

PROJECT TITLE:

Statewide Barley Variety Performance

YEAR:

1989

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, coordinator  
Conrad - Greg Kushnak  
Havre - Gregg Carlson  
Huntley - Gil Stalknecht  
Kalispell - Vern Stewart  
Moccasin - Grant Jackson  
Sidney - Joyce Eckhoff

RESULTS:

The statewide (Intrastate) Barley Variety Nursery was grown at the 7 locations listed above. Some locations had both irrigated and dryland nurseries. Dryland yields were low at Sidney due to drought conditions, and exceptionally high at Conrad due to above normal (150%) rainfall. Varieties at Moccasin were differentially shattered by a light hail storm.

Yield and other agronomic data are summarized in Table 1 for dryland, and Table 2 for irrigated. Of the named varieties, Steptoe, Bowman, Hector, Gallatin, and Lewis had the highest average yields on dryland. On irrigated, the top yielders were Baronesse, Russel, Gallatin, Steptoe, and Lewis. Descriptions for most of these varieties can be found in MSU Extension Bulletin 1094.

Table 1.

1989 SPRING BARLEY STATEWIDE REPORT

DRYLAND

YIELD (Bu/ac)

Statewide average

ID	PEDIGREE	HAVRE	SIDNEY	MOCCASIN	HUNTLEY	CONRAD	BOZEMAN	Statewide average				
								Yield	Plant height	Test wt	% Pimp	Head date
								AVG	AVG	AVG	AVG	AVG
BA 8529	BA2B82-8529	46.2	14.8	65.5	49.5	96.7	57.1	55.0	22.1	49.5	51.7	186.6
CI 9558	Pirolone	47.7	15.0	64.4	48.9	100.0	56.3	55.4	24.1	49.7	50.8	183.3
CI 15229	Steptoe	50.5	29.9	73.5	58.2	95.1	55.0	60.4	25.6	43.1	55.7	179.9
CI 15478	Klages	35.4	2.8	54.5	37.0	77.9	47.3	42.5	23.7	48.4	32.6	187.5
CI 15514	Hector	54.0	21.1	69.6	52.5	98.2	52.8	58.0	25.5	49.7	57.0	185.6
CI 15687	Kimberly	42.0	0.6	57.5	37.2	90.2	52.5	46.7	24.7	49.1	53.9	188.8
CI 15773	Morex	31.6	20.5	55.3	53.7	84.1	47.3	48.8	26.1	46.0	42.4	181.4
CI 15856	Lewis	54.3	24.4	61.4	50.0	102.1	50.9	57.2	26.3	49.9	60.4	185.5
CI 15857	Clark	44.2	17.1	56.1	49.0	79.8	64.0	51.7	24.6	47.5	51.7	186.1
MN 36	Robust	24.8	18.8	57.0	50.4	88.2	47.5	47.8	26.4	47.1	48.5	181.0
MT 81143	Hcr/Kgs//Kgs/Smt	43.0	18.5	62.8	53.0	96.7	50.1	54.0	24.9	49.8	63.1	183.2
MT 81161	Lewis//Kgs/Smt	57.5	22.4	72.5	54.2	98.9	56.2	60.3	24.8	47.2	54.5	185.0
MT 81502	Clark/WA895375	52.2	20.4	63.9	53.1	96.9	65.2	58.6	24.6	49.2	54.2	185.7
MT 83422	Clark/TR450	48.2	20.1	70.1	51.0	91.0	54.5	55.8	23.4	48.6	56.8	186.1
MT 83435	Clark/TR450	47.7	14.6	66.4	53.3	92.3	52.4	54.5	23.4	48.9	59.0	185.1
MT 83533	Clark/Lamont	49.7	11.4	62.2	50.2	84.4	56.8	52.5	23.2	47.2	48.3	186.6
MT140523	Hector/Klages	51.4	22.5	65.3	57.4	95.4	54.6	57.8	23.5	48.5	54.8	185.3
MT851005	Clark/ID810264	48.6	19.6	61.8	61.5	97.0	54.4	57.2	24.3	47.8	57.5	185.2
MT851011	Clark/WA877178	48.0	18.9	65.0	53.5	82.1	55.8	53.9	24.8	48.3	55.2	185.7
MT851012	Clark/WA877178	50.8	18.3	64.6	60.6	86.6	57.8	56.5	25.0	48.4	62.1	185.7
MT851013	Clark/WA877178	50.0	19.3	67.3	54.6	85.2	57.5	55.7	24.8	47.5	53.7	185.4
MT851031	Harrington/Clark	45.5	12.4	64.1	50.4	85.0	55.2	52.1	24.0	47.8	58.1	186.1
MT851032	Harrington/Clark	47.6	10.7	63.0	52.0	89.8	56.1	53.2	23.2	48.8	54.6	186.4
MT851051	Harrington/MT 41921	46.7	7.3	65.8	49.9	85.3	58.6	52.3	24.5	47.8	61.8	186.4
MT851088	MT354585/MT 4126	51.0	11.4	64.9	50.6	99.3	51.6	54.8	23.3	48.7	58.6	185.6
MT851161	MT 41918/MT 41279	49.6	16.8	61.9	48.0	102.1	58.3	56.1	22.2	48.2	54.0	187.0
MT851177	MT 41918/Bridger 82	46.4	12.1	67.7	45.7	93.9	53.6	53.2	22.0	47.8	54.8	185.7
MT851195	MT41918/TR450	47.8	19.0	69.6	56.8	104.5	58.1	59.3	24.6	49.2	59.6	183.4
MT851216	ID810264/MT 4126	58.6	23.6	62.8	55.3	91.8	60.5	58.8	23.0	48.4	64.6	185.9
MT851224	ID810264/MT 41918	47.5	15.7	69.8	48.1	103.1	55.5	56.6	23.5	47.1	53.3	186.3
MT860186	Lewis/Apex	52.0	17.3	61.7	51.0	89.1	60.1	55.2	21.6	46.6	54.6	185.9
MT860219	Lewis/Apex	51.9	14.4	64.6	49.1	96.2	50.3	54.4	22.7	47.8	58.0	186.0
MT860224	Lewis/Apex	50.1	14.6	64.2	48.4	97.3	54.1	54.8	23.6	49.4	60.3	187.1
MT860326	Lewis/TR533	53.1	26.1	65.0	53.0	102.2	53.1	58.8	24.7	49.2	52.1	184.2
MT860463	Harrington/Apex	47.1	13.9	58.5	51.0	83.0	55.8	51.5	22.7	48.0	76.5	186.2
MT860737	Gallatin/Apex	51.5	11.5	63.0	51.3	84.0	57.3	53.1	22.3	49.7	57.2	185.5
MT860756	Gallatin/Bellona	50.1	19.2	68.7	51.7	96.4	67.0	58.8	23.8	49.0	63.9	184.1
MT860767	Gallatin/Bellona	49.5	10.5	70.8	46.0	91.7	53.8	53.7	21.4	48.6	61.7	185.8
MT860839	Sunbar 560/MT 41549	53.4	22.2	70.0	52.0	91.3	53.4	57.0	22.6	47.8	55.0	183.2
MT861183	WA 890878/Menuet	44.1	7.4	67.5	43.0	82.4	55.7	50.0	22.9	47.6	60.7	185.7
MT861572	Lewis/MT 41549	48.4	22.0	65.5	51.2	93.4	51.6	55.3	24.7	50.9	53.8	185.0
MT861626	Gallatin/Harrington	43.1	11.9	57.0	44.5	91.8	56.6	50.8	24.2	47.9	51.6	185.6
MT870012	Apex/Lewis	49.8	19.5	58.7	44.8	88.7	58.8	53.4	22.2	46.8	45.2	187.4
MT870031	BA79533/Lewis	45.5	18.4	66.4	44.9	101.9	50.1	54.6	23.1	47.9	50.9	184.0
MT870056	Columbia/BA 26	44.4	10.9	60.5	45.8	85.2	52.9	49.9	23.3	43.6	39.1	184.8
MT870062	Columbia/Gallatin	48.0	14.4	68.6	44.9	84.2	57.3	52.9	24.5	44.1	40.7	181.5
MT870070	Columbia/Lindy	45.7	27.2	67.9	53.5	97.5	60.5	58.7	23.0	44.2	52.4	181.8
MT870098	Hazen/Azure	22.7	21.1	60.8	51.1	89.2	55.4	50.1	26.3	44.9	52.8	180.8

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Table 1 cont.

1989 SPRING BARLEY STATEWIDE REPORT DRYLAND YIELD (Bu/ac)								Statewide average				
ID	PEDIGREE	HAVRE	SIDNEY	MOCCASIN	HUNTLEY	CONRAD	BOZEMAN	Yield AVG	Plant height AVG	Test wt. AVG	% Plum AVG	Head date AVG
MT870100	Hazen/Chalky Glenn	21.4	19.9	58.0	50.5	87.0	48.0	47.4	26.1	45.3	52.2	180.5
MT870105	Hazen/UT1423	20.4	22.8	67.1	52.6	96.2	49.6	51.5	25.8	45.8	50.4	182.8
MT870109	ID 76871/Gallatin	43.3	18.6	60.7	54.3	95.8	54.4	54.5	24.3	49.6	51.5	184.6
MT870120	Lindy/Martin	52.6	26.0	73.5	58.5	97.2	61.7	61.6	25.7	43.6	56.3	180.2
MT870136	Minerva Mutant/Clark	44.3	20.8	58.1	49.0	76.7	49.5	49.7	23.0	47.8	54.8	185.2
MT870137	Minerva Mutant/Clark	45.0	15.6	63.3	48.1	75.4	51.9	49.9	22.6	45.2	43.1	186.1
MT870160	Morex/Robust	29.2	18.8	53.5	50.6	84.8	48.7	47.6	27.3	46.6	53.4	180.9
MT870170	MT 3712/Erbet	37.7	8.1	63.5	42.2	92.9	51.2	49.3	23.5	47.9	45.2	186.8
MT870216	Robust/Briggs	38.3	24.6	61.0	52.4	85.0	56.3	52.9	26.8	44.8	57.2	179.1
MT870246	Teton/Westbred 501	49.8	25.4	66.0	55.2	91.6	66.1	59.0	24.2	44.0	61.1	181.1
MTSU 247	Shonkin	34.6	13.6	57.7	50.1	74.7	41.3	45.3	25.8	51.6	15.9	186.2
PI483127	Russell	45.5	28.4	72.5	54.1	95.2	51.3	57.8	24.2	45.9	48.8	180.0
PI483237	Bowman	55.6	22.3	67.5	57.5	92.1	67.4	60.4	24.5	50.0	72.4	181.6
PI491534	Gallatin	50.7	18.8	59.2	51.4	103.4	59.5	57.2	25.3	49.8	56.1	184.6
PI531228	Bearpaw	50.2	0.0	59.3	49.9	81.6	55.2	49.4	24.2	45.9	51.3	186.9
SK 76333	Harrington	48.0	7.9	64.7	47.0	89.9	49.8	51.2	24.0	47.7	57.6	185.4
*****	SITE MEAN *****	45.9	17.3	63.9	50.7	91.2	55.0	54.0	24.1	47.7	53.8	184.6

Table 2.

1989 SPRING BARLEY STATEWIDE REPORT IRRIGATED

YIELD (Bu/ac)

Statewide average

ID	PEDIGREE	YIELD (Bu/ac)					Statewide average				
		BOZEMAN	SIDNEY	KALISPELL	HUNTLEY	CONRAD	Yield AVG	Plant height AVG	Test wt. AVG	% Plump AVG	Head date AVG
AC 1798	Steffi	124.8	100.7	95.9	82.2	99.1	100.5	30.2	50.7	95.6	189.5
BA 2601		120.6	97.8	92.7	77.3	115.5	100.8	29.0	48.2	74.7	186.2
BA 8529	2B82-8529	127.5	88.3	113.3	85.2	114.1	105.7	31.1	50.2	79.0	187.0
CI 9558	PIROLINE	108.7	84.6	88.4	80.9	83.7	89.3	33.6	50.9	78.3	185.0
CI 15229	STEPTOE	133.3	97.4	100.2	89.4	94.0	102.9	30.1	46.0	85.2	182.2
CI 15478	KLAGES	102.5	83.0	100.9	75.9	80.8	88.6	32.4	48.8	66.0	189.8
CI 15514	HECTOR	119.6	75.5	89.4	84.5	90.0	91.8	31.4	49.7	76.4	185.3
CI 15773	MOREX	93.9	92.1	78.5	78.6	85.6	85.7	35.3	48.5	80.0	182.7
CI 15856	LEWIS	122.3	90.6	99.7	88.5	103.7	100.9	31.4	52.0	87.2	186.0
CI 15857	CLARK	116.2	87.5	88.8	82.9	78.3	90.7	31.1	49.5	80.1	187.2
CO 89-1	AC81-83-4	108.4	91.5	105.3	67.3	99.8	94.5	33.9	50.4	80.9	188.2
CO 89-2	AC82-28-5	112.5	91.0	102.5	79.5	83.7	93.9	31.8	51.6	86.6	186.1
CO 89-3	AC82-117-11	113.8	97.0	110.5	78.6	68.8	93.8	26.1	46.9	71.1	191.8
CO 89-4	AC84-66-15	107.2	88.6	108.3	68.2	94.2	93.3	28.0	49.2	79.2	191.0
MN 36	ROBUST	91.7	92.7	82.6	85.2	80.8	86.6	33.5	50.0	84.4	183.3
MT 81143	Hcr/Kgs//Kgs/Smt	123.4	89.5	97.8	85.7	99.7	99.2	31.7	52.4	89.6	184.4
MT 81161	Lewis//Kgs/Smt	122.4	83.5	104.5	86.8	105.1	100.4	32.7	48.8	82.1	184.7
MT 81502	Clark//Kgs/Zy	118.6	87.9	106.6	86.2	94.1	98.7	31.2	50.3	79.8	185.5
MT 83422	CLARK/TR450	128.7	87.0	104.6	98.7	93.5	102.5	31.1	50.7	83.3	187.4
MT 83435	CLARK/TR450	128.6	101.6	105.8	94.2	103.8	106.8	32.9	51.6	90.0	187.2
MT 83533	CLARK/LAMONT	122.1	91.6	102.4	83.0	84.8	96.8	30.8	49.2	79.0	186.5
MT140523	HECTOR/KLAGES	124.2	95.4	98.9	80.4	93.6	98.5	30.8	50.4	78.9	185.3
MT851005	CLARK/ID 810264	113.5	82.6	95.7	89.2	89.1	94.0	32.9	49.3	87.2	185.6
MT851011	CLARK/WA877178	110.6	81.9	101.4	86.4	85.6	93.2	31.7	49.4	81.7	187.8
MT851012	CLARK/WA877178	112.1	78.2	97.7	84.6	85.8	91.7	31.4	49.1	82.5	186.9
MT851013	CLARK/WA877178	116.2	89.2	100.5	92.3	75.4	94.7	32.3	49.2	81.9	185.6
MT851031	HARRINGTON/CLARK	117.4	89.2	91.1	86.8	83.4	93.6	32.9	50.1	88.2	187.0
MT851032	HARRINGTON/CLARK	124.4	87.2	103.6	81.4	81.3	95.6	32.3	49.4	75.6	187.9
MT851051	HARRINGTON/MT 41921	113.0	94.4	106.0	86.9	77.9	95.6	33.5	50.2	87.2	187.4
MT851088	MT354585/MT 4126	117.4	88.2	94.0	92.0	94.8	97.3	30.8	50.9	87.9	186.6
MT851161	MT 41918/MT 41279	121.1	86.0	100.9	96.3	96.8	100.2	31.7	50.3	75.8	186.8
MT851177	MT 41918/BRIDGER 82	119.3	93.2	100.1	80.5	100.6	98.8	29.8	49.2	82.4	186.8
MT851195	MT 41918/TR 450	124.6	96.0	98.6	88.3	102.5	102.0	32.3	50.7	85.4	185.1
MT851216	ID810264/MT 4126	124.3	91.9	95.0	90.9	94.0	99.2	31.0	49.7	86.4	186.1
MT851224	ID810264/MT41918	116.6	85.3	90.6	78.8	104.6	95.2	31.1	48.9	84.9	187.0
MT860219	LEWIS/APEX	128.2	94.8	101.3	81.3	107.6	102.6	30.2	50.6	86.2	186.1
MT860224	LEWIS/APEX	117.0	85.3	107.9	84.3	112.1	101.3	31.4	50.2	82.3	187.4
MT860326	LEWIS/TR 533	119.8	87.1	105.6	75.4	98.1	97.2	31.3	51.6	81.4	186.7
MT860463	HARRINGTON/APEX	115.0	90.4	99.2	78.0	93.4	95.2	30.3	50.1	86.5	186.8
MT860737	GALLATIN/APEX	121.7	94.9	93.6	87.9	101.9	100.0	30.5	51.4	87.7	187.4
MT860839	SUNBAR 560/MT 41549	117.8	86.3	98.6	87.9	93.5	96.8	29.8	49.8	84.6	184.5
MT861183	WA 890878/MENUET	107.0	93.2	110.9	77.2	91.8	96.0	32.9	50.3	88.0	186.2
MT861572	LEWIS/MT 41549	116.2	89.3	100.9	83.5	101.1	98.2	33.0	52.4	84.9	185.3
MT861596	Lewis/MT 41549	120.7	88.5	92.8	76.1	102.7	96.2	31.9	52.3	80.8	186.3
MT861626	GALLATIN/HARRINGTON	114.5	87.1	104.0	85.5	95.8	97.4	33.7	49.2	78.6	187.9
MT870012	APEX/LEWIS	123.8	90.6	93.0	82.3	88.3	95.6	30.0	49.4	79.7	188.6
MT870031	BA79533/LEWIS	120.7	86.7	95.0	77.9	101.5	96.4	30.7	49.8	79.9	186.5
MT870056	COLUMBIA/BA 26	124.2	92.0	103.4	78.6	86.0	96.8	31.4	45.6	66.4	185.2
MT870098	HAZEN/AZURE	106.4	104.2	94.9	95.3	99.0	100.0	34.0	48.7	92.4	182.6

Continued

Table 2. cont.

1989 SPRING BARLEY STATEWIDE REPORT IRRIGATED YIELD (Bu/ac)							Statewide average				
ID	PEDIGREE	BOZEMAN	SIDNEY	KALISPELL	HUNTLEY	CONRAD	Yield	Plant	Test	%	Head
							AVG	hgt.	wt.	Plump	date
MT870100	HAZEN/CHALKY GLENN	107.8	104.0	85.4	88.6	93.8	95.9	34.0	49.0	87.9	182.8
MT870105	HAZEN/UT1423	105.8	107.0	95.0	91.9	101.8	100.3	34.5	49.7	91.6	183.3
MT870109	ID 76871/GALLATIN	125.1	93.4	101.0	81.7	103.2	100.9	32.8	51.1	78.4	185.3
MT870120	LINDY/MARTIN	135.8	99.2	105.4	97.1	91.9	105.9	30.8	46.2	84.4	182.2
MT870136	MINERVA MUTANT/CLARK	116.3	87.6	90.9	76.9	75.5	89.4	31.2	49.9	86.0	187.2
MT870137	MINERVA MUTANT/CLARK	122.3	79.7	93.1	82.2	75.6	90.6	30.8	48.1	78.7	187.5
MT870160	MOREX/ROBUST	101.6	95.0	94.2	80.7	75.8	89.4	36.6	49.6	88.2	182.7
MT870216	ROBUST/BRIGGS	117.4	91.3	92.0	75.5	95.8	94.4	33.6	47.0	83.7	180.4
MTSU 247	WANUBET LR247	93.5	61.5	95.4	72.7	72.5	79.1	33.5	51.7	41.2	187.9
NS 77021	Princesse	112.6	87.8	100.9	76.7	98.0	95.2	28.6	47.9	85.4	187.7
NS 78054	Baronesse	134.8	98.1	99.1	92.9	104.8	105.9	30.8	50.4	85.5	188.4
PI483127	RUSSELL	125.4	102.4	96.6	101.1	92.0	103.5	30.9	48.9	83.8	182.1
PI491534	GALLATIN	117.8	99.4	104.1	87.2	99.5	101.6	32.8	51.8	84.8	184.9
PI531228	Bearpaw	111.3	87.3	106.9	85.1	76.2	93.3	32.8	47.7	77.6	188.0
SK 76333	HARRINGTON	117.5	88.0	105.0	90.6	90.0	98.2	32.2	49.3	83.5	187.8
*****	SITE MEAN *****	117.2	90.5	98.7	84.2	92.8	96.7	31.7	49.7	82.1	186.2