5.7	44.6
14	**01ID451H**	25	5.7	5.7	44.6
15	**01ST1587**	20	4.7	7.0	56.9
16	**01ST1758**	7	5.0	7.0	56.0
17	**MT000047**	18	4.0	4.3	51.5
18	**MT000125**	10	5.3	5.3	58.2
19	**MT000138**	35	4.7	5.3	55.7
20	**ND21863**	0	2.0	3.3	58.7
21	**ND21867**	5	3.3	3.3	55.3
22	**ND22895**	3	3.3	4.3	58.1
23	**ND22996**	13	4.3	5.3	57.1
24	**UT99B1669-3243**	17	3.0	4.0	50.8
25	**UT99B1670-3458**	7	3.3	4.3	51.0
	Location Mean	21.08	4.43	5.19	51.50
	CV %		22.06	17.81	
	LSD (.05)		1.36	1.29	