

Project Title: Intrastate Barley Evaluation – 2012

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Objective: To evaluate barley varieties and experimental lines for agronomic performance in environments and cropping systems representative of northwestern Montana.

Results:

The average Julian heading days was 179 (June 27) and the average height was 38 inches. Lodging was observed in 18 out of the 64 cultivars in the evaluation. Yields averaged 120 bu/A with MT100128 and MT090190 yielding the highest at 142 bu/A and MT100170 yielding the lowest at 86 bu/A. Test weight averaged 51 lb/bu and percent plumpness averaged 86%. Protein content averaged 14% and ranged from 18% for MT100170 to 12% for MT100064 and MT090000.

Summary:

The highest yielding commercially available cultivars were Cowboy, Champion, Geraldine, Conrad and Pinnacle.

Table 1. Material and Methods - Evaluation of intrastate barley cultivars - 2012

Seeding Date:	4/10/2012	Soil Type:	Kalispell vfSL	Harvest Date:	8/17/2012
Seeding Rate:	80 lb/A	Soil Test:	57-12-110-42		
Previous Crop:	Alfalfa	Fertilizer:	138-0-75-14		
Tillage:	Conventional	Herbicide:	1.7 pt/A Wolverine		
Irrigation:	None	Insecticide:	None		

Table 2. Agronomic data from the barley intrastate nursery, Kalispell MT 2012

Cultivar	Heading Julian	Height inch	Lodging %	Yield bu/A	TWT lb/bu	Plump %	Protein %
MT100128	179	38	0	142	53	96	13
MT090190	179	39	0	142	53	93	13
MT100125	181	42	16	141	53	93	13
MT090193	180	41	4	140	52	93	14
EM090081	185	43	0	137	51	94	15
MT090180	178	40	0	137	52	93	13
MT090184	179	41	0	137	52	92	13
MT100124	178	41	10	136	52	95	14
MT100120	180	41	0	136	52	94	13
MT070111	183	40	0	133	52	92	14
MT100132	180	42	0	133	52	92	13
MT090181	179	41	21	132	53	93	13
MT100126	182	39	0	132	53	93	14
MT100060	177	38	1	132	53	91	13
MT090186	180	39	0	132	52	91	13
MT090182	178	41	30	131	50	92	13
MT100136	178	40	0	131	52	91	13
MT061035	181	37	0	129	51	86	14
MT070161	177	36	0	129	52	94	14
MT100070	178	40	0	129	51	91	14
MT080285	177	34	0	128	52	91	14
MT080279	178	34	0	127	51	90	14
MT100130	179	42	3	126	51	92	13
COWBOY	182	50	0	126	50	98	14
Champion	178	40	4	125	50	95	14
MT070158	178	36	0	124	52	94	14
Geraldine	180	38	29	123	52	82	14
MT080243	178	41	8	123	51	83	15
CONRAD	178	38	0	123	51	91	15
MT080281	177	35	0	123	52	89	14
Pinnacle	177	42	3	123	51	95	13
MT080179	178	42	0	122	53	94	15

Table 2. continued

Cultivar	Heading Julian	Height inch	Lodging %	Yield bu/A	TWT lb/bu	Plump %	Protein %
MT100051	177	37	0	122	52	91	14
EM090061	183	35	0	122	51	95	14
MT061169	179	37	0	121	52	94	14
MT103022	180	38	0	121	51	92	15
MT090001	180	40	0	121	49	57	12
MT070159	178	35	0	121	52	94	14
Eslick	181	35	0	121	50	78	14
MT070125	178	38	0	120	51	88	15
Scarlett	179	33	0	120	51	96	14
MT020155	175	39	0	120	51	83	14
Craft	176	41	0	120	52	82	15
MT010160	179	38	0	120	52	91	15
MT070175	177	41	0	119	53	91	13
MT100113	176	36	0	119	50	83	13
Metcalfe	180	43	18	118	52	91	15
EM090105	178	38	0	117	51	91	14
MT100074	178	40	0	117	52	88	13
Tradition	176	41	0	117	48	70	15
MT080081	183	35	1	116	51	91	15
Hockett	177	38	8	116	51	78	15
MT100063	178	39	0	116	52	86	13
Haxby	178	38	0	113	53	91	15
MT100064	178	39	0	112	52	83	12
MT070086	179	30	1	110	51	88	14
Expedition	182	33	0	110	51	91	14
Hays	178	36	33	99	48	69	15
Harrington	178	41	0	99	50	85	14
MT010158	178	39	0	98	51	87	15
MT103031	178	39	0	95	54	46	16
MT103015	175	41	0	92	47	57	15
MT103043	177	38	5	92	49	62	16
MT100170	180	45	4	86	58	90	18
Mean	179	38	3	120	51	86	14.03
CV	0.55	4.10	379.00	6.03	NA	NA	NA
LSD	1.6	2.6	19.2	11.9	NA	NA	NA
PR>F	0.0001	0.0001	0.1761	0.0001	NA	NA	NA

TWT: test weight