

Project Title: Off Station Barley Evaluation, Kalispell MT, 2012 (4W4147)

Project Leader: Bob Stougaard

Project Personnel: Brooke Bohannon and Tom Blake

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

Results:

Heading date averaged 184 days (July 2), and ranged from 181 days for Tradition and Gallatin to 188 days for Eslick. The average plant height was 37 inches, ranging from 30 to 51 inches. Lodging was not detected. The average yield was 98 bu/A with Champion having the highest yield at 107 bu/A, and Amsterdam was the lowest yielding at 80 bu/A. Nevertheless, there were no statistical differences in yield among the entries evaluated. Test weights averaged 52 lb/bu and ranged from 53 lb/bu to 50 lb/bu. Percent plumpness averaged 93% with a range from 99% for CDC Cowboy to 83% for Tradition.

Summary:

High spring rainfall and slightly above average growing temperatures provided an ideal growing season for barley in northwestern Montana.

Funding Summary: Budget information to be provided by OSP. No other grant support for this project.

MWBC FY 2013 Grant Submission Plans: Resubmittal is planned.

Table 1. Materials and Methods - Barley off station evaluation - 2012

Seeding Date: 4/13/2012	Soil Type: Creston SiL	Harvest Date: 8/21/2012
Seeding Rate: 80 lb/A	Soil Test: 124-18-144-30	
Previous Crop: Alfalfa	Fertilizer: 138-0-75-14	
Tillage: Conventional	Herbicide: 1.7 pt/A Wolverine	
Irrigation: None	Insecticide: None	

Table 1. Agronomic data from the barley off-station nursery, Kalispell MT 2012

Cultivar	Heading Julian	Height inches	Yield bu/A	TWT lb/bu	Plump %	Moisture %
Champion	183	39	107	52	97	14
Metcalf	185	39	106	52	96	14
MT010160	184	38	106	52	92	13
MT070159	183	34	103	52	94	13
Geraldine	187	35	102	52	86	14
Haxby	184	38	101	52	94	14
Hockett	182	38	99	53	90	14
Tradition	181	40	98	50	83	11
Conrad	186	33	97	52	98	14
Gallatin	181	39	96	52	89	14
MT080279	184	32	95	52	95	13
CDC Cowboy	184	51	94	53	99	13
MT070158	185	33	93	50	95	13
Eslick	188	30	92	50	91	15
Harrington	185	36	92	51	93	13
Amsterdam	185	32	80	52	96	16
Mean	184	37	98	52	93	14
CV	0.51	6.42	12.07	2.05	NA	6.33
LSD	1.6	3.9	19.6	1.8	NA	1.5
Pr>F	0.0001	0.0001	0.4631	0.0236	NA	0.0007

TWT: test weight