PROJECT TITLE: 2005 Evaluation of barley variety performance in recrop following an oilseed or pulse crop near Moccasin and Denton

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OBJECTIVES:
Evaluate the agronomic performance of spring barley varieties in recrop or continuous crop environments in the southern triangle and central Montana.

RESULTS:
Barley stands at Moccasin (after mustard) and Denton (after lentils) were good. Dry mid-late spring weather reduced yield potentials, but not as severely as the later maturing spring wheat yields were hurt. Traditional high yielding varieties Haxby, Baronesse, and Xena were joined by Boulder as top yielding varieties at both locations (Tables 1 & 2). Moccasin mean re-crop barley yield, 41.8 bu/a, was about ten bushels below the average of the past ten years. The Denton location mean barley yield, 49.4 bu/a, was near the ten year average. (56.6bu/a) and below expectation at Denton (42.4 bu/a).

SUMMARY:
2005 Barley yields were suppressed by dry late spring conditions. Early seeding help the yields at both locations.

FUTURE:
The barley variety evaluations will continue at Moccasin and Denton.

Table 1 2005 Barley variety performance trial on no-till recrop near Moccasin.
Exp 3670 Central Agricultural Research Center. Moccasin , Montana.

ID	Pedigree	Trt	Heading Date	Plant Height	Grain Yield	Test Weight	Sieve Size		
							Plump	Thin	Protein
		#	d of y	"	bu/ac	lb/bu	%	%	%
MT950186	Haxby	1	182	28	50.0	51.3	22.4	45.7	14.0
6B95?248	Tradition	19	179	30	49.5	50.8	36.5	39.0	14.5
BZ594?19	Xena	6	182	26	47.2	47.9	35.8	41.8	13.9
PI568246	Baronesse	2	181	26	46.4	45.3	15.7	45.4	16.1
BZ596117	Boulder	4	181	27	46.4	49.5	58.4	28.4	14.8
6B932978	Legacy	17	180	32	43.7	45.7	24.3	37.5	13.7
MT981060	Hays	20	184	27	43.6	44.3	17.5	37.1	14.9
MT970229	MT970229	3	180	26	43.6	49.5	43.0	40.5	15.8
MT970116	MT970116	15	180	33	42.9	49.7	42.1	36.3	16.3
ND15477	Drummond	16	179	30	42.6	48.2	25.9	40.5	16.5
2B965057	Conrad	9	183	26	42.2	46.1	25.9	39.1	16.8
MT960228	Eslick	5	183	27	41.9	46.6	14.9	41.5	14.8
MT960101	MT960101	14	186	26	40.9	48.9	18.2	41.3	17.6
MT910189	MT910189	13	181	27	39.2	50.2	30.1	40.0	16.0
TR133	Kendall	10	185	26	37.1	45.6	16.8	39.7	17.2
TR232	Metcalfe	12	181	28	36.9	47.4	22.1	42.9	17.3
TR150	Copeland	8	185	28	36.7	45.8	18.7	42.6	16.6
SK 76333	Harrington	7	184	25	35.8	46.8	28.4	43.5	17.0
2B914947	Merit	11	182	25	35.6	47.6	11.6	39.2	18.0
PI476976	Robust	18	181	29	34.5	48.9	35.1	40.7	13.3
EXPERIMENTAL MEANS			181.9	27.5	41.83				
C.V. 1: (S/MEAN)*100			0.73	6.53	12.73				
LSD (0.05)			2.2	2.97	8.8				

Seeded 7-Apr-05 No-till continuous crop following yellow mustard.
harvested: 10-Aug-05
Fertilizer: 10-10-10-5 w/s 45 N as urea topdressed.

Table 2 2005 Barley variety performance trial on no-till recrop near Denton.
3671 Central Agricultural Research Center. Moccasin , Montana.

ID	Variety		Heading Date	Plant Height	Grain Yield	Test Weight	Sieve Size		
							Plump	Thin	Protein
			d of y	"	bu/ac	lb/bu	%	%	%
PI568246	Baronesse	2		28.4	56.1	48.3	26.3	40.9	14.2
SK 76333	Harrington	7		29.1	55.5	50.7	15.1	29.7	14.3
MT950186	Haxby	1		29.5	54.9	53.3	19.2	39.9	13.1
BZ594?19	Xena	6		26.4	54.7	51.1	16.0	35.3	12.7
BZ596117	Boulder	4		26.4	53.9	53.3	7.3	21.8	13.0
MT960228	Eslick	5		28.0	53.1	51.2	20.0	38.1	13.4
6B932978	Legacy	17		26.4	52.4	48.8	32.1	40.0	13.5
TR150	Copeland	8		26.8	52.2	50.1	18.5	33.2	13.2
MT970116	MT970116	15		29.5	50.8	54.6	9.8	20.8	12.9
MT970229	MT970229	3		24.4	50.8	53.1	4.0	17.2	13.9
2B965057	Conrad	9		25.6	50.4	50.9	25.5	36.1	14.3
6B95?248	Tradition	19		28.7	50.3	52.2	11.1	32.6	12.7
PI476976	Robust	18		29.5	50.2	51.6	12.3	35.5	13.2
ND15477	Drummond	16		31.5	49.8	50.0	20.1	39.8	14.3
TR133	Kendall	10		25.2	44.7	48.9	32.1	37.5	14.1
MT981060	Hays	20		26.8	44.4	49.0	21.5	39.3	13.6
MT960101	MT960101	14		24.4	44.1	49.4	49.0	36.5	13.7
TR232	Metcalfe	12		28.0	43.8	49.0	35.2	44.0	15.1
2B914947	Merit	11		24.8	42.7	46.6	49.9	36.1	15.2
MT910189	MT910189	13		27.2	32.6	53.1	24.1	32.3	13.4
	Mean			27.3	49.38	50.73	22.455	34.33	13.69
	CV 1				ns	2.29			
	LSD (0.05)				ns	2.43			

Seeded 15-Apr-05 No-till continuous crop following lentils
harvested: 10-Aug-05
Fertilizer: 10-10-10-5 w/s 60 N as urea topdressed.