

PROJECT TITLE: Statewide Barley Performance

YEAR: 2001

LOCATIONS:

Bozeman - irrigated and dryland  
Conrad - irrigated and dryland  
Havre - dryland  
Huntley - irrigated and dryland  
Kalispell - high rainfall  
Moccasin - dryland  
Sidney - irrigated and dryland

PERSONNEL:

Bozeman: Tom Blake (Project Leader) & Pat Hensleigh  
Conrad: Greg Kushnak  
Havre: Gregg Carlson  
Huntley: Ken Kephart  
Kalispell: Bob Stougaard  
Moccasin: Dave Wichman  
Sidney: Joyce Eckhoff

RESULTS:

The statewide (Intrastate) Barley Variety Nursery was grown at the seven locations listed above, with some locations having both irrigated and dryland nurseries. An overall dryland summary is presented in Table 1. Summaries by dryland location for yield, test weight, percent plump, plant height and heading date are presented in the Tables 2, 3, 4, 5 and 6, respectively. An overall irrigated summary is presented in Table 7. Summaries by irrigated location for yield, test weight, percent plump, plant height and heading date are presented in Tables 8, 9, 10, 11 and 12, respectively.

Haxby (MT-950186) was equal or greater than Baronesse and Xena for yield and test weight, and was among the top yielders over the past three years. Haxby consistently produced the highest test weight among the varieties tested. Haxby appears to have a broad range of superior adaptability, including drought tolerance. Haxby was two days earlier to mature, and about three inches taller than Baronesse. Haxby will most likely replace all other feed-type barley varieties in Montana. Agronomic traits for Xena and Baronesse were not significantly different at most locations.

FUTURE PLANS: Continue the statewide barley nursery in cooperation with the MSU Barley Breeding Program.

TABLE 1. 2001 Montana Dryland Intrastate Spring Barley Nursery - Overall Summary

ID	PEDIGREE	YIELD bu/ac	Test Weight lb/bu	Plump Percent over #6	Heading Date From Jan 1.	Plant Height inches
BZ596117	WPB BZ596-117	66.2	50.6	77.5	177.4	22.1
BZ594-19	WPB Xena	66.1	49.8	76.2	178.4	23.4
<b>MT981030</b>	<b>Baronesse/MT910160</b>	<b>66.0</b>	<b>50.3</b>	<b>69.5</b>	<b>179.7</b>	<b>23.0</b>
MT970155	MT886610/MT140523	65.7	49.3	66.3	178.6	21.8
MT970229	MT890021/Stark	65.6	50.8	78.9	176.9	23.4
PI568246	Baronesse	65.5	49.2	68.2	177.8	21.6
MT970026	Baronesse/MT860756	65.2	51.0	73.0	177.1	23.3
<b>PI610264</b>	<b>Valier</b>	<b>64.8</b>	<b>50.2</b>	<b>67.0</b>	<b>178.1</b>	<b>22.9</b>
MT981212	MT910150/Stark	64.1	51.2	72.4	175.3	23.8
MT981091	MT851195/MT140523	64.0	49.4	70.3	177.4	22.3
MTLB 5	Lewis/Baronesse #5	63.9	50.5	63.1	178.0	22.1
MT960099	Manley/Baronesse	63.9	48.6	49.8	178.6	20.6
<b>MT981042</b>	<b>H5860219/Baronesse</b>	<b>63.8</b>	<b>49.8</b>	<b>64.3</b>	<b>179.6</b>	<b>21.7</b>
MT960228	Stark/Baronesse	63.7	49.5	64.2	177.5	22.4
MT981004	Baronesse/H2860224	63.2	49.2	69.3	177.0	22.2
MT960226	Stark/Baronesse	63.2	50.2	76.8	177.3	22.5
MT990172	Apex/MT890070	63.0	49.3	79.3	177.8	21.8
<b>MT960100</b>	<b>Manley/Baronesse</b>	<b>62.9</b>	<b>49.7</b>	<b>53.1</b>	<b>179.7</b>	<b>20.6</b>
CDCBOLD	CDC Bold	62.9	49.1	55.6	178.2	22.0
MT981006	Baronesse/H2860224	62.6	49.0	66.5	177.0	22.1
MT981177	MT910033/Targhee	62.2	49.6	62.8	177.0	22.3
MT990244	MT890018/Stark	62.0	51.4	63.3	174.1	22.4
<b>MT981039</b>	<b>H5860219/Baronesse</b>	<b>61.6</b>	<b>49.2</b>	<b>72.1</b>	<b>178.1</b>	<b>21.0</b>
MT990147	Apex/H6860756	61.6	49.8	80.3	177.5	21.0
BZ594-20	WPB BZ594-20	61.4	51.2	78.5	175.8	22.4
MT960222	Stark/Baronesse	61.3	46.9	66.8	178.1	23.5
N96/1116	Justina NORD 96/1116	61.3	48.1	75.7	179.4	21.5
<b>MT990106</b>	<b>Apex/H1851195</b>	<b>61.3</b>	<b>48.5</b>	<b>75.2</b>	<b>176.8</b>	<b>20.9</b>
MT950186	MT860756/MT83533	61.2	51.5	74.9	175.7	23.2
MT960101	Manley/Baronesse	61.1	49.6	63.9	180.1	22.0
MT970148	MT861596/ND 11120	61.1	48.4	69.0	177.2	20.8
MT970110	Klages/Baronesse	60.9	49.7	69.3	178.4	22.4
<b>MT990118</b>	<b>Apex/H1851195</b>	<b>60.8</b>	<b>48.5</b>	<b>74.7</b>	<b>176.5</b>	<b>21.6</b>
CDCNiska	CDC Niska	60.6	48.1	67.4	177.7	22.0
MT970116	Klages/Baronesse	60.5	51.0	71.9	175.0	24.4
MT981210	MT910150/Stark	60.5	49.8	73.8	178.0	22.8
SiteMean	SITE MEAN *****	60.4	49.5	69.6	177.0	22.4
<b>ND13299</b>	<b>Conlon</b>	<b>60.4</b>	<b>49.0</b>	<b>64.2</b>	<b>176.1</b>	<b>21.4</b>
MTLB 6	Lewis/Baronesse # 6	60.2	50.0	71.9	177.1	21.7
MT981238	ND112311/Lewis	60.1	51.2	75.3	174.6	24.0
MT990249	MT890018/Stark	60.0	51.7	72.3	173.0	22.1
CI 15856	Lewis	59.8	50.5	67.7	177.6	23.2
<b>H3860224</b>	<b>Lewis/Apex</b>	<b>59.7</b>	<b>49.2</b>	<b>69.6</b>	<b>178.5</b>	<b>23.1</b>
TR128	Stratus	59.6	48.1	58.2	178.3	19.5
ND 9866	Stark	59.4	51.3	78.1	174.8	24.3
MT990176	Apex/MT890070	59.3	49.9	62.0	178.9	24.1

Table 1 continues on next page

TABLE 1. 2001 Montana Dryland Intrastate Spring Barley Nursery - Overall Summary  
(Continued).

ID	PEDIGREE	YIELD bu/ac	Test Weight lb/bu	Plump Percent over #6	Heading Date From Jan 1.	Plant Height inches
PI491534	Gallatin	59.1	49.4	63.5	175.8	23.7
S3482	Calgary	59.0	49.2	69.1	178.6	19.7
MT990174	Apex/MT890070	58.7	48.8	77.5	177.1	22.0
MT990156	Apex/MT890070	58.2	49.6	84.9	176.8	22.6
NORD1958	NORD 1958	57.8	50.1	76.2	177.3	21.1
MT981009	Baronesse/MT860326	57.5	49.0	61.7	177.8	22.7
MT990133	Apex/H6860756	57.5	49.8	72.8	176.3	22.5
MT910189	ND 7293/Bearpaw	57.3	50.0	71.8	175.5	22.4
MT990132	Apex/H6860756	57.3	49.6	77.2	176.1	22.4
2B914947	Merit	57.3	47.3	67.4	177.9	22.4
MT990023	Alexis/H1851195	57.3	49.3	72.4	176.4	23.8
SK 76333	Harrington	57.0	48.1	72.1	177.5	22.5
MT990144	Apex/H6860756	56.8	50.1	77.5	176.1	21.8
PI605472	Garnett	56.8	48.2	67.8	177.8	22.7
MT990041	Alexis/Harrington	54.7	48.5	72.2	176.6	22.5
B2L20-36	BCL20/MOREX BC2F4	54.3	46.7	61.5	173.1	24.3
MT990074	Alexis/MT861596	53.8	49.9	63.8	173.9	22.9
6B932978	Legacy	48.3	46.4	65.0	174.8	24.0
CI 15773	Morex	44.7	46.2	53.4	173.4	26.0
C.V.*	C.V. (S/Mean) * 100	8.27	2.01	14.48	0.69	5.79
P-Value*		0.0001	0.0001	0.0001	0.0001	0.0001
L.S.D.*	L.S.D. (.05)	5.68	1.13	11.45	1.52	1.47

\*SAS Analysis proc GLM using lattice means for each location (p=.05)

TABLE 2. 2001 Montana Dryland Intrastate Spring Barley Nursery - Yield Summary (Bu/Ac) by Location

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Conrad	Bozeman	Avg.	BYX	RSQ
2B914947	Merit	28.5	82.9	60.3	44.4	16.9	110.7	57.3	1.00	0.99
6B932978	Legacy	21.9	75.6	48.2	29.5	16.0	98.4	48.3	0.93	0.97
B2L20-36	BCL20/MOREX BC2F4	20.0	79.2	64.6	44.1	20.6	97.2	54.3	0.90	0.98
<b>BZ594-19</b>	<b>WPB Xena</b>	<b>29.0</b>	<b>96.2</b>	<b>75.7</b>	<b>50.6</b>	<b>23.3</b>	<b>121.5</b>	<b>66.1</b>	<b>1.11</b>	<b>0.99</b>
BZ594-20	WPB BZ594-20	30.1	80.3	82.3	42.7	20.4	112.7	61.4	1.02	0.98
BZ596117	WPB BZ596-117	32.9	85.7	81.5	46.8	23.5	126.7	66.2	1.11	0.99
CDCBOLD	CDC Bold	35.0	74.5	75.1	48.5	19.6	124.8	62.9	1.05	0.96
CDCNiska	CDC Niska	28.0	87.6	68.6	47.1	14.0	118.3	60.6	1.11	0.99
<b>CI 15773</b>	<b>Morex</b>	<b>20.7</b>	<b>60.8</b>	<b>53.0</b>	<b>36.1</b>	<b>18.9</b>	<b>79.0</b>	<b>44.7</b>	<b>0.68</b>	<b>0.99</b>
CI 15856	Lewis	33.3	82.1	63.7	51.1	21.8	106.9	59.8	0.90	0.99
H3860224	Lewis/Apex	28.3	83.5	66.4	49.1	23.4	107.3	59.7	0.93	0.99
MT910189	ND 7293/Bearpaw	29.5	78.0	67.4	33.7	20.4	114.9	57.3	1.03	0.98
MT950186	MT860756/MT83533	28.9	78.2	77.4	47.2	22.4	113.1	61.2	0.99	0.99
<b>MT960099</b>	<b>Manley/Baronesse</b>	<b>30.9</b>	<b>95.2</b>	<b>67.8</b>	<b>42.8</b>	<b>21.0</b>	<b>126.1</b>	<b>63.9</b>	<b>1.16</b>	<b>0.99</b>
MT960100	Manley/Baronesse	28.2	89.3	72.8	47.7	21.5	117.6	62.9	1.07	1.00
MT960101	Manley/Baronesse	26.8	89.7	66.0	44.0	24.6	115.8	61.1	1.04	0.99
MT960222	Stark/Baronesse	30.6	90.3	69.1	50.3	20.5	107.2	61.3	0.97	0.99
MT960226	Stark/Baronesse	25.7	87.8	77.0	52.4	24.6	112.0	63.2	1.00	0.98
<b>MT960228</b>	<b>Stark/Baronesse</b>	<b>28.1</b>	<b>93.6</b>	<b>73.4</b>	<b>45.3</b>	<b>21.4</b>	<b>120.6</b>	<b>63.7</b>	<b>1.12</b>	<b>1.00</b>
MT970026	Baronesse/MT860756	32.5	91.5	74.6	48.1	26.0	118.4	65.2	1.04	1.00
MT970110	Klages/Baronesse	29.4	95.7	70.3	37.5	19.7	112.7	60.9	1.08	0.98
MT970116	Klages/Baronesse	26.4	93.7	69.9	35.4	21.9	115.6	60.5	1.10	0.98
MT970148	MT861596/ND 11120	32.3	85.6	70.0	48.1	21.4	109.1	61.1	0.96	1.00
<b>MT970155</b>	<b>MT886610/MT140523</b>	<b>37.1</b>	<b>94.3</b>	<b>67.0</b>	<b>53.7</b>	<b>22.3</b>	<b>119.7</b>	<b>65.7</b>	<b>1.03</b>	<b>0.98</b>
MT970229	MT890021/Stark	32.1	93.2	81.2	47.0	25.8	114.1	65.6	1.02	0.98
MT981004	Baronesse/H2860224	28.2	90.8	71.5	49.3	24.5	115.3	63.2	1.03	0.99
MT981006	Baronesse/H2860224	35.0	92.2	70.4	44.0	23.9	110.3	62.6	0.97	0.98
MT981009	Baronesse/MT860326	24.9	90.3	67.2	42.6	21.4	98.7	57.5	0.93	0.96
<b>MT981030</b>	<b>Baronesse/MT910160</b>	<b>33.0</b>	<b>92.5</b>	<b>72.4</b>	<b>52.9</b>	<b>21.9</b>	<b>123.3</b>	<b>66.0</b>	<b>1.09</b>	<b>0.99</b>
MT981039	H5860219/Baronesse	29.8	92.4	68.2	54.2	18.1	106.6	61.6	0.98	0.97
MT981042	H5860219/Baronesse	28.2	91.7	69.8	52.5	23.8	116.7	63.8	1.04	0.99
MT981091	MT851195/MT140523	27.2	80.9	77.7	54.5	20.7	123.1	64.0	1.09	0.98
MT981177	MT910033/Targhee	28.6	84.7	80.9	55.8	23.5	99.7	62.2	0.88	0.95
<b>MT981210</b>	<b>MT910150/Stark</b>	<b>31.2</b>	<b>83.6</b>	<b>72.3</b>	<b>44.9</b>	<b>20.0</b>	<b>110.7</b>	<b>60.5</b>	<b>0.99</b>	<b>1.00</b>
MT981212	MT910150/Stark	34.6	86.1	75.5	46.4	22.4	119.9	64.1	1.05	1.00

Table 2 continues on next page

TABLE 2. 2001 Montana Dryland Intrastate Spring Barley Nursery - Yield Summary (Bu/Ac) by Location  
(Continued).

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Conrad	Bozeman	Avg.	BYX	RSQ
MT981238	ND112311/Lewis	32.2	84.3	78.3	31.1	21.5	113.0	60.1	1.04	0.96
MT990023	Alexis/H1851195	24.5	84.5	66.6	42.9	16.8	108.6	57.3	1.03	1.00
MT990041	Alexis/Harrington	27.1	75.8	60.8	38.4	19.9	106.1	54.7	0.94	1.00
MT990074	Alexis/MT861596	29.3	75.3	59.7	39.4	18.8	100.5	53.8	0.88	0.99
MT990106	Apex/H1851195	33.8	83.2	66.8	48.0	18.1	117.9	61.3	1.03	0.99
MT990118	Apex/H1851195	26.7	84.2	66.0	48.4	18.8	120.5	60.8	1.09	0.99
MT990132	Apex/H6860756	29.9	73.7	70.4	45.6	22.9	101.3	57.3	0.85	0.99
MT990133	Apex/H6860756	31.3	76.2	64.4	48.6	21.1	103.6	57.5	0.87	0.99
MT990144	Apex/H6860756	28.3	78.7	63.5	42.2	21.9	106.3	56.8	0.93	1.00
MT990147	Apex/H6860756	31.8	80.4	68.3	44.2	25.2	119.7	61.6	1.01	0.98
MT990156	Apex/MT890070	25.9	78.4	71.6	43.2	21.4	108.6	58.2	0.97	0.99
MT990172	Apex/MT890070	27.5	83.5	69.6	51.6	24.0	122.1	63.0	1.06	0.99
MT990174	Apex/MT890070	32.4	79.4	66.8	46.5	17.6	109.3	58.7	0.96	1.00
MT990176	Apex/MT890070	28.8	78.8	72.3	44.4	21.4	110.4	59.3	0.97	0.99
MT990244	MT890018/Stark	33.7	76.7	75.8	47.3	23.7	114.6	62.0	0.96	0.98
MT990249	MT890018/Stark	30.1	71.7	71.8	46.2	21.3	119.0	60.0	1.01	0.97
MTLB 5	Lewis/Baronesse #5	35.2	86.8	69.1	54.0	22.4	115.7	63.9	0.98	0.99
MTLB 6	Lewis/Baronesse # 6	32.9	77.9	71.7	43.8	22.0	112.8	60.2	0.97	0.99
N96/1116	Justina NORD 96/1116	25.8	85.8	72.8	41.9	20.2	121.4	61.3	1.12	0.99
ND 9866	Stark	28.8	80.7	73.3	33.6	23.4	116.7	59.4	1.05	0.98
ND13299	Conlon	30.1	85.2	70.1	45.5	20.2	111.6	60.4	1.00	1.00
NORD1958	NORD 1958	26.0	81.5	72.0	47.0	20.8	99.5	57.8	0.90	0.98
PI491534	Gallatin	31.6	83.4	71.1	44.3	23.9	100.4	59.1	0.87	0.99
PI568246	Baronesse	32.2	95.5	71.7	48.2	27.9	117.6	65.5	1.03	0.99
PI605472	Garnett	32.9	75.5	61.8	43.6	20.1	106.8	56.8	0.90	0.99
PI610264	Valier	30.2	98.1	69.7	49.0	22.5	119.4	64.8	1.10	0.99
S3482	Calgary	26.0	75.7	65.3	43.7	20.3	122.9	59.0	1.08	0.98
SK 76333	Harrington	31.2	83.5	62.8	39.3	20.4	104.5	57.0	0.93	0.99
TR128	Stratus	25.7	76.6	73.9	41.2	25.2	115.3	59.6	1.01	0.98
SiteMean	SITE MEAN	29.5	84.1	69.8	45.4	21.5	112.4	60.4	1.00	1.00
C.V.	C.V. (S/Mean) * 100	11.33	8.16	7.59	10.93	15.26	5.97	***	***	***
F-Value		2.92	3.29	3.72	3.44	1.56	4.50	***	***	***
L.S.D.	L.S.D. (.05)	5.68	11.60	9.03	8.59	5.69	11.61	***	***	***
Efficiency	of Design Rel to RCB	1.10	1.07	1.12	1.38	1.45	1.35	***	***	***

Table 3. 2001 Montana Dryland Intrastate Spring Barley Nursery - Test Weight Summary (Lbs/Bu) by Location

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Conrad	Bozeman	Avg.	BYX	RSQ
2B914947	Merit	46.6	45.7	44.0	50.3	48.5	48.6	47.3	1.18	0.83
6B932978	Legacy	44.7	45.2	41.2	47.9	48.9	50.6	46.4	1.81	0.88
B2L20-36	BCL20/MOREX BC2F4	43.3	45.7	46.3	46.7	48.1	50.0	46.7	0.96	0.57
<b>BZ594-19</b>	<b>WPB Xena</b>	<b>48.4</b>	<b>48.7</b>	<b>48.2</b>	<b>50.9</b>	<b>51.9</b>	<b>51.1</b>	<b>49.9</b>	<b>0.88</b>	<b>0.93</b>
BZ594-20	WPB BZ594-20	49.0	50.6	50.0	51.9	53.1	52.8	51.2	0.85	0.84
BZ596117	WPB BZ596-117	47.7	49.4	49.5	50.7	53.5	53.2	50.7	1.11	0.72
CDCBOLD	CDC Bold	49.0	46.4	48.1	50.7	49.9	50.7	49.1	0.76	0.65
CDCNiska	CDC Niska	47.0	47.5	46.0	50.2	48.0	50.1	48.1	0.86	0.79
<b>CI 15773</b>	<b>Morex</b>	<b>43.5</b>	<b>45.1</b>	<b>42.3</b>	<b>48.8</b>	<b>47.4</b>	<b>50.1</b>	<b>46.2</b>	<b>1.68</b>	<b>0.93</b>
CI 15856	Lewis	48.9	49.4	48.7	52.5	51.6	52.4	50.6	0.99	0.97
H3860224	Lewis/Apex	48.7	47.6	48.0	51.5	49.7	49.9	49.2	0.68	0.70
MT910189	ND 7293/Bearpaw	48.2	48.6	47.0	52.2	52.2	51.5	49.9	1.27	0.97
MT950186	MT860756/MT83533	49.4	50.0	50.9	52.0	53.6	53.2	51.5	0.83	0.75
<b>MT960099</b>	<b>Manley/Baronesse</b>	<b>47.3</b>	<b>47.3</b>	<b>45.2</b>	<b>50.3</b>	<b>50.5</b>	<b>51.2</b>	<b>48.6</b>	<b>1.32</b>	<b>0.96</b>
MT960100	Manley/Baronesse	49.1	48.7	47.5	50.3	51.9	50.9	49.7	0.84	0.84
MT960101	Manley/Baronesse	48.6	49.5	46.5	50.6	51.2	51.3	49.6	0.97	0.84
MT960222	Stark/Baronesse	48.9	48.5	46.9	52.0	52.3	49.9	49.7	1.03	0.75
MT960226	Stark/Baronesse	48.1	50.4	47.1	51.9	52.7	51.4	50.3	1.14	0.82
<b>MT960228</b>	<b>Stark/Baronesse</b>	<b>47.7</b>	<b>47.1</b>	<b>47.2</b>	<b>51.4</b>	<b>52.8</b>	<b>50.8</b>	<b>49.5</b>	<b>1.31</b>	<b>0.87</b>
MT970026	Baronesse/MT860756	49.8	48.6	49.4	52.2	52.8	52.9	50.9	1.01	0.89
MT970110	Klages/Baronesse	49.6	48.5	48.6	50.7	51.2	49.7	49.7	0.49	0.62
MT970116	Klages/Baronesse	49.7	48.7	49.1	52.5	53.8	52.3	51.0	1.12	0.86
MT970148	MT861596/ND 11120	46.5	47.6	44.5	50.4	50.9	50.6	48.4	1.45	0.94
<b>MT970155</b>	<b>MT886610/MT140523</b>	<b>49.0</b>	<b>49.5</b>	<b>46.1</b>	<b>50.9</b>	<b>49.9</b>	<b>50.2</b>	<b>49.3</b>	<b>0.75</b>	<b>0.63</b>
MT970229	MT890021/Stark	49.2	50.3	50.2	51.8	51.0	52.4	50.8	0.57	0.75
MT981004	Baronesse/H2860224	47.0	48.2	46.4	51.1	50.9	51.7	49.2	1.29	0.98
MT981006	Baronesse/H2860224	47.4	48.8	45.3	50.6	50.6	51.1	49.0	1.22	0.89
MT981009	Baronesse/MT860326	47.6	48.2	46.0	51.8	51.5	49.2	49.0	1.12	0.76
<b>MT981030</b>	<b>Baronesse/MT910160</b>	<b>48.9</b>	<b>49.5</b>	<b>47.4</b>	<b>52.5</b>	<b>49.9</b>	<b>53.8</b>	<b>50.3</b>	<b>1.17</b>	<b>0.74</b>
MT981039	H5860219/Baronesse	49.1	49.4	45.9	50.7	49.4	50.7	49.2	0.76	0.59
MT981042	H5860219/Baronesse	49.0	49.7	45.9	51.6	50.3	52.0	49.7	1.07	0.75
MT981091	MT851195/MT140523	48.2	48.1	49.5	50.8	48.7	50.9	49.4	0.43	0.38
MT981177	MT910033/Targhee	47.9	47.4	49.0	51.7	51.7	49.8	49.6	0.83	0.64
<b>MT981210</b>	<b>MT910150/Stark</b>	<b>49.0</b>	<b>48.5</b>	<b>48.6</b>	<b>51.2</b>	<b>50.8</b>	<b>51.1</b>	<b>49.9</b>	<b>0.71</b>	<b>0.95</b>

Table 3 continues on next page

Table 3. 2001 Montana Dryland Intrastate Spring Barley Nursery - Test Weight Summary (Lbs/Bu) by Location (Continued).

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Conrad	Bozeman	Avg.	BYX	RSQ
MT981212	MT910150/Stark	50.0	50.8	49.0	52.0	52.9	52.7	51.2	0.85	0.92
MT981238	ND112311/Lewis	49.4	48.0	52.2	52.1	52.0	53.7	51.2	0.72	0.36
MT990023	Alexis/H1851195	47.8	47.4	48.6	51.5	50.9	49.6	49.3	0.78	0.68
MT990041	Alexis/Harrington	47.0	46.7	45.9	51.5	50.2	50.1	48.5	1.27	0.93
MT990074	Alexis/MT861596	48.0	48.0	49.1	51.2	52.0	51.4	49.9	0.92	0.82
MT990106	Apex/H1851195	46.5	47.4	45.4	51.3	48.5	52.4	48.6	1.41	0.82
MT990118	Apex/H1851195	46.4	47.5	46.2	50.5	49.8	50.6	48.5	1.15	0.98
MT990132	Apex/H6860756	48.3	48.7	48.5	52.7	49.3	50.3	49.6	0.69	0.54
MT990133	Apex/H6860756	47.1	48.9	49.9	51.2	49.9	52.0	49.8	0.72	0.54
MT990144	Apex/H6860756	47.7	49.4	48.2	51.5	51.3	52.3	50.1	1.03	0.93
MT990147	Apex/H6860756	47.7	49.3	49.4	51.2	49.2	52.3	49.8	0.66	0.51
MT990156	Apex/MT890070	48.2	47.8	47.8	50.9	50.6	52.4	49.6	1.06	0.91
MT990172	Apex/MT890070	46.9	47.8	48.2	51.1	49.9	52.0	49.3	1.03	0.83
MT990174	Apex/MT890070	47.8	46.6	47.3	50.1	49.8	51.0	48.8	0.94	0.88
MT990244	MT890018/Stark	49.6	48.9	50.1	52.4	54.3	53.2	51.4	1.12	0.81
MT990249	MT890018/Stark	50.1	50.4	50.9	52.3	53.8	52.7	51.7	0.73	0.78
MTLB 5	Lewis/Baronesse #5	49.3	50.1	47.9	51.0	52.8	51.7	50.5	0.90	0.81
MTLB 6	Lewis/Baronesse # 6	49.5	49.0	48.5	50.0	50.4	52.5	50.0	0.66	0.67
N96/1116	Justina NORD 96/1116	47.6	47.3	46.4	48.6	49.0	50.2	48.2	0.71	0.85
ND 9866	Stark	49.4	49.8	50.4	51.3	54.0	53.1	51.3	0.88	0.70
ND13299	Conlon	48.1	47.6	45.2	50.6	50.9	51.4	48.9	1.31	0.91
NORD1958	NORD 1958	47.9	48.5	47.6	51.7	53.4	51.5	50.1	1.30	0.90
PI491534	Gallatin	48.1	47.9	48.4	51.6	49.4	51.4	49.4	0.82	0.76
PI568246	Baronesse	48.1	48.5	45.9	50.8	51.3	50.8	49.2	1.13	0.91
PI605472	Garnett	46.7	46.7	46.0	49.8	50.4	49.1	48.1	1.02	0.92
PI610264	Valier	48.5	49.8	48.8	50.7	51.3	52.2	50.2	0.76	0.86
S3482	Calgary	46.9	48.3	45.4	50.5	51.2	52.6	49.2	1.48	0.92
SK 76333	Harrington	46.2	47.1	44.8	51.5	49.8	49.1	48.1	1.31	0.85
TR128	Stratus	46.9	47.6	44.3	49.1	51.4	49.4	48.1	1.23	0.78
SiteMean	SITE MEAN *****	48.0	48.3	47.4	51.0	51.0	51.3	49.5	1.00	1.00
C.V.	C.V. (S/Mean) * 100	1.68	1.86	2.77	1.02	***	1.06	***	***	***
F-Value		7.81	5.95	7.00	12.89	***	8.73	***	***	***
L.S.D.	L.S.D. (.05)	1.39	1.51	2.19	0.87	***	1.19	***	***	***
Efficiency	of Design Rel to RCB	1.24	1.04	1.03	1.05	***	1.41	***	***	***

Table 4. 2001 Montana Dryland Intrastate Spring Barley Nursery - % Plump (over 6/64 screen) by Location

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Conrad	Bozeman	Avg.	BYX	RSQ
2B914947	Merit	84.6	80.0	16.2	88.7	65.0	69.7	67.4	1.19	0.95
6B932978	Legacy	81.2	80.0	5.9	93.9	52.0	77.1	65.0	1.38	0.89
B2L20-36	BCL20/MOREX BC2F4	82.5	76.0	10.8	92.6	49.0	58.1	61.5	1.30	0.93
<b>BZ594-19</b>	<b>WPB Xena</b>	<b>92.2</b>	<b>90.0</b>	<b>34.7</b>	<b>91.7</b>	<b>84.0</b>	<b>64.4</b>	<b>76.2</b>	<b>1.00</b>	<b>0.92</b>
BZ594-20	WPB BZ594-20	82.7	90.0	43.9	94.1	88.0	72.2	78.5	0.82	0.94
BZ596117	WPB BZ596-117	88.3	86.0	40.4	91.3	80.0	78.7	77.5	0.84	0.95
CDCBOLD	CDC Bold	29.4	79.0	22.8	88.1	59.0	55.1	55.6	0.90	0.58
CDCNiska	CDC Niska	91.5	76.0	16.4	91.1	70.0	59.6	67.4	1.22	0.92
<b>CI 15773</b>	<b>Morex</b>	<b>69.4</b>	<b>76.0</b>	<b>3.9</b>	<b>95.2</b>	<b>30.0</b>	<b>46.0</b>	<b>53.4</b>	<b>1.41</b>	<b>0.86</b>
CI 15856	Lewis	73.6	86.0	11.6	92.6	73.0	69.3	67.7	1.30	0.97
H3860224	Lewis/Apex	59.2	85.0	40.6	91.5	82.0	59.3	69.6	0.77	0.73
MT910189	ND 7293/Bearpaw	76.1	79.0	19.8	95.7	82.0	78.4	71.8	1.14	0.89
MT950186	MT860756/MT83533	89.4	86.0	35.2	91.7	78.0	69.2	74.9	0.95	0.97
<b>MT960099</b>	<b>Manley/Baronesse</b>	<b>89.0</b>	<b>59.0</b>	<b>6.4</b>	<b>71.4</b>	<b>37.0</b>	<b>36.3</b>	<b>49.8</b>	<b>1.14</b>	<b>0.72</b>
MT960100	Manley/Baronesse	61.9	67.0	11.7	78.7	64.0	35.6	53.1	1.08	0.90
MT960101	Manley/Baronesse	86.9	84.0	15.4	83.8	58.0	55.1	63.9	1.21	0.93
MT960222	Stark/Baronesse	73.2	87.0	21.7	93.5	78.0	47.2	66.8	1.18	0.90
MT960226	Stark/Baronesse	90.8	92.0	26.4	96.2	88.0	67.4	76.8	1.18	0.94
<b>MT960228</b>	<b>Stark/Baronesse</b>	<b>72.3</b>	<b>84.0</b>	<b>17.5</b>	<b>90.2</b>	<b>65.0</b>	<b>56.3</b>	<b>64.2</b>	<b>1.19</b>	<b>1.00</b>
MT970026	Baronesse/MT860756	73.0	86.0	33.6	94.1	78.0	73.3	73.0	0.94	0.96
MT970110	Klages/Baronesse	76.2	87.0	30.3	93.3	84.0	45.2	69.3	1.05	0.81
MT970116	Klages/Baronesse	62.5	91.0	29.2	96.2	87.0	65.8	71.9	1.04	0.82
MT970148	MT861596/ND 11120	70.6	91.0	24.5	91.9	70.0	65.9	69.0	1.10	0.97
<b>MT970155</b>	<b>MT886610/MT140523</b>	<b>69.5</b>	<b>86.0</b>	<b>22.1</b>	<b>91.8</b>	<b>67.0</b>	<b>61.2</b>	<b>66.3</b>	<b>1.12</b>	<b>0.99</b>
MT970229	MT890021/Stark	87.1	91.0	53.2	94.4	85.0	62.5	78.9	0.70	0.83
MT981004	Baronesse/H2860224	81.5	83.0	17.6	92.6	76.0	65.4	69.3	1.22	0.98
MT981006	Baronesse/H2860224	82.7	87.0	14.9	91.4	67.0	56.3	66.5	1.29	0.98
MT981009	Baronesse/MT860326	84.1	82.0	14.0	88.2	63.0	39.1	61.7	1.28	0.89
<b>MT981030</b>	<b>Baronesse/MT910160</b>	<b>81.9</b>	<b>83.0</b>	<b>18.1</b>	<b>89.6</b>	<b>70.0</b>	<b>74.2</b>	<b>69.5</b>	<b>1.17</b>	<b>0.96</b>
MT981039	H5860219/Baronesse	88.1	92.0	31.5	91.0	59.0	71.3	72.1	1.03	0.90
MT981042	H5860219/Baronesse	85.6	82.0	12.7	90.6	55.0	59.7	64.3	1.30	0.95
MT981091	MT851195/MT140523	85.6	82.0	29.4	84.3	75.0	65.7	70.3	0.95	0.94
MT981177	MT910033/Targhee	37.2	85.0	34.0	93.4	74.0	53.2	62.8	0.83	0.53

Table 4 continues on next page

Table 4. 2001 Montana Dryland Intrastate Spring Barley Nursery - % Plump (over 6/64 screen) by Location (Continued).

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Conrad	Bozeman	Avg.	BYX	RSQ
MT981210	MT910150/Stark	79.7	92.0	38.4	89.8	75.0	67.9	73.8	0.88	0.97
MT981212	MT910150/Stark	75.0	86.0	28.8	91.5	79.0	74.4	72.4	1.00	0.95
MT981238	ND112311/Lewis	67.8	83.0	56.7	92.5	68.0	83.9	75.3	0.48	0.62
MT990023	Alexis/H1851195	89.8	81.0	44.5	93.3	62.0	63.6	72.4	0.79	0.83
MT990041	Alexis/Harrington	66.6	86.0	32.2	93.3	83.0	72.3	72.2	0.93	0.87
MT990074	Alexis/MT861596	70.8	75.0	22.7	92.6	60.0	61.5	63.8	1.05	0.97
MT990106	Apex/H1851195	82.5	89.0	32.1	95.5	76.0	76.3	75.2	1.02	0.99
MT990118	Apex/H1851195	78.6	90.0	28.8	94.4	77.0	79.4	74.7	1.05	0.95
MT990132	Apex/H6860756	89.6	87.0	48.2	94.0	82.0	62.1	77.2	0.77	0.87
MT990133	Apex/H6860756	73.3	91.0	45.7	92.3	70.0	64.4	72.8	0.76	0.91
MT990144	Apex/H6860756	82.6	88.0	44.7	94.3	81.0	74.2	77.5	0.79	0.99
MT990147	Apex/H6860756	85.3	91.0	61.6	92.4	73.0	78.3	80.3	0.51	0.90
MT990156	Apex/MT890070	88.6	91.0	60.7	93.3	88.0	87.7	84.9	0.53	0.93
MT990172	Apex/MT890070	65.9	94.0	57.0	95.1	79.0	84.8	79.3	0.56	0.63
MT990174	Apex/MT890070	80.9	91.0	48.8	89.9	73.0	81.2	77.5	0.68	0.92
MT990176	Apex/MT890070	74.1	75.0	23.6	91.2	55.0	53.3	62.0	1.05	0.95
MT990244	MT890018/Stark	89.5	90.0	25.4	95.7	3.0	76.1	63.3	1.16	0.42
MT990249	MT890018/Stark	76.9	85.0	29.9	93.5	80.0	68.4	72.3	1.01	0.97
MTLB 5	Lewis/Baronesse #5	86.0	76.0	21.1	89.3	53.0	53.2	63.1	1.12	0.90
MTLB 6	Lewis/Baronesse # 6	87.1	83.0	28.3	83.3	73.0	76.8	71.9	0.95	0.90
N96/1116	Justina NORD 96/1116	86.2	92.0	34.0	92.0	85.0	65.2	75.7	1.01	0.94
ND 9866	Stark	93.6	90.0	39.3	82.1	86.0	77.4	78.1	0.82	0.82
ND13299	Conlon	77.9	80.0	13.7	85.1	61.0	67.7	68.4	0.76	0.95
NORD1958	NORD 1958	75.3	93.0	41.0	94.8	77.0	76.2	76.2	0.86	0.95
PI491534	Gallatin	82.7	76.0	15.2	85.8	67.0	54.2	63.5	1.17	0.95
PI568246	Baronesse	85.9	82.0	19.8	91.0	76.0	54.3	68.2	1.19	0.94
PI605472	Garnett	29.1	89.0	43.5	92.7	78.0	74.7	67.8	0.62	0.28
PI610264	Valier	87.8	81.0	17.5	84.0	62.0	70.0	67.0	1.14	0.91
S3482	Calgary	84.0	76.0	34.4	88.2	53.0	79.0	69.1	0.83	0.75
SK 76333	Harrington	86.9	83.0	25.8	94.5	75.0	67.2	72.1	1.11	0.98
TR128	Stratus	48.4	82.0	11.9	90.2	64.0	52.5	58.2	1.19	0.87
Site Mean	SITE MEAN *****	77.6	84.3	29.2	91.0	69.8	65.5	69.6	1.00	1.00
C.V.	C.V. (S/Mean) * 100	***	***	40.66	3.87	***	9.15	***	***	***
F-Value		***	***	4.20	4.50	***	5.40	***	***	***
L.S.D.	L.S.D. (.05)	***	***	19.56	5.88	***	13.20	***	***	***
Efficiency	of Design Rel to RCB	***	***	1.03	1.03	***	1.64	***	***	***

Table 5. 2001 Montana Dryland Intrastate Spring Barley Nursery - Plant Height Summary (Inches) by Location

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Conrad	Bozeman	Avg.	BYX	RSQ
2B914947	Merit	16.6	27.6	29.9	16.7	14.0	29.5	22.4	1.15	0.99
6B932978	Legacy	15.0	29.1	30.8	17.4	17.0	34.8	24.0	1.29	0.93
B2L20-36	BCL20/MOREX BC2F4	16.5	25.5	32.3	19.0	18.0	34.4	24.3	1.15	0.90
<b>BZ594-19</b>	<b>WPB Xena</b>	<b>17.9</b>	<b>26.5</b>	<b>30.4</b>	<b>18.7</b>	<b>18.0</b>	<b>29.3</b>	<b>23.4</b>	<b>0.93</b>	<b>0.99</b>
BZ594-20	WPB BZ594-20	18.0	26.1	28.4	17.3	17.0	27.5	22.4	0.86	0.99
BZ596117	WPB BZ596-117	17.9	27.5	30.0	16.4	14.0	26.7	22.1	1.05	0.97
CDCBOLD	CDC Bold	16.5	26.4	29.8	16.9	14.0	28.6	22.0	1.10	1.00
CDCNiska	CDC Niska	15.9	27.0	29.0	17.7	14.0	28.4	22.0	1.08	0.99
<b>CI 15773</b>	<b>Morex</b>	<b>15.8</b>	<b>30.9</b>	<b>34.4</b>	<b>23.5</b>	<b>17.0</b>	<b>34.5</b>	<b>26.0</b>	<b>1.29</b>	<b>0.93</b>
CI 15856	Lewis	16.6	27.3	30.5	18.6	16.0	29.9	23.2	1.07	0.99
H3860224	Lewis/Apex	17.6	25.8	29.7	18.6	17.0	30.0	23.1	0.95	0.98
MT910189	ND 7293/Bearpaw	16.7	25.5	28.9	17.9	17.0	28.3	22.4	0.91	0.99
MT950186	MT860756/MT83533	18.4	24.9	30.7	18.9	18.0	28.1	23.2	0.85	0.96
<b>MT960099</b>	<b>Manley/Baronesse</b>	<b>14.4</b>	<b>26.1</b>	<b>26.6</b>	<b>15.5</b>	<b>13.0</b>	<b>27.9</b>	<b>20.6</b>	<b>1.08</b>	<b>0.97</b>
MT960100	Manley/Baronesse	16.0	24.7	26.5	16.5	14.0	25.9	20.6	0.89	0.99
MT960101	Manley/Baronesse	16.4	26.1	27.5	17.0	17.0	28.3	22.0	0.90	0.97
MT960222	Stark/Baronesse	17.3	28.2	31.7	18.6	17.0	28.1	23.5	1.03	0.99
MT960226	Stark/Baronesse	17.8	24.5	30.4	17.9	16.0	28.2	22.5	0.95	0.98
<b>MT960228</b>	<b>Stark/Baronesse</b>	<b>17.4</b>	<b>25.8</b>	<b>29.8</b>	<b>17.1</b>	<b>16.0</b>	<b>28.2</b>	<b>22.4</b>	<b>0.98</b>	<b>0.99</b>
MT970026	Baronesse/MT860756	17.7	26.3	30.8	19.6	16.0	29.4	23.3	0.99	0.99
MT970110	Klages/Baronesse	18.0	25.7	30.0	18.8	15.0	26.7	22.4	0.92	0.98
MT970116	Klages/Baronesse	18.6	30.3	32.4	19.5	14.0	31.8	24.4	1.24	0.97
MT970148	MT861596/ND 11120	15.9	25.3	28.7	15.3	15.0	24.8	20.8	0.95	0.97
<b>MT970155</b>	<b>MT886610/MT140523</b>	<b>17.4</b>	<b>25.7</b>	<b>30.7</b>	<b>17.6</b>	<b>14.0</b>	<b>25.3</b>	<b>21.8</b>	<b>0.98</b>	<b>0.95</b>
MT970229	MT890021/Stark	16.2	27.9	31.4	18.4	19.0	27.3	23.4	0.96	0.94
MT981004	Baronesse/H2860224	17.3	26.6	29.8	18.0	15.0	26.6	22.2	0.96	0.98
MT981006	Baronesse/H2860224	17.4	26.6	30.9	18.0	14.0	25.5	22.1	1.01	0.96
MT981009	Baronesse/MT860326	16.8	27.7	30.3	18.1	16.0	27.3	22.7	1.00	0.98
<b>MT981030</b>	<b>Baronesse/MT910160</b>	<b>16.8</b>	<b>27.9</b>	<b>30.2</b>	<b>17.8</b>	<b>18.0</b>	<b>27.3</b>	<b>23.0</b>	<b>0.94</b>	<b>0.97</b>
MT981039	H5860219/Baronesse	14.0	28.0	28.2	15.3	13.0	27.4	21.0	1.18	0.97
MT981042	H5860219/Baronesse	15.8	26.0	29.4	18.0	14.0	27.1	21.7	1.03	0.99
MT981091	MT851195/MT140523	17.1	26.2	29.2	16.9	17.0	27.2	22.3	0.92	0.99
MT981177	MT910033/Targhee	16.7	26.3	29.7	17.5	15.0	28.8	22.3	1.05	1.00

Table 5 continues on next page

Table 5. 2001 Montana Dryland Intrastate Spring Barley Nursery - Plant Height Summary (Inches) by Location (Continued).

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Conrad	Bozeman	Avg.	BYX	RSQ
MT981210	MT910150/Stark	16.3	28.3	28.7	18.2	16.0	29.4	22.8	1.03	0.97
MT981212	MT910150/Stark	18.2	27.8	30.2	19.5	17.0	30.1	23.8	0.97	0.99
MT981238	ND112311/Lewis	16.7	29.9	32.1	19.4	15.0	31.0	24.0	1.22	0.98
MT990023	Alexis/H1851195	17.7	28.6	33.5	18.0	16.0	29.2	23.8	1.17	0.99
MT990041	Alexis/Harrington	17.3	25.7	30.3	18.2	15.0	28.3	22.5	1.01	0.99
MT990074	Alexis/MT861596	16.1	26.9	32.6	17.4	17.0	27.4	22.9	1.08	0.97
MT990106	Apex/H1851195	16.7	25.7	28.2	15.6	14.0	25.4	20.9	0.96	0.98
MT990118	Apex/H1851195	16.5	26.3	29.6	17.0	14.0	26.0	21.6	1.01	0.98
MT990132	Apex/H6860756	17.3	25.7	31.4	18.2	15.0	26.7	22.4	1.01	0.98
MT990133	Apex/H6860756	17.7	24.0	32.0	18.1	16.0	27.2	22.5	0.96	0.94
MT990144	Apex/H6860756	16.3	26.3	29.6	16.7	16.0	26.0	21.8	0.96	0.98
MT990147	Apex/H6860756	15.6	24.4	28.2	16.7	15.0	26.0	21.0	0.92	0.99
MT990156	Apex/MT890070	16.5	26.4	30.2	18.1	16.0	28.6	22.6	1.02	1.00
MT990172	Apex/MT890070	17.9	24.1	29.3	17.9	14.0	27.8	21.8	0.95	0.96
MT990174	Apex/MT890070	15.6	27.7	30.2	17.2	13.0	28.2	22.0	1.18	0.99
MT990176	Apex/MT890070	18.0	28.0	32.6	18.7	18.0	29.1	24.1	1.03	0.99
MT990244	MT890018/Stark	17.3	26.0	28.7	17.3	18.0	27.1	22.4	0.85	0.98
MT990249	MT890018/Stark	17.8	24.7	29.5	17.8	17.0	25.9	22.1	0.82	0.98
MTLB 5	Lewis/Baronesse #5	16.3	27.8	28.6	16.7	14.0	29.6	22.1	1.12	0.98
MTLB 6	Lewis/Baronesse # 6	16.6	24.6	30.3	16.3	14.0	28.2	21.7	1.08	0.98
N96/1116	Justina NORD 96/1116	15.6	24.7	27.5	18.0	18.0	25.5	21.5	0.76	0.95
ND 9866	Stark	18.2	28.0	32.2	20.1	16.0	31.0	24.3	1.10	0.99
ND13299	Conlon	17.2	24.8	28.0	17.0	15.0	26.6	21.4	0.89	0.99
NORD1958	NORD 1958	17.2	24.7	26.1	17.9	16.0	24.9	21.1	0.71	0.99
PI491534	Gallatin	17.3	30.3	30.3	18.6	17.0	28.7	23.7	1.03	0.96
PI568246	Baronesse	16.9	25.3	29.1	17.0	16.0	25.6	21.6	0.89	0.99
PI605472	Garnett	16.9	27.3	29.1	18.2	15.0	29.8	22.7	1.05	0.98
PI610264	Valier	17.8	28.1	29.4	17.0	15.0	29.9	22.9	1.08	0.97
S3482	Calgary	14.6	21.5	27.1	15.6	14.0	25.4	19.7	0.90	0.98
SK 76333	Harrington	17.1	25.0	30.4	19.0	15.0	28.3	22.5	0.98	0.97
TR128	Stratus	16.4	22.3	23.5	17.0	15.0	23.0	19.5	0.59	0.98
Site Mean	SITE MEAN *****	16.8	26.5	29.8	17.8	15.6	28.0	22.4	1.00	1.00
C.V.	C.V. (S/Mean) * 100	6.54	6.19	4.24	6.15	***	2.64	***	***	***
F-Value		2.34	3.21	6.01	3.83	***	24.80	***	***	***
L.S.D.	L.S.D. (.05)	1.78	2.80	2.16	1.88	***	1.27	***	***	***
Efficiency of Design	Rel to RCB	0.00	1.15	1.14	1.25	***	1.23	***	***	***

Table 6. 2001 Montana Dryland Intrastate Spring Barley - Heading Date Summary (Days>Jan 1) by Location

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Bozeman	Avg.	BYX	RSQ
2B914947	Merit	177.9	178.1	188.0	168.7	177.0	177.9	0.89	0.99
6B932978	Legacy	178.2	174.7	186.0	159.3	175.6	174.8	1.24	0.96
B2L20-36	BCL20/MOREX BC2F4	176.3	173.1	185.0	158.0	172.9	173.1	1.25	0.98
<b>BZ594-19</b>	<b>WPB Xena</b>	<b>178.0</b>	<b>180.2</b>	<b>188.0</b>	<b>168.7</b>	<b>177.0</b>	<b>178.4</b>	<b>0.88</b>	<b>0.96</b>
BZ594-20	WPB BZ594-20	175.9	172.7	188.0	168.7	173.9	175.8	0.90	0.90
BZ596117	WPB BZ596-117	177.7	175.0	191.0	167.3	176.0	177.4	1.09	0.96
CDCBOLD	CDC Bold	179.6	178.7	188.0	167.7	177.1	178.2	0.94	1.00
CDCNiska	CDC Niska	178.8	177.3	188.0	167.7	176.9	177.7	0.94	1.00
<b>CI 15773</b>	<b>Morex</b>	<b>176.7</b>	<b>174.7</b>	<b>185.0</b>	<b>157.3</b>	<b>173.4</b>	<b>173.4</b>	<b>1.28</b>	<b>0.96</b>
CI 15856	Lewis	178.0	178.3	188.0	167.7	176.2	177.6	0.93	0.98
H3860224	Lewis/Apex	179.6	177.7	190.0	168.7	176.7	178.5	0.99	0.99
MT910189	ND 7293/Bearpaw	177.1	174.3	186.0	166.3	173.7	175.5	0.92	0.99
MT950186	MT860756/MT83533	175.5	174.3	186.0	167.3	175.3	175.7	0.86	0.98
<b>MT960099</b>	<b>Manley/Baronesse</b>	<b>181.2</b>	<b>177.1</b>	<b>189.0</b>	<b>168.3</b>	<b>177.6</b>	<b>178.6</b>	<b>0.97</b>	<b>0.99</b>
MT960100	Manley/Baronesse	182.4	180.4	190.0	168.0	177.8	179.7	1.03	0.98
MT960101	Manley/Baronesse	181.9	182.1	190.0	168.7	178.0	180.1	0.99	0.97
MT960222	Stark/Baronesse	180.2	177.6	188.0	167.7	177.0	178.1	0.95	1.00
MT960226	Stark/Baronesse	178.8	176.9	188.0	167.0	176.0	177.3	0.97	0.99
<b>MT960228</b>	<b>Stark/Baronesse</b>	<b>178.2</b>	<b>176.0</b>	<b>188.0</b>	<b>168.7</b>	<b>176.6</b>	<b>177.5</b>	<b>0.89</b>	<b>0.98</b>
MT970026	Baronesse/MT860756	178.7	175.7	189.0	166.0	176.0	177.1	1.07	1.00
MT970110	Klages/Baronesse	181.0	178.7	189.0	166.3	177.0	178.4	1.06	0.99
MT970116	Klages/Baronesse	176.8	174.7	187.0	160.7	175.7	175.0	1.21	0.98
MT970148	MT861596/ND 11120	179.3	175.0	188.0	167.7	176.0	177.2	0.95	0.98
<b>MT970155</b>	<b>MT886610/MT140523</b>	<b>180.9</b>	<b>176.0</b>	<b>191.0</b>	<b>168.3</b>	<b>176.7</b>	<b>178.6</b>	<b>1.06</b>	<b>0.97</b>
MT970229	MT890021/Stark	178.5	177.0	188.0	164.3	177.0	176.9	1.09	0.99
MT981004	Baronesse/H2860224	178.1	176.0	188.0	166.7	176.1	177.0	0.99	1.00
MT981006	Baronesse/H2860224	177.7	175.7	188.0	167.0	176.3	177.0	0.97	0.99
MT981009	Baronesse/MT860326	180.4	176.7	188.0	168.3	175.4	177.8	0.92	0.97
<b>MT981030</b>	<b>Baronesse/MT910160</b>	<b>182.7</b>	<b>179.4</b>	<b>190.0</b>	<b>168.7</b>	<b>177.8</b>	<b>179.7</b>	<b>1.00</b>	<b>0.98</b>
MT981039	H5860219/Baronesse	179.8	178.3	188.0	167.3	177.1	178.1	0.96	1.00
MT981042	H5860219/Baronesse	183.9	178.8	190.0	168.3	177.1	179.6	1.03	0.96
MT981091	MT851195/MT140523	178.9	176.3	188.0	167.7	176.0	177.4	0.94	0.99
MT981177	MT910033/Targhee	176.5	176.6	188.0	168.0	176.0	177.0	0.91	0.97

Table 6 continues on next page

Table 6. 2001 Montana Dryland Intrastate Spring Barley - Heading Date Summary (Days>Jan 1) by Location (Continued).

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Bozeman	Avg.	BYX	RSQ
MT981210	MT910150/Stark	179.4	178.3	188.0	167.3	177.0	178.0	0.96	1.00
MT981212	MT910150/Stark	175.6	175.7	186.0	163.3	175.7	175.3	1.03	0.98
MT981238	ND112311/Lewis	175.1	175.3	186.0	161.7	175.0	174.6	1.11	0.98
MT990023	Alexis/H1851195	176.7	176.6	188.0	164.7	175.9	176.4	1.07	0.99
MT990041	Alexis/Harrington	177.8	177.0	188.0	163.7	176.3	176.6	1.12	0.99
MT990074	Alexis/MT861596	174.1	173.4	186.0	163.7	172.4	173.9	1.03	0.99
MT990106	Apex/H1851195	179.1	175.8	188.0	165.0	176.0	176.8	1.07	1.00
MT990118	Apex/H1851195	177.8	174.9	188.0	165.0	176.8	176.5	1.06	0.99
MT990132	Apex/H6860756	177.1	177.0	186.0	164.3	175.9	176.1	0.99	0.98
MT990133	Apex/H6860756	176.4	175.6	187.0	166.7	176.0	176.3	0.93	0.99
MT990144	Apex/H6860756	177.4	175.8	187.0	164.3	176.0	176.1	1.04	0.99
MT990147	Apex/H6860756	178.3	178.0	188.0	167.0	176.3	177.5	0.97	1.00
MT990156	Apex/MT890070	178.3	176.0	188.0	166.0	175.7	176.8	1.02	1.00
MT990172	Apex/MT890070	179.0	177.0	189.0	167.7	176.3	177.8	0.99	1.00
MT990174	Apex/MT890070	179.0	178.0	185.0	166.3	177.0	177.1	0.86	0.96
MT990176	Apex/MT890070	181.3	179.7	189.0	168.3	176.5	178.9	0.97	0.98
MT990244	MT890018/Stark	174.6	175.0	185.0	162.7	173.3	174.1	1.02	0.98
MT990249	MT890018/Stark	173.1	172.6	185.0	161.3	172.8	173.0	1.08	0.99
MTLB 5	Lewis/Baronesse #5	179.5	178.7	187.0	168.3	176.4	178.0	0.87	0.99
MTLB 6	Lewis/Baronesse # 6	178.6	175.8	188.0	167.0	176.3	177.1	0.97	0.99
N96/1116	Justina NORD 96/1116	180.1	178.9	190.0	169.0	179.0	179.4	0.97	1.00
ND 9866	Stark	175.4	173.7	187.0	164.0	174.0	174.8	1.06	0.99
ND13299	Conlon	177.7	175.6	186.0	165.0	176.4	176.1	0.97	0.99
NORD1958	NORD 1958	178.0	175.6	189.0	167.3	176.6	177.3	1.00	0.98
PI491534	Gallatin	176.2	177.0	186.0	165.0	174.6	175.8	0.96	0.98
PI568246	Baronesse	180.1	176.0	188.0	167.7	177.0	177.8	0.95	0.99
PI605472	Garnett	179.0	177.3	188.0	167.7	177.0	177.8	0.94	1.00
PI610264	Valier	179.4	177.1	189.0	168.3	176.6	178.1	0.96	0.99
S3482	Calgary	182.3	177.4	188.0	168.3	177.0	178.6	0.93	0.97
SK 76333	Harrington	178.4	177.4	188.0	166.7	177.0	177.5	0.98	1.00
TR128	Stratus	178.7	178.6	190.0	166.7	177.5	178.3	1.07	0.99
SiteMean	SITE MEAN *****	178.4	176.6	187.8	166.2	176.1	177.0	1.00	1.00
C.V.	C.V. (S/Mean) * 100	0.73	0.68	***	0.71	0.29	***	***	***
F-Value		7.42	7.39	***	15.23	18.71	***	***	***
L.S.D.	L.S.D. (.05)	2.19	1.97	***	1.91	0.84	***	***	***
Efficiency of Design	Rel to RCB	1.03	1.01	***	0.00	1.04	***	***	***

Table 7. 2001 Montana Irrigated Intrastate Spring Barley Nursery - Overall Summary

ID	PEDIGREE	YIELD bu/ac	Test Weight lb/bu	Plump Percent over #6	Heading Date rom Jan	Plant Height inches
MT970229	MT890021/Stark	134.9	51.2	81.9	176.5	29.9
MT981091	MT851195/MT140523	133.3	49.7	77.3	175.8	27.9
MTLB 5	Lewis/Baronesse #5	132.2	49.8	73.5	177.1	30.8
MT970116	Klages/Baronesse	131.7	50.5	78.8	175.9	32.4
<b>BZ594-20</b>	<b>WPB BZ594-20</b>	<b>130.8</b>	<b>50.5</b>	<b>84.1</b>	<b>173.2</b>	<b>27.9</b>
MT970110	Klages/Baronesse	129.2	49.9	85.1	178.4	29.6
S3482	Calgary	128.2	49.2	79.5	177.1	26.7
MT981004	Baronesse/H2860224	126.6	48.8	74.0	177.1	29.2
N96/1116	Justina (NORD 96-1116)	125.9	48.5	83.4	179.4	27.0
<b>MT960100</b>	<b>Manley/Baronesse</b>	<b>125.2</b>	<b>49.3</b>	<b>66.0</b>	<b>178.9</b>	<b>28.2</b>
MT950186	MT860756/MT83533	125.2	50.8	77.4	175.2	29.5
MT960099	Manley/Baronesse	125.0	48.7	64.4	178.6	26.1
MT981238	ND112311/Lewis	124.7	50.5	78.2	174.9	31.0
MT981212	MT910150/Stark	124.5	50.4	75.7	175.4	29.7
<b>6B932978</b>	<b>Legacy</b>	<b>124.4</b>	<b>46.7</b>	<b>75.0</b>	<b>175.6</b>	<b>32.3</b>
MT981210	MT910150/Stark	124.1	49.3	82.6	177.6	29.7
PI610264	Valier	123.6	48.8	72.5	177.4	30.0
MT990106	Apex/H1851195	123.1	48.8	77.4	176.4	27.5
MT990249	MT890018/Stark	122.5	51.9	86.6	171.4	28.5
<b>ND13299</b>	<b>Conlon</b>	<b>122.5</b>	<b>48.5</b>	<b>72.1</b>	<b>177.1</b>	<b>27.9</b>
BZ596117	WPB BZ596-117	122.3	50.9	84.6	176.6	29.5
MT981006	Baronesse/H2860224	122.3	48.8	73.5	176.1	28.2
MT990244	MT890018/Stark	122.2	51.1	81.8	174.1	29.1
PI568246	Baronesse	121.9	48.6	71.1	178.1	28.2
<b>MT970026</b>	<b>Baronesse/MT860756</b>	<b>121.8</b>	<b>50.5</b>	<b>79.5</b>	<b>176.0</b>	<b>30.9</b>
MT910189	ND 7293/Bearpaw	121.7	48.6	75.5	174.7	29.1
MT981177	MT910033/Targhee	121.5	49.2	74.4	175.7	28.7
MT990172	Apex/MT890070	121.3	49.2	79.6	176.0	29.1
MTLB 6	Lewis/Baronesse #6	121.0	49.2	75.5	175.7	29.3
<b>B2L20-36</b>	<b>BCL20/Morex BC2F4</b>	<b>120.9</b>	<b>47.0</b>	<b>73.4</b>	<b>172.8</b>	<b>31.6</b>
MT970148	MT861596/ND 11120	120.9	48.0	78.7	176.0	26.8
MT981030	Baronesse/MT910160	120.5	49.7	71.5	179.2	29.2
ND 9866	Stark	120.4	50.9	84.3	173.3	32.1
NORD1958	NORD 1958	119.7	49.3	87.7	177.8	26.6
<b>2B914947</b>	<b>Merit</b>	<b>119.6</b>	<b>46.5</b>	<b>82.5</b>	<b>178.0</b>	<b>29.6</b>
SiteMean	SITE MEAN *****	119.4	48.8	76.5	176.6	28.8
C 37	Coors C37	119.4	48.8	79.1	177.3	26.9
MT960228	Stark/Baronesse	119.1	48.5	69.2	176.8	29.3
PI491534	Gallatin	119.0	49.3	69.3	175.6	31.0
<b>MT960226</b>	<b>Stark/Baronesse</b>	<b>118.9</b>	<b>49.9</b>	<b>80.4</b>	<b>176.5</b>	<b>29.2</b>
CDCBOLD	CDC Bold	118.7	48.9	75.9	177.5	28.7
PI601736	Galena	118.2	47.9	73.8	180.1	28.1
H3860224	Lewis/Apex	117.8	49.0	81.0	178.0	29.9
CI 15856	Lewis	117.5	49.4	72.4	176.4	30.8
<b>MT960101</b>	<b>Manley/Baronesse</b>	<b>117.5</b>	<b>48.6</b>	<b>66.6</b>	<b>179.7</b>	<b>28.3</b>
TR128	Stratus	116.9	45.9	63.4	179.3	25.9

Table 7 continues on next page

Table 7. 2001 Montana Irrigated Intrastate Spring Barley Nursery - Overall Summary (Continued).

ID	PEDIGREE	YIELD bu/ac	Test Weight lb/bu	Plump Percent over #6	Heading Date rom Jan	Plant Height inches
MT990156	Apex/MT890070	116.2	48.8	90.6	175.8	28.4
MT970155	MT886610/MT140523	115.7	49.3	77.5	178.3	28.4
SK 76333	Harrington	115.6	47.0	70.8	178.2	29.1
<b>MT981080</b>	<b>MT140523/Baronesse</b>	<b>115.5</b>	<b>47.8</b>	<b>74.6</b>	<b>177.4</b>	<b>28.8</b>
MT990041	Alexis/Harrington	115.4	47.4	82.8	176.2	28.3
MT960222	Stark/Baronesse	113.6	48.5	72.2	177.5	29.0
MT990074	Alexis/MT861596	112.9	49.4	70.5	172.4	29.0
C53	Coors 53	112.7	44.9	85.8	178.5	25.3
<b>PI605472</b>	<b>Garnett</b>	<b>112.6</b>	<b>48.1</b>	<b>83.3</b>	<b>179.1</b>	<b>29.1</b>
MT990023	Alexis/H1851195	112.5	47.1	75.2	175.2	31.6
MT990084	Apex/H1851195	112.2	47.5	78.0	176.2	28.9
C56	Coors 56	110.3	50.0	80.5	172.8	25.1
MT981042	H5860219/Baronesse	109.7	48.5	64.6	178.6	28.2
<b>C46</b>	<b>Coors 46</b>	<b>108.0</b>	<b>45.2</b>	<b>68.5</b>	<b>179.4</b>	<b>26.7</b>
MT990132	Apex/H6860756	107.0	48.7	74.1	176.3	29.1
CI 15773	Morex	106.1	47.0	66.8	173.7	33.6
MT981039	H5860219/Baronesse	104.0	49.2	79.1	179.1	28.8
C57	Coors 57	100.2	44.1	72.1	179.7	24.6
C40	Coors 40	99.8	46.4	75.5	170.6	25.7
C.V.*	C.V. (S/Mean) * 100	8.85	2.54	10.98	53.77	5.02
P-Value*		0.0001	0.0001	0.0001	0.0001	0.0001
L.S.D.*	L.S.D. (.05)	13.16	1.54	10.46	1.70	1.80

\*SAS Analysis proc GLM using lattice means for each location (p=.05)

Table 8. 2001 Montana Irrigated Intrastate Spring Barley Nursery - Yield Summary (Bu/Ac) by Location

ID	PEDIGREE	Kalispell High M	Sidney Irr	Huntley Irr	Conrad Irr	Bozeman Irr	AVG	BYX	RSQ
2B914947	Merit	186.8	53.2	138.2	73.2	146.6	119.6	1.09	0.96
6B932978	Legacy	174.1	68.3	175.7	70.2	133.8	124.4	1.05	0.96
<b>B2L20-36</b>	<b>BCL20/Morex BC2F4</b>	<b>168.8</b>	<b>83.9</b>	<b>169.8</b>	<b>61.2</b>	<b>120.9</b>	<b>120.9</b>	<b>0.94</b>	<b>0.90</b>
BZ594-20	WPB BZ594-20	178.0	82.7	171.9	72.8	148.7	130.8	0.99	0.97
BZ596117	WPB BZ596-117	161.9	64.1	157.6	81.2	146.6	122.3	0.91	0.96
C 37	Coors C37	183.6	57.2	160.8	75.7	119.9	119.4	1.07	0.97
C40	Coors 40	148.4	51.9	133.9	55.5	109.4	99.8	0.89	0.99
<b>C46</b>	<b>Coors 46</b>	<b>183.7</b>	<b>32.8</b>	<b>133.2</b>	<b>75.1</b>	<b>115.5</b>	<b>108.0</b>	<b>1.11</b>	<b>0.92</b>
C53	Coors 53	172.6	54.9	145.8	70.9	119.2	112.7	0.99	0.98
C56	Coors 56	177.8	61.0	148.0	60.7	104.0	110.3	1.02	0.93
C57	Coors 57	156.7	30.6	126.9	73.1	113.7	100.2	0.96	0.93
CDCBOLD	CDC Bold	172.0	63.2	144.4	71.4	142.5	118.7	0.97	0.99
<b>CI 15773</b>	<b>Morex</b>	<b>146.4</b>	<b>79.3</b>	<b>148.8</b>	<b>51.0</b>	<b>105.2</b>	<b>106.1</b>	<b>0.79</b>	<b>0.85</b>
CI 15856	Lewis	169.7	59.8	152.7	71.7	133.8	117.5	0.99	1.00
H3860224	Lewis/Apex	173.1	54.9	146.2	73.5	141.6	117.8	1.02	0.99
MT910189	ND 7293/Bearpaw	189.1	56.8	164.1	64.3	134.1	121.7	1.19	0.99
MT950186	MT860756/MT83533	181.1	73.2	163.3	76.9	131.4	125.2	0.99	0.99
<b>MT960099</b>	<b>Manley/Baronesse</b>	<b>183.9</b>	<b>72.0</b>	<b>146.4</b>	<b>73.5</b>	<b>149.1</b>	<b>125.0</b>	<b>0.99</b>	<b>0.97</b>
MT960100	Manley/Baronesse	167.7	51.1	174.9	80.5	151.7	125.2	1.09	0.94
MT960101	Manley/Baronesse	187.2	55.6	129.4	72.7	142.8	117.5	1.04	0.93
MT960222	Stark/Baronesse	144.7	67.0	153.9	81.7	121.0	113.6	0.75	0.94
MT960226	Stark/Baronesse	166.6	67.5	149.0	71.4	140.1	118.9	0.93	0.99
<b>MT960228</b>	<b>Stark/Baronesse</b>	<b>147.6</b>	<b>60.7</b>	<b>172.6</b>	<b>83.0</b>	<b>131.6</b>	<b>119.1</b>	<b>0.87</b>	<b>0.87</b>
MT970026	Baronesse/MT860756	176.3	61.7	170.2	63.7	137.0	121.8	1.12	0.98
MT970110	Klages/Baronesse	179.3	91.0	155.9	80.4	139.3	129.2	0.84	0.97
MT970116	Klages/Baronesse	202.6	73.1	173.9	65.5	143.3	131.7	1.22	0.99
MT970148	MT861596/ND 11120	193.7	67.4	139.5	68.5	135.2	120.9	1.05	0.95
<b>MT970155</b>	<b>MT886610/MT140523</b>	<b>152.0</b>	<b>58.6</b>	<b>145.0</b>	<b>71.3</b>	<b>151.7</b>	<b>115.7</b>	<b>0.90</b>	<b>0.92</b>
MT970229	MT890021/Stark	193.0	78.0	173.9	78.1	151.4	134.9	1.09	1.00
MT981004	Baronesse/H2860224	181.0	54.7	162.6	79.4	155.1	126.6	1.11	0.97
MT981006	Baronesse/H2860224	166.1	71.5	154.2	82.3	137.6	122.3	0.86	0.99
MT981030	Baronesse/MT910160	183.6	50.5	148.1	74.5	145.8	120.5	1.11	0.98
<b>MT981039</b>	<b>H5860219/Baronesse</b>	<b>150.1</b>	<b>34.5</b>	<b>129.9</b>	<b>74.4</b>	<b>131.0</b>	<b>104.0</b>	<b>0.93</b>	<b>0.92</b>
MT981042	H5860219/Baronesse	158.4	52.8	124.8	71.8	140.9	109.7	0.88	0.93
MT981080	MT140523/Baronesse	176.8	54.5	148.5	75.3	122.5	115.5	1.01	0.98

Table 8 continues on next page

Table 8. 2001 Montana Irrigated Intrastate Spring Barley Nursery - Yield Summary (Bu/Ac) by Location (Continued).

ID	PEDIGREE	Kalispell High M	Sidney Irr	Huntley Irr	Conrad Irr	Bozeman Irr	AVG	BYX	RSQ
MT981091	MT851195/MT140523	217.3	81.0	150.8	67.8	149.8	133.3	1.17	0.92
MT981177	MT910033/Targhee	168.5	68.2	158.3	71.4	141.1	121.5	0.97	0.99
<b>MT981210</b>	<b>MT910150/Stark</b>	<b>191.2</b>	<b>65.4</b>	<b>157.4</b>	<b>68.0</b>	<b>138.2</b>	<b>124.1</b>	<b>1.12</b>	<b>0.99</b>
MT981212	MT910150/Stark	183.1	64.8	164.9	65.2	144.6	124.5	1.13	1.00
MT981238	ND112311/Lewis	194.1	78.7	137.4	66.9	146.7	124.7	1.01	0.92
MT990023	Alexis/H1851195	167.0	53.7	151.0	70.0	120.9	112.5	0.99	0.99
MT990041	Alexis/Harrington	182.1	69.1	134.1	62.6	129.1	115.4	0.98	0.95
<b>MT990074</b>	<b>Alexis/MT861596</b>	<b>185.8</b>	<b>58.3</b>	<b>147.7</b>	<b>57.5</b>	<b>115.1</b>	<b>112.9</b>	<b>1.11</b>	<b>0.96</b>
MT990084	Apex/H1851195	167.1	66.6	141.9	65.2	120.6	112.2	0.91	0.99
MT990106	Apex/H1851195	163.2	58.5	171.1	75.6	147.2	123.1	1.03	0.95
MT990132	Apex/H6860756	145.6	53.3	151.6	68.8	115.8	107.0	0.88	0.96
MT990156	Apex/MT890070	170.7	60.9	145.1	71.6	133.0	116.2	0.96	0.99
<b>MT990172</b>	<b>Apex/MT890070</b>	<b>174.5</b>	<b>72.1</b>	<b>152.7</b>	<b>71.1</b>	<b>136.1</b>	<b>121.3</b>	<b>0.95</b>	<b>0.99</b>
MT990244	MT890018/Stark	187.6	73.2	156.0	64.9	129.3	122.2	1.05	0.97
MT990249	MT890018/Stark	165.5	82.9	159.1	68.6	136.2	122.5	0.88	0.96
MTLB 5	Lewis/Baronesse #5	211.8	65.6	160.6	80.5	142.3	132.2	1.19	0.97
MTLB 6	Lewis/Baronesse #6	168.7	63.5	154.3	75.9	142.7	121.0	0.96	0.99
<b>N96/1116</b>	<b>Justina (NORD 96-1116)</b>	<b>176.2</b>	<b>59.4</b>	<b>166.2</b>	<b>75.5</b>	<b>152.0</b>	<b>125.9</b>	<b>1.09</b>	<b>0.98</b>
ND 9866	Stark	170.1	64.7	157.5	73.3	136.4	120.4	0.98	1.00
ND13299	Conlon	173.3	58.6	160.3	74.9	145.4	122.5	1.05	0.99
NORD1958	NORD 1958	167.4	68.8	160.8	71.3	130.0	119.7	0.95	0.98
PI491534	Gallatin	181.4	64.3	144.7	70.0	134.6	119.0	1.01	0.99
<b>PI568246</b>	<b>Baronesse</b>	<b>173.5</b>	<b>64.2</b>	<b>158.4</b>	<b>85.9</b>	<b>127.3</b>	<b>121.9</b>	<b>0.93</b>	<b>0.98</b>
PI601736	Galena	166.0	57.3	158.2	69.5	140.1	118.2	1.02	0.98
PI605472	Garnett	156.5	62.6	135.0	71.8	136.9	112.6	0.85	0.98
PI610264	Valier	173.6	63.3	166.7	74.7	139.6	123.6	1.04	0.99
S3482	Calgary	187.3	61.2	164.3	73.8	154.6	128.2	1.14	0.99
<b>SK 76333</b>	<b>Harrington</b>	<b>178.5</b>	<b>61.9</b>	<b>131.5</b>	<b>67.7</b>	<b>138.4</b>	<b>115.6</b>	<b>0.98</b>	<b>0.95</b>
TR128	Stratus	165.6	64.6	141.2	79.9	133.2	116.9	0.86	0.99
SiteMean	SITE MEAN *****	174.2	63.1	152.7	71.7	135.2	119.4	1.00	1.00
C.V.	C.V. (S/Mean) * 100	14.45	13.35	5.54	10.17	5.92	****	****	****
F-Value		0.97	5.05	6.85	2.32	6.75	****	****	****
L.S.D.	L.S.D. (.05)	43.34	14.09	14.07	12.62	13.38	****	****	****
Efficiency	Design Rel to RCB	1.24	1.03	1.02	1.37	1.03	****	****	****

Table 9. 2001 Montana Irrigated Intrastate Spring Barley Nursery - Test Weight Summary (Lbs/Bu) by Location

ID	PEDIGREE	Kalispell High M	Sidney Irr	Huntley Irr	Conrad Irr	Bozeman Irr	AVG	BYX	RSQ
2B914947	Merit	52.1	34.0	46.9	47.3	52.1	46.5	1.24	0.99
6B932978	Legacy	50.3	37.7	46.7	47.6	51.5	46.7	0.91	0.99
<b>B2L20-36</b>	<b>BCL20/Morex BC2F4</b>	<b>51.0</b>	<b>39.1</b>	<b>45.9</b>	<b>48.2</b>	<b>51.1</b>	<b>47.0</b>	<b>0.82</b>	<b>0.97</b>
BZ594-20	WPB BZ594-20	53.1	42.7	49.9	52.2	54.7	50.5	0.79	0.98
BZ596117	WPB BZ596-117	54.3	42.4	50.0	53.1	54.9	50.9	0.86	0.98
C 37	Coors C37	54.1	39.1	49.0	49.8	51.9	48.8	0.95	0.96
C40	Coors 40	49.7	36.0	46.6	49.2	50.4	46.4	1.01	0.99
<b>C46</b>	<b>Coors 46</b>	<b>50.3</b>	<b>30.6</b>	<b>44.3</b>	<b>49.8</b>	<b>50.9</b>	<b>45.2</b>	<b>1.44</b>	<b>0.98</b>
C53	Coors 53	49.9	32.6	45.6	47.9	48.5	44.9	1.18	0.98
C56	Coors 56	54.3	41.1	49.9	52.0	52.6	50.0	0.87	0.98
C57	Coors 57	49.5	31.3	44.2	47.0	48.7	44.1	1.26	0.99
CDCBOLD	CDC Bold	52.5	38.8	48.7	50.5	54.3	48.9	1.02	0.99
<b>CI 15773</b>	<b>Morex</b>	<b>48.7</b>	<b>39.2</b>	<b>47.1</b>	<b>48.9</b>	<b>51.2</b>	<b>47.0</b>	<b>0.77</b>	<b>0.98</b>
CI 15856	Lewis	52.9	38.6	50.7	50.9	53.7	49.4	1.03	0.99
H3860224	Lewis/Apex	53.2	37.0	50.6	50.4	53.7	49.0	1.15	0.98
MT910189	ND 7293/Bearpaw	52.9	37.6	48.9	51.2	52.4	48.6	1.07	1.00
MT950186	MT860756/MT83533	53.1	42.1	51.2	52.9	55.0	50.8	0.85	0.98
<b>MT960099</b>	<b>Manley/Baronesse</b>	<b>52.5</b>	<b>39.0</b>	<b>48.5</b>	<b>50.2</b>	<b>53.3</b>	<b>48.7</b>	<b>0.97</b>	<b>0.99</b>
MT960100	Manley/Baronesse	52.8	38.0	49.4	51.4	54.8	49.3	1.11	0.99
MT960101	Manley/Baronesse	53.0	36.6	48.8	51.0	53.4	48.6	1.17	1.00
MT960222	Stark/Baronesse	51.6	37.3	49.1	52.1	52.4	48.5	1.07	0.97
MT960226	Stark/Baronesse	52.3	42.1	49.6	51.4	54.1	49.9	0.78	0.98
<b>MT960228</b>	<b>Stark/Baronesse</b>	<b>52.6</b>	<b>37.7</b>	<b>48.1</b>	<b>52.1</b>	<b>52.1</b>	<b>48.5</b>	<b>1.06</b>	<b>0.98</b>
MT970026	Baronesse/MT860756	54.5	40.3	50.7	52.9	54.4	50.5	1.00	0.99
MT970110	Klages/Baronesse	53.4	42.5	49.3	50.7	53.8	49.9	0.77	0.98
MT970116	Klages/Baronesse	53.3	42.4	50.4	51.2	55.0	50.5	0.81	0.98
MT970148	MT861596/ND 11120	52.0	35.9	49.7	50.5	51.8	48.0	1.14	0.98
<b>MT970155</b>	<b>MT886610/MT140523</b>	<b>52.2</b>	<b>40.9</b>	<b>47.5</b>	<b>52.3</b>	<b>53.8</b>	<b>49.3</b>	<b>0.86</b>	<b>0.94</b>
MT970229	MT890021/Stark	54.0	42.6	51.5	52.3	55.6	51.2	0.85	0.99
MT981004	Baronesse/H2860224	52.0	39.3	48.3	50.8	53.9	48.8	0.96	0.99
MT981006	Baronesse/H2860224	51.5	38.4	49.4	51.2	53.6	48.8	1.01	0.99
MT981030	Baronesse/MT910160	54.3	36.5	49.8	52.7	55.2	49.7	1.29	1.00
<b>MT981039</b>	<b>H5860219/Baronesse</b>	<b>52.6</b>	<b>39.4</b>	<b>48.8</b>	<b>52.0</b>	<b>53.4</b>	<b>49.2</b>	<b>0.98</b>	<b>1.00</b>
MT981042	H5860219/Baronesse	52.7	39.0	46.4	50.2	54.4	48.5	1.01	0.95
MT981080	MT140523/Baronesse	51.9	37.2	47.8	50.9	51.2	47.8	1.03	0.98

Table 9 continues on next page

Table 9. 2001 Montana Irrigated Intrastate Spring Barley Nursery - Test Weight Summary (Lbs/Bu) by Location (Continued).

ID	PEDIGREE	Kalispell High M	Sidney Irr	Huntley Irr	Conrad Irr	Bozeman Irr	AVG	BYX	RSQ
MT981091	MT851195/MT140523	53.4	42.1	48.3	50.6	54.1	49.7	0.80	0.96
MT981177	MT910033/Targhee	53.3	38.3	49.6	50.9	53.9	49.2	1.07	1.00
MT981210	MT910150/Stark	53.8	38.2	48.7	52.2	53.5	49.3	1.10	0.99
MT981212	MT910150/Stark	53.2	42.3	50.5	51.9	54.0	50.4	0.79	0.99
MT981238	ND112311/Lewis	54.0	42.6	51.0	50.3	54.9	50.5	0.80	0.95
MT990023	Alexis/H1851195	52.8	34.2	48.0	49.8	51.0	47.1	1.25	0.99
MT990041	Alexis/Harrington	52.6	36.4	48.2	48.8	51.0	47.4	1.07	0.98
MT990074	Alexis/MT861596	52.9	41.3	49.5	50.7	52.6	49.4	0.80	0.99
MT990084	Apex/H1851195	51.6	37.7	48.0	47.9	52.1	47.5	0.97	0.98
MT990106	Apex/H1851195	51.9	36.4	50.5	51.7	53.5	48.8	1.17	0.97
MT990132	Apex/H6860756	51.6	36.4	49.2	52.3	54.2	48.7	1.19	0.98
MT990156	Apex/MT890070	51.8	39.9	49.3	49.5	53.6	48.8	0.89	0.99
MT990172	Apex/MT890070	52.8	39.4	50.0	50.5	53.4	49.2	0.96	1.00
MT990244	MT890018/Stark	54.4	44.5	50.5	51.6	54.4	51.1	0.68	0.97
MT990249	MT890018/Stark	54.5	45.8	51.1	52.5	55.6	51.9	0.63	0.96
MTLB 5	Lewis/Baronesse #5	53.4	39.0	51.7	51.9	53.2	49.8	1.01	0.97
MTLB 6	Lewis/Baronesse #6	53.0	39.9	49.3	50.9	52.8	49.2	0.91	0.99
N96/1116	Justina (NORD 96-1116)	52.1	38.9	47.7	49.5	54.0	48.5	0.98	0.98
ND 9866	Stark	53.9	43.1	50.5	52.2	55.1	50.9	0.80	0.99
ND13299	Conlon	51.7	36.9	50.3	50.4	53.4	48.5	1.11	0.98
NORD1958	NORD 1958	53.4	38.0	50.0	52.3	52.8	49.3	1.08	0.99
PI491534	Gallatin	53.9	38.8	50.4	50.5	53.0	49.3	1.01	0.98
PI568246	Baronesse	51.9	38.5	49.6	51.3	51.9	48.6	0.96	0.98
PI601736	Galena	52.6	36.2	48.7	49.2	52.9	47.9	1.15	1.00
PI605472	Garnett	51.9	36.7	48.4	50.4	52.9	48.1	1.11	0.99
PI610264	Valier	53.3	37.0	50.5	50.4	52.6	48.8	1.12	0.98
S3482	Calgary	52.7	36.9	50.8	51.1	54.8	49.2	1.19	0.98
SK 76333	Harrington	52.4	35.1	47.6	49.2	50.7	47.0	1.16	0.99
TR128	Stratus	48.7	34.4	45.7	49.2	51.2	45.9	1.12	0.98
SiteMean	SITE MEAN *****	52.5	38.6	49.0	50.7	53.1	48.8	1.00	1.00
C.V.	C.V. (S/Mean) * 100	1.60	4.04	2.36	****	0.94	****	****	****
F-Value		7.09	10.21	5.89	****	19.64	****	****	****
L.S.D.	L.S.D. (.05)	1.47	2.70	1.95	****	0.99	****	****	****
Efficiency	Design Rel to RCB	2.09	1.34	1.06	****	****	****	****	****

Table 10. 2001 Montana Irrigated Intrastate Spring Barley Nursery - % Plump (over 6/64 screen) by Location

ID	PEDIGREE	Kalispell High M	Sidney Irr	Huntley Irr	Conrad Irr	Bozeman Irr	AVG	BYX	RSQ
2B914947	Merit	93.9	55.0	85.3	96.0	82.1	82.5	0.75	0.97
6B932978	Legacy	79.6	52.0	83.9	94.0	65.6	75.0	0.72	0.88
<b>B2L20-36</b>	<b>BCL20/Morex BC2F4</b>	<b>90.4</b>	<b>36.0</b>	<b>84.7</b>	<b>90.0</b>	<b>66.1</b>	<b>73.4</b>	<b>1.07</b>	<b>0.98</b>
BZ594-20	WPB BZ594-20	95.4	66.0	92.6	85.0	81.4	84.1	0.49	0.83
BZ596117	WPB BZ596-117	91.0	65.0	88.4	96.0	82.6	84.6	0.55	0.98
C 37	Coors C37	93.5	42.0	92.5	95.0	72.6	79.1	1.05	0.99
C40	Coors 40	82.1	41.0	86.8	96.0	71.6	75.5	0.97	0.97
<b>C46</b>	<b>Coors 46</b>	<b>81.3</b>	<b>21.0</b>	<b>73.9</b>	<b>94.0</b>	<b>72.3</b>	<b>68.5</b>	<b>1.27</b>	<b>0.95</b>
C53	Coors 53	96.1	77.0	87.5	98.0	70.5	85.8	0.39	0.49
C56	Coors 56	91.8	58.0	92.5	96.0	64.4	80.5	0.75	0.81
C57	Coors 57	84.3	21.0	84.2	97.0	73.8	72.1	1.37	0.98
CDCBOLD	CDC Bold	88.0	34.0	83.1	91.0	83.6	75.9	1.06	0.93
<b>CI 15773</b>	<b>Morex</b>	<b>72.1</b>	<b>32.0</b>	<b>88.4</b>	<b>86.0</b>	<b>55.3</b>	<b>66.8</b>	<b>1.03</b>	<b>0.88</b>
CI 15856	Lewis	87.7	28.0	90.0	90.0	66.5	72.4	1.24	0.99
H3860224	Lewis/Apex	95.4	40.0	92.3	97.0	80.2	81.0	1.11	1.00
MT910189	ND 7293/Bearpaw	92.8	31.0	84.6	96.0	72.9	75.5	1.23	1.00
MT950186	MT860756/MT83533	89.5	38.0	88.0	95.0	76.4	77.4	1.07	0.99
<b>MT960099</b>	<b>Manley/Baronesse</b>	<b>91.2</b>	<b>42.0</b>	<b>65.1</b>	<b>72.0</b>	<b>51.5</b>	<b>64.4</b>	<b>0.72</b>	<b>0.66</b>
MT960100	Manley/Baronesse	82.3	13.0	81.1	87.0	66.5	66.0	1.42	0.99
MT960101	Manley/Baronesse	86.4	22.0	71.9	93.0	59.9	66.6	1.29	0.97
MT960222	Stark/Baronesse	85.2	35.0	87.4	91.0	62.4	72.2	1.09	0.97
MT960226	Stark/Baronesse	82.7	61.0	87.2	90.0	81.1	80.4	0.52	0.95
<b>MT960228</b>	<b>Stark/Baronesse</b>	<b>88.3</b>	<b>24.0</b>	<b>84.5</b>	<b>93.0</b>	<b>56.1</b>	<b>69.2</b>	<b>1.34</b>	<b>0.97</b>
MT970026	Baronesse/MT860756	94.3	41.0	90.1	97.0	75.3	79.5	1.08	1.00
MT970110	Klages/Baronesse	90.6	82.0	83.7	95.0	74.3	85.1	0.20	0.28
MT970116	Klages/Baronesse	94.7	32.0	90.7	94.0	82.6	78.8	1.22	0.97
MT970148	MT861596/ND 11120	88.4	50.0	90.0	93.0	72.1	78.7	0.83	0.98
<b>MT970155</b>	<b>MT886610/MT140523</b>	<b>90.0</b>	<b>39.0</b>	<b>78.5</b>	<b>95.0</b>	<b>84.9</b>	<b>77.5</b>	<b>0.99</b>	<b>0.90</b>
MT970229	MT890021/Stark	96.5	39.0	93.8	96.0	84.3	81.9	1.13	0.98
MT981004	Baronesse/H2860224	79.5	33.0	85.3	97.0	75.4	74.0	1.11	0.95
MT981006	Baronesse/H2860224	78.2	37.0	83.6	97.0	71.9	73.5	1.01	0.94
MT981030	Baronesse/MT910160	88.8	17.0	80.2	93.0	78.7	71.5	1.41	0.95
<b>MT981039</b>	<b>H5860219/Baronesse</b>	<b>90.0</b>	<b>46.0</b>	<b>84.7</b>	<b>96.0</b>	<b>78.7</b>	<b>79.1</b>	<b>0.91</b>	<b>0.99</b>
MT981042	H5860219/Baronesse	76.5	23.0	64.6	88.0	70.7	64.6	1.10	0.90
MT981080	MT140523/Baronesse	86.1	47.0	83.9	96.0	59.8	74.6	0.89	0.88

Table 10 continues on next page

Table 10. 2001 Montana Irrigated Intrastate Spring Barley Nursery - % Plump (over 6/64 screen) by Location

ID	PEDIGREE	Kalispell High M	Sidney Irr	Huntley Irr	Conrad Irr	Bozeman Irr	AVG	BYX	RSQ
MT981091	MT851195/MT140523	88.4	46.0	82.6	92.0	77.7	77.3	0.85	0.99
MT981177	MT910033/Targhee	91.4	27.0	86.3	90.0	77.2	74.4	1.24	0.97
MT981210	MT910150/Stark	94.9	62.0	84.3	94.0	78.0	82.6	0.61	0.93
MT981212	MT910150/Stark	87.8	35.0	88.5	90.0	77.5	75.7	1.07	0.97
MT981238	ND112311/Lewis	87.2	42.0	89.1	86.0	86.8	78.2	0.88	0.87
MT990023	Alexis/H1851195	93.4	39.0	88.4	93.0	62.3	75.2	1.09	0.95
MT990041	Alexis/Harrington	92.7	67.0	91.2	93.0	70.3	82.8	0.54	0.78
MT990074	Alexis/MT861596	93.4	29.0	84.5	87.0	58.7	70.5	1.21	0.95
MT990084	Apex/H1851195	91.3	48.0	86.9	92.0	71.9	78.0	0.86	0.98
MT990106	Apex/H1851195	92.4	35.0	91.4	94.0	74.2	77.4	1.16	0.99
MT990132	Apex/H6860756	83.7	37.0	85.7	90.0	74.3	74.1	1.00	0.99
MT990156	Apex/MT890070	93.5	84.0	94.5	95.0	85.9	90.6	0.22	0.81
MT990172	Apex/MT890070	87.9	40.0	91.8	95.0	83.4	79.6	1.03	0.96
MT990244	MT890018/Stark	92.4	55.0	85.5	91.0	85.3	81.8	0.69	0.94
MT990249	MT890018/Stark	95.4	67.0	88.2	93.0	89.7	86.6	0.51	0.92
MTLB 5	Lewis/Baronesse #5	85.5	25.0	94.0	95.0	68.0	73.5	1.34	0.97
MTLB 6	Lewis/Baronesse #6	92.5	32.0	86.3	93.0	73.6	75.5	1.19	1.00
N96/1116	Justina (NORD 96-1116)	97.4	40.0	92.7	97.0	90.1	83.4	1.11	0.94
ND 9866	Stark	94.7	55.0	92.2	94.0	85.6	84.3	0.77	0.97
ND13299	Conlon	81.3	22.0	92.3	93.0	71.9	72.1	1.34	0.96
NORD195f	NORD 1958	93.2	73.0	93.7	97.0	81.8	87.7	0.45	0.93
PI491534	Gallatin	92.0	17.0	88.5	95.0	54.0	69.3	1.54	0.97
PI568246	Baronesse	92.4	31.0	85.6	93.0	53.7	71.1	1.24	0.92
PI601736	Galena	92.4	18.0	90.8	94.0	74.0	73.8	1.49	0.98
PI605472	Garnett	95.9	49.0	88.3	98.0	85.4	83.3	0.91	0.97
PI610264	Valier	94.4	20.0	88.6	92.0	67.7	72.5	1.45	0.99
S3482	Calgary	90.4	31.0	93.6	95.0	87.3	79.5	1.23	0.93
SK 76333	Harrington	86.9	26.0	82.3	94.0	64.6	70.8	1.27	1.00
TR128	Stratus	80.6	17.0	68.0	94.0	57.5	63.4	1.34	0.96
SiteMean	SITE MEAN *****	89.2	40.5	86.3	93.0	73.3	76.5	1.00	1.00
C.V.	C.V. (S/Mean) * 100	****	****	5.75	****	7.41	****	****	****
F-Value		****	****	4.64	****	6.47	****	****	****
L.S.D.	L.S.D. (.05)	****	****	8.46	****	10.86	****	****	****
Efficiency	Design Rel to RCB	****	****	1.13	****	****	****	****	****

Table 11. 2001 Montana Irrigated Intrastate Spring Barley Nursery - Plant Height Summary (Inches) by Location

ID	PEDIGREE	Kalispell High M	Sidney Irr	Huntley Irr	Conrad Irr	Bozeman Irr	AVG	BYX	RSQ
2B914947	Merit	33.8	29.5	31.7	23.0	29.8	29.6	1.23	0.93
6B932978	Legacy	33.9	30.9	34.7	27.0	35.1	32.3	0.91	0.73
<b>B2L20-36</b>	<b>BCL20/Morex BC2F4</b>	<b>31.2</b>	<b>30.8</b>	<b>33.9</b>	<b>29.0</b>	<b>33.3</b>	<b>31.6</b>	<b>0.46</b>	<b>0.55</b>
BZ594-20	WPB BZ594-20	29.1	26.9	30.1	24.0	29.3	27.9	0.71	0.84
BZ596117	WPB BZ596-117	33.1	29.4	31.9	25.0	27.9	29.5	0.98	0.92
C 37	Coors C37	29.9	27.7	30.4	23.0	23.5	26.9	0.95	0.75
C40	Coors 40	26.5	26.9	29.3	22.0	23.7	25.7	0.77	0.74
<b>C46</b>	<b>Coors 46</b>	<b>28.8</b>	<b>29.1</b>	<b>30.7</b>	<b>22.0</b>	<b>22.9</b>	<b>26.7</b>	<b>1.01</b>	<b>0.66</b>
C53	Coors 53	28.0	24.2	29.0	21.0	24.5	25.3	1.00	0.97
C56	Coors 56	28.7	26.2	28.2	21.0	21.3	25.1	0.98	0.70
C57	Coors 57	25.6	24.7	28.6	18.0	25.9	24.6	1.16	0.87
CDCBOLD	CDC Bold	31.4	27.4	32.6	22.0	30.0	28.7	1.28	0.94
<b>CI 15773</b>	<b>Morex</b>	<b>38.1</b>	<b>33.3</b>	<b>35.6</b>	<b>24.0</b>	<b>37.3</b>	<b>33.6</b>	<b>1.56</b>	<b>0.76</b>
CI 15856	Lewis	32.9	30.7	34.5	25.0	30.8	30.8	1.12	0.97
H3860224	Lewis/Apex	30.5	29.1	33.6	25.0	31.3	29.9	0.91	0.82
MT910189	ND 7293/Bearpaw	32.1	28.8	32.5	24.0	28.1	29.1	1.08	0.99
MT950186	MT860756/MT83533	31.0	30.1	33.5	24.0	28.7	29.5	1.06	0.92
<b>MT960099</b>	<b>Manley/Baronesse</b>	<b>28.5</b>	<b>26.6</b>	<b>29.4</b>	<b>19.0</b>	<b>27.1</b>	<b>26.1</b>	<b>1.24</b>	<b>0.91</b>
MT960100	Manley/Baronesse	29.1	28.4	31.2	25.0	27.3	28.2	0.68	0.88
MT960101	Manley/Baronesse	31.0	27.4	31.5	22.0	29.6	28.3	1.18	0.94
MT960222	Stark/Baronesse	31.0	29.2	31.6	25.0	28.4	29.0	0.81	0.98
MT960226	Stark/Baronesse	30.8	29.0	31.7	26.0	28.6	29.2	0.69	0.98
<b>MT960228</b>	<b>Stark/Baronesse</b>	<b>30.8</b>	<b>28.1</b>	<b>32.3</b>	<b>27.0</b>	<b>28.1</b>	<b>29.3</b>	<b>0.63</b>	<b>0.83</b>
MT970026	Baronesse/MT860756	33.5	30.9	34.5	26.0	29.6	30.9	1.04	0.97
MT970110	Klages/Baronesse	33.0	28.6	32.8	26.0	27.6	29.6	0.93	0.87
MT970116	Klages/Baronesse	35.6	32.4	34.7	28.0	31.4	32.4	0.92	0.96
MT970148	MT861596/ND 11120	30.8	28.0	30.9	19.0	25.5	26.8	1.51	0.95
<b>MT970155</b>	<b>MT886610/MT140523</b>	<b>30.1</b>	<b>30.8</b>	<b>32.4</b>	<b>23.0</b>	<b>25.9</b>	<b>28.4</b>	<b>1.05</b>	<b>0.75</b>
MT970229	MT890021/Stark	31.3	30.1	34.1	26.0	28.1	29.9	0.89	0.84
MT981004	Baronesse/H2860224	30.4	30.4	32.2	25.0	28.0	29.2	0.81	0.86
MT981006	Baronesse/H2860224	29.8	28.1	31.6	25.0	26.4	28.2	0.77	0.87
MT981030	Baronesse/MT910160	33.7	26.0	32.3	25.0	28.9	29.2	1.08	0.82
<b>MT981039</b>	<b>H5860219/Baronesse</b>	<b>30.8</b>	<b>27.0</b>	<b>32.0</b>	<b>25.0</b>	<b>29.0</b>	<b>28.8</b>	<b>0.85</b>	<b>0.92</b>
MT981042	H5860219/Baronesse	31.5	27.9	30.8	23.0	27.8	28.2	1.04	0.98
MT981080	MT140523/Baronesse	31.8	29.5	31.5	23.0	28.0	28.8	1.10	0.96

Table 11 continues on next page

Table 11. 2001 Montana Irrigated Intrastate Spring Barley Nursery - Plant Height Summary (Inches) by Location (Continued).

ID	PEDIGREE	Kalispell High M	Sidney Irr	Huntley Irr	Conrad Irr	Bozeman Irr	AVG	BYX	RSQ
MT981091	MT851195/MT140523	32.4	27.2	30.9	21.0	28.1	27.9	1.36	0.97
MT981177	MT910033/Targhee	31.8	26.4	31.9	23.0	30.5	28.7	1.14	0.87
MT981210	MT910150/Stark	31.4	27.7	34.3	24.0	31.0	29.7	1.16	0.87
MT981212	MT910150/Stark	31.6	30.2	31.6	24.0	31.1	29.7	0.93	0.83
MT981238	ND112311/Lewis	35.6	29.4	33.3	26.0	30.7	31.0	1.10	0.90
MT990023	Alexis/H1851195	33.7	30.8	35.2	28.0	30.1	31.6	0.87	0.92
MT990041	Alexis/Harrington	33.6	29.8	28.8	21.0	28.0	28.3	1.24	0.74
MT990074	Alexis/MT861596	32.4	29.5	30.7	23.0	29.3	29.0	1.06	0.90
MT990084	Apex/H1851195	31.7	27.9	32.6	24.0	28.3	28.9	1.07	0.99
MT990106	Apex/H1851195	30.8	27.0	28.9	23.0	27.8	27.5	0.87	0.91
MT990132	Apex/H6860756	31.7	27.5	34.9	24.0	27.3	29.1	1.26	0.89
MT990156	Apex/MT890070	30.7	26.9	29.9	25.0	29.7	28.4	0.68	0.80
MT990172	Apex/MT890070	32.8	27.0	32.0	23.0	30.5	29.1	1.21	0.90
MT990244	MT890018/Stark	30.5	28.5	32.2	25.0	29.1	29.1	0.83	0.97
MT990249	MT890018/Stark	28.9	29.5	31.4	24.0	28.7	28.5	0.77	0.81
MTLB 5	Lewis/Baronesse #5	32.8	28.4	33.7	29.0	30.1	30.8	0.61	0.68
MTLB 6	Lewis/Baronesse #6	33.6	25.9	33.5	24.0	29.5	29.3	1.28	0.87
N96/1116	Justina (NORD 96-1116)	29.2	26.1	30.3	24.0	25.5	27.0	0.78	0.89
ND 9866	Stark	35.2	30.9	35.4	27.0	32.1	32.1	1.08	0.98
ND13299	Conlon	32.9	26.8	30.7	22.0	27.0	27.9	1.27	0.94
NORD195f	NORD 1958	28.7	27.9	29.4	21.0	26.1	26.6	1.01	0.90
PI491534	Gallatin	33.4	29.8	34.0	29.0	28.6	31.0	0.66	0.68
PI568246	Baronesse	31.7	27.9	30.7	24.0	26.7	28.2	0.94	0.92
PI601736	Galena	29.7	27.4	31.4	26.0	25.8	28.1	0.64	0.69
PI605472	Garnett	33.0	27.8	30.6	24.0	30.4	29.1	0.99	0.85
PI610264	Valier	32.6	27.8	34.7	23.0	32.0	30.0	1.38	0.89
S3482	Calgary	31.0	23.6	29.0	22.0	27.9	26.7	1.05	0.78
SK 76333	Harrington	33.3	27.5	32.3	24.0	28.2	29.1	1.17	0.95
TR128	Stratus	29.8	25.7	29.9	21.0	23.1	25.9	1.18	0.89
SiteMean	SITE MEAN *****	31.5	28.3	31.9	24.0	28.5	28.8	1.00	1.00
C.V.	C.V. (S/Mean) * 100	5.54	7.31	6.53	****	3.02	****	****	****
F-Value		4.57	2.43	2.48	****	28.59	****	****	****
L.S.D.	L.S.D. (.05)	2.86	3.38	3.37	****	1.47	****	****	****
Efficiency	Design Rel to RCB	1.00	1.00	0.00	****	1.12	****	****	****

Table 12. 2001 Montana Irrigated Intrastate Spring Barley - Heading Date Summary (Days>Jan1) by Location

ID	PEDIGREE	Kalispell High M	Sidney Irr	Huntley Irr	Conrad Irr	Bozeman Irr	AVG	BYX	RSQ
2B914947	Merit	178.4	182.0	173.4	179.0	177.3	178.0	0.67	0.94
6B932978	Legacy	175.7	181.4	165.9	179.0	176.0	175.6	1.29	0.99
<b>B2L20-36</b>	<b>BCL20/Morex BC2F4</b>	<b>173.0</b>	<b>178.3</b>	<b>162.5</b>	<b>176.0</b>	<b>174.3</b>	<b>172.8</b>	<b>1.33</b>	<b>0.98</b>
BZ594-20	WPB BZ594-20	173.4	178.6	161.9	176.0	176.0	173.2	1.42	0.97
BZ596117	WPB BZ596-117	178.7	180.3	168.6	179.0	176.3	176.6	1.02	0.97
C 37	Coors C37	179.6	182.1	167.2	179.0	178.3	177.3	1.25	0.97
C40	Coors 40	171.7	174.7	160.5	173.0	173.3	170.6	1.23	0.94
<b>C46</b>	<b>Coors 46</b>	<b>176.1</b>	<b>183.9</b>	<b>174.4</b>	<b>182.0</b>	<b>180.3</b>	<b>179.4</b>	<b>0.74</b>	<b>0.72</b>
C53	Coors 53	180.0	183.2	171.1	179.0	179.3	178.5	0.97	0.96
C56	Coors 56	175.9	177.8	160.9	174.0	175.3	172.8	1.44	0.93
C57	Coors 57	182.0	184.3	173.7	179.0	179.7	179.7	0.80	0.84
CDCBOLD	CDC Bold	177.7	180.9	170.8	181.0	177.3	177.5	0.88	0.94
<b>CI 15773</b>	<b>Morex</b>	<b>173.4</b>	<b>178.5</b>	<b>163.5</b>	<b>178.0</b>	<b>175.3</b>	<b>173.7</b>	<b>1.31</b>	<b>0.96</b>
CI 15856	Lewis	177.1	180.9	168.9	178.0	177.0	176.4	0.98	0.99
H3860224	Lewis/Apex	179.0	182.8	170.6	180.0	177.7	178.0	1.00	0.99
MT910189	ND 7293/Bearpaw	175.3	179.5	165.8	177.0	176.0	174.7	1.15	1.00
MT950186	MT860756/MT83533	176.7	179.7	164.8	178.0	177.0	175.2	1.29	0.97
<b>MT960099</b>	<b>Manley/Baronesse</b>	<b>179.3</b>	<b>182.9</b>	<b>173.7</b>	<b>179.0</b>	<b>178.0</b>	<b>178.6</b>	<b>0.69</b>	<b>0.92</b>
MT960100	Manley/Baronesse	180.5	182.9	172.8	180.0	178.3	178.9	0.82	0.96
MT960101	Manley/Baronesse	181.9	183.1	175.0	180.0	178.3	179.7	0.63	0.82
MT960222	Stark/Baronesse	177.4	183.0	170.8	179.0	177.3	177.5	0.95	0.96
MT960226	Stark/Baronesse	176.4	181.6	168.6	179.0	177.0	176.5	1.07	0.99
<b>MT960228</b>	<b>Stark/Baronesse</b>	<b>178.0</b>	<b>181.3</b>	<b>166.8</b>	<b>181.0</b>	<b>177.0</b>	<b>176.8</b>	<b>1.28</b>	<b>0.97</b>
MT970026	Baronesse/MT860756	176.3	180.7	167.9	178.0	177.0	176.0	1.06	1.00
MT970110	Klages/Baronesse	179.6	182.1	173.5	179.0	177.7	178.4	0.67	0.93
MT970116	Klages/Baronesse	176.3	180.6	166.9	179.0	176.7	175.9	1.16	0.99
MT970148	MT861596/ND 11120	177.3	179.9	169.4	177.0	176.3	176.0	0.86	0.98
<b>MT970155</b>	<b>MT886610/MT140523</b>	<b>178.4</b>	<b>182.9</b>	<b>173.9</b>	<b>179.0</b>	<b>177.3</b>	<b>178.3</b>	<b>0.67</b>	<b>0.88</b>
MT970229	MT890021/Stark	179.0	181.3	167.1	178.0	177.3	176.5	1.19	0.97
MT981004	Baronesse/H2860224	176.8	181.5	171.1	179.0	177.0	177.1	0.83	0.97
MT981006	Baronesse/H2860224	176.4	180.0	170.0	178.0	176.3	176.1	0.83	1.00
MT981030	Baronesse/MT910160	181.0	182.7	172.9	181.0	178.3	179.2	0.82	0.94
<b>MT981039</b>	<b>H5860219/Baronesse</b>	<b>180.6</b>	<b>182.6</b>	<b>172.8</b>	<b>181.0</b>	<b>178.3</b>	<b>179.1</b>	<b>0.83</b>	<b>0.96</b>
MT981042	H5860219/Baronesse	180.1	182.8	172.3	180.0	178.0	178.6	0.85	0.96
MT981080	MT140523/Baronesse	177.7	181.5	171.3	179.0	177.3	177.4	0.82	0.99

Table 12 continues on next page

Table 12. 2001 Montana Irrigated Intrastate Spring Barley - Heading Date Summary (Days>Jan1) by Location (Continued).

ID	PEDIGREE	Kalispell High M	Sidney Irr	Huntley Irr	Conrad Irr	Bozeman Irr	AVG	BYX	RSQ
MT981091	MT851195/MT140523	175.0	180.4	167.7	179.0	177.0	175.8	1.07	0.96
MT981177	MT910033/Targhee	176.9	180.3	167.5	177.0	177.0	175.7	1.05	0.98
MT981210	MT910150/Stark	178.9	181.0	169.7	181.0	177.7	177.6	1.01	0.96
MT981212	MT910150/Stark	175.6	180.6	166.4	178.0	176.3	175.4	1.17	0.99
MT981238	ND112311/Lewis	174.7	179.9	166.0	178.0	175.7	174.9	1.16	0.98
MT990023	Alexis/H1851195	177.0	180.2	165.6	178.0	175.3	175.2	1.25	0.99
MT990041	Alexis/Harrington	177.7	181.5	167.0	178.0	177.0	176.2	1.20	1.00
MT990074	Alexis/MT861596	172.1	178.3	161.6	176.0	174.0	172.4	1.41	0.98
MT990084	Apex/H1851195	177.0	179.3	170.2	178.0	176.3	176.2	0.78	1.00
MT990106	Apex/H1851195	177.6	181.4	167.2	179.0	176.7	176.4	1.19	1.00
MT990132	Apex/H6860756	177.9	180.5	168.0	178.0	177.0	176.3	1.05	0.99
MT990156	Apex/MT890070	173.5	179.4	171.0	179.0	176.3	175.8	0.69	0.77
MT990172	Apex/MT890070	175.3	180.5	171.4	176.0	176.7	176.0	0.67	0.87
MT990244	MT890018/Stark	173.3	177.7	166.7	178.0	174.7	174.1	0.97	0.92
MT990249	MT890018/Stark	171.0	175.4	164.6	173.0	172.7	171.4	0.89	0.98
MTLB 5	Lewis/Baronesse #5	178.0	182.3	167.7	180.0	177.3	177.1	1.22	0.99
MTLB 6	Lewis/Baronesse #6	175.8	180.8	167.0	178.0	177.0	175.7	1.14	0.99
N96/1116	Justina (NORD 96-1116)	180.6	184.0	172.6	180.0	179.7	179.4	0.90	0.97
ND 9866	Stark	172.9	179.5	165.3	174.0	174.7	173.3	1.10	0.94
ND13299	Conlon	178.9	181.1	166.9	181.0	177.7	177.1	1.27	0.96
NORD195f	NORD 1958	179.3	181.4	171.4	179.0	177.7	177.8	0.82	0.97
PI491534	Gallatin	177.0	180.2	166.7	177.0	177.0	175.6	1.12	0.98
PI568246	Baronesse	180.0	182.1	171.5	179.0	178.0	178.1	0.86	0.96
PI601736	Galena	182.4	184.1	172.9	182.0	179.0	180.1	0.94	0.93
PI605472	Garnett	178.5	182.8	173.7	180.0	180.3	179.1	0.72	0.94
PI610264	Valier	178.4	181.9	169.4	180.0	177.3	177.4	1.05	0.99
S3482	Calgary	177.3	181.2	169.1	180.0	177.7	177.1	1.03	0.98
SK 76333	Harrington	177.7	182.7	173.4	180.0	177.0	178.2	0.72	0.89
TR128	Stratus	179.4	183.5	174.2	181.0	178.7	179.3	0.74	0.96
SiteMean	SITE MEAN *****	177.3	181.0	169.0	178.6	177.0	176.6	1.00	1.00
C.V.	C.V. (S/Mean) * 100	0.77	0.36	0.86	****	0.29	****	****	****
F-Value		10.39	24.35	18.05	****	24.99	****	****	****
L.S.D.	L.S.D. (.05)	2.24	1.11	2.42	****	0.83	****	****	****
Efficiency	Design Rel to RCB	1.01	1.06	1.02	****	0.00	****	****	****