

PROJECT TITLE: **Statewide Barley Performance**

YEAR: **2007**

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: Tom Blake (Project Leader) & Stan Bates  
Conrad: Greg Kushnak  
Havre: Gregg Carlson & Peggy Lamb  
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. Tables 1 and 9 summarize statewide averages for all traits. Specific performance traits at each location can be found in Tables 2-8 for dryland and Tables 10-16 for irrigated.

In the **dryland trials**, the feed varieties Boulder, Eslick, Baroness, Champion and Haxby averaged the highest yields statewide (Tables 1-2). Haxby and Champion had the highest test weights. Tradition, Conrad and Craft had the highest yields among the malt types, and averaged about 3 bu/a higher than Harrington. Hockett and Craft had the highest test weight and percent plump, which were substantially higher than for Harrington. Hockett and Craft were 2 to 3 days earlier to head than Harrington. Tradition had exceptionally high dryland test weight and percent plump for a 6-row barley, with similar performance as some of the 2-row malt types.

In the **irrigated trials**, Champion, Boulder, Eslick and Baroness were the highest yielding 2-row feed varieties (Tables 9-10). The 2-row malt varieties Conrad and Craft averaged 10 bu/a higher than Harrington.

Future Plans: MAES will continue to evaluate barley lines and varieties in Intrastate Trials.

**Table 1. 2007 Montana Dryland Intrastate Barley - All Traits**

Variety ID	Yield bu/a	Test Wt lb/bu	Statewide Average*			Height in.	Head date
			Plump %	Thin %	Protein %		
MT040013	89.2	51.8	65.1	12.2	12.4	31.0	174.6
<b>Boulder</b>	86.5	52.1	76.5	15.9	12.9	29.8	175.7
MT050048	86.3	53.2	76.2	7.3	12.3	31.1	175.0
MT040216	85.3	52.6	70.7	9.6	12.7	27.9	174.8
<b>Eslick</b>	85.1	51.5	61.1	18.0	12.8	27.6	175.6
MT050030	85.1	51.7	70.7	9.7	12.1	30.0	175.0
MT050049	84.7	53.2	77.5	6.3	12.2	32.5	174.5
<b>Baroness</b>	84.7	51.6	71.7	11.6	12.7	29.9	175.6
MT050062	84.4	52.2	72.7	9.3	11.9	32.1	176.0
MT040136	84.3	53.4	72.3	8.6	12.8	29.0	175.0
<b>Champion</b>	84.3	52.7	68.3	10.2	12.1	30.0	174.6
MT040024	84.2	52.0	49.7	18.6	12.1	29.6	173.1
<b>Haxby</b>	84.0	53.0	69.2	9.2	12.1	31.4	173.1
MT040231	84.0	52.3	72.9	7.5	12.9	29.8	173.3
MT020155	83.9	51.5	69.6	9.6	12.4	31.0	171.5
MT040226	83.4	52.7	58.5	15.4	13.1	29.7	175.3
MT030137	83.3	52.6	75.1	8.0	12.7	28.7	174.6
MT040073	83.2	52.8	65.1	12.3	12.4	29.9	174.7
MT030063	83.2	52.6	80.3	6.9	12.5	31.1	174.1
MT030079	82.9	52.6	64.3	13.0	12.5	29.4	174.1
MT020064	82.8	51.2	85.2	5.5	12.9	30.6	173.8
MT040204	82.8	50.9	54.3	17.3	12.1	29.5	176.3
MT050050	82.8	52.9	75.9	8.1	12.3	31.6	173.8
MT050117	82.4	51.9	84.0	4.9	12.8	30.8	174.2
MT040181	82.3	51.9	63.8	12.9	12.4	28.9	175.8
MT010160	82.2	50.9	72.0	9.3	12.7	31.6	175.2
MT050201	82.0	52.7	81.4	5.8	12.6	32.3	174.2
MT030042	81.7	52.2	63.7	14.3	11.7	28.7	174.2
MT030144	81.5	52.5	80.6	5.7	12.8	30.1	174.9
MT050187	81.4	53.5	79.4	6.1	13.6	33.9	171.9
<b>Tradition</b>	81.1	50.9	70.9	8.0	12.5	32.2	171.9
MT040209	81.1	51.7	67.9	12.8	12.9	28.4	175.7
MT050088	81.0	51.7	82.3	4.6	13.0	31.6	173.0
<b>Conrad</b>	81.0	51.5	74.6	8.3	13.4	29.2	175.1
MT040130	80.8	51.1	58.1	16.2	13.1	28.5	175.7
<b>Craft</b>	80.7	52.6	82.6	6.6	12.4	32.9	172.8
MT040106	80.6	52.0	79.4	6.0	12.8	28.7	175.7

*Continued*

Table 1 cont	Yield	Test Wt	Plump	Thin	Protein	Height	Head
MT020205	80.4	51.8	75.7	8.8	13.1	30.0	172.8
MT040220	80.4	51.3	59.4	12.8	12.5	29.2	175.8
MT020162	80.2	51.7	70.6	9.9	13.3	30.3	175.2
MT020204	80.2	52.4	71.7	11.1	12.9	29.9	172.7
MT050080	79.9	52.2	77.8	7.2	13.0	32.3	174.0
LR101-30	79.9	49.7	53.2	19.9	12.7	28.5	177.0
MT050035	79.1	51.3	73.9	10.1	12.3	30.3	176.0
2B992316	78.7	48.9	55.7	20.9	12.8	29.0	167.0
LR116-6	78.5	51.9	66.3	14.9	12.9	32.2	174.2
MT050182	78.3	53.3	81.3	6.6	12.6	31.0	173.6
MT010158	78.1	51.1	70.3	9.6	13.1	30.4	173.6
MT040107	77.7	51.7	64.1	12.9	12.9	28.4	177.5
<b>Hockett</b>	77.7	52.4	79.3	7.8	12.5	31.2	172.6
MT050047	77.7	52.3	74.3	10.0	12.6	32.1	173.5
<b>Harrington</b>	77.5	50.3	73.8	11.4	13.0	29.8	174.9
MT040110	77.4	51.8	75.6	8.1	13.1	28.6	177.1
MT050184	77.0	53.2	85.3	13.6	12.9	32.3	172.9
MT040058	76.5	53.2	69.6	11.1	12.3	27.8	173.8
<b>Geraldine</b>	76.3	50.1	51.0	22.0	13.1	28.4	177.0
MT050082	75.8	52.4	83.6	5.0	12.8	32.2	172.7
MT050081	75.8	51.9	74.7	9.1	13.1	31.5	174.1
MT050110	75.7	52.6	90.1	2.8	12.8	30.7	173.5
MT050104	75.6	52.2	87.0	3.2	13.1	30.9	171.9
MT020167	75.1	51.0	69.6	12.5	13.0	29.1	174.8
2B992657	73.7	47.9	57.9	18.8	13.0	29.2	174.3
<b>Metcalfe</b>	73.1	50.7	70.5	12.3	13.1	30.8	173.0
<b>Conlon</b>	66.7	49.5	84.8	5.1	13.1	30.2	170.5
Means	80.7	51.9	71.9	10.4	12.5	30.3	174.2

\* Locations: Bozeman, Conrad, Havre, Huntley, Moccasin and Sidney.

**Table 2. 2007 Montana Dryland Intrastate Barley - Yield, bu/a**

<u>Variety ID</u>	<u>Bozeman</u>	<u>Conrad</u>	<u>Havre</u>	<u>Huntley</u>	<u>Moccasin</u>	<u>Sidney</u>	<u>Mean</u>
MT040013	131.3	69.9	73.3	102.0	68.4	90.0	89.2
<b>Boulder</b>	146.6	61.6	70.6	89.5	70.5	80.2	86.5
MT050048	132.3	74.7	60.8	90.7	75.9	83.8	86.3
MT040216	131.7	67.1	74.6	78.6	76.4	83.2	85.3
<b>Eslick</b>	134.8	55.8	68.8	93.6	64.3	93.6	85.1
MT050030	134.1	68.3	70.1	82.8	63.5	91.9	85.1
MT050049	126.0	72.0	65.1	86.9	74.1	84.3	84.7
<b>Baroness</b>	139.5	58.2	66.8	96.1	64.2	83.3	84.7
MT050062	125.2	71.2	60.9	90.9	66.6	91.4	84.4
MT040136	126.8	61.5	71.5	82.9	78.1	85.0	84.3
<b>Champion</b>	142.1	64.7	64.4	82.7	71.7	80.1	84.3
MT040024	122.0	66.5	67.6	85.8	75.2	88.5	84.2
<b>Haxby</b>	125.7	64.1	69.9	93.5	70.8	80.0	84.0
MT040231	127.5	62.6	76.1	86.9	62.9	88.1	84.0
MT020155	127.5	62.6	72.0	86.2	69.9	85.2	83.9
MT040226	119.1	64.2	62.8	86.6	77.1	90.3	83.4
MT030137	123.0	60.4	66.8	92.0	69.0	88.6	83.3
MT040073	127.4	64.9	70.7	84.2	70.7	81.6	83.2
MT030063	133.9	65.6	72.1	81.5	67.0	79.0	83.2
MT030079	123.7	63.9	74.5	80.4	74.2	80.7	82.9
MT020064	132.5	65.3	63.3	88.9	69.0	78.2	82.8
MT040204	129.1	58.4	64.7	92.6	63.6	88.3	82.8
MT050050	118.0	67.1	61.7	88.3	74.1	87.5	82.8
MT050117	131.7	64.0	62.9	85.3	69.4	81.4	82.4
MT040181	129.4	57.1	69.4	87.4	63.4	87.1	82.3
MT010160	126.4	61.6	67.0	83.7	71.0	83.9	82.2
MT050201	116.1	68.8	64.1	84.4	72.3	86.0	82.0
MT030042	126.3	60.9	72.7	84.3	68.0	77.7	81.7
MT030144	133.8	60.7	70.8	80.8	63.8	79.3	81.5
MT050187	120.3	65.7	66.5	85.3	67.9	82.9	81.4
<b>Tradition</b>	119.7	65.7	71.5	77.3	67.6	85.1	81.1
MT040209	129.1	56.6	57.0	100.0	61.3	82.8	81.1
MT050088	123.4	64.6	67.3	81.9	68.8	80.2	81.0
<b>Conrad</b>	133.4	58.1	57.6	91.9	63.5	81.2	81.0
MT040130	121.2	58.7	64.9	92.4	65.0	82.6	80.8
<b>Craft</b>	118.0	64.9	64.3	84.1	75.4	77.3	80.7
MT040106	125.5	63.2	63.0	81.7	70.0	80.1	80.6

*Continued*

Table 2, Yield cont.

	<u>Bozeman</u>	<u>Conrad</u>	<u>Havre</u>	<u>Huntley</u>	<u>Moccasin</u>	<u>Sidney</u>	<u>Mean</u>
MT020205	132.4	64.2	62.3	83.3	60.3	79.9	80.4
MT040220	120.8	59.4	64.5	91.6	66.7	79.3	80.4
MT020162	134.0	62.9	59.8	87.7	57.9	79.3	80.2
MT020204	132.3	65.6	55.0	86.0	62.6	79.5	80.2
MT050080	120.9	67.9	56.9	80.2	69.2	84.1	79.9
LR101-30	121.6	57.2	64.2	86.6	63.3	86.4	79.9
MT050035	127.7	61.1	59.3	79.9	69.1	77.6	79.1
2B992316	120.9	64.4	53.6	91.5	63.1	78.8	78.7
LR116-6	118.5	64.0	56.7	86.1	66.2	79.4	78.5
MT050182	126.4	64.2	63.2	77.7	69.9	68.1	78.3
MT010158	127.8	58.0	62.7	81.6	62.2	76.5	78.1
MT040107	110.1	65.8	61.7	81.0	68.3	79.5	77.7
<b>Hockett</b>	117.4	63.2	61.7	90.6	58.7	74.5	77.7
MT050047	113.4	61.6	68.2	73.2	69.4	80.1	77.7
<b>Harrington</b>	119.3	61.7	64.6	80.7	60.1	78.5	77.5
MT040110	120.8	58.3	58.7	84.1	64.6	77.7	77.4
MT050184	118.5	56.8	55.5	84.7	65.8	81.0	77.0
MT040058	91.7	63.9	68.1	85.0	70.2	80.3	76.5
<b>Geraldine</b>	117.9	54.7	58.9	82.7	60.3	83.1	76.3
MT050082	118.9	63.4	56.2	81.1	59.4	76.0	75.8
MT050081	118.6	64.2	51.0	80.6	61.4	79.1	75.8
MT050110	116.0	66.8	53.0	81.0	58.2	79.0	75.7
MT050104	121.0	58.6	54.8	86.0	57.4	75.7	75.6
MT020167	106.7	60.3	56.5	80.5	73.7	72.8	75.1
2B992657	107.7	59.1	44.1	88.8	63.4	78.8	73.7
<b>Metcalf</b>	107.2	58.6	53.5	84.2	58.3	76.6	73.1
<b>Conlon</b>	63.7	60.9	55.8	80.2	68.2	71.4	66.7
Means	123.2	63.0	63.6	85.6	67.2	81.6	80.7
C.V.	10.66	8.66	7.30	7.23	6.23	7.91	
LSD	21.2	9.4	13.0	10.0	7.2	11.1	

**Table 3. 2007 Montana Dryland Intrastate Barley - Test Weight, lbs/bu**

<u>Variety ID</u>	<u>Bozeman</u>	<u>Conrad</u>	<u>Havre</u>	<u>Huntley</u>	<u>Moccasin</u>	<u>Sidney</u>	<u>Mean</u>
MT040013	52.7	50.8	49.2	52.5	54.8	51.0	51.8
<b>Boulder</b>	55.3	46.7	49.3	53.9	54.1	53.0	52.1
MT050048	55.5	49.1	50.8	54.4	56.5	53.2	53.2
MT040216	55.1	49.8	49.0	52.5	56.3	52.8	52.6
<b>Eslick</b>	53.4	50.8	48.9	51.7	53.0	51.4	51.5
MT050030	52.4	53.2	46.9	52.0	54.8	51.1	51.7
MT050049	54.2	53.3	49.5	53.9	56.1	52.5	53.2
<b>Baroness</b>	52.9	52.8	48.7	52.6	52.0	50.4	51.6
MT050062	52.2	54.0	49.0	52.4	54.2	51.0	52.2
MT040136	55.3	51.9	49.3	55.4	55.7	52.6	53.4
<b>Champion</b>	54.4	52.0	50.3	53.1	54.7	51.5	52.7
MT040024	52.9	52.2	48.6	52.5	54.6	51.0	52.0
<b>Haxby</b>	55.0	50.4	50.7	54.4	55.5	52.2	53.0
MT040231	53.9	52.4	49.0	53.4	53.9	51.4	52.3
MT020155	54.0	51.5	47.5	51.8	53.9	50.4	51.5
MT040226	55.0	49.3	47.7	55.3	56.0	53.2	52.7
MT030137	53.3	50.3	50.6	54.3	55.0	52.1	52.6
MT040073	54.2	51.1	50.8	53.2	54.9	52.4	52.8
MT030063	53.5	51.9	49.2	53.2	55.6	51.9	52.6
MT030079	53.4	49.5	50.9	53.8	55.8	52.4	52.6
MT020064	54.6	43.5	48.2	53.6	55.2	52.0	51.2
MT040204	51.4	51.9	47.5	51.9	52.4	50.5	50.9
MT050050	54.4	50.3	50.5	53.9	55.9	52.5	52.9
MT050117	53.3	53.5	48.5	52.1	52.8	51.0	51.9
MT040181	52.6	51.8	49.4	52.8	53.5	51.0	51.9
MT010160	53.2	46.6	47.9	52.9	53.9	50.7	50.9
MT050201	54.3	51.2	51.2	53.2	54.8	51.8	52.7
MT030042	53.1	48.7	50.8	53.7	55.2	51.6	52.2
MT030144	54.3	51.2	50.2	53.3	54.9	51.2	52.5
MT050187	54.6	50.6	51.8	54.5	56.7	52.6	53.5
<b>Tradition</b>	53.3	52.3	47.0	50.5	52.8	49.6	50.9
MT040209	53.3	50.3	48.0	52.6	54.6	51.7	51.7
MT050088	53.2	49.5	47.9	51.8	55.9	51.8	51.7
<b>Conrad</b>	52.9	52.9	47.4	52.7	53.6	49.3	51.5
MT040130	51.8	50.7	48.0	51.5	53.5	50.8	51.1
<b>Craft</b>	53.5	51.5	50.0	53.0	56.0	51.8	52.6
MT040106	53.0	52.1	48.7	52.1	54.9	51.1	52.0

*Continued*

Table 3, Test Wt cont.

	<u>Bozeman</u>	<u>Conrad</u>	<u>Havre</u>	<u>Huntley</u>	<u>Moccasin</u>	<u>Sidney</u>	<u>Mean</u>
MT020205	54.4	49.7	48.7	52.7	54.2	51.3	51.8
MT040220	51.1	48.7	52.2	52.1	52.8	51.1	51.3
MT020162	53.1	51.7	48.9	51.8	53.9	50.9	51.7
MT020204	54.7	51.7	49.0	53.3	53.7	52.3	52.4
MT050080	53.9	52.5	49.4	51.1	55.5	50.8	52.2
LR101-30	50.3	47.7	47.8	51.2	51.5	49.8	49.7
MT050035	53.0	49.1	48.4	52.3	54.2	51.2	51.3
2B992316	50.0	47.9	46.6	50.0	51.4	47.2	48.9
LR116-6	54.0	48.0	49.2	53.0	55.2	52.1	51.9
MT050182	54.1	52.7	50.7	53.6	55.9	52.6	53.3
MT010158	53.6	48.4	49.6	52.6	52.6	50.0	51.1
MT040107	51.2	50.1	48.8	52.5	55.3	52.3	51.7
<b>Hockett</b>	53.5	51.5	49.9	52.5	54.5	52.2	52.4
MT050047	54.2	47.5	50.8	53.3	56.1	52.2	52.3
<b>Harrington</b>	51.9	52.9	47.2	50.4	51.5	47.7	50.3
MT040110	51.8	51.0	48.6	52.4	55.2	52.1	51.8
MT050184	54.8	51.9	50.7	53.9	55.7	52.2	53.2
MT040058	54.8	51.0	50.6	54.0	56.0	52.5	53.2
<b>Geraldine</b>	50.1	50.9	47.3	50.1	53.1	49.3	50.1
MT050082	54.3	51.5	49.4	52.0	55.4	51.9	52.4
MT050081	54.5	48.4	49.4	52.1	55.2	51.5	51.9
MT050110	55.0	53.0	48.3	52.7	54.8	51.8	52.6
MT050104	54.8	50.9	49.7	52.1	54.6	51.4	52.2
MT020167	50.8	47.9	48.3	52.2	55.1	51.8	51.0
2B992657	49.6	48.7	44.5	48.5	49.1	47.0	47.9
<b>Metcalfe</b>	51.7	53.1	48.2	50.9	51.0	49.6	50.7
<b>Conlon</b>	41.7	48.4	48.2	51.4	55.7	51.8	49.5
Means	53.2	50.6	49.1	52.6	54.4	51.3	51.9
C.V.	3.29		1.53	1.46		1.22	
LSD	2.8		2.1	1.2		1.1	

**Table 4. 2007 Montana Dryland Intrastate Barley - Plump percent**

<u>Variety ID</u>	<u>Bozeman</u>	<u>Conrad</u>	<u>Havre</u>	<u>Huntley</u>	<u>Moccasin</u>	<u>Sidney</u>	<u>Mean</u>
MT040013	70.9	51.0	63.4	82.8	36.6	86.0	65.1
<b>Boulder</b>	90.1	58.1	69.5	90.9	57.0	93.5	76.5
MT050048	88.7	43.0	81.6	89.3	66.8	88.0	76.2
MT040216	79.4	42.7	77.0	87.8	52.0	85.0	70.7
<b>Eslick</b>	72.0	81.2	56.3	65.3	10.9	81.0	61.1
MT050030	75.7	57.7	72.8	83.5	50.7	83.5	70.7
MT050049	82.4	53.1	78.8	88.5	70.4	92.0	77.5
<b>Baroness</b>	80.7	88.7	56.6	84.0	42.5	78.0	71.7
MT050062	74.0	65.3	65.7	82.4	65.1	83.5	72.7
MT040136	82.0	21.1	72.8	87.7	81.1	89.0	72.3
<b>Champion</b>	81.7	66.2	72.6	76.6	30.5	82.0	68.3
MT040024	60.7	52.7	26.5	64.3	21.8	72.0	49.7
<b>Haxby</b>	75.7	66.0	70.2	79.9	37.0	86.5	69.2
MT040231	78.5	90.5	76.8	81.7	33.1	77.0	72.9
MT020155	86.6	26.0	75.4	85.7	55.0	89.0	69.6
MT040226	72.9	28.8	51.4	82.3	32.1	83.5	58.5
MT030137	77.7	54.7	69.4	90.4	67.6	90.5	75.1
MT040073	81.0	53.2	72.2	82.0	21.8	80.5	65.1
MT030063	78.9	86.7	64.7	83.4	78.4	89.5	80.3
MT030079	57.2	53.4	84.5	82.2	23.1	85.5	64.3
MT020064	96.3	57.4	92.5	94.4	77.6	93.0	85.2
MT040204	58.0	42.7	39.4	76.0	27.5	82.0	54.3
MT050050	80.4	35.8	83.9	89.8	73.5	92.0	75.9
MT050117	88.3	85.5	76.5	90.8	71.2	92.0	84.0
MT040181	66.7	48.4	51.7	81.5	54.7	79.5	63.8
MT010160	84.3	57.1	69.8	86.2	44.5	90.0	72.0
MT050201	82.9	79.7	80.9	86.2	68.2	90.5	81.4
MT030042	69.1	39.5	66.3	80.6	47.0	79.5	63.7
MT030144	88.8	73.3	77.0	91.9	62.6	90.0	80.6
MT050187	86.0	64.5	81.4	90.8	65.0	88.5	79.4
<b>Tradition</b>	80.2	61.0	56.5	88.1	52.8	87.0	70.9
MT040209	80.2	85.0	47.2	80.1	36.2	79.0	67.9
MT050088	87.7	57.8	88.2	89.7	74.7	95.5	82.3
<b>Conrad</b>	91.7	43.0	74.0	93.6	55.0	90.5	74.6
MT040130	62.4	46.7	57.4	72.9	33.2	76.0	58.1
<b>Craft</b>	76.8	91.0	75.7	88.2	75.2	88.5	82.6
MT040106	90.1	41.3	82.2	95.9	72.6	94.5	79.4

*Continued*

Table 4, % Plump cont.

	<u>Bozeman</u>	<u>Conrad</u>	<u>Havre</u>	<u>Huntley</u>	<u>Moccasin</u>	<u>Sidney</u>	<u>Mean</u>
MT020205	90.4	64.2	74.8	88.6	46.0	90.0	75.7
MT040220	57.2	34.5	72.1	78.4	33.7	80.5	59.4
MT020162	80.0	69.4	63.7	78.5	47.2	85.0	70.6
MT020204	89.7	72.2	64.5	86.2	33.8	84.0	71.7
MT050080	91.6	61.8	80.5	88.0	55.0	90.0	77.8
LR101-30	51.5	46.4	49.8	61.4	45.9	64.0	53.2
MT050035	85.3	27.7	82.2	94.7	61.7	92.0	73.9
2B992316	72.1	10.1	59.0	83.3	40.3	69.5	55.7
LR116-6	83.5	44.4	79.7	90.1	9.2	91.0	66.3
MT050182	90.8	77.1	89.2	94.0	43.1	93.5	81.3
MT010158	93.3	32.3	72.4	91.9	48.1	84.0	70.3
MT040107	58.4	49.2	58.3	76.2	58.9	83.5	64.1
<b>Hockett</b>	84.1	77.8	81.3	89.0	57.4	86.0	79.3
MT050047	84.6	16.0	86.1	91.4	76.9	90.5	74.3
<b>Harrington</b>	82.9	80.8	68.8	86.5	48.3	75.5	73.8
MT040110	72.0	59.8	67.1	85.1	78.7	91.0	75.6
MT050184	92.2	74.5	75.6	97.1	78.8	93.5	85.3
MT040058	86.3	31.2	71.9	82.6	59.4	86.0	69.6
<b>Geraldine</b>	45.9	75.0	39.0	55.4	24.7	66.0	51.0
MT050082	91.7	66.8	82.8	92.8	73.8	93.5	83.6
MT050081	92.8	16.3	76.5	90.0	79.9	93.0	74.7
MT050110	96.3	84.0	90.6	96.2	77.5	96.0	90.1
MT050104	96.9	73.8	91.8	97.1	66.5	96.0	87.0
MT020167	68.7	16.4	82.4	87.5	73.3	89.5	69.6
2B992657	66.4	25.5	58.0	83.3	38.5	75.5	57.9
<b>Metcalfe</b>	78.7	75.9	71.2	85.3	34.8	77.0	70.5
<b>Conlon</b>	87.8	58.3	94.3	94.6	81.0	93.0	84.8
Means	79.5	55.8	71.0	85.2	54.3	85.8	71.9
C.V.	5.23			3.63			
LSD	7.1			5.3			

**Table 5. 2007 Montana Dryland Intrastate Barley - Thin percent**

<u>Variety ID</u>	<u>Bozeman</u>	<u>Conrad</u>	<u>Havre</u>	<u>Huntley</u>	<u>Moccasin</u>	<u>Sidney</u>	<u>Mean</u>
MT040013	10.0	13.2	10.8	6.9	20.4	12.0	12.2
<b>Boulder</b>	2.6	11.9	7.3	3.2	10.4	60.0	15.9
MT050048	2.7	12.8	4.1	3.7	10.0	10.5	7.3
MT040216	4.8	16.5	5.4	3.9	13.9	13.0	9.6
<b>Eslick</b>	8.5	3.1	15.6	14.1	50.2	16.5	18.0
MT050030	6.6	7.7	7.5	5.5	16.8	14.0	9.7
MT050049	5.7	8.4	6.8	4.7	5.7	6.5	6.3
<b>Baroness</b>	6.6	2.0	13.6	6.4	21.9	19.0	11.6
MT050062	8.1	6.2	10.4	6.3	9.7	15.0	9.3
MT040136	4.9	20.7	6.1	4.7	7.3	8.0	8.6
<b>Champion</b>	4.7	9.1	6.2	6.2	19.6	15.5	10.2
MT040024	13.9	12.7	24.5	13.0	25.3	22.5	18.6
<b>Haxby</b>	7.2	6.4	6.6	8.3	16.7	10.0	9.2
MT040231	6.1	2.3	5.9	6.5	19.4	5.0	7.5
MT020155	3.5	18.0	6.2	5.0	15.6	9.5	9.6
MT040226	7.0	24.0	18.8	6.8	23.5	12.5	15.4
MT030137	7.7	12.5	6.2	3.8	11.0	7.0	8.0
MT040073	4.7	9.9	6.8	8.6	29.2	14.5	12.3
MT030063	6.3	2.2	14.6	5.0	4.9	8.5	6.9
MT030079	14.7	9.6	3.2	5.9	31.9	12.5	13.0
MT020064	1.4	16.0	2.3	2.0	5.9	5.5	5.5
MT040204	13.4	10.0	20.2	8.2	35.7	16.0	17.3
MT050050	7.0	18.4	5.0	4.6	6.5	7.0	8.1
MT050117	3.2	2.5	6.6	3.5	7.1	6.5	4.9
MT040181	12.2	11.9	18.5	7.9	9.9	17.0	12.9
MT010160	4.0	10.3	9.0	4.5	19.6	8.5	9.3
MT050201	5.0	4.9	5.2	5.7	6.0	8.0	5.8
MT030042	10.4	16.3	13.6	8.1	20.3	17.0	14.3
MT030144	2.8	5.7	6.2	2.2	8.9	8.5	5.7
MT050187	2.5	8.0	4.9	2.9	8.9	9.5	6.1
<b>Tradition</b>	4.1	6.2	12.7	3.3	9.5	12.0	8.0
MT040209	5.2	3.6	18.3	8.4	24.0	17.0	12.8
MT050088	3.7	7.4	3.8	3.4	6.1	3.5	4.6
<b>Conrad</b>	2.4	13.1	9.6	3.0	14.0	8.0	8.3
MT040130	10.6	12.5	16.8	11.6	24.4	21.5	16.2
<b>Craft</b>	8.0	1.4	8.0	4.8	7.7	9.5	6.6
MT040106	3.8	12.1	6.4	2.0	6.8	5.0	6.0

*Continued*

Table 5, % Thin cont.

	<u>Bozeman</u>	<u>Conrad</u>	<u>Havre</u>	<u>Huntley</u>	<u>Moccasin</u>	<u>Sidney</u>	<u>Mean</u>
MT020205	2.8	7.0	8.8	4.7	21.7	8.0	8.8
MT040220	13.1	22.0	5.7	7.3	13.9	15.0	12.8
MT020162	5.1	6.5	10.7	8.4	16.5	12.5	9.9
MT020204	2.8	6.9	13.6	6.0	25.2	12.0	11.1
MT050080	2.5	7.7	5.8	4.8	14.3	8.0	7.2
LR101-30	17.8	17.4	20.4	15.2	16.9	31.5	19.9
MT050035	4.1	34.9	6.0	2.4	6.9	6.5	10.1
2B992316	10.3	40.3	17.8	5.6	26.0	25.5	20.9
LR116-6	4.6	19.1	6.8	4.0	48.0	7.0	14.9
MT050182	2.1	4.5	3.0	2.3	22.8	5.0	6.6
MT010158	0.9	17.5	8.2	2.7	14.4	14.0	9.6
MT040107	14.5	13.2	15.7	9.0	13.2	12.0	12.9
<b>Hockett</b>	5.0	4.6	6.0	3.6	16.4	11.0	7.8
MT050047	5.5	33.3	4.3	3.9	5.5	7.5	10.0
<b>Harrington</b>	4.8	3.8	10.6	5.0	22.6	21.5	11.4
MT040110	9.1	7.3	14.0	5.6	5.8	7.0	8.1
MT050184	2.6	5.5	7.5	1.3	4.9	60.0	13.6
MT040058	4.2	23.3	8.6	7.3	12.5	11.0	11.1
<b>Geraldine</b>	22.1	3.9	26.4	18.1	30.5	31.0	22.0
MT050082	2.2	8.8	4.4	2.8	6.3	5.5	5.0
MT050081	1.9	33.6	6.4	4.1	3.2	5.5	9.1
MT050110	1.3	2.8	2.1	1.4	6.0	3.0	2.8
MT050104	0.9	4.2	1.9	1.3	6.9	4.0	3.2
MT020167	11.3	37.0	5.5	5.5	7.5	8.0	12.5
2B992657	13.3	25.4	17.2	7.0	30.8	19.0	18.8
<b>Metcalfe</b>	6.6	4.1	10.0	6.5	26.6	20.0	12.3
<b>Conlon</b>	4.5	9.7	1.7	1.9	7.3	5.5	5.1
Means	6.4	12.1	9.4	5.7	15.4	13.3	10.4
C.V.	31.60			27.70			
LSD	3.5			2.7			

**Table 6. 2007 Montana Dryland Intrastate Barley - Protein percent**

<u>Variety ID</u>	<u>Bozeman</u>	<u>Conrad</u>	<u>Havre</u>	<u>Huntley</u>	<u>Moccasin</u>	<u>Sidney</u>	<u>Mean</u>
MT040013	11.4	13.6	15.5	9.7	12.5	11.5	12.4
<b>Boulder</b>	12.4	13.7	16.2	9.7	13.3	12.1	12.9
MT050048	12.0	13.4	15.0	9.6	12.0	11.9	12.3
MT040216	12.2	14.1	15.2	9.4	14.1	11.3	12.7
<b>Eslick</b>	10.9	15.4	16.0	9.3	13.5	11.5	12.8
MT050030	11.2	14.0	14.3	9.3	12.5	11.6	12.1
MT050049	11.6	14.4	14.7	8.7	12.8	11.2	12.2
<b>Baroness</b>	12.1	12.9	16.3	9.6	13.6	11.5	12.7
MT050062	11.4	13.5	14.7	9.1	11.6	11.3	11.9
MT040136	12.1	14.3	15.5	9.7	13.4	11.7	12.8
<b>Champion</b>	11.4	14.1	14.6	9.2	12.5	11.0	12.1
MT040024	11.7	13.7	14.7	9.3	12.5	10.9	12.1
<b>Haxby</b>	12.3	14.4	15.1	9.1	9.8	12.0	12.1
MT040231	12.9	14.1	15.6	10.0	12.3	12.6	12.9
MT020155	11.9	13.8	15.0	9.3	12.5	11.9	12.4
MT040226	12.1	14.2	16.8	9.6	14.3	11.8	13.1
MT030137	12.1	14.1	15.0	10.1	13.4	11.3	12.7
MT040073	12.7	13.4	15.3	9.6	11.4	12.2	12.4
MT030063	11.8	14.4	14.6	9.3	12.9	12.0	12.5
MT030079	11.8	14.2	15.2	10.1	11.7	11.8	12.5
MT020064	11.8	14.0	16.0	10.0	13.5	11.9	12.9
MT040204	11.1	13.8	15.4	8.9	12.6	10.8	12.1
MT050050	11.7	14.5	14.8	9.1	12.7	11.1	12.3
MT050117	12.3	14.2	16.4	10.2	12.7	11.1	12.8
MT040181	11.3	14.4	15.5	9.3	12.3	11.6	12.4
MT010160	11.8	13.9	16.0	9.5	13.2	11.8	12.7
MT050201	12.3	13.6	14.8	9.3	13.3	12.1	12.6
MT030042	11.0	13.4	14.7	8.9	12.0	10.1	11.7
MT030144	12.3	14.2	15.3	10.1	12.6	12.1	12.8
MT050187	13.5	14.6	15.9	10.6	13.7	13.2	13.6
<b>Tradition</b>	11.7	13.6	15.2	9.5	13.0	12.0	12.5
MT040209	11.8	14.6	16.3	9.5	13.6	11.3	12.9
MT050088	12.8	14.2	15.9	10.1	12.4	12.6	13.0
<b>Conrad</b>	12.2	15.0	16.4	10.1	13.8	12.9	13.4
MT040130	11.4	14.5	16.3	10.8	12.9	12.4	13.1
<b>Craft</b>	12.1	13.3	15.4	9.3	12.7	11.7	12.4
MT040106	11.8	14.2	15.8	10.0	13.4	11.8	12.8

*Continued*

Table 6, Protein cont.

	<u>Bozeman</u>	<u>Conrad</u>	<u>Havre</u>	<u>Huntley</u>	<u>Moccasin</u>	<u>Sidney</u>	<u>Mean</u>
MT020205	12.3	13.9	16.6	9.7	14.0	12.1	13.1
MT040220	12.1	14.9	14.5	9.3	12.0	12.0	12.5
MT020162	12.2	15.0	16.1	9.6	14.5	12.2	13.3
MT020204	12.0	14.7	16.6	9.7	12.8	11.7	12.9
MT050080	12.5	13.9	16.3	9.7	12.8	12.6	13.0
LR101-30	12.0	15.0	16.4	9.3	11.8	11.7	12.7
MT050035	12.3	14.0	15.5	9.9	9.9	12.2	12.3
2B992316	11.7	14.6	16.5	9.1	13.6	11.6	12.8
LR116-6	12.1	14.2	15.1	9.7	14.2	12.2	12.9
MT050182	11.9	14.2	15.3	9.5	12.9	11.8	12.6
MT010158	12.3	14.7	16.0	10.2	13.1	12.3	13.1
MT040107	12.0	14.3	16.6	9.6	13.6	11.2	12.9
<b>Hockett</b>	12.2	13.9	14.7	9.5	13.6	11.1	12.5
MT050047	11.9	13.8	14.7	9.7	13.3	12.0	12.6
<b>Harrington</b>	11.7	15.0	15.8	9.7	13.5	12.1	13.0
MT040110	12.3	14.0	17.0	9.5	14.0	11.7	13.1
MT050184	12.5	13.1	16.2	10.5	12.0	12.9	12.9
MT040058	12.2	12.8	15.2	9.1	12.9	11.6	12.3
<b>Geraldine</b>	12.1	13.4	16.5	9.6	14.6	12.1	13.1
MT050082	12.8	13.8	16.7	9.9	11.0	12.6	12.8
MT050081	12.9	13.4	16.7	10.1	12.5	13.1	13.1
MT050110	12.8	14.3	15.9	10.1	11.4	12.5	12.8
MT050104	13.0	13.3	15.8	10.5	12.8	13.0	13.1
MT020167	12.1	13.5	16.2	10.0	13.7	12.4	13.0
2B992657	11.9	13.8	17.2	8.6	14.8	11.6	13.0
<b>Metcalfe</b>	12.2	14.2	16.4	9.8	13.8	12.0	13.1
<b>Conlon</b>	13.2	14.9	14.4	10.6	13.4	12.4	13.1
Means	12.1	14.1	15.7	9.6	11.5	11.9	12.5
C.V.	3.32		1.13	4.86		3.86	
LSD	0.7		0.5	0.8		0.8	

**Table 7. 2007 Montana Dryland Intrastate Barley - Height, inches**

<u>Variety ID</u>	<u>Bozeman</u>	<u>Conrad</u>	<u>Havre</u>	<u>Huntley</u>	<u>Moccasin</u>	<u>Sidney</u>	<u>Mean</u>
MT040013	33.7	27.0	25.5	32.2	38.2	29.3	31.0
<b>Boulder</b>	33.8	26.0	24.9	30.9	33.6	29.6	29.8
MT050048	35.1	23.0	26.3	33.7	37.6	30.7	31.1
MT040216	33.0	22.0	22.3	28.6	33.7	27.8	27.9
<b>Eslick</b>	28.9	24.0	22.8	27.8	35.1	27.1	27.6
MT050030	34.7	24.0	24.7	30.1	36.8	29.9	30.0
MT050049	36.4	25.0	25.9	34.2	41.1	32.6	32.5
<b>Baroness</b>	32.4	28.0	23.3	32.5	36.6	26.7	29.9
MT050062	35.4	25.0	26.6	33.8	39.0	33.0	32.1
MT040136	33.6	23.0	24.5	28.6	36.5	27.9	29.0
<b>Champion</b>	33.9	26.0	24.4	30.3	37.8	27.6	30.0
MT040024	32.5	24.0	25.0	29.5	36.8	29.7	29.6
<b>Haxby</b>	35.3	27.0	25.1	31.5	38.7	30.7	31.4
MT040231	32.7	26.0	22.0	33.3	35.8	29.2	29.8
MT020155	36.2	24.0	26.3	32.5	38.2	29.0	31.0
MT040226	34.3	20.0	24.0	32.8	37.3	30.1	29.7
MT030137	32.2	22.0	24.3	30.4	36.1	27.3	28.7
MT040073	34.1	28.0	24.3	30.6	34.7	27.7	29.9
MT030063	35.5	25.0	22.1	33.9	39.9	30.3	31.1
MT030079	32.5	23.0	25.1	29.7	36.7	29.3	29.4
MT020064	32.5	23.0	27.3	32.3	39.2	29.4	30.6
MT040204	32.8	23.0	24.3	32.2	36.2	28.6	29.5
MT050050	35.0	25.0	26.1	31.7	39.3	32.4	31.6
MT050117	32.9	29.0	24.8	31.7	36.6	30.0	30.8
MT040181	32.2	23.0	23.5	30.6	35.1	29.0	28.9
MT010160	34.4	26.0	25.9	34.1	38.7	30.6	31.6
MT050201	36.2	25.0	27.0	34.2	39.2	32.3	32.3
MT030042	31.7	24.0	22.4	29.8	36.9	27.5	28.7
MT030144	33.3	25.0	23.0	32.4	37.1	29.9	30.1
MT050187	35.8	29.0	28.0	33.5	43.0	34.1	33.9
<b>Tradition</b>	37.4	24.0	24.8	33.3	40.1	33.7	32.2
MT040209	32.1	22.0	22.7	30.1	35.7	28.0	28.4
MT050088	37.0	25.0	25.7	31.2	39.1	31.7	31.6
<b>Conrad</b>	31.4	27.0	24.6	28.9	35.6	27.6	29.2
MT040130	28.9	22.0	23.9	32.7	35.1	28.4	28.5
<b>Craft</b>	36.9	26.0	28.8	33.0	40.4	32.4	32.9
MT040106	30.8	24.0	25.3	28.2	36.6	27.5	28.7

*Continued*

Table 7, Height cont.

	<u>Bozeman</u>	<u>Conrad</u>	<u>Havre</u>	<u>Huntley</u>	<u>Moccasin</u>	<u>Sidney</u>	<u>Mean</u>
MT020205	33.2	24.0	23.4	32.3	37.3	29.6	30.0
MT040220	32.5	22.0	25.8	29.6	36.5	28.7	29.2
MT020162	34.8	24.0	24.3	32.6	37.0	29.4	30.3
MT020204	32.9	24.0	23.4	30.7	40.0	28.2	29.9
MT050080	36.3	24.0	24.9	36.4	39.8	32.2	32.3
LR101-30	31.6	23.0	22.1	31.8	34.7	28.1	28.5
MT050035	35.9	22.0	26.6	31.2	38.5	27.4	30.3
2B992316	31.8	24.0	23.3	32.0	36.6	26.2	29.0
LR116-6	36.8	24.0	27.7	34.2	38.6	31.5	32.2
MT050182	35.1	27.0	24.5	30.8	38.6	30.2	31.0
MT010158	33.2	29.0	23.2	30.2	37.6	29.0	30.4
MT040107	30.5	24.0	23.9	29.5	35.1	27.5	28.4
<b>Hockett</b>	35.1	29.0	25.1	31.0	37.9	29.1	31.2
MT050047	37.1	26.0	27.2	34.3	37.7	30.2	32.1
<b>Harrington</b>	32.3	26.0	23.1	32.9	36.8	27.6	29.8
MT040110	31.1	23.0	23.3	30.0	35.3	28.8	28.6
MT050184	35.1	27.0	26.2	33.6	41.0	31.2	32.3
MT040058	30.8	21.0	22.9	28.3	36.0	27.7	27.8
<b>Geraldine</b>	30.8	25.0	21.4	31.2	35.4	26.7	28.4
MT050082	36.3	24.0	25.6	33.5	40.0	33.9	32.2
MT050081	35.7	23.0	25.2	33.7	40.2	31.5	31.5
MT050110	34.2	27.0	25.3	29.3	38.5	29.9	30.7
MT050104	35.7	25.0	24.8	31.7	37.1	31.0	30.9
MT020167	32.6	19.0	25.4	30.0	37.9	29.3	29.1
2B992657	33.3	22.0	24.5	30.4	36.3	28.3	29.2
<b>Metcalf</b>	33.7	27.0	25.4	32.8	36.4	29.5	30.8
<b>Conlon</b>	34.2	21.0	26.9	33.0	36.0	29.9	30.2
Means	33.8	24.5	24.7	31.6	37.5	29.6	30.3
C.V.	3.92		4.33	5.24	4.58	6.88	
LSD	2.3		3.0	2.7	2.9	3.5	

**Table 8. 2007 Montana Dryland Intrastate Barley - Head Date**  
Days from January 1

<u>Variety ID</u>	<u>Bozeman</u>	<u>Conrad</u>	<u>Havre</u>	<u>Huntley</u>	<u>Moccasin</u>	<u>Sidney</u>	<u>Mean</u>
MT040013	175.3	178	180.0	165.7	177.5	171.1	174.6
<b>Boulder</b>	177.9	179	181.7	167.8	177.5	170.4	175.7
MT050048	176.6	179	183.3	165.5	174.7	170.6	175.0
MT040216	176.3	180	180.7	165.5	176.0	170.0	174.8
<b>Eslick</b>	176.2	176	183.7	167.6	179.1	170.9	175.6
MT050030	176.3	178	182.0	167.4	175.5	170.9	175.0
MT050049	177.4	179	180.7	166.0	173.9	169.9	174.5
<b>Baroness</b>	177.4	178	182.3	167.4	177.5	171.1	175.6
MT050062	177.0	179	183.0	167.1	178.2	171.6	176.0
MT040136	179.6	178	181.7	166.3	175.6	169.0	175.0
<b>Champion</b>	179.7	177	178.0	167.0	175.1	170.5	174.6
MT040024	175.0	176	180.3	163.7	173.8	169.9	173.1
<b>Haxby</b>	177.7	177	179.3	162.4	173.8	168.2	173.1
MT040231	178.3	173	179.7	165.2	174.0	169.5	173.3
MT020155	178.7	178	174.7	160.8	171.0	165.7	171.5
MT040226	177.6	179	184.3	165.1	175.6	170.1	175.3
MT030137	176.0	180	181.3	166.8	174.6	168.7	174.6
MT040073	178.0	179	181.0	165.1	175.3	169.6	174.7
MT030063	175.7	176	177.3	167.3	177.0	171.4	174.1
MT030079	176.2	175	183.3	166.2	174.4	169.6	174.1
MT020064	176.7	178	178.3	165.1	174.6	170.1	173.8
MT040204	178.6	176	183.7	167.9	179.2	172.3	176.3
MT050050	175.0	180	180.3	164.0	174.1	169.4	173.8
MT050117	175.9	179	181.0	164.7	175.1	169.7	174.2
MT040181	177.5	178	182.7	167.3	178.2	171.2	175.8
MT010160	179.2	178	179.3	166.0	177.8	171.1	175.2
MT050201	178.7	178	180.3	163.6	174.5	170.0	174.2
MT030042	177.2	180	180.0	166.2	174.6	167.3	174.2
MT030144	178.3	178	180.7	167.9	175.4	169.2	174.9
MT050187	177.3	178	175.7	162.0	172.4	166.1	171.9
<b>Tradition</b>	176.9	178	175.0	160.2	174.0	167.6	171.9
MT040209	178.0	178	184.3	166.5	176.2	171.0	175.7
MT050088	174.0	179	178.7	163.7	174.2	168.5	173.0
<b>Conrad</b>	177.7	175	183.7	167.1	177.3	170.0	175.1
MT040130	175.2	179	182.7	167.6	179.3	170.6	175.7
<b>Craft</b>	177.3	176	178.7	162.8	173.7	168.4	172.8
MT040106	174.7	177	183.0	170.1	178.6	170.9	175.7

*Continued*

Table 8, Head Date cont.

	<u>Bozeman</u>	<u>Conrad</u>	<u>Havre</u>	<u>Huntley</u>	<u>Moccasin</u>	<u>Sidney</u>	<u>Mean</u>
MT020205	177.0	179	175.7	162.3	174.0	168.7	172.8
MT040220	176.2	180	178.7	168.4	179.8	171.7	175.8
MT020162	177.4	176	181.7	166.7	177.8	171.7	175.2
MT020204	177.6	177	178.3	162.0	172.6	168.6	172.7
MT050080	176.0	178	181.7	164.3	174.1	170.1	174.0
LR101-30	178.7	178	184.7	168.5	179.7	172.4	177.0
MT050035	178.0	179	183.7	167.4	176.7	171.4	176.0
2B992316	124.7	179	182.0	167.3	178.0	170.9	167.0
LR116-6	180.2	179	178.3	164.3	173.6	169.5	174.2
MT050182	176.3	176	181.7	166.1	172.6	169.0	173.6
MT010158	176.3	175	181.7	163.5	176.3	168.8	173.6
MT040107	179.6	178	184.7	170.7	180.2	171.7	177.5
<b>Hockett</b>	175.5	177	179.3	163.9	174.2	165.8	172.6
MT050047	176.7	180	178.7	164.3	172.3	168.9	173.5
<b>Harrington</b>	176.3	176	182.3	165.4	178.4	170.7	174.9
MT040110	176.8	179	183.7	170.3	181.0	171.8	177.1
MT050184	177.9	176	178.3	163.0	172.8	169.1	172.9
MT040058	176.0	178	181.7	163.6	174.8	168.8	173.8
<b>Geraldine</b>	175.6	178	184.7	170.2	181.2	172.0	177.0
MT050082	178.0	176	176.0	163.4	173.5	169.4	172.7
MT050081	179.3	180	180.7	163.0	173.0	168.4	174.1
MT050110	179.0	178	177.7	165.0	173.9	167.7	173.5
MT050104	176.0	179	176.3	162.0	172.4	165.6	171.9
MT020167	175.4	180	181.0	167.5	174.6	170.4	174.8
2B992657	177.7	179	178.3	163.0	176.8	170.8	174.3
<b>Metcalfe</b>	177.0	175	179.0	162.4	175.6	169.0	173.0
<b>Conlon</b>	175.0	176	171.3	160.5	175.6	164.3	170.5
Means	176.3	177.8	180.4	165.4	175.6	169.7	174.2
C.V.			0.60	0.48	0.46	0.39	
LSD			3.0	1.4	1.4	1.1	

**Table 9. 2007 Montana Irrigated Intrastate Barley - All Traits**

Variety ID	Yield bu/a	Test Wt lb/bu	Statewide Average*			Height in.	Head date
			Plump %	Thin %	Protein %		
<b>Champion</b>	107.5	52.7	79.9	10.2	12.3	32.9	175.0
MT040013	105.1	51.8	83.4	6.7	11.9	33.4	176.8
<b>Baroness</b>	103.7	52.1	84.8	6.0	12.1	31.4	176.6
MT040209	103.0	51.5	77.5	8.5	12.8	31.9	176.3
<b>Boulder</b>	102.0	52.7	83.0	7.6	13.6	31.9	175.7
<b>Eslick</b>	100.9	51.6	72.7	11.1	12.0	29.3	178.5
MT030137	98.8	52.1	83.0	8.1	13.5	31.0	175.5
MT050030	98.6	51.1	79.9	7.3	12.0	31.9	177.1
MT050050	97.4	52.6	82.5	8.8	12.5	33.8	175.5
MT020162	97.2	51.9	84.4	6.7	12.9	32.1	176.4
MT040204	96.7	48.9	72.4	10.6	12.0	31.6	178.2
MT050035	96.4	51.9	85.8	7.3	12.7	32.6	177.1
MT050049	96.3	52.5	82.5	8.8	12.2	34.0	175.9
MT050062	96.3	52.3	83.6	7.1	11.8	35.7	176.2
MT020205	96.2	52.5	85.6	5.6	13.0	32.2	173.6
LR101-30	96.1	51.3	71.9	10.8	12.6	31.6	177.5
<b>Conrad</b>	96.0	51.3	88.0	5.2	13.2	31.9	176.6
<b>Craft</b>	95.7	52.8	82.7	7.6	12.4	33.9	174.4
MT040024	95.7	51.6	73.6	12.7	12.0	32.1	174.4
MT030063	95.0	52.7	86.3	6.9	12.5	34.1	176.6
MT040130	94.8	51.3	78.5	7.5	13.0	31.8	178.4
MT050117	94.3	51.7	85.6	7.1	12.8	31.2	175.4
2B992316	94.3	50.8	80.5	8.4	12.3	33.0	176.6
MT040073	94.1	53.2	81.3	9.0	13.3	33.1	174.8
LR116-6	93.9	52.5	81.0	9.8	13.0	34.9	174.8
MT040136	92.9	53.6	85.0	6.2	13.1	31.9	175.7
MT030079	92.9	52.5	78.4	9.4	12.4	32.5	175.7
MT050201	92.8	52.6	86.4	7.4	12.1	33.6	175.4
MT050080	92.5	52.3	88.9	5.9	13.3	36.3	175.0
MT040226	92.5	53.4	81.8	5.9	12.2	32.3	175.0
MT040231	92.4	52.2	77.1	8.7	13.2	32.1	175.9
MT020155	92.3	51.6	81.9	7.1	12.6	32.3	172.8
MT040220	92.2	50.7	75.4	8.0	12.7	30.8	178.0
<b>Haxby</b>	92.2	52.5	83.0	7.8	12.8	31.9	173.8
2B992657	92.1	49.1	79.9	9.4	12.4	32.7	176.4
MT030042	92.1	52.5	81.9	9.1	11.6	31.0	176.0
MT040216	92.1	52.9	81.7	6.8	12.7	30.5	176.7

*Continued*

Table 9 cont	Yield	Test Wt	Plump	Thin	Protein	Height	Head
MT040106	91.9	51.6	88.1	6.5	13.3	31.0	179.1
MT020204	91.9	52.1	84.3	7.8	12.8	31.1	174.4
MT040181	91.9	51.8	78.2	9.0	12.2	29.3	178.0
<b>Geraldine</b>	91.4	51.2	76.5	12.1	12.2	30.2	177.9
MT020064	91.4	51.9	86.2	8.8	13.3	33.0	175.1
MT050048	91.2	52.8	82.3	9.4	12.7	32.6	176.4
MT050182	90.9	53.2	89.6	5.5	12.7	33.3	176.5
MT010158	90.9	51.4	83.8	7.1	12.9	31.5	175.1
MT050184	90.6	52.7	85.6	7.6	13.3	33.7	174.6
MT050047	90.0	52.7	86.7	6.3	12.4	33.5	174.7
MT040058	89.8	52.7	81.7	7.7	12.7	31.9	175.4
MT040110	88.7	51.7	78.7	9.4	13.2	30.5	179.3
MT050088	88.6	51.8	87.3	6.9	13.4	33.3	175.4
MT030144	88.2	52.0	86.0	6.5	12.7	31.2	176.2
MT010160	87.7	51.8	84.8	8.8	12.5	33.4	176.7
MT050082	87.5	52.3	87.2	6.8	13.5	35.3	174.7
MT040107	87.4	51.7	75.1	10.9	12.9	30.4	179.3
<b>Harrington</b>	86.3	50.6	82.6	7.3	12.3	32.3	176.7
<b>Metcalfe</b>	85.6	50.6	83.9	8.1	13.1	32.4	175.6
<b>Conlon</b>	85.0	51.8	86.9	7.5	13.2	33.2	172.4
<b>Tradition</b>	84.9	51.0	81.4	7.7	12.5	34.8	173.2
MT050081	84.0	52.7	86.5	8.1	13.4	34.7	174.5
MT050187	83.8	52.2	77.1	12.5	13.9	33.2	174.9
MT020167	83.7	51.7	81.7	9.3	13.2	31.7	176.7
<b>Hockett</b>	82.3	52.2	82.0	6.9	12.3	30.9	175.4
MT050104	76.7	51.7	89.7	6.3	13.4	32.5	173.0
MT050110	76.4	51.7	88.4	6.8	13.5	32.8	174.9
Means	92.3	51.9	82.5	8.0	12.7	32.4	175.7

\* Locations: Bozeman, Conrad, Huntley, Kalispell and Sidney.

**Table 10. 2007 Montana Irrigated Intrastate Barley - Yield, bu/a**

<u>Variety ID</u>	<u>Bozeman</u>	<u>Conrad</u>	<u>Huntley</u>	<u>Kalispell</u>	<u>Sidney</u>	<u>Mean</u>
<b>Champion</b>	129.0	113.0	151.3	80.3	63.8	107.5
MT040013	117.5	87.9	161.7	86.0	72.8	105.1
<b>Baroness</b>	113.4	112.2	142.3	81.8	68.9	103.7
MT040209	114.5	107.7	145.3	79.3	68.1	103.0
<b>Boulder</b>	115.2	109.5	148.9	81.4	55.1	102.0
<b>Eslick</b>	120.8	105.5	128.7	78.0	71.4	100.9
MT030137	109.9	109.0	144.4	76.2	54.2	98.8
MT050030	111.5	104.8	125.5	84.6	66.5	98.6
MT050050	109.1	98.7	139.5	83.9	55.6	97.4
MT020162	108.5	100.6	134.9	81.8	60.3	97.2
MT040204	106.7	96.7	124.6	83.4	72.1	96.7
MT050035	99.4	105.4	130.3	83.0	64.1	96.4
MT050049	102.0	99.1	135.5	82.2	62.7	96.3
MT050062	102.3	100.5	128.2	80.3	70.2	96.3
MT020205	113.8	95.6	132.2	81.4	57.7	96.2
LR101-30	103.6	108.4	133.6	73.4	61.6	96.1
<b>Conrad</b>	110.1	102.0	125.0	81.3	61.9	96.0
<b>Craft</b>	105.9	103.7	124.6	79.5	65.0	95.7
MT040024	101.9	105.9	130.4	78.9	61.2	95.7
MT030063	106.4	99.2	129.4	85.5	54.3	95.0
MT040130	108.1	94.7	137.9	74.9	58.5	94.8
MT050117	113.4	107.8	118.8	74.9	56.8	94.3
2B992316	102.1	107.0	125.2	80.4	56.8	94.3
MT040073	107.7	91.1	124.7	82.5	64.6	94.1
LR116-6	97.1	103.0	130.0	79.6	60.0	93.9
MT040136	93.4	104.4	130.1	76.5	60.3	92.9
MT030079	102.2	104.3	129.5	77.8	50.7	92.9
MT050201	105.5	97.6	117.1	82.8	60.8	92.8
MT050080	103.0	102.1	122.2	76.4	58.9	92.5
MT040226	100.7	98.2	122.4	83.0	58.1	92.5
MT040231	104.5	99.5	123.8	76.4	58.0	92.4
MT020155	101.8	97.6	136.0	75.9	50.3	92.3
MT040220	104.9	98.0	126.8	78.1	53.1	92.2
<b>Haxby</b>	103.4	103.3	123.8	77.6	52.6	92.2
2B992657	94.6	90.0	146.8	72.0	57.3	92.1
MT030042	103.3	100.1	124.8	83.9	48.5	92.1
MT040216	104.8	97.1	127.1	74.2	57.4	92.1

*Continued*

Table 10, Irr Yield cont.

	<u>Bozeman</u>	<u>Conrad</u>	<u>Huntley</u>	<u>Kalispell</u>	<u>Sidney</u>	<u>Mean</u>
MT040106	111.8	84.8	146.4	68.6	48.1	91.9
MT020204	108.2	93.0	123.4	80.7	54.3	91.9
MT040181	96.1	101.2	125.3	79.7	57.2	91.9
<b>Geraldine</b>	106.3	96.5	120.5	71.6	62.3	91.4
MT020064	107.1	95.2	117.1	80.3	57.3	91.4
MT050048	98.1	102.1	118.1	80.7	56.7	91.2
MT050182	96.0	109.8	119.6	75.3	54.0	90.9
MT010158	104.6	100.7	121.7	78.3	49.4	90.9
MT050184	101.7	98.2	119.9	75.3	57.6	90.6
MT050047	104.2	100.1	107.9	81.3	56.5	90.0
MT040058	88.8	96.3	127.2	79.3	57.5	89.8
MT040110	96.2	90.4	133.7	67.2	56.1	88.7
MT050088	102.9	98.1	111.5	74.6	55.8	88.6
MT030144	106.3	80.4	119.5	83.0	51.6	88.2
MT010160	94.4	87.2	118.4	77.8	60.6	87.7
MT050082	99.5	96.7	109.8	77.7	54.0	87.5
MT040107	107.8	90.5	115.2	64.0	59.4	87.4
<b>Harrington</b>	92.9	86.1	113.1	75.4	64.1	86.3
<b>Metcalfe</b>	87.1	87.6	123.6	78.7	51.1	85.6
<b>Conlon</b>	83.7	95.0	130.0	75.8	40.3	85.0
<b>Tradition</b>	83.8	102.2	104.8	77.1	56.8	84.9
MT050081	97.9	92.6	99.8	78.4	51.2	84.0
MT050187	90.0	91.4	115.3	75.6	46.7	83.8
MT020167	87.3	97.1	116.5	68.6	49.2	83.7
<b>Hockett</b>	84.9	79.1	112.8	85.1	49.6	82.3
MT050104	63.8	88.2	102.5	81.6	47.2	76.7
MT050110	66.9	84.8	105.8	80.6	43.7	76.4
Means	101.6	98.2	125.8	78.5	57.5	92.3
C.V.	7.27	9.44	9.66	8.93	9.09	
LSD	12.7	15.7	19.6	12.2	9.0	

**Table 11. 2007 Montana Irrigated Intrastate Barley - Test Weight**  
Lbs/bu

<u>Variety ID</u>	<u>Bozeman</u>	<u>Conrad</u>	<u>Huntley</u>	<u>Kalispell</u>	<u>Sidney</u>	<u>Mean</u>
<b>Champion</b>	55.1	52.6	53.8	51.9	49.9	52.7
MT040013	53.4	51.5	54.2	49.1	50.7	51.8
<b>Baroness</b>	53.5	53.8	53.9	49.1	50.1	52.1
MT040209	53.9	53.4	53.6	47.1	49.6	51.5
<b>Boulder</b>	54.5	52.2	54.5	51.1	51.3	52.7
<b>Eslick</b>	53.5	53.3	53.8	46.9	50.6	51.6
MT030137	54.6	51.9	54.9	49.7	49.3	52.1
MT050030	52.7	52.4	53.7	48.1	48.8	51.1
MT050050	54.5	55.1	55.1	49.4	49.1	52.6
MT020162	53.4	53.6	54.0	48.6	50.0	51.9
MT040204	51.7	46.0	52.5	45.3	48.8	48.9
MT050035	53.3	52.7	54.3	50.9	48.1	51.9
MT050049	54.6	51.8	54.5	51.7	50.1	52.5
MT050062	53.9	54.0	53.7	50.8	49.0	52.3
MT020205	53.4	54.9	54.8	49.6	49.7	52.5
LR101-30	52.3	54.5	53.7	47.1	49.1	51.3
<b>Conrad</b>	53.4	53.4	53.9	47.5	48.1	51.3
<b>Craft</b>	53.4	55.2	54.3	51.0	50.2	52.8
MT040024	53.2	52.7	53.4	49.4	49.0	51.6
MT030063	53.9	54.3	53.5	52.4	49.3	52.7
MT040130	53.2	51.6	53.7	47.8	50.2	51.3
MT050117	53.4	54.6	52.1	49.1	49.2	51.7
2B992316	52.1	52.1	51.8	49.9	48.0	50.8
MT040073	54.4	52.8	54.9	52.5	51.2	53.2
LR116-6	54.7	51.8	54.4	51.0	50.5	52.5
MT040136	54.9	54.2	55.2	52.2	51.4	53.6
MT030079	54.6	52.4	55.2	50.0	50.1	52.5
MT050201	54.1	51.8	53.8	51.9	51.2	52.6
MT050080	53.7	53.5	53.6	51.5	48.9	52.3
MT040226	54.9	51.9	55.9	52.0	52.2	53.4
MT040231	53.7	53.9	54.1	49.7	49.4	52.2
MT020155	52.9	55.5	53.3	49.1	47.4	51.6
MT040220	52.5	49.7	53.8	47.7	49.7	50.7
<b>Haxby</b>	54.3	52.0	54.6	51.4	50.4	52.5
2B992657	51.3	52.7	50.9	44.0	46.9	49.1
MT030042	53.9	50.6	54.7	53.2	49.9	52.5
MT040216	54.4	53.3	55.0	50.5	51.2	52.9

*Continued*

Table 11, Irr Test Wt cont.

	<u>Bozeman</u>	<u>Conrad</u>	<u>Huntley</u>	<u>Kalispell</u>	<u>Sidney</u>	<u>Mean</u>
MT040106	54.0	53.9	53.5	48.5	47.9	51.6
MT020204	53.8	52.5	54.4	49.8	50.1	52.1
MT040181	53.2	53.4	54.1	48.9	49.2	51.8
<b>Geraldine</b>	51.2	52.4	53.2	49.4	49.9	51.2
MT020064	54.3	50.6	54.5	51.5	48.8	51.9
MT050048	54.7	51.2	54.6	52.4	51.1	52.8
MT050182	55.4	54.1	54.7	51.7	49.9	53.2
MT010158	53.3	50.6	54.2	50.2	48.8	51.4
MT050184	54.4	54.6	53.5	51.3	49.7	52.7
MT050047	54.8	52.0	54.1	52.5	49.9	52.7
MT040058	54.1	53.0	54.8	52.1	49.7	52.7
MT040110	54.2	51.5	54.7	49.6	48.4	51.7
MT050088	53.7	51.8	53.5	50.8	49.3	51.8
MT030144	54.1	51.7	54.1	51.5	48.8	52.0
MT010160	53.3	51.8	54.1	50.7	49.1	51.8
MT050082	54.3	54.4	54.0	49.4	49.4	52.3
MT040107	53.4	52.8	54.5	48.4	49.3	51.7
<b>Harrington</b>	52.2	51.8	52.9	48.6	47.7	50.6
<b>Metcalfe</b>	52.6	51.5	53.2	48.0	48.0	50.6
<b>Conlon</b>	53.7	54.1	55.0	48.8	47.5	51.8
<b>Tradition</b>	53.3	53.5	51.5	49.7	47.2	51.0
MT050081	54.7	53.4	54.2	51.7	49.5	52.7
MT050187	54.5	50.8	54.4	51.4	49.9	52.2
MT020167	53.1	52.9	54.3	49.3	49.2	51.7
<b>Hockett</b>	54.0	53.6	53.9	51.0	48.6	52.2
MT050104	53.4	53.4	52.9	51.1	47.6	51.7
MT050110	54.2	50.3	53.7	51.6	48.7	51.7
Means	53.7	52.7	53.9	50.0	49.4	51.9
C.V.	0.70		0.85		1.11	
LSD	0.7		0.7		1.0	

**Table 12. 2007 Montana Irrigated Intrastate Barley - Plump percent**

<u>Variety ID</u>	<u>Bozeman</u>	<u>Conrad</u>	<u>Huntley</u>	<u>Kalispell</u>	<u>Sidney</u>	<u>Mean</u>
<b>Champion</b>	91.1	69.7	94.6	74.0	70.0	79.9
MT040013	89.6	83.6	93.7	68.1	82.0	83.4
<b>Baroness</b>	89.2	85.6	96.7	68.6	84.0	84.8
MT040209	85.4	89.1	88.6	52.3	72.0	77.5
<b>Boulder</b>	94.4	73.5	97.0	74.0	76.0	83.0
<b>Eslick</b>	77.2	81.8	92.3	45.3	67.0	72.7
MT030137	90.9	79.0	96.8	72.3	76.0	83.0
MT050030	91.0	79.0	96.1	53.6	80.0	79.9
MT050050	92.4	86.7	96.0	68.5	69.0	82.5
MT020162	85.0	82.9	96.8	76.3	81.0	84.4
MT040204	82.1	70.9	92.7	44.4	72.0	72.4
MT050035	90.5	78.5	98.2	82.7	79.0	85.8
MT050049	90.9	76.1	95.5	76.2	74.0	82.5
MT050062	89.1	82.6	92.7	71.6	82.0	83.6
MT020205	89.0	84.5	97.0	74.8	83.0	85.6
LR101-30	73.7	92.2	88.9	37.9	67.0	71.9
<b>Conrad</b>	90.6	84.6	98.4	77.3	89.0	88.0
<b>Craft</b>	85.9	79.2	95.7	70.5	82.0	82.7
MT040024	82.8	78.2	87.4	62.5	57.0	73.6
MT030063	94.1	83.1	92.8	82.6	79.0	86.3
MT040130	86.3	73.4	93.5	56.0	83.0	78.5
MT050117	88.0	83.0	97.4	80.8	79.0	85.6
2B992316	84.4	77.3	85.6	73.4	82.0	80.5
MT040073	89.7	74.3	94.6	72.1	76.0	81.3
LR116-6	91.7	64.3	96.5	76.4	76.0	81.0
MT040136	91.4	90.8	96.8	69.9	76.0	85.0
MT030079	89.5	74.6	94.4	56.4	77.0	78.4
MT050201	89.2	81.8	95.0	86.2	80.0	86.4
MT050080	90.5	85.3	97.6	85.2	86.0	88.9
MT040226	87.9	84.0	92.2	62.9	82.0	81.8
MT040231	86.6	81.3	95.8	50.0	72.0	77.1
MT020155	88.4	86.3	93.1	65.8	76.0	81.9
MT040220	82.1	77.0	93.4	44.6	80.0	75.4
<b>Haxby</b>	90.1	86.6	93.6	72.9	72.0	83.0
2B992657	82.3	83.6	88.3	69.2	76.0	79.9
MT030042	85.1	81.0	89.6	81.9	72.0	81.9
MT040216	90.9	86.5	97.3	57.7	76.0	81.7

*Continued*

Table 12, Irr Plump cont.

	<u>Bozeman</u>	<u>Conrad</u>	<u>Huntley</u>	<u>Kalispell</u>	<u>Sidney</u>	<u>Mean</u>
MT040106	93.5	90.8	96.2	84.3	76.0	88.1
MT020204	88.0	78.1	96.2	79.4	80.0	84.3
MT040181	81.1	76.6	92.6	59.6	81.0	78.2
<b>Geraldine</b>	70.0	88.1	83.6	72.0	69.0	76.5
MT020064	94.4	69.5	96.3	90.0	81.0	86.2
MT050048	92.2	61.4	96.4	80.7	81.0	82.3
MT050182	96.0	90.0	98.1	84.9	79.0	89.6
MT010158	86.9	75.5	97.5	75.1	84.0	83.8
MT050184	91.3	88.3	95.7	80.7	72.0	85.6
MT050047	93.9	77.6	96.9	80.8	84.0	86.7
MT040058	86.2	88.7	95.4	71.2	67.0	81.7
MT040110	88.3	64.9	97.4	63.7	79.0	78.7
MT050088	92.2	77.1	96.6	86.5	84.0	87.3
MT030144	88.9	81.3	97.6	79.3	83.0	86.0
MT010160	84.2	78.1	96.1	79.7	86.0	84.8
MT050082	93.1	80.7	97.2	86.2	79.0	87.2
MT040107	83.6	74.4	94.7	51.6	71.0	75.1
<b>Harrington</b>	82.5	83.7	96.7	71.1	79.0	82.6
<b>Metcalfe</b>	85.5	82.1	96.9	79.1	76.0	83.9
<b>Conlon</b>	93.9	87.2	97.0	83.2	73.0	86.9
<b>Tradition</b>	87.9	85.2	94.6	64.5	75.0	81.4
MT050081	93.5	72.3	97.5	88.3	81.0	86.5
MT050187	85.7	72.2	94.1	67.7	66.0	77.1
MT020167	90.7	68.5	94.8	74.6	80.0	81.7
<b>Hockett</b>	91.3	81.4	83.6	76.7	77.0	82.0
MT050104	95.1	86.4	98.8	89.1	79.0	89.7
MT050110	94.2	72.3	98.0	93.6	84.0	88.4
Means	88.4	80.1	94.7	71.7	77.4	82.5
C.V.	2.60		3.67			
LSD	3.9		5.6			

**Table 13. 2007 Montana Irrigated Intrastate Barley - Thin percent**

<u>Variety ID</u>	<u>Bozeman</u>	<u>Conrad</u>	<u>Huntley</u>	<u>Sidney</u>	<u>Mean</u>
<b>Champion</b>	2.5	11.9	1.6	25.0	10.2
MT040013	3.4	6.6	1.8	15.0	6.7
<b>Baroness</b>	3.8	5.7	0.7	14.0	6.0
MT040209	4.4	3.9	4.6	21.0	8.5
<b>Boulder</b>	1.8	11.5	1.2	16.0	7.6
<b>Eslick</b>	7.5	7.1	1.9	28.0	11.1
MT030137	3.2	10.1	1.2	18.0	8.1
MT050030	2.5	8.5	1.1	17.0	7.3
MT050050	2.7	6.4	1.2	25.0	8.8
MT020162	4.5	7.5	0.8	14.0	6.7
MT040204	6.0	10.5	2.0	24.0	10.6
MT050035	3.1	9.7	0.3	16.0	7.3
MT050049	3.1	9.2	1.9	21.0	8.8
MT050062	3.6	7.9	2.0	15.0	7.1
MT020205	3.8	4.5	1.0	13.0	5.6
LR101-30	10.1	3.0	3.0	27.0	10.8
<b>Conrad</b>	3.1	7.3	0.5	10.0	5.2
<b>Craft</b>	4.8	9.0	1.6	15.0	7.6
MT040024	4.8	10.7	3.3	32.0	12.7
MT030063	1.9	6.5	2.2	17.0	6.9
MT040130	5.1	9.1	1.8	14.0	7.5
MT050117	4.0	6.9	0.6	17.0	7.1
2B992316	5.3	9.0	5.3	14.0	8.4
MT040073	3.2	12.5	2.2	18.0	9.0
LR116-6	2.6	16.9	0.8	19.0	9.8
MT040136	2.5	3.3	1.1	18.0	6.2
MT030079	3.2	14.2	1.2	19.0	9.4
MT050201	3.7	7.7	1.3	17.0	7.4
MT050080	3.2	7.5	0.8	12.0	5.9
MT040226	3.4	3.3	1.9	15.0	5.9
MT040231	4.9	6.5	1.3	22.0	8.7
MT020155	3.3	3.7	2.3	19.0	7.1
MT040220	7.0	8.6	1.6	15.0	8.0
<b>Haxby</b>	3.1	4.6	2.5	21.0	7.8
2B992657	6.8	6.8	4.1	20.0	9.4
MT030042	5.2	7.9	3.5	20.0	9.1
MT040216	2.8	4.7	0.8	19.0	6.8

*Continued*

Table 13, Irr % Thin cont.

	<u>Bozeman</u>	<u>Conrad</u>	<u>Huntley</u>	<u>Sidney</u>	<u>Mean</u>
MT040106	2.2	3.3	1.3	19.0	6.5
MT020204	3.9	9.9	1.4	16.0	7.8
MT040181	7.2	10.8	2.1	16.0	9.0
<b>Geraldine</b>	11.6	5.1	4.6	27.0	12.1
MT020064	1.7	17.9	1.4	14.0	8.8
MT050048	2.1	19.7	0.7	15.0	9.4
MT050182	1.4	3.3	0.5	17.0	5.5
MT010158	3.9	11.0	0.5	13.0	7.1
MT050184	3.0	4.0	1.6	22.0	7.6
MT050047	2.2	10.4	0.8	12.0	6.3
MT040058	4.4	4.6	1.7	20.0	7.7
MT040110	4.7	15.0	0.9	17.0	9.4
MT050088	3.2	10.2	1.0	13.0	6.9
MT030144	3.5	9.0	0.5	13.0	6.5
MT010160	5.0	9.0	1.1	20.0	8.8
MT050082	2.1	8.1	0.8	16.0	6.8
MT040107	7.1	12.5	1.8	22.0	10.9
<b>Harrington</b>	6.4	5.6	1.1	16.0	7.3
<b>Metcalf</b>	5.0	7.7	0.8	19.0	8.1
<b>Conlon</b>	2.3	4.4	1.1	22.3	7.5
<b>Tradition</b>	2.4	5.6	0.9	22.0	7.7
MT050081	2.2	14.3	0.7	15.0	8.1
MT050187	4.4	15.5	2.1	28.0	12.5
MT020167	3.0	16.2	2.2	16.0	9.3
<b>Hockett</b>	2.7	6.2	0.7	18.0	6.9
MT050104	1.7	6.2	0.2	17.0	6.3
MT050110	1.7	11.8	0.6	13.0	6.8
Means	3.9	8.6	1.6	18.1	8.0
C.V.	23.40		59.40		
LSD	1.6		1.5		

**Table 14. 2007 Montana Irrigated Intrastate Barley - Protein percent**

<u>Variety ID</u>	<u>Bozeman</u>	<u>Conrad</u>	<u>Huntley</u>	<u>Kalispell</u>	<u>Sidney</u>	<u>Mean</u>
<b>Champion</b>	13.1	11.1	11.3	14.4	11.5	12.3
MT040013	13.0	11.4	9.9	14.0	11.2	11.9
<b>Baroness</b>	13.5	11.4	8.2	15.6	11.5	12.1
MT040209	13.2	11.0	11.7	16.5	11.4	12.8
<b>Boulder</b>	14.6	12.5	11.6	15.8	13.3	13.6
<b>Eslick</b>	13.5	11.2	8.4	15.5	11.4	12.0
MT030137	14.1	12.6	10.8	17.2	12.7	13.5
MT050030	12.8	11.4	8.8	15.3	11.9	12.0
MT050050	13.4	12.0	9.5	15.8	11.6	12.5
MT020162	14.0	12.6	9.8	15.4	12.6	12.9
MT040204	13.1	11.6	9.6	15.3	10.6	12.0
MT050035	13.9	12.1	10.1	15.3	12.3	12.7
MT050049	13.3	11.3	10.2	14.4	11.8	12.2
MT050062	12.9	10.9	9.5	14.1	11.5	11.8
MT020205	13.5	12.7	10.0	16.2	12.6	13.0
LR101-30	13.5	12.5	9.0	16.4	11.8	12.6
<b>Conrad</b>	14.1	12.5	10.4	16.7	12.6	13.2
<b>Craft</b>	13.5	12.4	9.8	15.1	11.5	12.4
MT040024	12.8	11.1	9.1	15.5	11.8	12.0
MT030063	13.5	11.8	9.8	15.6	11.9	12.5
MT040130	13.9	11.7	9.7	16.8	12.8	13.0
MT050117	13.8	12.3	9.6	16.4	11.8	12.8
2B992316	13.9	12.0	9.7	14.6	11.5	12.3
MT040073	14.6	12.7	10.5	15.9	12.6	13.3
LR116-6	14.1	12.4	10.2	15.9	12.4	13.0
MT040136	14.3	12.8	10.4	15.2	12.7	13.1
MT030079	13.2	11.3	9.7	15.3	12.5	12.4
MT050201	13.5	11.8	9.3	14.1	11.6	12.1
MT050080	14.6	12.6	10.8	15.7	12.9	13.3
MT040226	13.3	11.7	9.1	15.2	11.8	12.2
MT040231	14.1	12.2	10.4	16.0	13.1	13.2
MT020155	13.9	11.8	10.0	15.6	11.9	12.6
MT040220	13.7	12.1	8.6	17.2	11.8	12.7
<b>Haxby</b>	13.8	12.1	9.9	15.7	12.4	12.8
2B992657	13.4	12.1	9.6	16.2	11.0	12.4
MT030042	12.8	11.1	9.2	13.2	11.6	11.6
MT040216	13.7	12.0	9.2	16.2	12.3	12.7

*Continued*

Table 14, Irr Protein cont.

	<u>Bozeman</u>	<u>Conrad</u>	<u>Huntley</u>	<u>Kalispell</u>	<u>Sidney</u>	<u>Mean</u>
MT040106	14.1	12.6	11.0	15.7	13.0	13.3
MT020204	13.7	12.6	9.7	15.8	12.2	12.8
MT040181	13.4	12.2	8.7	15.2	11.4	12.2
<b>Geraldine</b>	13.9	11.8	9.2	14.5	11.7	12.2
MT020064	14.1	12.5	11.4	15.7	12.7	13.3
MT050048	14.2	12.1	9.9	14.9	12.3	12.7
MT050182	13.9	11.9	9.6	15.9	12.4	12.7
MT010158	13.9	11.9	9.7	16.2	12.7	12.9
MT050184	14.5	12.3	10.2	16.6	12.9	13.3
MT050047	13.7	12.2	8.9	14.8	12.2	12.4
MT040058	14.1	11.6	9.6	15.5	12.6	12.7
MT040110	14.1	11.8	10.2	17.2	12.7	13.2
MT050088	14.3	12.7	10.7	16.7	12.7	13.4
MT030144	13.8	11.8	10.3	15.7	12.0	12.7
MT010160	13.5	12.0	9.5	14.9	12.5	12.5
MT050082	14.6	12.5	10.2	16.6	13.3	13.5
MT040107	13.9	11.8	9.9	16.7	12.0	12.9
<b>Harrington</b>	13.6	11.7	9.6	14.4	12.0	12.3
<b>Metcalfe</b>	14.3	12.1	10.3	16.2	12.4	13.1
<b>Conlon</b>	14.4	12.9	10.4	15.1	13.3	13.2
<b>Tradition</b>	13.3	12.1	10.1	14.8	12.4	12.5
MT050081	14.6	12.4	10.4	16.4	13.0	13.4
MT050187	15.3	13.0	11.5	16.8	13.1	13.9
MT020167	14.5	12.3	10.5	15.9	12.9	13.2
<b>Hockett</b>	13.5	11.5	9.7	14.9	12.1	12.3
MT050104	14.9	13.0	10.0	16.0	12.9	13.4
MT050110	15.2	12.7	11.2	15.5	13.2	13.5
Means	13.8	12.0	9.9	15.6	12.2	12.7
C.V.	2.05		9.00		2.16	
LSD	0.5		1.5		0.5	

**Table 15. 2007 Montana Irrigated Intrastate Barley - Height, inches**

<u>Variety ID</u>	<u>Bozeman</u>	<u>Conrad</u>	<u>Huntley</u>	<u>Kalispell</u>	<u>Sidney</u>	<u>Mean</u>
<b>Champion</b>	31.0	27.0	41.5	34.9	30.0	32.9
MT040013	31.0	29.0	40.7	34.8	31.4	33.4
<b>Baroness</b>	31.3	30.0	34.9	32.9	27.7	31.4
MT040209	28.7	32.0	38.8	32.4	27.5	31.9
<b>Boulder</b>	30.3	29.0	38.3	34.9	26.7	31.9
<b>Eslick</b>	28.8	26.0	33.8	31.0	26.7	29.3
MT030137	28.3	30.0	35.8	33.3	27.7	31.0
MT050030	31.2	28.0	35.6	35.9	28.6	31.9
MT050050	31.4	34.0	38.9	36.5	28.1	33.8
MT020162	30.5	25.0	37.7	35.4	31.8	32.1
MT040204	28.9	30.0	36.1	34.5	28.5	31.6
MT050035	31.4	25.0	38.7	37.2	30.8	32.6
MT050049	32.3	33.0	39.4	36.3	29.1	34.0
MT050062	31.8	36.0	40.0	37.9	32.9	35.7
MT020205	31.0	26.0	37.6	38.6	27.8	32.2
LR101-30	29.0	31.0	36.6	33.8	27.9	31.6
<b>Conrad</b>	29.6	33.0	36.6	32.6	27.6	31.9
<b>Craft</b>	31.6	27.0	39.9	38.1	32.9	33.9
MT040024	30.6	35.0	35.8	33.8	25.6	32.1
MT030063	32.5	28.0	40.0	38.5	31.4	34.1
MT040130	29.1	31.0	37.3	33.5	28.1	31.8
MT050117	30.5	27.0	36.0	34.4	28.0	31.2
2B992316	31.2	33.0	37.1	35.0	28.6	33.0
MT040073	31.4	31.0	39.3	35.1	28.6	33.1
LR116-6	32.3	29.0	40.4	39.9	32.9	34.9
MT040136	28.1	30.0	38.4	34.8	28.2	31.9
MT030079	28.6	33.0	38.4	34.8	28.0	32.5
MT050201	33.5	28.0	38.3	37.9	30.3	33.6
MT050080	32.1	36.0	42.4	39.2	31.9	36.3
MT040226	28.9	30.0	36.7	35.7	30.2	32.3
MT040231	31.1	29.0	39.2	34.7	26.4	32.1
MT020155	31.4	27.0	37.7	37.1	28.2	32.3
MT040220	28.9	27.0	36.8	35.2	26.2	30.8
<b>Haxby</b>	29.6	29.0	39.4	34.9	26.4	31.9
2B992657	29.5	32.0	38.3	34.6	29.2	32.7
MT030042	30.2	28.0	36.3	33.1	27.2	31.0
MT040216	27.5	27.0	37.3	33.5	27.1	30.5

*Continued*

Table 15, Height cont.

	<u>Bozeman</u>	<u>Conrad</u>	<u>Huntley</u>	<u>Kalispell</u>	<u>Sidney</u>	<u>Mean</u>
MT040106	27.8	31.0	35.5	34.1	26.4	31.0
MT020204	31.6	24.0	36.0	35.3	28.5	31.1
MT040181	27.7	28.0	34.2	31.7	25.0	29.3
<b>Geraldine</b>	27.1	28.0	35.8	32.7	27.4	30.2
MT020064	30.9	29.0	38.6	35.9	30.4	33.0
MT050048	30.6	30.0	37.7	34.7	30.2	32.6
MT050182	29.7	34.0	38.7	35.8	28.5	33.3
MT010158	30.5	29.0	36.8	34.1	27.3	31.5
MT050184	35.0	26.0	38.3	37.6	31.4	33.7
MT050047	32.4	29.0	37.1	38.7	30.3	33.5
MT040058	27.0	36.0	35.6	33.9	27.1	31.9
MT040110	27.2	28.0	36.3	33.5	27.3	30.5
MT050088	30.9	33.0	38.4	34.4	29.7	33.3
MT030144	29.1	30.0	34.6	34.7	27.4	31.2
MT010160	31.3	31.0	37.6	36.9	30.0	33.4
MT050082	32.6	36.0	39.4	37.7	30.7	35.3
MT040107	29.9	29.0	32.9	32.8	27.5	30.4
<b>Harrington</b>	30.1	31.0	35.7	34.5	30.3	32.3
<b>Metcalfe</b>	30.6	29.0	37.6	36.7	28.2	32.4
<b>Conlon</b>	31.9	31.0	38.4	35.3	29.2	33.2
<b>Tradition</b>	32.9	32.0	41.3	38.5	29.5	34.8
MT050081	33.1	32.0	40.3	39.9	28.4	34.7
MT050187	32.4	27.0	40.8	35.6	30.5	33.2
MT020167	30.9	27.0	38.5	34.7	27.3	31.7
<b>Hockett</b>	30.9	27.0	35.3	35.5	25.7	30.9
MT050104	32.6	30.0	34.4	36.0	29.8	32.5
MT050110	33.4	31.0	36.4	34.7	28.5	32.8
Means	30.6	29.8	37.6	35.4	28.7	32.4
C.V.	5.32		5.64	0.24	6.17	
LSD	2.6		3.4	0.7	3.0	

**Table 16. 2007 Montana Irrigated Intrastate Barley - Head Date**  
Days from January 1

<u>Variety ID</u>	<u>Bozeman</u>	<u>Conrad</u>	<u>Huntley</u>	<u>Kalispell</u>	<u>Sidney</u>	<u>Mean</u>
<b>Champion</b>	182.6	178.0	163.3	174.5	176.7	175.0
MT040013	183.0	179.0	166.0	176.9	179.3	176.8
<b>Baroness</b>	183.5	179.0	165.3	176.6	178.4	176.6
MT040209	182.9	176.0	164.7	178.8	179.1	176.3
<b>Boulder</b>	183.4	176.0	165.3	176.7	176.9	175.7
<b>Eslick</b>	183.5	180.0	167.3	182.3	179.2	178.5
MT030137	182.1	179.0	163.3	175.7	177.2	175.5
MT050030	184.0	180.0	165.3	177.7	178.2	177.1
MT050050	182.4	180.0	163.7	175.0	176.6	175.5
MT020162	184.1	176.0	165.6	177.4	179.0	176.4
MT040204	184.7	180.0	166.7	179.4	180.3	178.2
MT050035	184.1	179.0	166.3	176.8	179.2	177.1
MT050049	182.5	181.0	163.0	175.0	177.8	175.9
MT050062	185.0	175.0	167.0	175.3	178.9	176.2
MT020205	182.0	176.0	161.6	172.8	175.5	173.6
LR101-30	184.6	176.0	167.3	180.3	179.5	177.5
<b>Conrad</b>	183.2	176.0	165.0	179.8	178.9	176.6
<b>Craft</b>	182.1	179.0	162.7	172.2	176.0	174.4
MT040024	182.7	176.0	162.7	174.0	176.7	174.4
MT030063	182.8	179.0	165.0	177.1	179.0	176.6
MT040130	184.2	179.0	167.4	178.9	182.6	178.4
MT050117	183.3	179.0	164.7	174.0	175.9	175.4
2B992316	183.0	179.0	165.7	176.6	178.6	176.6
MT040073	183.4	176.0	164.0	173.4	177.2	174.8
LR116-6	182.5	180.0	163.3	171.7	176.7	174.8
MT040136	184.4	176.0	163.7	177.2	177.3	175.7
MT030079	182.5	178.0	164.6	175.9	177.5	175.7
MT050201	182.6	180.0	164.0	173.3	177.1	175.4
MT050080	183.1	176.0	164.0	173.1	178.9	175.0
MT040226	184.0	175.0	163.7	174.2	178.3	175.0
MT040231	183.6	180.0	163.9	173.7	178.5	175.9
MT020155	180.1	179.0	160.0	170.4	174.7	172.8
MT040220	184.4	179.0	168.0	179.1	179.6	178.0
<b>Haxby</b>	181.8	177.0	162.7	172.5	175.3	173.8
2B992657	183.1	179.0	164.3	177.6	177.9	176.4
MT030042	182.0	179.0	164.0	176.4	178.7	176.0
MT040216	184.2	179.0	164.0	178.4	177.9	176.7

*Continued*

Table 16, Irr Head Date cont.

	<u>Bozeman</u>	<u>Conrad</u>	<u>Huntley</u>	<u>Kalispell</u>	<u>Sidney</u>	<u>Mean</u>
MT040106	183.9	180.0	168.0	182.1	181.6	179.1
MT020204	181.3	180.0	162.7	172.8	175.4	174.4
MT040181	184.5	178.0	166.7	181.2	179.8	178.0
<b>Geraldine</b>	184.1	176.0	168.7	180.6	180.1	177.9
MT020064	182.8	176.0	163.3	176.1	177.6	175.1
MT050048	183.2	180.0	165.0	175.2	178.6	176.4
MT050182	183.4	180.0	164.7	176.4	178.0	176.5
MT010158	183.7	174.0	164.0	176.5	177.4	175.1
MT050184	181.7	179.0	162.0	174.4	176.1	174.6
MT050047	182.5	180.0	163.0	171.9	175.9	174.7
MT040058	183.6	178.0	163.0	175.6	176.9	175.4
MT040110	184.6	181.0	167.3	183.1	180.5	179.3
MT050088	183.1	178.0	164.0	175.7	176.1	175.4
MT030144	183.1	176.0	164.3	178.3	179.0	176.2
MT010160	183.9	180.0	164.6	177.5	177.7	176.7
MT050082	182.7	179.0	163.1	172.3	176.5	174.7
MT040107	184.7	178.0	168.0	182.6	183.4	179.3
<b>Harrington</b>	183.8	179.0	165.1	177.2	178.4	176.7
<b>Metcalfe</b>	182.7	179.0	163.7	174.9	177.6	175.6
<b>Conlon</b>	180.8	178.0	164.0	165.0	174.4	172.4
<b>Tradition</b>	181.9	178.0	160.0	170.3	175.7	173.2
MT050081	182.5	179.0	163.0	171.9	176.1	174.5
MT050187	182.2	176.0	162.4	174.6	179.1	174.9
MT020167	182.4	181.0	165.7	176.0	178.5	176.7
<b>Hockett</b>	181.5	180.0	163.7	174.9	177.0	175.4
MT050104	181.5	172.0	162.7	173.2	175.8	173.0
MT050110	181.0	179.0	162.6	175.9	175.9	174.9
Means	183.0	178.2	164.4	175.0	177.9	175.7
C.V.	7.27	9.44	9.66	8.93	9.09	
LSD	12.7	15.7	19.6	12.2	9.0	