

PROJECT TITLE: Statewide Barley Performance

YEAR: 2002

LOCATIONS:

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

PERSONNEL:

Bozeman: Suzanne Mickelson (Project Leader) & Pat Hensleigh (Research Associate)
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.

Among the feed-barley varieties, Haxby and MT 960228 were superior to Baronesse for yield and test weight (Tables 1 and 8). Yields of Haxby were 2.5 and 7.8 percent higher than Baronesse on dryland and irrigated, respectively. Haxby had the highest test weight of all entries. Yields of MT 960228 were 4.7 and 4.0 percent higher than Baronesse on dryland and irrigated, respectively. Heading dates for the two varieties were one to two days earlier than Baronesse, and plant heights one to four inches taller than Baronesse. MT 960228 is currently in the process of naming and release as a recommended feed barley for Montana. Haxby was recommended and released the previous year.

Among the malt varieties, Conlon was superior to Harrington for yield, test weight and plump on both dryland and irrigated (Tables 1 and 8). Merit was superior to Harrington only on irrigated, and has not shown to be suitable for dryland conditions.

Specific details of field performance traits at each location can be found in Tables 2-7 and 9-14.

Table 1. 2002 Montana Dryland Intrastate Spring Barley Nursery - Overall Summary.

ID	PEDIGREE	Yield bu/ac	Test Wt. lb/bu	Plump Percent	Heading Date	Plant Ht inches	Protein Percent
BZ594-20	WPB BZ594-20	62.2	49.6	77.6	183.6	24.8	14.7
MT981091	MT851195/MT140523	60.0	48.4	62.2	184.9	24.3	12.1
BZ596117	WPB BZ596-117	59.9	48.2	67.8	186.2	24.9	15.4
MT960228	Stark/Baronesse	58.2	47.6	69.1	185.8	25.5	14.8
MT990106	Apex/H1851195	57.5	47.3	67.3	186.1	23.4	15.7
MT990244	MT890018/Stark	57.4	49.2	69.5	183.7	25.1	15.7
MT981212	MT910150/Stark	57.3	48.0	65.1	184.4	26.1	15.6
MT000092	MT890008/Lewis	57.3	47.9	72.8	184.9	25.4	14.6
MT970026	Baronesse/MT860756	57.2	48.2	61.8	185.5	26.8	15.0
MT000153	MT920059/Baronesse	57.2	48.7	65.1	184.7	25.1	15.4
MT950186	Haxby	57.0	49.9	60.4	184.8	25.3	15.1
MT960099	Manley/Baronesse	56.6	47.3	45.2	187.4	22.2	15.6
MT000138	MT920041/H1851195	56.6	49.3	71.5	184.4	27.0	16.0
MT970116	Klages/Baronesse	56.5	48.7	67.7	184.2	28.2	15.0
NORD1958	NORD 1958	56.3	46.9	64.1	186.9	23.4	14.9
MT981210	MT910150/Stark	56.2	47.9	64.7	186.2	25.9	15.9
MT000130	MT910189/MT890070	56.1	49.0	72.5	184.8	27.2	14.7
PI568246	Baronesse	55.6	47.2	65.2	186.7	24.6	15.4
B99AL621	B99AL-621	55.4	46.4	59.4	186.6	23.8	15.2
MTLB 13	Lewis/Baronesse #13	55.3	47.3	53.4	186.2	24.5	15.5
MT000047	Chinook/MT920161	55.3	47.3	61.3	185.1	25.1	15.7
MT000063	H3860224/MT920041	55.3	47.9	60.3	185.9	24.2	15.5
MT970229	MT890021/Stark	55.2	49.4	77.8	186.1	25.0	15.3
MT990249	MT890018/Stark	55.2	47.1	74.3	182.5	25.0	15.2
MT970155	MT886610/MT140523	54.9	47.9	70.8	187.2	24.4	15.4
MT970148	MT861596/ND 11120	54.9	46.8	69.3	184.9	23.4	14.7
MT990172	Apex/MT890070	54.6	47.4	71.2	185.7	24.3	15.5
MT000040	Chinook/MT920161	53.9	48.4	55.8	185.9	24.1	15.9
MT981006	Baronesse/H2860224	53.8	46.6	63.9	185.8	24.8	15.5
6B952482	(BA6B95-2482) 6B89--21	53.7	46.4	53.4	184.3	26.6	15.3
ND13299	Conlon	53.3	48.8	86.4	181.8	26.6	15.0
MT960100	Manley/Baronesse	53.2	48.3	55.3	187.1	22.6	15.4
SITEMEAN	Site Mean	53.2	47.5	64.0	185.7	24.9	15.3
MT981004	Baronesse/H2860224	53.1	46.4	64.1	186.2	24.9	15.4
MT960226	Stark/Baronesse	53.0	48.1	69.8	185.5	25.9	15.0
MT960222	Stark/Baronesse	53.0	48.1	68.7	186.3	25.4	14.9
MT981030	Baronesse/MT910160	52.9	48.0	62.1	186.8	24.9	14.8
MT981060	Haybet/Baronesse	52.8	45.5	55.2	186.8	24.3	14.9
MT981177	MT910033/Targhee	52.7	47.0	58.1	184.9	24.0	15.5
MT981238	ND112311/Lewis	52.3	48.9	67.1	183.8	26.1	15.3
H3860224	Lewis/Apex (MT860224)	52.1	46.5	69.0	187.0	26.0	15.8
MT910189	ND 7293/Bearpaw	52.0	48.3	68.3	184.0	24.8	15.0
MT981042	H5860219/Baronesse	51.8	48.0	60.3	187.0	24.3	15.3
MT000177	MT930029/Baronesse	51.7	47.3	75.4	186.3	23.0	15.5
PI491534	Gallatin	51.6	47.1	58.6	184.1	26.5	15.2
MT000045	Chinook/MT920161	51.6	48.2	61.5	185.4	25.3	15.9
N96/1116	Justina	51.2	45.1	65.9	187.4	23.2	14.6

Table 1 continues on next page

Table 1. 2002 Montana Dryland Intrastate Spring Barley Nursery - Overall Summary.
(Continued).

ID	PEDIGREE	Yield bu/ac	Test Wt. lb/bu	Plump Percent	Heading Date	Plant Ht inches	Protein Percent
MT000156	MT920059/Baronesse	51.0	47.9	73.3	183.2	25.8	15.5
MT000237	Harrington/MT920059	50.9	46.6	66.5	187.9	25.4	15.7
MT000180	MT930029/Baronesse	50.8	48.5	65.5	185.9	25.4	15.2
MT960101	Manley/Baronesse	50.7	48.0	58.1	186.8	24.2	15.0
NORD1963	NORD 1963	50.1	45.5	66.9	187.5	21.6	14.7
MT000125	MT910189/Lewis	50.1	47.6	66.2	186.1	25.7	15.3
MT000066	H3860224/MT920161	49.7	47.6	65.1	186.2	25.4	15.8
PI610264	Valier	49.6	48.6	54.2	186.7	25.0	11.9
MT000159	MT920059/Baronesse	49.4	47.2	60.4	186.2	24.1	15.7
SK 76333	Harrington	48.7	46.8	64.1	185.5	25.3	15.6
MT000239	Harrington/MT920059	48.6	46.4	66.5	187.2	24.2	15.7
MT000157	MT920059/Baronesse	48.5	46.9	49.8	186.6	24.1	15.4
2B914947	Merit	47.7	45.1	55.0	186.5	24.1	15.3
6B932978	Legacy	47.7	44.6	47.7	184.1	26.3	15.4
PI605472	Garnet	47.4	46.2	71.8	187.2	24.5	15.7
MT000178	MT930029/Baronesse	47.3	46.8	67.0	187.2	24.5	15.5
MT970110	Klages/Baronesse	46.8	47.8	77.0	186.6	25.7	15.6
PI533600	Haybet	40.7	44.7	28.1	184.3	26.8	16.1

Table 2. 2002 Montana Dryland Intrastate Spring Barley Nursery - Yield Summary (Lb/Bu) by Location.

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
2B914947	Merit	47.8	51.1	41.6	8.7	72.2	64.9	47.7	1.1	1.0
6B932978	Legacy	51.6	49.1	45.1	19.4	67.2	53.8	47.7	0.8	0.9
6B952482	(BA6B95-2482) 6B89--21	54.9	54.6	45.0	23.9	78.2	65.4	53.7	0.9	1.0
B99AL621	B99AL-621	59.2	50.8	51.4	27.3	79.7	64.2	55.4	0.9	1.0
BZ594-20	WPB BZ594-20	58.7	54.2	57.7	32.2	82.1	88.3	62.2	1.0	0.9
BZ596117	WPB BZ596-117	61.0	52.1	52.9	21.7	81.8	89.8	59.9	1.2	0.9
H3860224	Lewis/Apex (MT860224)	55.7	48.1	44.6	18.0	86.2	59.9	52.1	1.1	0.9
MT000040	Chinook/MT920161	50.9	46.8	50.1	26.6	74.4	74.8	53.9	0.9	1.0
MT000045	Chinook/MT920161	52.0	49.1	48.0	19.8	78.1	62.7	51.6	1.0	1.0
MT000047	Chinook/MT920161	54.4	48.0	51.8	21.5	76.6	79.7	55.3	1.0	1.0
MT000063	H3860224/MT920041	55.7	48.9	44.9	23.8	81.0	77.4	55.3	1.1	1.0
MT000066	H3860224/MT920161	48.4	48.6	42.5	17.9	75.1	65.6	49.7	1.0	1.0
MT000092	MT890008/Lewis	57.4	54.9	48.0	22.2	74.9	86.6	57.3	1.1	0.9
MT000125	MT910189/Lewis	48.4	52.6	45.7	21.3	77.8	55.1	50.1	0.9	0.9
MT000130	MT910189/MT890070	52.6	57.7	49.2	29.5	79.3	68.2	56.1	0.8	1.0
MT000138	MT920041/H1851195	55.1	52.2	46.3	32.3	75.9	77.7	56.6	0.8	0.9
MT000153	MT920059/Baronesse	54.0	50.3	48.1	26.3	76.6	88.1	57.2	1.0	0.9
MT000156	MT920059/Baronesse	52.9	46.1	46.4	31.4	78.6	50.6	51.0	0.7	0.8
MT000157	MT920059/Baronesse	47.4	43.4	46.8	9.5	83.1	60.8	48.5	1.2	1.0
MT000159	MT920059/Baronesse	47.2	43.8	48.8	16.9	73.0	66.6	49.4	1.0	1.0
MT000177	MT930029/Baronesse	50.8	43.9	47.1	15.5	68.0	84.8	51.7	1.1	0.9
MT000178	MT930029/Baronesse	52.2	44.5	46.0	14.1	76.5	50.5	47.3	0.9	0.9
MT000180	MT930029/Baronesse	50.5	46.7	45.4	20.6	75.3	66.6	50.8	1.0	1.0
MT000237	Harrington/MT920059	52.1	43.4	46.1	11.0	84.6	66.4	50.9	1.2	1.0
MT000239	Harrington/MT920059	49.7	41.7	47.7	8.5	78.4	67.1	48.6	1.2	1.0
MT910189	ND 7293/Bearpaw	51.9	49.7	44.8	23.8	82.1	59.9	52.0	0.9	0.9
MT950186	Haxby	54.6	51.2	56.6	26.6	76.2	76.9	57.0	0.9	1.0
MT960099	Manley/Baronesse	61.0	57.5	44.4	7.6	88.7	80.1	56.6	1.4	1.0
MT960100	Manley/Baronesse	54.4	48.5	44.9	10.7	85.0	75.6	53.2	1.3	1.0
MT960101	Manley/Baronesse	57.1	42.2	48.2	9.6	85.6	61.4	50.7	1.2	1.0
MT960222	Stark/Baronesse	57.4	45.0	54.3	17.3	78.9	65.3	53.0	1.0	1.0
MT960226	Stark/Baronesse	46.1	46.4	52.9	28.7	82.5	61.7	53.0	0.9	0.9
MT960228	Stark/Baronesse	58.6	54.4	53.6	15.4	91.3	75.9	58.2	1.3	1.0
MT970026	Baronesse/MT860756	60.3	50.3	51.6	27.9	81.4	71.5	57.2	0.9	1.0
MT970110	Klages/Baronesse	51.5	44.0	44.1	15.2	75.4	50.5	46.8	0.9	0.9
MT970116	Klages/Baronesse	59.8	51.9	48.6	29.4	73.1	75.9	56.5	0.8	1.0
MT970148	MT861596/ND 11120	50.5	61.6	51.1	16.6	80.1	69.4	54.9	1.1	0.9
MT970155	MT886610/MT140523	57.0	49.9	49.5	16.7	78.4	77.9	54.9	1.1	1.0
MT970229	MT890021/Stark	55.6	50.9	44.1	17.3	75.2	88.0	55.2	1.2	0.9
MT981004	Baronesse/H2860224	53.9	51.9	45.2	19.0	79.5	69.4	53.1	1.0	1.0
MT981006	Baronesse/H2860224	53.5	52.6	43.9	21.4	75.8	75.2	53.8	1.0	1.0
MT981030	Baronesse/MT910160	53.1	53.6	48.0	11.5	84.4	67.1	52.9	1.2	1.0
MT981042	H5860219/Baronesse	54.9	48.7	51.9	16.4	73.9	65.1	51.8	1.0	1.0
MT981060	Haybet/Baronesse	56.3	41.9	49.8	6.2	81.6	81.1	52.8	1.4	1.0
MT981091	MT851195/MT140523	53.2	53.3	54.3	27.2	88.4	83.4	60.0	1.1	1.0
MT981177	MT910033/Targhee	54.3	46.6	48.8	19.0	76.5	71.2	52.7	1.0	1.0
MT981210	MT910150/Stark	56.7	46.2	55.3	25.5	80.6	72.7	56.2	1.0	1.0
MT981212	MT910150/Stark	53.3	44.8	53.6	30.1	82.2	79.9	57.3	1.0	0.9

Table 2 continues on next page

Table 2. 2002 Montana Dryland Intrastate Spring Barley Nursery - Yield Summary (Lb/Bu) by Location.
(Continued).

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
MT981238	ND112311/Lewis	49.3	49.8	50.5	23.9	71.6	69.0	52.3	0.9	1.0
MT990106	Apex/H1851195	53.8	57.6	45.3	25.4	74.8	88.1	57.5	1.0	0.9
MT990172	Apex/MT890070	58.5	47.7	51.4	22.2	76.9	70.7	54.6	1.0	1.0
MT990244	MT890018/Stark	54.8	52.0	54.5	37.3	66.2	79.4	57.4	0.6	0.8
MT990249	MT890018/Stark	50.3	49.5	48.7	36.9	66.8	78.9	55.2	0.7	0.8
MTLB 13	Lewis/Baronesse #13	52.7	49.2	50.8	21.6	88.5	68.8	55.3	1.1	1.0
N96/1116	Justina	49.5	49.7	46.4	9.3	76.3	76.1	51.2	1.2	1.0
ND13299	Conlon	55.1	51.0	46.9	37.4	60.7	68.7	53.3	0.5	0.8
NORD1958	NORD 1958	55.0	54.6	46.6	21.9	87.0	72.4	56.3	1.1	1.0
NORD1963	NORD 1963	53.5	48.8	45.2	14.9	69.5	69.1	50.1	1.0	1.0
PI491534	Gallatin	54.4	52.4	48.1	18.5	78.7	57.7	51.6	0.9	0.9
PI533600	Haybet	37.8	48.4	38.3	17.9	65.7	36.1	40.7	0.6	0.7
PI568246	Baronesse	56.6	51.2	51.8	23.1	82.6	68.3	55.6	1.0	1.0
PI605472	Garnet	51.3	41.8	44.7	13.0	76.2	57.2	47.4	1.0	1.0
PI610264	Valier	53.6	45.4	42.7	13.6	78.9	63.4	49.6	1.1	1.0
SK 76333	Harrington	53.6	49.5	43.3	11.6	81.7	52.6	48.7	1.1	0.9
SiteMean	SITE MEAN *****	53.5	49.4	48.2	20.4	78.0	69.8	53.2	1.0	1.0
C.V.	C.V. (S/Mean) * 100	8.5	10.3	7.3	21.8	8.4	14.4	***	***	***
F-Value		2.2	1.8	3.4	8.4	2.2	3.6	***	***	***
L.S.D.	L.S.D. (.05)	7.7	8.8	6.0	7.5	11.4	16.2	***	***	***
Efficiency of Design	Rel to RCB	1.1	1.2	1.3	1.1	1.6	1.0	***	***	***

Table 3. 2002 Montana Dryland Intrastate Spring Barley Nursery - Test Weight Summary (Lb/Bu) by Location.

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
2B914947	Merit	47.3	44.7	47.8	36.4	47.3	47.0	45.1	1.0	1.0
6B932978	Legacy	45.2	47.2	49.0	34.7	46.6	44.9	44.6	1.1	0.9
6B952482	(BA6B95-2482) 6B89--21	46.8	47.3	50.7	37.8	49.2	46.7	46.4	1.0	0.9
B99AL621	B99AL-621	48.3	46.7	51.8	36.9	47.8	47.0	46.4	1.1	0.9
BZ594-20	WPB BZ594-20	49.9	50.8	50.6	42.9	50.8	52.4	49.6	0.7	0.9
BZ596117	WPB BZ596-117	49.2	49.9	50.4	37.8	52.1	49.8	48.2	1.1	0.9
H3860224	Lewis/Apex (MT860224)	48.9	43.6	50.7	37.5	51.1	47.1	46.5	1.1	0.9
MT000040	Chinook/MT920161	50.3	45.9	51.2	41.7	51.6	49.4	48.4	0.8	0.9
MT000045	Chinook/MT920161	49.4	46.0	50.6	40.9	51.3	50.7	48.2	0.9	1.0
MT000047	Chinook/MT920161	49.1	44.6	49.8	40.5	49.2	50.6	47.3	0.8	0.9
MT000063	H3860224/MT920041	50.1	46.0	50.6	39.0	51.4	50.2	47.9	1.1	1.0
MT000066	H3860224/MT920161	48.9	45.5	51.2	38.5	52.2	49.5	47.6	1.1	1.0
MT000092	MT890008/Lewis	48.7	47.9	50.8	39.1	50.6	50.2	47.9	1.0	1.0
MT000125	MT910189/Lewis	49.1	45.7	50.2	41.0	49.1	50.6	47.6	0.8	0.9
MT000130	MT910189/MT890070	49.7	48.0	51.4	41.0	51.6	52.6	49.0	1.0	1.0
MT000138	MT920041/H1851195	50.3	47.1	51.9	42.4	53.3	50.7	49.3	0.9	0.9
MT000153	MT920059/Baronesse	49.9	47.7	51.9	41.0	50.9	50.9	48.7	0.9	1.0
MT000156	MT920059/Baronesse	49.2	46.1	51.1	37.4	52.1	51.2	47.9	1.3	1.0
MT000157	MT920059/Baronesse	48.5	47.2	51.8	36.1	51.0	47.1	46.9	1.3	1.0
MT000159	MT920059/Baronesse	49.0	46.7	49.3	39.7	49.0	49.4	47.2	0.9	1.0
MT000177	MT930029/Baronesse	48.5	46.8	50.6	37.2	50.4	50.1	47.3	1.2	1.0
MT000178	MT930029/Baronesse	47.9	45.7	49.7	37.3	50.2	50.2	46.8	1.1	1.0
MT000180	MT930029/Baronesse	50.6	46.2	50.9	40.1	53.7	49.4	48.5	1.1	0.9
MT000237	Harrington/MT920059	49.0	45.4	48.9	39.7	49.8	46.7	46.6	0.8	0.9
MT000239	Harrington/MT920059	47.7	46.4	50.4	39.0	48.6	46.6	46.4	0.9	0.9
MT910189	ND 7293/Bearpaw	49.7	47.5	50.0	39.3	51.9	51.4	48.3	1.1	1.0
MT950186	Haxby	50.4	49.7	52.0	43.0	52.8	51.8	49.9	0.8	1.0
MT960099	Manley/Baronesse	48.8	47.5	51.3	36.1	50.3	49.5	47.3	1.3	1.0
MT960100	Manley/Baronesse	49.5	49.5	51.2	38.4	51.5	49.6	48.3	1.1	1.0
MT960101	Manley/Baronesse	49.1	47.7	51.6	38.9	52.3	48.3	48.0	1.1	1.0
MT960222	Stark/Baronesse	49.4	46.7	51.2	40.2	51.8	49.5	48.1	1.0	1.0
MT960226	Stark/Baronesse	49.1	47.7	51.8	40.1	49.7	50.0	48.1	0.9	1.0
MT960228	Stark/Baronesse	49.6	46.4	50.9	38.6	51.9	48.4	47.6	1.1	1.0
MT970026	Baronesse/MT860756	49.7	47.2	51.0	41.1	50.6	49.7	48.2	0.9	1.0
MT970110	Klages/Baronesse	49.6	47.6	51.0	38.9	51.0	48.4	47.8	1.0	1.0
MT970116	Klages/Baronesse	50.5	48.2	48.1	40.8	53.5	51.1	48.7	0.9	0.8
MT970148	MT861596/ND 11120	47.1	46.7	50.8	38.2	48.7	49.2	46.8	1.0	1.0
MT970155	MT886610/MT140523	48.7	47.2	52.6	37.8	51.3	49.6	47.9	1.2	1.0
MT970229	MT890021/Stark	50.2	49.2	51.6	39.8	52.9	52.6	49.4	1.1	1.0
MT981004	Baronesse/H2860224	48.3	46.7	50.4	37.3	48.1	47.8	46.4	1.0	1.0
MT981006	Baronesse/H2860224	47.8	46.7	50.5	36.1	49.7	48.6	46.6	1.2	1.0
MT981030	Baronesse/MT910160	48.8	47.2	51.5	37.7	54.5	48.2	48.0	1.3	0.9
MT981042	H5860219/Baronesse	49.0	47.5	50.2	39.4	53.4	48.3	48.0	1.0	0.9
MT981060	Haybet/Baronesse	45.3	45.9	49.5	38.9	46.8	46.7	45.5	0.8	0.9
MT981091	MT851195/MT140523	49.7	46.5	50.4	39.0	52.9	52.1	48.4	1.1	1.0
MT981177	MT910033/Targhee	48.6	45.9	49.7	36.7	49.5	51.5	47.0	1.2	1.0
MT981210	MT910150/Stark	49.4	46.1	49.7	41.2	52.6	48.6	47.9	0.9	0.9
MT981212	MT910150/Stark	49.2	46.6	51.2	39.6	51.6	49.8	48.0	1.0	1.0

Table 3 continues on next page

Table 3. 2002 Montana Dryland Intrastate Spring Barley Nursery - Test Weight Summary (Lb/Bu) by Location. (Continued).

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
MT981238	ND112311/Lewis	49.2	47.8	52.4	41.0	50.7	52.3	48.9	0.9	0.9
MT990106	Apex/H1851195	48.2	45.8	51.6	39.0	48.6	50.6	47.3	1.0	0.9
MT990172	Apex/MT890070	48.4	47.0	50.4	40.8	49.8	48.0	47.4	0.8	1.0
MT990244	MT890018/Stark	50.0	48.6	49.9	42.5	51.6	52.7	49.2	0.8	0.9
MT990249	MT890018/Stark	50.8	49.7	31.6	42.8	54.0	53.5	47.1	0.3	0.0
MTLB 13	Lewis/Baronesse #13	48.5	46.3	50.9	37.4	52.5	48.2	47.3	1.2	1.0
N96/1116	Justina	47.7	45.4	50.1	33.0	47.2	47.4	45.1	1.4	1.0
ND13299	Conlon	48.5	46.6	52.4	43.6	50.4	51.1	48.8	0.7	0.8
NORD1958	NORD 1958	49.5	46.4	49.3	37.3	49.4	49.8	46.9	1.1	1.0
NORD1963	NORD 1963	47.5	43.9	50.2	37.7	47.1	46.5	45.5	0.9	0.9
PI491534	Gallatin	48.5	47.0	49.4	38.6	49.2	49.6	47.1	1.0	1.0
PI533600	Haybet	45.5	40.7	51.9	37.3	46.3	46.4	44.7	1.0	0.7
PI568246	Baronesse	48.9	48.4	49.9	37.8	49.6	48.4	47.2	1.0	1.0
PI605472	Garnet	48.0	45.1	51.1	35.8	49.9	47.4	46.2	1.2	1.0
PI610264	Valier	49.8	48.0	50.2	40.7	53.1	50.0	48.6	0.9	1.0
SK 76333	Harrington	48.4	45.6	49.8	37.4	52.6	47.0	46.8	1.1	0.9
SiteMean	SITE MEAN *****	48.9	46.8	50.4	39.0	50.7	49.4	47.5	1.0	1.0
C.V.	C.V. (S/Mean) * 100	1.7	1.8	7.6	***	***	1.5	***	***	***
F-Value		5.7	10.2	1.4	***	***	11.9	***	***	***
L.S.D.	L.S.D. (.05)	1.4	1.4	6.2	***	***	1.6	***	***	***
Efficiency of Design	Rel to RCB	0.0	1.2	0.0	***	***	1.2	***	***	***

Table 4. 2002 Montana Dryland Intrastate Spring Barley Nursery - Plump Summary (%) by Location.

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
2B914947	Merit	84.1	73.0	25.4	0.2	83.0	64.0	54.9	0.9	0.8
6B932978	Legacy	70.6	68.0	38.5	1.0	78.0	28.2	47.4	0.8	0.8
6B952482	(BA6B95-2482) 6B89--21	79.0	69.0	34.1	1.0	93.0	42.3	53.1	1.0	0.8
B99AL621	B99AL-621	87.2	78.0	72.7	0.3	70.0	47.6	59.3	0.9	0.8
BZ594-20	WPB BZ594-20	96.2	90.0	92.6	0.8	99.0	85.5	77.3	1.1	1.0
BZ596117	WPB BZ596-117	90.9	81.0	64.5	1.3	99.0	67.5	67.4	1.1	1.0
H3860224	Lewis/Apex (MT860224)	89.5	64.0	86.5	4.1	95.0	66.5	67.6	1.0	0.9
MT000040	Chinook/MT920161	85.4	59.0	46.5	0.2	87.0	56.7	55.8	1.0	1.0
MT000045	Chinook/MT920161	84.6	63.0	60.3	0.3	91.0	69.2	61.4	1.0	1.0
MT000047	Chinook/MT920161	81.0	68.0	70.4	0.5	75.0	72.0	61.1	0.9	0.9
MT000063	H3860224/MT920041	88.9	72.0	48.2	0.5	88.0	63.0	60.1	1.0	1.0
MT000066	H3860224/MT920161	86.9	66.0	73.4	0.5	97.0	65.9	64.9	1.0	1.0
MT000092	MT890008/Lewis	92.1	86.0	72.2	0.7	97.0	87.4	72.6	1.1	1.0
MT000125	MT910189/Lewis	88.7	61.0	87.7	0.5	83.0	75.3	66.0	1.0	0.9
MT000130	MT910189/MT890070	87.7	76.0	82.9	0.6	98.0	88.7	72.3	1.1	0.9
MT000138	MT920041/H1851195	93.7	86.0	69.0	0.6	99.0	79.5	71.3	1.1	1.0
MT000153	MT920059/Baronesse	91.1	73.0	61.1	0.3	96.0	68.5	65.0	1.1	1.0
MT000156	MT920059/Baronesse	93.4	74.0	80.5	2.5	97.0	87.7	72.5	1.1	1.0
MT000157	MT920059/Baronesse	72.8	60.0	46.3	0.9	83.0	33.7	49.5	0.9	0.9
MT000159	MT920059/Baronesse	90.4	74.0	54.9	0.4	85.0	57.2	60.3	1.0	1.0
MT000177	MT930029/Baronesse	96.6	92.0	77.6	0.7	99.0	84.9	75.1	1.1	1.0
MT000178	MT930029/Baronesse	90.6	81.0	53.4	0.2	95.0	81.5	66.9	1.1	0.9
MT000180	MT930029/Baronesse	91.5	76.0	64.4	0.3	99.0	61.2	65.4	1.1	1.0
MT000237	Harrington/MT920059	93.4	76.0	73.3	1.9	95.0	56.3	66.0	1.0	1.0
MT000239	Harrington/MT920059	85.9	83.0	72.7	0.4	87.0	68.7	66.3	1.0	1.0
MT910189	ND 7293/Bearpaw	89.6	79.0	60.1	0.4	97.0	83.0	68.2	1.1	1.0
MT950186	Haxby	83.5	51.0	64.7	0.9	93.0	67.7	60.1	1.0	0.9
MT960099	Manley/Baronesse	69.6	27.0	42.9	0.2	84.0	47.3	45.2	0.8	0.8
MT960100	Manley/Baronesse	76.5	67.0	44.1	0.3	90.0	53.0	55.2	0.9	0.9
MT960101	Manley/Baronesse	80.5	73.0	52.6	0.5	94.0	47.2	58.0	1.0	0.9
MT960222	Stark/Baronesse	86.7	73.0	87.3	0.2	98.0	66.8	68.7	1.1	0.9
MT960226	Stark/Baronesse	91.7	79.0	72.3	1.3	98.0	74.3	69.4	1.1	1.0
MT960228	Stark/Baronesse	87.7	78.0	86.7	0.8	94.0	65.8	68.8	1.0	0.9
MT970026	Baronesse/MT860756	91.2	50.0	76.5	0.3	88.0	64.4	61.7	1.0	0.9
MT970110	Klages/Baronesse	85.0	69.0	80.4	0.0	91.0	59.8	77.0	0.0	0.0
MT970116	Klages/Baronesse	92.7	71.0	74.4	0.7	97.0	68.8	67.4	1.1	1.0
MT970148	MT861596/ND 11120	86.4	87.0	71.4	0.7	88.0	80.9	69.1	1.0	1.0
MT970155	MT886610/MT140523	90.5	85.0	73.5	0.6	96.0	78.4	70.7	1.1	1.0
MT970229	MT890021/Stark	93.4	95.0	88.6	0.7	97.0	90.8	77.6	1.1	0.9
MT981004	Baronesse/H2860224	87.8	80.0	74.6	0.2	87.0	54.5	64.0	1.0	0.9
MT981006	Baronesse/H2860224	88.5	65.0	61.3	0.8	95.0	71.2	63.6	1.0	1.0
MT981030	Baronesse/MT910160	74.2	69.0	76.6	0.2	98.0	54.0	62.0	1.0	0.9
MT981042	H5860219/Baronesse	81.8	72.0	57.6	0.6	97.0	51.8	60.1	1.0	1.0
MT981060	Haybet/Baronesse	81.8	68.0	39.0	0.4	85.0	56.4	55.1	0.9	0.9
MT981091	MT851195/MT140523	85.9	51.0	64.0	0.3	96.0	75.6	62.1	1.0	0.9
MT981177	MT910033/Targhee	84.0	60.0	36.8	0.4	86.0	80.6	58.0	1.0	0.8
MT981210	MT910150/Stark	91.2	54.0	70.1	0.2	98.0	74.4	64.6	1.0	0.9
MT981212	MT910150/Stark	84.2	68.0	70.2	0.8	97.0	68.9	64.8	1.0	1.0

Table 4 continues on next page

Table 4. 2002 Montana Dryland Intrastate Spring Barley Nursery - Plump Summary (%) by Location.
(Continued).

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
MT981238	ND112311/Lewis	79.3	86.0	66.9	0.3	92.0	77.6	67.0	1.0	1.0
MT990106	Apex/H1851195	91.7	87.0	49.2	0.8	87.0	86.6	67.0	1.0	0.9
MT990172	Apex/MT890070	94.1	85.0	75.4	0.3	96.0	75.6	71.1	1.1	1.0
MT990244	MT890018/Stark	95.6	62.0	72.0	0.3	98.0	88.5	69.4	1.1	0.9
MT990249	MT890018/Stark	95.7	81.0	78.2	1.2	98.0	89.4	73.9	1.1	1.0
MTLB 13	Lewis/Baronesse #13	75.5	43.0	47.8	0.1	97.0	56.8	53.4	0.9	0.9
N96/1116	Justina	87.7	84.0	83.8	0.5	76.0	62.6	65.8	1.0	0.9
ND13299	Conlon	97.2	91.0	96.7	13.8	99.0	92.9	81.8	1.0	0.9
NORD1958	NORD 1958	92.4	61.0	63.3	0.2	93.0	74.1	64.0	1.0	1.0
NORD1963	NORD 1963	83.1	82.0	66.0	0.5	88.0	80.6	66.7	1.0	1.0
PI491534	Gallatin	79.6	80.0	60.0	0.1	79.0	52.6	58.6	0.9	0.9
PI533600	Haybet	58.6	12.0	7.7	0.2	69.0	21.0	28.1	0.6	0.5
PI568246	Baronesse	86.0	75.0	76.8	0.2	86.0	66.8	65.1	1.0	1.0
PI605472	Garnet	90.3	89.0	76.5	0.6	97.0	76.2	71.6	1.1	1.0
PI610264	Valier	83.2	47.0	49.3	0.3	98.0	46.9	54.1	1.0	0.9
SK 76333	Harrington	88.7	70.0	64.4	0.9	97.0	61.6	63.8	1.0	1.0
SiteMean	SITE MEAN *****	86.5	71.2	65.1	0.8	91.6	67.2	63.7	1.0	1.0
F-Value		***	***	***	***	***	4.3	***	***	***
L.S.D.	L.S.D. (.05)	***	***	***	***	***	0.9	***	***	***
Efficiency of Design	Rel to RCB	***	***	***	***	***	1.2	***	***	***

Table 5. 2002 Montana Dryland Intrastate Spring Barley Nursery - Heading Date Summary (Days > Jan. 1) by Location.

ID	PEDIGREE	Havre	Sidney	Moccasin	Conrad	Bozeman	Avg	Byx	Rsq
2B914947	Merit	193.2	181.4	187.0	187.0	184.0	186.5	1.0	1.0
6B932978	Legacy	193.0	178.6	181.7	185.0	182.4	184.1	1.2	1.0
6B952482	(BA6B95-2482) 6B89--2126	191.7	179.9	182.3	186.0	181.4	184.3	1.0	1.0
B99AL621	B99AL-621	192.3	181.8	188.4	187.0	183.4	186.6	0.8	0.9
BZ594-20	WPB BZ594-20	192.5	179.6	180.6	182.0	183.3	183.6	1.0	0.9
BZ596117	WPB BZ596-117	192.6	181.6	187.8	186.0	183.1	186.2	0.9	0.9
H3860224	Lewis/Apex (MT860224 HR	193.9	181.4	188.6	187.0	183.9	187.0	1.0	0.9
MT000040	Chinook/MT920161	193.2	181.7	183.2	188.0	183.6	185.9	1.0	1.0
MT000045	Chinook/MT920161	193.5	181.4	182.5	187.0	182.5	185.4	1.1	1.0
MT000047	Chinook/MT920161	193.7	181.6	181.5	187.0	181.8	185.1	1.1	0.9
MT000063	H3860224/MT920041	193.6	181.1	185.1	186.0	183.7	185.9	1.0	1.0
MT000066	H3860224/MT920161	194.0	180.2	186.6	187.0	182.9	186.2	1.1	1.0
MT000092	MT890008/Lewis	193.3	181.0	183.0	185.0	182.3	184.9	1.1	1.0
MT000125	MT910189/Lewis	193.4	181.0	184.7	188.0	183.3	186.1	1.1	1.0
MT000130	MT910189/MT890070	193.0	181.3	181.9	185.0	183.0	184.8	1.0	0.9
MT000138	MT920041/H1851195	192.7	180.2	180.8	187.0	181.3	184.4	1.1	0.9
MT000153	MT920059/Baronesse	193.1	181.0	181.3	186.0	182.1	184.7	1.1	0.9
MT000156	MT920059/Baronesse	193.1	179.2	180.3	184.0	179.7	183.2	1.3	1.0
MT000157	MT920059/Baronesse	193.0	183.1	187.2	186.0	183.7	186.6	0.8	0.9
MT000159	MT920059/Baronesse	193.2	181.3	187.8	185.0	183.6	186.2	0.9	0.9
MT000177	MT930029/Baronesse	192.0	181.7	187.4	187.0	183.6	186.3	0.8	0.9
MT000178	MT930029/Baronesse	192.9	183.2	187.4	186.0	186.4	187.2	0.7	0.9
MT000180	MT930029/Baronesse	193.5	181.5	185.2	186.0	183.1	185.9	1.0	1.0
MT000237	Harrington/MT920059	193.6	182.2	188.6	190.0	184.9	187.9	0.9	0.9
MT000239	Harrington/MT920059	193.1	183.4	186.7	188.0	184.7	187.2	0.8	1.0
MT910189	ND 7293/Bearpaw	193.4	180.4	181.7	184.0	180.6	184.0	1.2	1.0
MT950186	Haxby	194.4	180.2	180.8	186.0	182.7	184.8	1.2	0.9
MT960099	Manley/Baronesse	193.7	182.2	189.9	187.0	184.4	187.4	0.9	0.8
MT960100	Manley/Baronesse	193.7	182.9	188.5	187.0	183.6	187.1	0.9	0.9
MT960101	Manley/Baronesse	192.4	182.5	189.1	186.0	184.2	186.8	0.8	0.8
MT960222	Stark/Baronesse	193.3	182.4	185.6	186.0	184.0	186.3	0.9	1.0
MT960226	Stark/Baronesse	193.6	181.6	182.7	186.0	183.4	185.5	1.0	1.0
MT960228	Stark/Baronesse	192.8	180.9	184.6	187.0	183.6	185.8	1.0	1.0
MT970026	Baronesse/MT860756	193.3	180.7	182.7	188.0	183.0	185.5	1.1	0.9
MT970110	Klages/Baronesse	193.6	182.2	185.7	188.0	183.6	186.6	1.0	1.0
MT970116	Klages/Baronesse	192.9	180.1	181.1	185.0	182.0	184.2	1.1	1.0
MT970148	MT861596/ND 11120	192.1	180.5	183.5	186.0	182.6	184.9	1.0	1.0
MT970155	MT886610/MT140523	192.4	182.1	189.2	188.0	184.2	187.2	0.8	0.8
MT970229	MT890021/Stark	193.3	182.0	184.0	187.0	183.9	186.1	1.0	1.0
MT981004	Baronesse/H2860224	193.4	180.8	187.3	187.0	182.7	186.2	1.0	0.9
MT981006	Baronesse/H2860224	193.0	180.1	187.0	186.0	183.0	185.8	1.0	0.9
MT981030	Baronesse/MT910160	192.4	182.2	184.7	189.0	185.8	186.8	0.8	0.9
MT981042	H5860219/Baronesse	193.3	182.2	188.7	187.0	184.0	187.0	0.9	0.9
MT981060	Haybet/Baronesse	192.3	181.9	185.1	186.0	188.7	186.8	0.7	0.7
MT981091	MT851195/MT140523	193.0	180.4	182.0	187.0	182.0	184.9	1.1	1.0
MT981177	MT910033/Targhee	193.3	180.9	182.1	186.0	182.3	184.9	1.1	1.0
MT981210	MT910150/Stark	193.7	182.5	184.0	187.0	183.6	186.2	1.0	1.0
MT981212	MT910150/Stark	191.6	180.6	181.2	186.0	182.8	184.4	1.0	0.9

Table 5 continues on next page

Table 5. 2002 Montana Dryland Intrastate Spring Barley Nursery - Heading Date Summary
(Days > Jan. 1) by Location. (Continued).

ID	PEDIGREE	Havre	Sidney	Moccasin	Conrad	Bozeman	Avg	Byx	Rsq
MT981238	ND112311/Lewis	192.5	179.3	180.7	185.0	181.7	183.8	1.1	1.0
MT990106	Apex/H1851195	194.0	180.7	185.4	187.0	183.1	186.1	1.1	1.0
MT990172	Apex/MT890070	193.6	181.3	185.0	186.0	182.6	185.7	1.1	1.0
MT990244	MT890018/Stark	192.8	179.4	182.1	183.0	181.1	183.7	1.1	1.0
MT990249	MT890018/Stark	192.8	178.6	179.1	183.0	178.8	182.5	1.3	0.9
MTLB 13	Lewis/Baronesse #13	195.7	181.6	184.6	186.0	183.1	186.2	1.2	1.0
N96/1116	Justina	193.1	183.4	186.2	188.0	186.4	187.4	0.8	1.0
ND13299	Conlon	193.0	176.2	178.2	183.0	178.6	181.8	1.5	1.0
NORD1958	NORD 1958	192.7	181.7	185.7	189.0	185.3	186.9	0.9	0.9
NORD1963	NORD 1963	192.7	182.1	187.8	189.0	185.9	187.5	0.8	0.9
PI491534	Gallatin	193.1	178.9	180.4	186.0	182.1	184.1	1.2	0.9
PI533600	Haybet	192.7	179.6	182.0	184.0	183.5	184.3	1.1	0.9
PI568246	Baronesse	193.6	182.0	188.6	186.0	183.4	186.7	0.9	0.9
PI605472	Garnet	193.6	183.8	186.7	188.0	184.1	187.2	0.9	1.0
PI610264	Valier	192.7	181.9	187.4	188.0	183.7	186.7	0.9	0.9
SK 76333	Harrington	192.2	180.7	184.0	187.0	183.6	185.5	0.9	1.0
SiteMean	SITE MEAN *****	193.1	181.2	184.6	186.4	183.2	185.7	1.0	1.0
C.V.	C.V. (S/Mean) * 100	0.4	0.4	0.7	***	0.6	***	***	***
F-Value		2.2	7.9	15.2	***	5.7	***	***	***
L.S.D.	L.S.D. (.05)	1.3	1.3	2.1	***	1.9	***	***	***
Efficiency of Design	Rel to RCB	1.0	1.1	1.0	***	1.0	***	***	***

Table 6. 2002 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	21.3	22.7	21.8	18.4	28.0	32.5	24.1	1.1	0.9
6B932978	Legacy	23.3	24.5	23.7	20.8	31.0	34.6	26.3	1.1	0.9
6B952482	(BA6B95-2482) 6B89--21	21.6	24.2	24.6	21.7	32.0	35.7	26.6	1.3	1.0
B99AL621	B99AL-621	20.3	21.3	23.3	21.3	25.0	31.7	23.8	0.9	1.0
BZ594-20	WPB BZ594-20	21.6	22.7	25.1	22.6	25.0	31.6	24.8	0.8	0.9
BZ596117	WPB BZ596-117	21.4	23.4	22.6	22.0	28.0	31.7	24.9	0.9	1.0
H3860224	Lewis/Apex (MT860224)	21.3	22.2	23.9	25.5	30.0	33.1	26.0	1.0	0.9
MT000040	Chinook/MT920161	19.5	20.7	23.3	22.3	27.0	32.1	24.1	1.0	1.0
MT000045	Chinook/MT920161	20.1	23.3	25.0	21.3	28.0	33.8	25.3	1.1	1.0
MT000047	Chinook/MT920161	21.7	23.3	25.1	20.3	26.0	34.4	25.1	1.1	0.9
MT000063	H3860224/MT920041	19.2	21.1	22.9	21.4	28.0	32.6	24.2	1.1	1.0
MT000066	H3860224/MT920161	22.2	21.8	22.2	20.7	31.0	34.5	25.4	1.3	1.0
MT000092	MT890008/Lewis	21.4	24.3	24.4	22.9	27.0	32.3	25.4	0.8	1.0
MT000125	MT910189/Lewis	20.7	23.8	24.6	23.7	28.0	33.5	25.7	1.0	1.0
MT000130	MT910189/MT890070	23.0	26.9	25.2	25.2	28.0	34.8	27.2	0.9	0.9
MT000138	MT920041/H1851195	23.2	24.2	25.2	22.7	32.0	34.5	27.0	1.1	1.0
MT000153	MT920059/Baronesse	21.6	22.3	24.4	21.6	27.0	33.5	25.1	1.0	1.0
MT000156	MT920059/Baronesse	20.9	22.9	24.1	23.7	29.0	34.1	25.8	1.1	1.0
MT000157	MT920059/Baronesse	21.6	20.5	22.9	19.7	28.0	32.1	24.1	1.1	1.0
MT000159	MT920059/Baronesse	20.6	20.9	23.1	21.0	26.0	32.8	24.1	1.0	1.0
MT000177	MT930029/Baronesse	21.0	21.4	15.1	19.9	29.0	31.7	23.0	1.2	0.7
MT000178	MT930029/Baronesse	20.5	21.4	23.8	19.3	30.0	32.1	24.5	1.1	0.9
MT000180	MT930029/Baronesse	21.3	22.5	23.5	21.8	29.0	34.3	25.4	1.1	1.0
MT000237	Harrington/MT920059	21.9	22.2	23.1	22.0	30.0	33.2	25.4	1.1	1.0
MT000239	Harrington/MT920059	22.2	20.3	23.0	19.7	27.0	32.8	24.2	1.1	1.0
MT910189	ND 7293/Bearpaw	21.8	21.8	24.1	22.3	25.0	33.5	24.8	0.9	0.9
MT950186	Haxby	21.4	24.2	24.7	22.0	26.0	33.3	25.3	0.9	0.9
MT960099	Manley/Baronesse	19.9	19.2	20.9	17.6	25.0	30.5	22.2	1.0	1.0
MT960100	Manley/Baronesse	20.6	20.3	21.0	18.5	25.0	30.2	22.6	0.9	1.0
MT960101	Manley/Baronesse	22.1	19.3	21.9	21.3	29.0	31.7	24.2	1.0	0.9
MT960222	Stark/Baronesse	21.7	22.5	25.2	22.3	27.0	33.9	25.4	1.0	1.0
MT960226	Stark/Baronesse	22.7	24.4	24.4	23.1	29.0	32.1	25.9	0.8	1.0
MT960228	Stark/Baronesse	22.4	21.3	24.8	21.8	29.0	33.7	25.5	1.1	1.0
MT970026	Baronesse/MT860756	23.7	25.0	24.8	23.3	30.0	34.2	26.8	0.9	1.0
MT970110	Klages/Baronesse	22.4	20.1	22.8	21.2	33.0	34.3	25.7	1.3	0.9
MT970116	Klages/Baronesse	24.2	26.2	25.9	25.6	33.0	34.6	28.2	0.9	0.9
MT970148	MT861596/ND 11120	18.6	21.2	24.1	19.5	26.0	31.0	23.4	1.0	0.9
MT970155	MT886610/MT140523	21.9	20.8	23.7	21.5	27.0	31.8	24.4	0.9	1.0
MT970229	MT890021/Stark	22.4	22.2	22.7	21.1	29.0	32.4	25.0	1.0	1.0
MT981004	Baronesse/H2860224	22.1	21.7	22.8	22.6	27.0	33.3	24.9	1.0	1.0
MT981006	Baronesse/H2860224	20.6	23.8	23.3	23.1	25.0	33.1	24.8	0.9	0.9
MT981030	Baronesse/MT910160	21.1	21.9	24.1	20.2	30.0	31.9	24.9	1.1	0.9
MT981042	H5860219/Baronesse	20.5	24.0	22.8	18.6	27.0	33.0	24.3	1.1	0.9
MT981060	Haybet/Baronesse	22.1	21.1	23.1	17.9	29.0	32.6	24.3	1.2	0.9
MT981091	MT851195/MT140523	20.4	22.9	24.1	22.5	26.0	30.0	24.3	0.7	0.9
MT981177	MT910033/Targhee	19.5	20.9	23.3	21.8	26.0	32.6	24.0	1.0	1.0
MT981210	MT910150/Stark	21.8	23.6	25.6	23.3	28.0	33.1	25.9	0.9	1.0
MT981212	MT910150/Stark	22.0	23.4	25.3	23.9	29.0	33.0	26.1	0.9	1.0

Table 6 continues on next page

Table 6. 2002 Montana Dryland Intrastate Spring Barley Nursery - Plant Height Summary (Inches) by Location. (Continued).

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
MT990106	Apex/H1851195	21.0	20.9	22.0	20.9	25.0	30.9	23.4	0.9	1.0
MT990172	Apex/MT890070	22.4	19.8	23.8	21.6	27.0	31.3	24.3	0.9	0.9
MT990244	MT890018/Stark	22.4	21.6	24.4	25.1	26.0	31.3	25.1	0.7	0.8
MT990249	MT890018/Stark	20.9	20.4	25.1	25.3	27.0	31.1	25.0	0.8	0.8
MTLB 13	Lewis/Baronesse #13	20.4	22.5	22.8	21.0	28.0	32.3	24.5	1.0	1.0
N96/1116	Justina	21.1	20.1	22.8	19.5	26.0	29.7	23.2	0.9	1.0
ND13299	Conlon	20.6	27.5	27.4	24.8	25.0	34.4	26.6	0.8	0.6
NORD1958	NORD 1958	20.7	21.5	22.1	19.2	26.0	31.2	23.4	1.0	1.0
NORD1963	NORD 1963	17.7	18.3	20.8	20.4	24.0	28.6	21.6	0.9	0.9
PI491534	Gallatin	22.1	26.0	25.2	21.6	29.0	35.3	26.5	1.1	0.9
PI533600	Haybet	24.1	24.6	24.5	20.4	30.0	37.4	26.8	1.3	0.9
PI568246	Baronesse	21.3	23.3	23.4	20.7	26.0	33.0	24.6	1.0	1.0
PI605472	Garnet	20.7	20.5	22.8	20.3	29.0	33.5	24.5	1.2	1.0
PI610264	Valier	20.3	22.2	22.6	20.9	31.0	33.1	25.0	1.2	1.0
SK 76333	Harrington	22.1	21.6	22.7	21.1	29.0	35.2	25.3	1.2	1.0
SiteMean	SITE MEAN *****	21.4	22.4	23.6	21.6	27.9	32.9	24.9	1.0	1.0
C.V.	C.V. (S/Mean) * 100	5.3	8.1	7.7	7.4	***	3.7	***	***	***
F-Value		3.1	3.0	2.5	3.9	***	4.8	***	***	***
L.S.D.	L.S.D. (.05)	1.8	3.1	3.0	2.6	***	2.0	***	***	***
Efficiency of Design	Rel to RCB	1.1	1.2	1.0	1.0	***	1.1	***	***	***

Table 7. 2002 Montana Dryland Intrastate Spring Barley Nursery - Protein Summary (%) by Location.

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
2B914947	Merit	16.3	12.5	14.8	18.1	13.8	16.4	15.3	0.9	0.9
6B932978	Legacy	16.2	13.5	14.5	18.5	13.0	16.8	15.4	1.0	1.0
6B952482	(BA6B95-2482) 6B89--21	16.2	13.3	14.5	17.8	13.5	16.7	15.3	0.9	0.9
B99AL621	B99AL-621	16.5	13.3	14.3	17.9	13.2	16.2	15.2	0.9	1.0
BZ594-20	WPB BZ594-20	15.4	13.0	14.6	17.5	12.9	14.9	14.7	0.8	1.0
BZ596117	WPB BZ596-117	16.6	12.9	14.6	18.0	13.6	16.5	15.4	0.9	1.0
H3860224	Lewis/Apex (MT860224)	17.8	13.2	14.6	19.5	12.7	17.2	15.8	1.3	1.0
MT000040	Chinook/MT920161	17.2	13.8	14.2	19.4	13.8	16.7	15.9	1.1	1.0
MT000045	Chinook/MT920161	17.7	12.9	14.7	19.7	13.8	16.5	15.9	1.2	1.0
MT000047	Chinook/MT920161	16.7	13.2	14.5	20.8	13.5	15.6	15.7	1.3	0.9
MT000063	H3860224/MT920041	16.8	12.9	14.5	19.4	13.5	16.0	15.5	1.1	1.0
MT000066	H3860224/MT920161	17.5	13.9	14.6	19.4	12.8	16.9	15.8	1.2	1.0
MT000092	MT890008/Lewis	15.2	12.9	14.2	18.3	12.6	14.5	14.6	1.0	0.9
MT000125	MT910189/Lewis	16.8	13.6	14.7	18.8	12.8	15.2	15.3	1.0	1.0
MT000130	MT910189/MT890070	15.7	12.8	15.0	17.4	12.5	14.6	14.7	0.9	0.9
MT000138	MT920041/H1851195	17.9	14.0	14.5	19.1	14.0	16.4	16.0	1.0	1.0
MT000153	MT920059/Baronesse	17.4	13.5	14.6	17.6	13.2	15.9	15.4	0.9	1.0
MT000156	MT920059/Baronesse	17.0	14.1	14.5	18.5	13.1	15.9	15.5	1.0	1.0
MT000157	MT920059/Baronesse	17.3	14.0	14.1	16.8	13.3	17.2	15.4	0.8	0.8
MT000159	MT920059/Baronesse	17.3	13.7	14.8	18.7	13.2	16.4	15.7	1.0	1.0
MT000177	MT930029/Baronesse	17.3	14.2	14.2	17.1	13.8	16.2	15.5	0.7	0.9
MT000178	MT930029/Baronesse	16.6	14.4	14.8	18.0	13.8	15.8	15.5	0.7	1.0
MT000180	MT930029/Baronesse	16.7	13.4	14.5	17.9	13.2	15.4	15.2	0.9	1.0
MT000237	Harrington/MT920059	17.9	14.4	14.1	18.3	12.7	17.1	15.7	1.0	0.9
MT000239	Harrington/MT920059	17.8	13.6	14.6	19.1	12.6	16.6	15.7	1.2	1.0
MT910189	ND 7293/Bearpaw	16.5	12.4	14.5	18.8	12.6	15.4	15.0	1.2	1.0
MT950186	Haxby	16.3	12.8	14.9	18.4	12.6	15.5	15.1	1.0	1.0
MT960099	Manley/Baronesse	17.0	13.9	14.9	19.8	12.1	15.9	15.6	1.3	1.0
MT960100	Manley/Baronesse	17.4	13.4	14.7	17.8	12.7	16.5	15.4	1.0	1.0
MT960101	Manley/Baronesse	16.9	13.3	14.2	17.4	11.8	16.3	15.0	1.0	0.9
MT960222	Stark/Baronesse	15.8	12.8	15.1	18.4	12.0	15.2	14.9	1.1	0.9
MT960226	Stark/Baronesse	16.3	13.2	14.6	17.8	12.8	15.4	15.0	0.9	1.0
MT960228	Stark/Baronesse	15.9	13.5	14.4	17.7	12.3	14.9	14.8	0.9	1.0
MT970026	Baronesse/MT860756	16.2	13.3	14.8	17.3	12.5	15.9	15.0	0.9	1.0
MT970110	Klages/Baronesse	17.1	14.6	14.3	18.8	12.2	16.5	15.6	1.1	0.9
MT970116	Klages/Baronesse	15.8	13.0	14.9	18.5	12.1	15.5	15.0	1.1	1.0
MT970148	MT861596/ND 11120	15.7	12.1	14.8	18.4	12.4	14.7	14.7	1.1	0.9
MT970155	MT886610/MT140523	17.2	13.4	14.6	18.0	13.1	16.3	15.4	1.0	1.0
MT970229	MT890021/Stark	16.3	13.2	14.4	18.9	13.6	15.2	15.3	1.0	0.9
MT981004	Baronesse/H2860224	16.2	12.9	14.4	18.9	12.8	17.2	15.4	1.1	0.9
MT981006	Baronesse/H2860224	16.8	13.4	14.7	18.9	13.3	16.1	15.5	1.0	1.0
MT981030	Baronesse/MT910160	16.4	13.0	14.8	17.2	12.2	15.5	14.8	0.9	0.9
MT981042	H5860219/Baronesse	16.0	13.2	14.0	19.4	12.7	16.5	15.3	1.2	1.0
MT981060	Haybet/Baronesse	16.6	13.8	14.6	16.3	12.4	15.5	14.9	0.7	0.8
MT981091	MT851195/MT140523	16.0	14.2	14.9	***	12.3	15.1	***	***	***
MT981177	MT910033/Targhee	17.5	14.0	14.5	18.3	12.8	15.9	15.5	1.0	1.0
MT981210	MT910150/Stark	17.2	14.1	14.0	20.2	13.3	16.9	15.9	1.2	1.0
MT981212	MT910150/Stark	16.7	13.4	14.5	19.3	13.5	16.0	15.6	1.1	1.0

Table 7 continues on next page

Table 7. 2002 Montana Dryland Intrastate Spring Barley Nursery - Protein Summary (%) by Location.
(Continued).

ID	PEDIGREE	Havre	Sidney	Moccasin	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
MT981238	ND112311/Lewis	16.6	13.6	14.8	18.6	12.9	15.1	15.3	1.0	1.0
MT990106	Apex/H1851195	17.1	13.3	14.1	20.2	14.1	15.7	15.7	1.2	0.9
MT990172	Apex/MT890070	16.5	13.7	14.4	19.1	13.2	16.1	15.5	1.0	1.0
MT990244	MT890018/Stark	17.4	13.5	14.5	18.3	14.7	15.7	15.7	0.8	0.9
MT990249	MT890018/Stark	17.8	14.7	14.1	18.3	14.7	16.1	15.9	0.8	0.8
MTLB 13	Lewis/Baronesse #13	16.4	13.5	15.1	18.2	12.9	16.6	15.5	0.9	1.0
N96/1116	Justina	16.0	13.1	14.8	16.1	12.2	15.3	14.6	0.7	0.9
ND13299	Conlon	15.6	13.2	14.4	17.4	13.4	15.8	15.0	0.8	1.0
NORD1958	NORD 1958	15.9	12.8	14.2	17.8	13.0	15.4	14.9	0.9	1.0
NORD1963	NORD 1963	15.5	12.5	14.4	17.7	12.3	15.8	14.7	1.0	1.0
PI491534	Gallatin	16.6	12.6	14.3	18.5	12.8	16.3	15.2	1.1	1.0
PI533600	Haybet	17.6	14.0	15.0	19.0	14.3	16.7	16.1	1.0	1.0
PI568246	Baronesse	16.3	13.7	15.0	19.0	12.5	16.2	15.4	1.1	1.0
PI605472	Garnet	17.1	14.3	14.5	18.4	13.3	16.5	15.7	0.9	1.0
PI610264	Valier	17.0	13.7	14.9	***	9.1	16.9	***	***	***
SK 76333	Harrington	16.6	14.1	14.5	18.8	12.7	16.8	15.6	1.1	1.0
SiteMean	SITE MEAN *****	16.7	13.4	14.5	18.4	13.0	16.0	15.3	1.0	1.0
C.V.	C.V. (S/Mean) * 100	***	***	8.3	***	3.4	2.6	***	***	***
F-Value		***	***	1.0	***	5.7	4.3	***	***	***
L.S.D.	L.S.D. (.05)	***	***	2.0	***	0.8	0.9	***	***	***
Efficiency of Design	Rel to RCB	***	***	1.0	***	2.3	1.2	***	***	***

Table 8. 2002 Montana Irrigated Intrastate Sping Barley Nursery - Overall Summary.

ID	PEDIGREE	Yield bu/ac	Test Wt. lb/bu	Plump Percent	Heading Date	Plant Ht inches	Protein Percent
MT970229	MT890021/Stark	130.6	52.7	95.7	182.7	32.7	13.6
BZ596117	WPB BZ596-117	129.0	52.4	92.3	182.0	30.5	14.1
MT000153	MT920059/Baronesse	127.5	51.3	89.6	179.8	30.1	14.3
MT000047	Chinook/MT920161	126.7	50.3	82.2	181.7	31.8	14.1
MT960100	Manley/Baronesse	125.8	51.4	84.6	184.0	29.5	13.8
MT981006	Baronesse/H2860224	125.7	50.2	89.7	182.0	30.2	14.2
MT960099	Manley/Baronesse	125.6	50.0	72.7	183.7	28.9	13.5
S3482	Calgary	125.5	50.4	85.2	183.5	26.9	13.3
MT950186	Haxby	125.1	52.7	90.6	182.1	33.5	13.5
MT000040	Chinook/MT920161	124.3	50.8	79.2	182.8	30.0	14.6
MT981004	Baronesse/H2860224	123.7	49.9	86.5	181.6	30.9	13.8
BZ594-20	WPB BZ594-20	123.1	51.3	90.8	178.0	30.3	13.4
MT000092	MT890008/Lewis	122.3	50.9	91.0	181.8	32.7	13.6
MT970116	Klages/Baronesse	122.1	51.4	89.0	180.7	34.0	13.7
MT981210	MT910150/Stark	121.5	50.6	83.2	182.7	32.4	14.5
MT981177	MT910033/Targhee	121.4	50.6	86.6	181.0	30.0	14.2
MT981030	Baronesse/MT910160	121.2	52.0	87.1	184.5	33.3	13.2
MT000130	MT910189/MT890070	121.1	50.8	87.6	180.0	33.1	13.2
MT000125	MT910189/Lewis	121.0	51.0	89.2	182.0	32.0	13.6
MT960228	Stark/Baronesse	120.9	50.7	83.7	183.2	31.6	13.3
B99AL621	B99AL-621	120.4	50.4	88.4	182.6	29.9	13.8
MT000063	H3860224/MT920041	120.2	50.9	86.7	184.1	31.8	13.8
MT000180	MT930029/Baronesse	120.2	50.9	89.4	182.5	32.1	14.6
MT970026	Baronesse/MT860756	120.1	51.7	88.6	180.9	31.9	13.9
MT981212	MT910150/Stark	120.0	50.8	77.8	181.2	31.6	14.6
MT970148	MT861596/ND 11120	119.6	49.9	88.5	181.0	29.1	13.3
MT960101	Manley/Baronesse	119.1	49.7	80.5	184.6	30.0	13.8
MT981091	MT851195/MT140523	119.0	50.3	81.8	180.7	29.3	14.0
MT990172	Apex/MT890070	118.9	50.4	91.7	180.9	30.3	13.9
MT000159	MT920059/Baronesse	118.6	50.1	87.1	183.8	32.1	14.5
MT981238	ND112311/Lewis	118.4	51.0	86.3	179.2	32.5	14.3
MT000239	Harrington/MT920059	118.2	49.3	87.9	184.3	32.5	14.0
MT970110	Klages/Baronesse	117.8	51.2	90.7	183.4	32.2	14.0
MT990106	Apex/H1851195	117.7	50.8	92.0	182.3	29.3	14.5
SITEMEAN	SITE MEAN *****	117.3	50.4	86.4	182.1	31.1	14.0
NORD1958	Nord 1958	117.3	50.4	88.7	184.1	28.2	13.6
MT000178	MT930029/Baronesse	117.1	50.9	93.5	183.8	32.6	14.2
PI610264	Valier	116.6	51.3	85.0	183.0	31.5	14.0
MT960226	Stark/Baronesse	116.5	51.6	92.8	181.4	32.0	13.7
PI568246	Baronesse	116.3	50.6	87.7	183.2	29.8	13.9
MT910189	ND 7293/Bearpaw	116.0	50.3	85.2	179.8	29.3	13.6
MT960222	Stark/Baronesse	115.3	50.3	86.9	183.0	32.0	13.6
MT000156	MT920059/Baronesse	115.2	51.0	87.1	178.5	29.6	14.7
MT000045	Chinook/MT920161	115.2	50.8	87.0	181.3	30.7	14.5
2B914947	Merit	115.1	49.4	90.8	183.4	31.2	13.8
MT000066	H3860224/MT920161	114.9	50.3	82.9	183.3	30.5	14.8
H3860224	Lewis/Apex (MT860224 t	114.6	49.8	88.0	184.2	30.1	14.1

Table 8 continues on next page

Table 8. 2002 Montana Irrigated Intrastate Spring Barley Nursery - Overall Summary.
(Continued).

ID	PEDIGREE	Yield bu/ac	Test Wt. lb/bu	Plump Percent	Heading Date	Plant Ht inches	Protein Percent
MT970155	MT886610/MT140523	114.1	50.3	90.6	184.9	29.3	14.5
MT990244	MT890018/Stark	113.9	51.3	89.7	178.6	29.2	14.9
PI491534	Gallatin	113.9	50.8	82.5	179.9	33.0	13.6
MTLB 13	Lewis/Baronesse #13	113.3	49.8	83.2	181.0	29.3	14.3
PI605472	Garnet	112.8	49.6	93.7	183.8	34.7	14.2
MT000138	MT920041/H1851195	112.8	51.7	92.5	179.1	33.4	15.0
N96/1116	Justina	112.6	48.5	81.3	184.9	28.2	13.7
MT000177	MT930029/Baronesse	112.5	51.1	96.1	182.1	31.6	15.1
6B952482	(BA6B95-2482) 6B89--21	112.4	49.1	92.4	180.2	33.0	14.4
MT000237	Harrington/MT920059	111.6	49.5	89.6	184.9	34.1	14.1
MT000157	MT920059/Baronesse	110.3	50.6	80.2	183.5	32.6	14.3
ND13299	Conlon	108.9	50.9	94.2	176.7	30.2	14.1
MT981042	H5860219/Baronesse	108.9	51.2	86.5	183.9	29.6	14.4
6B932978	Legacy	108.8	47.9	81.3	180.2	33.0	14.5
NORD1963	NORD 1963	108.0	48.9	90.1	184.0	28.2	13.2
SK 76333	Harrington	106.8	48.8	83.6	182.6	31.8	13.6
MT981060	Haybet/Baronesse	100.1	46.2	70.9	182.3	31.3	14.0
PI533600	Haybet	84.4	45.2	44.3	181.3	33.7	15.8

Table 9. 2002 Montana Irrigated Intrastate Spring Barley Nursery - Yield Summary (Bu/Ac) by Location.

ID	PEDIGREE	Kalispell	Sidney	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
2B914947	Merit	120.0	77.1	154.8	118.1	105.7	115.1	0.9	0.8
6B932978	Legacy	140.9	81.7	139.7	105.3	76.3	108.8	1.0	0.9
6B952482	(BA6B95-2482) 6B89--21	161.3	88.3	135.7	101.3	75.2	112.4	1.0	0.7
B99AL621	B99AL-621	153.3	88.9	154.5	120.2	85.4	120.4	1.1	0.9
BZ594-20	WPB BZ594-20	163.8	86.7	122.9	123.4	118.8	123.1	0.8	0.7
BZ596117	WPB BZ596-117	151.4	81.2	166.1	123.0	123.0	129.0	1.1	1.0
H3860224	Lewis/Apex (MT860224)	136.5	70.6	146.3	114.8	104.8	114.6	1.0	1.0
MT000040	Chinook/MT920161	141.3	74.0	159.0	126.3	120.9	124.3	1.1	0.9
MT000045	Chinook/MT920161	136.0	78.3	153.3	102.6	106.0	115.2	1.0	0.9
MT000047	Chinook/MT920161	149.2	76.7	160.9	125.1	121.7	126.7	1.1	1.0
MT000063	H3860224/MT920041	135.9	80.4	155.9	115.2	113.9	120.2	0.9	0.9
MT000066	H3860224/MT920161	128.2	78.4	133.2	117.3	117.3	114.9	0.7	0.9
MT000092	MT890008/Lewis	145.2	67.3	159.5	116.8	122.5	122.3	1.2	0.9
MT000125	MT910189/Lewis	145.0	74.8	150.5	122.2	112.7	121.0	1.0	1.0
MT000130	MT910189/MT890070	148.6	74.5	161.2	117.0	103.9	121.1	1.2	1.0
MT000138	MT920041/H1851195	135.9	65.0	138.7	112.8	111.7	112.8	1.0	0.9
MT000153	MT920059/Baronesse	159.3	84.7	147.0	126.5	120.1	127.5	1.0	1.0
MT000156	MT920059/Baronesse	136.1	75.9	152.3	117.6	94.0	115.2	1.1	1.0
MT000157	MT920059/Baronesse	141.5	69.5	145.8	107.4	87.2	110.3	1.2	1.0
MT000159	MT920059/Baronesse	150.9	77.9	156.0	119.3	88.7	118.6	1.2	1.0
MT000177	MT930029/Baronesse	142.3	60.6	140.2	113.4	106.2	112.5	1.1	1.0
MT000178	MT930029/Baronesse	144.6	76.6	146.9	107.8	109.4	117.1	1.0	1.0
MT000180	MT930029/Baronesse	156.0	76.2	149.2	119.4	100.1	120.2	1.2	1.0
MT000237	Harrington/MT920059	137.0	71.7	129.4	125.7	94.4	111.6	0.9	0.9
MT000239	Harrington/MT920059	136.7	78.6	148.6	117.2	109.7	118.2	0.9	1.0
MT910189	ND 7293/Bearpaw	136.3	74.3	161.8	110.0	97.5	116.0	1.1	0.9
MT950186	Haxby	151.3	87.4	164.6	123.9	98.4	125.1	1.1	1.0
MT960099	Manley/Baronesse	159.1	81.9	144.8	129.5	112.9	125.6	1.0	1.0
MT960100	Manley/Baronesse	151.3	73.5	168.7	120.1	115.3	125.8	1.3	1.0
MT960101	Manley/Baronesse	148.4	75.8	142.1	125.0	104.2	119.1	1.0	1.0
MT960222	Stark/Baronesse	150.8	84.1	133.3	116.4	91.8	115.3	0.9	0.9
MT960226	Stark/Baronesse	151.2	74.2	137.8	117.7	101.6	116.5	1.0	1.0
MT960228	Stark/Baronesse	139.2	82.9	163.7	118.4	100.5	120.9	1.1	0.9
MT970026	Baronesse/MT860756	147.3	74.4	168.7	112.1	98.1	120.1	1.3	1.0
MT970110	Klages/Baronesse	155.3	82.7	145.0	123.5	82.3	117.8	1.1	0.9
MT970116	Klages/Baronesse	145.5	81.0	154.8	127.0	102.1	122.1	1.1	1.0
MT970148	MT861596/ND 11120	146.9	80.1	141.4	123.3	106.5	119.6	0.9	1.0
MT970155	MT886610/MT140523	133.4	79.4	126.4	116.8	114.5	114.1	0.7	0.9
MT970229	MT890021/Stark	154.4	81.0	177.5	127.4	112.7	130.6	1.3	1.0
MT981004	Baronesse/H2860224	152.1	79.6	162.3	124.0	100.7	123.7	1.2	1.0
MT981006	Baronesse/H2860224	152.9	80.7	155.5	125.4	114.1	125.7	1.1	1.0
MT981030	Baronesse/MT910160	146.8	77.4	163.3	115.9	102.8	121.2	1.2	1.0
MT981042	H5860219/Baronesse	142.0	80.3	116.7	114.8	90.6	108.9	0.8	0.8
MT981060	Haybet/Baronesse	131.1	69.4	120.2	103.4	76.5	100.1	0.9	0.9
MT981091	MT851195/MT140523	130.2	79.2	154.3	123.8	107.6	119.0	0.9	0.9
MT981177	MT910033/Targhee	142.2	76.4	155.0	124.8	108.5	121.4	1.1	1.0
MT981210	MT910150/Stark	151.5	69.8	156.4	117.3	112.3	121.5	1.2	1.0
MT981212	MT910150/Stark	159.5	70.0	132.5	122.1	116.1	120.0	1.0	0.8

Table 9 continues on next page

Table 9. 2002 Montana Irrigated Intrastate Spring Barley Nursery - Yield Summary (Bu/Ac) by Location. (Continued).

ID	PEDIGREE	Kalispell	Sidney	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
MT981238	ND112311/Lewis	147.0	77.5	149.5	111.7	106.1	118.4	1.0	1.0
MT990106	Apex/H1851195	137.3	76.7	145.5	104.8	124.2	117.7	0.9	0.8
MT990172	Apex/MT890070	138.1	75.1	147.0	121.8	112.6	118.9	1.0	1.0
MT990244	MT890018/Stark	132.7	83.0	139.3	104.5	109.9	113.9	0.8	0.9
MTLB 13	Lewis/Baronesse #13	141.8	75.3	147.4	115.2	86.6	113.3	1.1	1.0
N96/1116	Justina	124.3	79.9	122.2	120.8	115.6	112.6	0.6	0.7
ND13299	Conlon	142.6	77.1	116.0	104.4	104.2	108.9	0.7	0.8
NORD1958	Nord 1958	133.6	85.1	137.9	115.5	114.2	117.3	0.7	1.0
NORD1963	NORD 1963	137.9	75.4	137.6	91.3	97.7	108.0	0.9	0.9
PI491534	Gallatin	139.9	85.6	131.9	117.1	95.0	113.9	0.8	0.9
PI533600	Haybet	110.3	65.2	116.6	76.9	52.7	84.4	0.9	0.8
PI568246	Baronesse	144.1	77.8	141.6	119.9	98.2	116.3	1.0	1.0
PI605472	Garnet	141.8	73.1	145.1	103.2	101.1	112.8	1.0	1.0
PI610264	Valier	146.4	80.0	151.8	106.0	98.9	116.6	1.1	1.0
S3482	Calgary	147.2	82.1	158.5	125.9	113.9	125.5	1.0	1.0
SK 76333	Harrington	129.6	71.0	135.9	106.9	90.7	106.8	0.9	1.0
SiteMean	SITE MEAN *****	143.3	77.4	146.5	116.0	103.4	117.3	1.0	1.0
C.V.	C.V. (S/Mean) * 100	7.2	5.7	10.9	6.6	8.6	***	***	***
F-Value		2.6	4.6	2.1	4.3	6.3	***	***	***
L.S.D.	L.S.D. (.05)	17.9	7.6	27.1	12.9	15.3	***	***	***
Efficiency of Design Rel to RCB		1.3	1.2	1.1	1.1	1.3	***	***	***

Table 10. 2002 Montana Irrigated Intrastate Spring Barley Nursery - Test Weight Summary (Lbs/Bu) by Location.

ID	PEDIGREE	Kalispell	Sidney	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
2B914947	Merit	49.1	45.7	49.7	50.4	52.3	49.4	0.9	1.0
6B932978	Legacy	44.0	46.2	50.7	49.1	49.7	47.9	0.6	0.3
6B952482	(BA6B95-2482) 6B89--21	48.0	46.3	50.9	48.7	51.8	49.1	0.7	0.8
B99AL621	B99AL-621	50.2	48.5	50.7	50.9	51.9	50.4	0.5	1.0
BZ594-20	WPB BZ594-20	50.8	48.5	51.2	51.3	54.9	51.3	0.8	0.9
BZ596117	WPB BZ596-117	52.3	49.0	52.5	53.1	55.0	52.4	0.8	1.0
H3860224	Lewis/Apex (MT860224)	49.1	44.3	50.5	51.9	53.1	49.8	1.3	1.0
MT000040	Chinook/MT920161	49.5	45.5	51.9	52.6	54.3	50.8	1.3	1.0
MT000045	Chinook/MT920161	50.3	46.8	51.7	51.0	54.3	50.8	1.0	0.9
MT000047	Chinook/MT920161	50.3	44.6	51.8	51.3	53.4	50.3	1.2	0.9
MT000063	H3860224/MT920041	50.7	46.7	50.5	52.3	54.5	50.9	1.1	1.0
MT000066	H3860224/MT920161	49.8	45.3	50.4	51.8	54.3	50.3	1.3	1.0
MT000092	MT890008/Lewis	50.6	46.2	52.4	52.0	53.6	50.9	1.1	0.9
MT000125	MT910189/Lewis	50.6	46.0	52.3	51.4	54.5	51.0	1.2	0.9
MT000130	MT910189/MT890070	51.8	46.2	50.1	51.2	54.5	50.8	1.1	0.9
MT000138	MT920041/H1851195	52.1	46.7	52.3	52.4	54.9	51.7	1.1	0.9
MT000153	MT920059/Baronesse	50.5	48.4	51.7	52.1	53.8	51.3	0.8	1.0
MT000156	MT920059/Baronesse	51.0	47.0	51.8	51.1	54.0	51.0	0.9	0.9
MT000157	MT920059/Baronesse	48.1	46.2	51.6	54.1	52.9	50.6	1.1	0.8
MT000159	MT920059/Baronesse	48.8	48.1	49.5	51.0	53.2	50.1	0.7	0.8
MT000177	MT930029/Baronesse	51.2	48.2	50.7	52.0	53.4	51.1	0.7	1.0
MT000178	MT930029/Baronesse	50.1	47.2	51.0	52.0	54.2	50.9	1.0	1.0
MT000180	MT930029/Baronesse	51.3	48.9	49.7	51.6	53.3	50.9	0.6	0.8
MT000237	Harrington/MT920059	49.1	46.5	48.1	51.1	52.8	49.5	0.9	0.9
MT000239	Harrington/MT920059	47.2	46.0	48.8	51.8	52.6	49.3	1.0	0.9
MT910189	ND 7293/Bearpaw	49.8	45.7	51.1	51.0	54.0	50.3	1.2	1.0
MT950186	Haxby	51.3	49.0	53.7	54.3	55.1	52.7	0.9	0.9
MT960099	Manley/Baronesse	49.8	45.9	49.0	51.4	54.0	50.0	1.1	0.9
MT960100	Manley/Baronesse	50.6	48.0	51.9	52.3	54.4	51.4	0.9	1.0
MT960101	Manley/Baronesse	48.2	46.3	49.2	51.4	53.6	49.7	1.1	0.9
MT960222	Stark/Baronesse	48.6	47.9	49.8	52.7	52.4	50.3	0.7	0.8
MT960226	Stark/Baronesse	50.6	48.2	52.6	52.5	54.1	51.6	0.9	1.0
MT960228	Stark/Baronesse	50.8	46.0	51.5	52.6	52.6	50.7	1.0	0.9
MT970026	Baronesse/MT860756	50.9	47.0	52.7	53.4	54.8	51.7	1.2	1.0
MT970110	Klages/Baronesse	51.3	48.8	49.4	52.3	54.1	51.2	0.7	0.7
MT970116	Klages/Baronesse	51.6	47.5	50.8	52.3	54.9	51.4	1.0	0.9
MT970148	MT861596/ND 11120	49.7	46.3	49.3	50.7	53.6	49.9	1.0	0.9
MT970155	MT886610/MT140523	49.2	47.9	48.9	51.8	53.7	50.3	0.8	0.8
MT970229	MT890021/Stark	52.8	49.8	53.4	52.9	54.7	52.7	0.7	0.9
MT981004	Baronesse/H2860224	48.1	45.2	51.7	52.1	52.4	49.9	1.1	0.9
MT981006	Baronesse/H2860224	48.7	45.5	50.6	52.4	54.1	50.2	1.3	1.0
MT981030	Baronesse/MT910160	51.6	47.0	53.4	53.9	54.2	52.0	1.1	0.9
MT981042	H5860219/Baronesse	51.6	47.9	49.0	52.4	55.0	51.2	0.9	0.8
MT981060	Haybet/Baronesse	44.7	43.5	46.8	46.1	49.7	46.2	0.8	0.8
MT981091	MT851195/MT140523	48.8	45.1	51.3	52.3	53.8	50.3	1.3	1.0
MT981177	MT910033/Targhee	51.3	46.0	49.2	51.9	54.6	50.6	1.2	0.9
MT981210	MT910150/Stark	51.0	44.0	52.0	52.3	53.9	50.6	1.4	0.9
MT981212	MT910150/Stark	51.4	45.2	50.6	52.5	54.3	50.8	1.3	0.9

Table 10 continues on next page

Table 10. 2002 Montana Irrigated Intrastate Spring Barley Nursery - Test Weight Summary (Lbs/Bu) by Location. (Continued).

ID	PEDIGREE	Kalispell	Sidney	Huntley	Conrad	Bozeman	Avg	Byx	Rsqr
MT981238	ND112311/Lewis	51.5	46.4	50.3	52.7	54.3	51.0	1.1	0.9
MT990106	Apex/H1851195	49.5	45.2	51.5	53.0	54.9	50.8	1.4	1.0
MT990172	Apex/MT890070	50.6	45.9	51.0	51.6	52.8	50.4	1.0	0.9
MT990244	MT890018/Stark	50.1	48.2	50.8	52.1	55.2	51.3	1.0	0.9
MTLB 13	Lewis/Baronesse #13	50.0	45.8	49.9	50.5	52.6	49.8	0.9	1.0
N96/1116	Justina	46.5	45.8	46.6	51.6	52.0	48.5	1.0	0.7
ND13299	Conlon	52.6	45.5	50.7	51.4	54.2	50.9	1.2	0.8
NORD1958	Nord 1958	50.6	46.2	50.9	51.2	53.1	50.4	1.0	1.0
NORD1963	NORD 1963	49.1	43.1	49.9	50.7	51.9	48.9	1.3	0.9
PI491534	Gallatin	50.2	46.7	50.4	52.1	54.5	50.8	1.1	1.0
PI533600	Haybet	43.4	42.5	46.4	44.7	48.9	45.2	0.9	0.7
PI568246	Baronesse	50.2	48.1	50.0	51.8	53.1	50.6	0.7	0.9
PI605472	Garnet	49.6	45.6	49.2	51.5	52.0	49.6	0.9	0.9
PI610264	Valier	50.2	48.1	53.0	52.3	53.1	51.3	0.8	0.8
S3482	Calgary	47.7	45.5	52.5	52.8	53.4	50.4	1.3	0.8
SK 76333	Harrington	45.2	45.0	49.1	51.2	53.4	48.8	1.3	0.8
SiteMean	SITE MEAN *****	49.8	46.5	50.7	51.7	53.5	50.4	1.0	1.0
C.V.	C.V. (S/Mean) * 100	***	2.0	3.3	***	0.9	***	***	***
F-Value		***	7.5	2.5	***	13.9	***	***	***
L.S.D.	L.S.D. (.05)	***	1.6	2.8	***	1.0	***	***	***
Efficiency of Design	Rel to RCB	***	1.0	1.0	***	1.0	***	***	***

Table 11. 2002 Montana Irrigated Intrastate Spring Barley Nursery - Plump Summary (%) by Location.

ID	PEDIGREE	Kalispell	Sidney	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
2B914947	Merit	92.4	79.0	87.2	99.0	96.3	90.8	0.9	1.0
6B932978	Legacy	58.8	78.0	84.6	98.0	87.1	81.3	0.7	0.2
6B952482	(BA6B95-2482) 6B89--21	91.0	89.0	87.2	98.0	96.6	92.4	0.5	0.9
B99AL621	B99AL-621	87.9	90.0	80.4	96.0	87.5	88.4	0.3	0.2
BZ594-20	WPB BZ594-20	94.6	80.0	85.1	96.0	98.3	90.8	0.9	0.9
BZ596117	WPB BZ596-117	95.6	87.0	83.3	98.0	97.7	92.3	0.7	0.8
H3860224	Lewis/Apex (MT860224)	84.2	79.0	83.7	98.0	95.1	88.0	0.9	0.9
MT000040	Chinook/MT920161	77.6	43.0	85.6	95.0	94.8	79.2	2.1	0.7
MT000045	Chinook/MT920161	91.0	72.0	80.8	94.0	97.0	87.0	1.1	0.9
MT000047	Chinook/MT920161	84.5	59.0	79.5	95.0	93.3	82.2	1.6	0.9
MT000063	H3860224/MT920041	82.8	77.0	84.0	93.0	96.8	86.7	0.9	0.9
MT000066	H3860224/MT920161	84.9	70.0	67.6	96.0	95.9	82.9	1.5	0.9
MT000092	MT890008/Lewis	90.7	77.0	92.9	98.0	96.5	91.0	0.8	0.7
MT000125	MT910189/Lewis	91.6	75.0	88.7	95.0	95.6	89.2	0.9	0.8
MT000130	MT910189/MT890070	96.6	58.0	89.3	96.0	98.2	87.6	1.6	0.6
MT000138	MT920041/H1851195	97.6	84.0	85.0	97.0	99.0	92.5	0.8	0.8
MT000153	MT920059/Baronesse	90.9	86.0	80.9	96.0	94.2	89.6	0.6	0.8
MT000156	MT920059/Baronesse	93.7	73.0	80.4	96.0	92.3	87.1	1.1	0.8
MT000157	MT920059/Baronesse	63.6	72.0	81.8	99.0	84.5	80.2	1.0	0.4
MT000159	MT920059/Baronesse	78.5	92.0	79.0	95.0	91.1	87.1	0.3	0.1
MT000177	MT930029/Baronesse	97.7	96.0	90.2	99.0	97.6	96.1	0.3	0.4
MT000178	MT930029/Baronesse	94.8	89.0	86.2	99.0	98.4	93.5	0.6	0.8
MT000180	MT930029/Baronesse	93.1	85.0	77.1	97.0	94.7	89.4	0.8	0.7
MT000237	Harrington/MT920059	88.9	90.0	77.4	97.0	94.6	89.6	0.6	0.5
MT000239	Harrington/MT920059	83.6	79.0	83.2	98.0	95.5	87.9	0.9	0.9
MT910189	ND 7293/Bearpaw	91.5	65.0	83.2	94.0	92.4	85.2	1.2	0.8
MT950186	Haxby	88.0	83.0	85.9	98.0	98.3	90.6	0.8	1.0
MT960099	Manley/Baronesse	76.9	38.0	63.5	92.0	93.3	72.7	2.6	0.9
MT960100	Manley/Baronesse	87.9	79.0	69.5	95.0	91.7	84.6	1.0	0.7
MT960101	Manley/Baronesse	72.0	71.0	75.9	95.0	88.8	80.5	1.1	0.8
MT960222	Stark/Baronesse	83.3	88.0	75.1	99.0	89.2	86.9	0.6	0.4
MT960226	Stark/Baronesse	93.5	88.0	86.9	99.0	96.8	92.8	0.6	0.9
MT960228	Stark/Baronesse	90.4	58.0	81.4	96.0	92.5	83.7	1.6	0.8
MT970026	Baronesse/MT860756	88.9	77.0	81.0	98.0	98.0	88.6	1.1	1.0
MT970110	Klages/Baronesse	94.4	85.0	83.0	98.0	93.1	90.7	0.7	0.8
MT970116	Klages/Baronesse	90.8	72.0	89.0	96.0	97.4	89.0	1.1	0.8
MT970148	MT861596/ND 11120	89.0	81.0	80.4	96.0	96.1	88.5	0.9	0.9
MT970155	MT886610/MT140523	89.9	94.0	75.2	97.0	96.9	90.6	0.6	0.3
MT970229	MT890021/Stark	98.4	94.0	90.3	98.0	98.0	95.7	0.3	0.5
MT981004	Baronesse/H2860224	78.8	80.0	87.6	98.0	88.0	86.5	0.6	0.5
MT981006	Baronesse/H2860224	84.9	89.0	82.9	96.0	95.7	89.7	0.5	0.5
MT981030	Baronesse/MT910160	92.7	69.0	83.8	98.0	92.2	87.1	1.2	0.8
MT981042	H5860219/Baronesse	92.8	83.0	66.8	97.0	93.2	86.5	1.0	0.5
MT981060	Haybet/Baronesse	59.5	67.0	67.1	76.0	84.9	70.9	0.7	0.4
MT981091	MT851195/MT140523	79.8	57.0	80.7	96.0	95.7	81.8	1.7	0.9
MT981177	MT910033/Targhee	94.6	67.0	77.6	97.0	96.7	86.6	1.5	0.9
MT981210	MT910150/Stark	91.8	48.0	82.9	96.0	97.4	83.2	2.1	0.7
MT981212	MT910150/Stark	91.7	27.0	74.0	98.0	98.4	77.8	3.1	0.8

Table 11 continues on next page

Table 11. 2002 Montana Irrigated Intrastate Spring Barley Nursery - Plump Summary (%) by Location. (Continued).

ID	PEDIGREE	Kalispell	Sidney	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
MT981238	ND112311/Lewis	91.7	59.0	84.8	98.0	97.9	86.3	1.7	0.8
MT990106	Apex/H1851195	91.7	91.0	83.8	96.0	97.5	92.0	0.5	0.6
MT990172	Apex/MT890070	92.6	82.0	87.5	99.0	97.3	91.7	0.8	1.0
MT990244	MT890018/Stark	87.8	81.0	83.8	97.0	99.0	89.7	0.9	1.0
MTLB 13	Lewis/Baronesse #13	90.5	66.0	78.3	92.0	89.1	83.2	1.2	0.8
N96/1116	Justina	64.8	96.0	55.2	99.0	91.6	81.3	0.8	0.1
ND13299	Conlon	98.7	85.0	88.9	99.0	99.3	94.2	0.7	0.8
NORD1958	Nord 1958	95.8	77.0	79.9	97.0	93.8	88.7	1.0	0.8
NORD1963	NORD 1963	93.3	76.0	88.4	98.0	94.9	90.1	0.9	0.8
PI491534	Gallatin	81.4	69.0	72.0	95.0	95.1	82.5	1.4	1.0
PI533600	Haybet	35.7	38.0	39.0	47.0	61.9	44.3	0.9	0.5
PI568246	Baronesse	91.8	83.0	73.5	99.0	91.1	87.7	0.9	0.6
PI605472	Garnet	93.4	91.0	89.0	98.0	97.1	93.7	0.4	0.9
PI610264	Valier	80.9	69.0	84.9	98.0	92.2	85.0	1.2	0.8
S3482	Calgary	76.3	73.0	83.8	98.0	95.1	85.2	1.1	0.8
SK 76333	Harrington	65.6	86.0	76.8	97.0	92.7	83.6	0.7	0.2
Sitemean	SITE MEAN *****	86.3	75.6	80.5	95.8	94.0	86.4	1.0	1.0
C.V.	C.V. (S/Mean) * 100	***	***	8.3	***	3.3	***	***	***
F-Value		***	***	4.9	***	12.4	***	***	***
L.S.D.	L.S.D. (.05)	***	***	11.3	***	4.4	***	***	***
Efficiency of Design	Rel to RCB	***	***	1.1	***	1.0	***	***	***

Table 12. 2002 Montana Irrigated Intrastate Spring Barley Nursery - Heading Date Summary (Days > Jan 1) by Location.

ID	PEDIGREE	Kalispell	Sidney	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
2B914947	Merit	185.0	187.8	172.8	186.0	185.3	183.4	1.0	1.0
6B932978	Legacy	182.7	184.6	167.4	184.0	182.3	180.2	1.2	1.0
6B952482	(BA6B95-2482) 6B89--21	179.3	184.8	169.8	185.0	182.1	180.2	1.0	1.0
B99AL621	B99AL-621	185.7	186.6	171.8	185.0	184.1	182.6	1.0	0.9
BZ594-20	WPB BZ594-20	176.3	183.8	168.0	181.0	181.1	178.0	1.0	1.0
BZ596117	WPB BZ596-117	183.7	187.2	170.8	184.0	184.1	182.0	1.1	1.0
H3860224	Lewis/Apex (MT860224)	186.0	189.1	175.0	186.0	184.7	184.2	0.9	1.0
MT000040	Chinook/MT920161	183.3	188.8	172.1	186.0	183.8	182.8	1.1	1.0
MT000045	Chinook/MT920161	180.0	188.6	170.6	184.0	183.4	181.3	1.1	1.0
MT000047	Chinook/MT920161	183.0	187.8	170.1	184.0	183.4	181.7	1.1	1.0
MT000063	H3860224/MT920041	187.7	187.7	173.8	186.0	185.4	184.1	0.9	0.9
MT000066	H3860224/MT920161	185.0	188.4	173.8	185.0	184.5	183.3	0.9	1.0
MT000092	MT890008/Lewis	180.3	187.7	172.0	186.0	183.2	181.8	1.0	1.0
MT000125	MT910189/Lewis	183.0	187.5	172.2	184.0	183.1	182.0	1.0	1.0
MT000130	MT910189/MT890070	177.7	186.5	169.0	184.0	182.7	180.0	1.1	1.0
MT000138	MT920041/H1851195	177.7	184.6	168.6	183.0	181.9	179.1	1.1	1.0
MT000153	MT920059/Baronesse	177.0	185.8	168.9	185.0	182.2	179.8	1.1	0.9
MT000156	MT920059/Baronesse	177.0	184.5	168.1	182.0	181.0	178.5	1.1	1.0
MT000157	MT920059/Baronesse	186.7	188.6	172.1	185.0	185.0	183.5	1.1	0.9
MT000159	MT920059/Baronesse	185.0	189.3	173.6	187.0	184.3	183.8	1.0	1.0
MT000177	MT930029/Baronesse	181.0	185.8	174.0	185.0	184.5	182.1	0.8	1.0
MT000178	MT930029/Baronesse	185.0	187.8	175.1	185.0	186.2	183.8	0.8	1.0
MT000180	MT930029/Baronesse	184.3	186.8	171.5	185.0	184.7	182.5	1.0	1.0
MT000237	Harrington/MT920059	185.7	189.4	175.2	188.0	186.3	184.9	0.9	1.0
MT000239	Harrington/MT920059	186.7	188.4	174.6	186.0	185.9	184.3	0.9	1.0
MT910189	ND 7293/Bearpaw	178.0	186.8	170.0	183.0	181.1	179.8	1.0	0.9
MT950186	Haxby	183.7	186.2	171.4	186.0	183.0	182.1	1.0	1.0
MT960099	Manley/Baronesse	185.0	187.9	175.7	185.0	184.8	183.7	0.8	1.0
MT960100	Manley/Baronesse	186.0	189.0	174.9	185.0	185.0	184.0	0.9	1.0
MT960101	Manley/Baronesse	186.0	189.5	174.2	188.0	185.3	184.6	1.0	1.0
MT960222	Stark/Baronesse	184.3	187.6	172.9	185.0	185.1	183.0	1.0	1.0
MT960226	Stark/Baronesse	179.7	187.3	171.9	184.0	184.0	181.4	1.0	1.0
MT960228	Stark/Baronesse	184.7	188.4	172.2	186.0	184.6	183.2	1.1	1.0
MT970026	Baronesse/MT860756	179.3	186.0	170.3	185.0	183.8	180.9	1.1	1.0
MT970110	Klages/Baronesse	185.3	188.2	174.2	184.0	185.3	183.4	0.9	0.9
MT970116	Klages/Baronesse	177.0	186.0	171.8	185.0	183.6	180.7	0.9	0.9
MT970148	MT861596/ND 11120	178.3	187.5	171.9	184.0	183.1	181.0	1.0	0.9
MT970155	MT886610/MT140523	187.7	189.1	176.5	186.0	185.1	184.9	0.8	0.9
MT970229	MT890021/Stark	184.3	187.0	172.2	185.0	185.0	182.7	1.0	1.0
MT981004	Baronesse/H2860224	181.7	186.3	171.8	185.0	183.4	181.6	1.0	1.0
MT981006	Baronesse/H2860224	181.7	187.0	173.0	185.0	183.3	182.0	0.9	1.0
MT981030	Baronesse/MT910160	187.3	188.1	174.6	186.0	186.7	184.5	0.9	0.9
MT981042	H5860219/Baronesse	185.7	187.7	174.7	186.0	185.4	183.9	0.9	1.0
MT981060	Haybet/Baronesse	181.3	187.4	172.0	185.0	185.9	182.3	1.0	1.0
MT981091	MT851195/MT140523	179.7	186.2	169.6	185.0	183.1	180.7	1.1	1.0
MT981177	MT910033/Targhee	180.0	186.9	170.5	185.0	182.7	181.0	1.1	1.0
MT981210	MT910150/Stark	183.0	188.2	171.5	186.0	184.6	182.7	1.1	1.0
MT981212	MT910150/Stark	179.7	186.4	170.5	186.0	183.2	181.2	1.1	1.0

Table 12 continues on next page

Table 12. 2002 Montana Irrigated Intrastate Spring Barley Nursery - Heading Date Summary (Days > Jan 1) by Location. (Continued).

ID	PEDIGREE	Kalispell	Sidney	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
MT981238	ND112311/Lewis	179.0	185.5	167.5	182.0	182.0	179.2	1.2	1.0
MT990106	Apex/H1851195	185.0	186.2	171.4	185.0	184.1	182.3	1.0	1.0
MT990172	Apex/MT890070	179.7	187.0	169.9	184.0	183.7	180.9	1.1	1.0
MT990244	MT890018/Stark	176.3	184.1	167.5	184.0	181.0	178.6	1.1	0.9
MTLB 13	Lewis/Baronesse #13	178.3	187.8	169.9	186.0	182.9	181.0	1.2	0.9
N96/1116	Justina	187.7	189.3	176.3	184.0	187.2	184.9	0.8	0.8
ND13299	Conlon	175.0	181.7	167.0	181.0	179.0	176.7	1.0	1.0
NORD1958	Nord 1958	185.0	186.5	174.9	187.0	187.1	184.1	0.9	0.9
NORD1963	NORD 1963	185.7	188.8	173.2	186.0	186.6	184.0	1.0	1.0
PI491534	Gallatin	179.0	185.1	169.8	183.0	182.6	179.9	1.0	1.0
PI533600	Haybet	182.0	185.7	169.7	185.0	184.0	181.3	1.1	1.0
PI568246	Baronesse	187.0	187.2	172.3	185.0	184.6	183.2	1.0	0.9
PI605472	Garnet	184.7	188.2	173.5	187.0	185.6	183.8	1.0	1.0
PI610264	Valier	184.0	188.3	171.7	186.0	185.0	183.0	1.1	1.0
S3482	Calgary	184.7	188.1	174.9	185.0	184.8	183.5	0.8	1.0
SK 76333	Harrington	182.7	188.3	171.9	185.0	185.2	182.6	1.1	1.0
Sitemean	SITE MEAN *****	182.5	187.1	171.9	184.9	184.0	182.1	1.0	1.0
C.V.	C.V. (S/Mean) * 100	1.0	0.4	0.7	***	0.2	***	***	***
F-Value		10.3	15.7	11.5	***	38.8	***	***	***
L.S.D.	L.S.D. (.05)	3.0	1.1	2.0	***	0.7	***	***	***
Efficiency of Design Rel to RCB		0.0	1.2	1.0	***	1.1	***	***	***

Table 13. 2002 Montana Irrigated Intrastate Spring Barley Nursery - Plant Height Summary (Inches) by Location.

ID	PEDIGREE	Kalispell	Sidney	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
2B914947	Merit	29.6	25.2	36.4	31.0	33.8	31.2	1.0	1.0
6B932978	Legacy	33.9	27.2	35.8	33.0	35.3	33.0	0.8	1.0
6B952482	(BA6B95-2482) 6B89--21	35.0	26.2	37.5	29.0	37.2	33.0	1.1	0.8
B99AL621	B99AL-621	28.4	24.0	35.9	29.0	32.5	29.9	1.0	0.9
BZ594-20	WPB BZ594-20	30.5	25.5	32.3	29.0	34.1	30.3	0.7	0.9
BZ596117	WPB BZ596-117	29.8	24.1	34.7	30.0	33.8	30.5	1.0	1.0
H3860224	Lewis/Apex (MT860224 f	29.4	22.7	35.7	28.0	34.5	30.1	1.2	1.0
MT000040	Chinook/MT920161	29.5	22.5	34.9	28.0	35.2	30.0	1.2	1.0
MT000045	Chinook/MT920161	30.6	25.0	34.7	29.0	34.1	30.7	0.9	1.0
MT000047	Chinook/MT920161	31.1	23.5	38.1	31.0	35.4	31.8	1.3	1.0
MT000063	H3860224/MT920041	29.6	24.4	37.1	32.0	35.7	31.8	1.2	1.0
MT000066	H3860224/MT920161	30.8	24.2	32.6	30.0	34.9	30.5	0.9	0.9
MT000092	MT890008/Lewis	32.0	23.8	38.1	34.0	35.7	32.7	1.3	1.0
MT000125	MT910189/Lewis	30.9	24.8	38.3	31.0	35.1	32.0	1.2	1.0
MT000130	MT910189/MT890070	34.5	25.9	37.7	31.0	36.4	33.1	1.1	0.9
MT000138	MT920041/H1851195	32.7	24.4	40.4	32.0	37.5	33.4	1.4	1.0
MT000153	MT920059/Baronesse	31.6	24.9	31.7	29.0	33.4	30.1	0.7	0.8
MT000156	MT920059/Baronesse	31.6	23.2	32.3	29.0	31.7	29.6	0.9	0.9
MT000157	MT920059/Baronesse	30.9	23.9	41.3	33.0	33.7	32.6	1.4	0.9
MT000159	MT920059/Baronesse	32.4	23.9	36.2	33.0	34.9	32.1	1.1	1.0
MT000177	MT930029/Baronesse	31.7	26.6	34.9	30.0	34.9	31.6	0.8	1.0
MT000178	MT930029/Baronesse	32.2	25.7	36.0	32.0	37.1	32.6	1.0	1.0
MT000180	MT930029/Baronesse	34.0	26.5	35.5	32.0	32.7	32.1	0.7	0.8
MT000237	Harrington/MT920059	31.6	24.9	38.6	38.0	37.3	34.1	1.2	0.8
MT000239	Harrington/MT920059	30.1	25.3	40.5	31.0	35.7	32.5	1.3	0.9
MT910189	ND 7293/Bearpaw	29.9	22.4	36.3	27.0	31.0	29.3	1.2	0.9
MT950186	Haxby	32.7	25.9	40.3	34.0	34.5	33.5	1.2	0.9
MT960099	Manley/Baronesse	27.2	22.4	32.9	29.0	33.0	28.9	1.0	1.0
MT960100	Manley/Baronesse	28.1	23.5	34.2	30.0	31.4	29.5	0.9	1.0
MT960101	Manley/Baronesse	29.0	22.9	34.7	30.0	33.6	30.0	1.1	1.0
MT960222	Stark/Baronesse	29.9	26.2	36.4	33.0	34.7	32.0	0.9	0.9
MT960226	Stark/Baronesse	30.6	24.0	37.3	33.0	35.2	32.0	1.2	1.0
MT960228	Stark/Baronesse	31.3	27.4	35.8	30.0	33.4	31.6	0.7	0.9
MT970026	Baronesse/MT860756	30.6	25.8	36.6	31.0	35.5	31.9	1.0	1.0
MT970110	Klages/Baronesse	33.6	26.6	36.0	31.0	33.9	32.2	0.8	0.9
MT970116	Klages/Baronesse	31.7	26.1	40.3	34.0	38.0	34.0	1.3	1.0
MT970148	MT861596/ND 11120	29.2	22.9	31.5	30.0	31.9	29.1	0.8	0.9
MT970155	MT886610/MT140523	29.8	23.0	32.5	30.0	31.5	29.3	0.9	1.0
MT970229	MT890021/Stark	31.1	26.3	38.1	33.0	34.8	32.7	1.0	1.0
MT981004	Baronesse/H2860224	32.1	23.2	36.6	29.0	33.4	30.9	1.2	0.9
MT981006	Baronesse/H2860224	30.5	22.4	35.2	31.0	31.9	30.2	1.1	0.9
MT981030	Baronesse/MT910160	32.6	26.8	39.5	34.0	33.6	33.3	1.0	0.9
MT981042	H5860219/Baronesse	30.1	24.2	30.5	29.0	34.0	29.6	0.7	0.8
MT981060	Haybet/Baronesse	33.6	25.4	33.4	30.0	34.2	31.3	0.8	0.8
MT981091	MT851195/MT140523	29.5	23.9	34.0	27.0	32.0	29.3	0.9	0.9
MT981177	MT910033/Targhee	30.1	23.8	34.0	28.0	34.2	30.0	1.0	1.0
MT981210	MT910150/Stark	32.8	24.1	37.4	31.0	36.6	32.4	1.3	1.0
MT981212	MT910150/Stark	33.7	24.3	32.1	32.0	36.1	31.6	0.9	0.7

Table 13 continues on next page

Table 13. 2002 Montana Irrigated Intrastate Spring Barley Nursery - Plant Height Summary (Inches) by Location. (Continued).

ID	PEDIGREE	Kalispell	Sidney	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
MT981238	ND112311/Lewis	31.7	24.9	39.0	30.0	37.0	32.5	1.3	1.0
MT990106	Apex/H1851195	28.2	23.8	30.5	30.0	33.8	29.3	0.8	0.8
MT990172	Apex/MT890070	28.9	24.9	33.5	31.0	33.3	30.3	0.8	0.9
MT990244	MT890018/Stark	28.8	23.9	33.5	27.0	32.7	29.2	0.9	0.9
MTLB 13	Lewis/Baronesse #13	29.9	23.3	33.4	29.0	30.9	29.3	0.9	1.0
N96/1116	Justina	30.8	24.4	28.8	27.0	30.0	28.2	0.5	0.6
ND13299	Conlon	31.8	22.9	35.9	28.0	32.2	30.2	1.1	0.9
NORD1958	Nord 1958	29.1	24.7	28.8	27.0	31.3	28.2	0.5	0.7
NORD1963	NORD 1963	28.5	22.2	32.1	26.0	32.3	28.2	1.0	0.9
PI491534	Gallatin	31.6	27.4	36.8	34.0	35.3	33.0	0.8	0.9
PI533600	Haybet	32.9	26.5	39.2	34.0	36.0	33.7	1.1	1.0
PI568246	Baronesse	29.1	23.6	33.7	30.0	32.6	29.8	0.9	1.0
PI605472	Garnet	31.9	31.0	39.8	36.0	34.8	34.7	0.7	0.6
PI610264	Valier	30.3	25.5	36.2	31.0	34.5	31.5	1.0	1.0
S3482	Calgary	28.4	20.3	29.8	25.0	31.1	26.9	1.0	0.9
SK 76333	Harrington	29.0	25.0	38.3	32.0	34.5	31.8	1.2	0.9
SiteMean	SITE MEAN *****	30.9	24.6	35.5	30.6	34.1	31.1	1.0	1.0
C.V.	C.V. (S/Mean) * 100	4.2	6.6	6.7	***	3.7	***	***	***
F-Value		4.5	3.2	4.3	***	5.9	***	***	***
L.S.D.	L.S.D. (.05)	2.3	2.7	4.0	***	2.2	***	***	***
Efficiency of Design	Rel to RCB	1.9	1.0	1.1	***	1.4	***	***	***

Table 14. 2002 Montana Irrigated Intrastate Spring Barley Nursery - Protein Summary (%) by Location.

ID	PEDIGREE	Kalispell	Sidney	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
2B914947	Merit	14.3	14.4	13.2	13.3	14.3	13.9	1.1	0.9
6B932978	Legacy	14.5	14.7	14.2	14.2	15.1	14.5	0.7	0.8
6B952482	(BA6B95-2482) 6B89--21	13.9	14.4	14.3	14.6	14.3	14.3	-0.3	0.3
B99AL621	B99AL-621	14.2	13.8	12.5	13.6	15.2	13.8	1.7	0.7
BZ594-20	WPB BZ594-20	13.1	13.8	13.3	13.2	13.5	13.4	0.2	0.1
BZ596117	WPB BZ596-117	14.1	14.5	13.1	14.1	14.9	14.1	1.1	0.6
H3860224	Lewis/Apex (MT860224)	15.2	14.7	13.4	13.4	14.7	14.3	1.5	0.8
MT000040	Chinook/MT920161	15.6	15.9	13.3	14.0	15.2	14.8	1.9	0.7
MT000045	Chinook/MT920161	14.4	14.9	13.8	13.7	15.5	14.5	1.4	0.9
MT000047	Chinook/MT920161	14.1	13.9	13.6	13.6	15.5	14.1	1.2	0.7
MT000063	H3860224/MT920041	14.8	14.0	13.7	12.9	14.5	14.0	1.3	0.8
MT000066	H3860224/MT920161	14.8	14.6	14.3	14.4	16.0	14.8	1.1	0.7
MT000092	MT890008/Lewis	14.0	14.0	13.2	13.0	14.1	13.7	1.0	0.9
MT000125	MT910189/Lewis	13.8	13.8	13.3	12.8	14.6	13.6	1.3	0.9
MT000130	MT910189/MT890070	13.5	13.9	12.6	12.8	13.4	13.2	0.9	0.7
MT000138	MT920041/H1851195	14.9	15.1	14.9	14.8	15.1	14.9	0.2	0.4
MT000153	MT920059/Baronesse	14.4	14.7	13.8	13.9	15.0	14.4	1.0	0.9
MT000156	MT920059/Baronesse	15.2	14.8	13.6	14.5	16.0	14.8	1.6	0.8
MT000157	MT920059/Baronesse	15.1	13.5	14.1	14.2	15.3	14.4	0.8	0.3
MT000159	MT920059/Baronesse	15.1	14.8	14.0	14.0	15.4	14.6	1.3	1.0
MT000177	MT930029/Baronesse	14.0	15.8	14.4	14.3	15.9	14.9	1.0	0.3
MT000178	MT930029/Baronesse	14.4	14.1	13.2	14.4	14.9	14.2	0.8	0.4
MT000180	MT930029/Baronesse	13.9	15.5	13.8	14.1	15.1	14.5	0.9	0.3
MT000237	Harrington/MT920059	14.6	14.5	14.5	13.2	14.1	14.2	0.5	0.2
MT000239	Harrington/MT920059	14.7	14.3	13.9	13.5	14.4	14.2	0.9	0.8
MT910189	ND 7293/Bearpaw	14.3	13.4	13.0	13.2	14.9	13.8	1.4	0.8
MT950186	Haxby	14.6	14.4	12.6	13.3	13.7	13.7	1.2	0.5
MT960099	Manley/Baronesse	14.2	14.4	13.4	12.5	13.9	13.7	1.2	0.6
MT960100	Manley/Baronesse	14.5	14.2	13.3	13.0	14.7	13.9	1.4	1.0
MT960101	Manley/Baronesse	15.0	14.3	13.8	12.6	14.4	14.0	1.5	0.7
MT960222	Stark/Baronesse	14.4	13.6	13.2	13.1	14.6	13.8	1.3	0.9
MT960226	Stark/Baronesse	13.5	14.1	13.3	13.1	14.4	13.7	1.0	0.7
MT960228	Stark/Baronesse	14.2	13.8	12.8	12.4	14.1	13.5	1.6	0.9
MT970026	Baronesse/MT860756	14.6	14.5	13.4	13.5	14.1	14.0	0.9	0.7
MT970110	Klages/Baronesse	14.3	14.7	13.4	13.3	14.7	14.1	1.3	0.9
MT970116	Klages/Baronesse	13.5	14.0	13.3	13.3	14.3	13.7	0.7	0.7
MT970148	MT861596/ND 11120	13.2	13.9	13.0	12.4	14.1	13.3	1.2	0.7
MT970155	MT886610/MT140523	15.0	14.9	14.5	13.2	15.2	14.6	1.3	0.7
MT970229	MT890021/Stark	14.0	14.4	12.7	13.1	14.1	13.7	1.2	0.8
MT981004	Baronesse/H2860224	15.3	13.3	13.2	13.5	15.2	14.1	1.6	0.6
MT981006	Baronesse/H2860224	14.8	13.3	14.2	14.0	15.3	14.3	0.7	0.2
MT981030	Baronesse/MT910160	13.6	13.2	13.0	13.0	13.6	13.3	0.6	0.8
MT981042	H5860219/Baronesse	14.5	14.0	14.9	13.8	14.7	14.4	0.2	0.0
MT981060	Haybet/Baronesse	14.5	14.3	14.1	13.3	14.2	14.1	0.6	0.5
MT981091	MT851195/MT140523	14.7	15.0	13.4	13.4	14.4	14.2	1.2	0.7
MT981177	MT910033/Targhee	14.1	14.6	13.4	13.7	15.3	14.2	1.3	0.8
MT981210	MT910150/Stark	14.5	15.6	13.9	13.4	15.1	14.5	1.4	0.7
MT981212	MT910150/Stark	14.6	15.5	13.9	13.8	15.1	14.6	1.3	0.7

Table 14 continues on next page

Table 14. 2002 Montana Irrigated Intrastate Spring Barley Nursery - Protein Summary (%) by Location. (Continued).

ID	PEDIGREE	Kalispell	Sidney	Huntley	Conrad	Bozeman	Avg	Byx	Rsq
MT981238	ND112311/Lewis	14.6	13.8	14.4	14.2	15.0	14.4	0.4	0.2
MT990106	Apex/H1851195	14.8	14.7	13.9	14.1	15.2	14.5	1.0	1.0
MT990172	Apex/MT890070	14.3	15.5	12.8	13.2	14.0	14.0	1.4	0.5
MT990244	MT890018/Stark	15.1	14.1	15.2	15.0	15.5	15.0	0.0	0.0
MTLB 13	Lewis/Baronesse #13	14.6	14.3	13.4	14.1	15.5	14.4	1.3	0.7
N96/1116	Justina	14.2	13.9	14.2	12.8	13.8	13.8	0.5	0.2
ND13299	Conlon	13.8	13.1	15.0	14.1	14.4	14.1	-0.6	0.2
NORD1958	Nord 1958	13.6	13.9	13.3	13.4	13.8	13.6	0.4	0.7
NORD1963	NORD 1963	14.0	13.5	12.4	13.3	13.7	13.4	0.9	0.6
PI491534	Gallatin	14.3	13.6	13.2	13.0	14.7	13.8	1.3	0.9
PI533600	Haybet	15.8	15.3	15.8	15.4	16.5	15.8	0.5	0.3
PI568246	Baronesse	14.3	14.1	13.5	13.1	14.9	14.0	1.4	0.9
PI605472	Garnet	14.4	14.4	13.8	13.9	14.6	14.2	0.7	1.0
PI610264	Valier	15.3	14.3	13.2	13.7	14.7	14.2	1.4	0.7
S3482	Calgary	14.6	13.4	12.5	13.3	13.9	13.5	1.1	0.5
SK 76333	Harrington	14.5	13.9	13.0	13.2	14.4	13.8	1.3	0.9
SiteMean	SITE MEAN *****	14.4	14.3	13.6	13.6	14.7	14.1	1.0	1.0
C.V.	C.V. (S/Mean) * 100	***	***	***	2.8	0.9	***	***	***
F-Value		***	***	***	7.2	1.7	***	***	***
L.S.D.	L.S.D. (.05)	***	***	***	0.7	11.1	***	***	***
Efficiency of Design	Rel to RCB	***	***	***	1.2	1.3	***	***	***