Project Title:	Off-Station Barley Evaluation -2011
Principal Investigator:	Bob Stougaard
Project personnel:	Tom Blake, Stan Bates
Objectives:	To evaluate barley varieties for agronomic performance in environments and cropping systems representative of northwestern Montana.

Results:

Treatments were seeded 1.5 inches deep on April 23, 2011. Individual plots consisted of seven, 6-in wide rows, 15 feet in length with each variety replicated 3 times in a randomized complete block design. A preplant application of 150-30-120-24 lb/A of N-P-K-S was applied on April 12, 2011. Wolverine was applied at 1.7 pt/A on May 25, 2010 for weed control. Height measurements were recorded near maturity. The study was harvested August 16. Grain yield, test weight, grain moisture, and percent plump were then determined.

Plant heights averaged 30.9 inches. Tradition was the tallest (35.4 inches) and Geraldine was the shortest (28.6 inches). Lodging was not detected. Yields averaged 82 bu/A, and ranged from a high of 97 bu/A for Goldeneye to a low of 67.8 bu/A for Metcalfe. Test weights were good and averaged 50.9 lb/Bu. Test weights ranged from a low of 49 lb/bu for Goldeneye to a high of 52.8 lb/bu for Haxby. Percent plump values were low and averaged 80 percent.

Summary:

Goldeneye continues to be one of the highest yielding entries, but test weights are low.

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

MWBC FY 2012 Grant Submission Plans: Resubmittal is planned.

Table 1. Agronomic data from the barley off station nursery,Kalispell, MT 2011.

Cultivar	Yield (bu/A)	Test wt. (lb/bu)	Plump (%)	Moisture (%)	Height (inches)
Goldeneye	97.0	49.0	72.0	11.9	33.6
MT020162	90.3	50.5	83.1	12.2	30.7
Hockett	90.1	51.4	77.5	12.1	31.6
Tradition	87.8	51.4	78.5	11.1	35.4
Conrad	86.3	50.3	85.9	13.1	28.7
Pinnacle	86.0	51.1	92.2	14.5	28.7
MT020155	82.9	50.1	84.4	12.3	32.0
MT061035	81.2	49.6	69.3	11.7	29.0
Gallatin	80.7	51.6	78.1	12.6	31.4
Haxby	80.6	52.8	84.9	12.6	29.3
MT070175	79.4	51.6	84.0	13.1	32.5
MT010160	78.1	51.9	81.8	12.2	29.4
Harrington	76.8	49.5	81.9	11.8	31.8
MT010158	74.0	51.7	87.6	12.9	29.9
Geraldine	73.2	51.8	65.9	12.1	28.6
Metcalfe	67.8	50.1	77.6	12.0	31.6
MEAN	82.0	50.9	80.3	12.4	30.9
LSD (0.05)	14.7	1.6	8.5	0.8	2.8
CV	10.74	1.83	6.32	3.93	5.38

Planted April 23, harvested August 16, 2011.