Title: Intrastate Barley Evaluation – 2015

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

Results:

Significant differences were observed for heading, height, and yield (Table 2). Values for protein, test weight, and percent plump were obtained from a single representative sample of each cultivar. Heading date averaged 171 Julian days (June 20) and ranged from 167 to 178 Julian days. Heights averaged 22.7 inches and ranged from 15.0 to 25.3 inches. Yield averaged 59.2 bu/A and ranged from 49.5 bu/A for MT124148 to 70.1 bu/A for Hockett. Protein averaged 14.5% with a range from 12.1% for MT124113 to 16.2% for Conrad and AC Metcalfe. Average test weight was 45.0 lb/bu and ranged from 39.6 lb/bu for Haybet to 47.5 lb/bu for Craft and MT124127. Percent plump averaged 83.3% ranging from 37.5% for Haybet to 94.9% for ME3.

Summary:

The highest yielding commercially available cultivars were Hocket, Conrad, Merit, Champion, and Craft.

Table 1. Materials and Methods - Intrastate Barley Evaluation - 2015

Seeding Date:	4/23/2015	Harvest Date:	8/4/2015
Julian Date:	113	Julian Date:	216
Seeding Rate:	80 lb/A	Soil Type:	Kalispell VFSL
Previous Crop:	Canola	Soil Test:	90-10-147
Tillage:	Conventional-till	Fertilizer:	244-10-70
Irrigation:	None	Herbicide:	Huskie plus 11 floz/A & Axial 16.4 floz/A

Table 2. Intrastate Barley Evaluation, Kalispell, MT - 2015.

Cultivar	HD Julian	HT in	YLD[1] bu/A	PRO[2] %	TWT[1] lb/bu	PLMP %
Hockett	169	22.7	70.1	14.1	46.4	93.9
MT124663	167	23.0	69.4	13.4	46.2	90.8
MT124113	167	24.0	69.3	12.1	46.5	92.0
MT124128	167	23.3	67.6	12.5	46.8	92.7
MT124134	167	22.7	66.7	12.2	46.8	94.3
ME5	173	23.0	66.3	14.4	44.8	92.7
MT124601	172	24.0	65.9	14.2	46.7	84.6
MT124457	171	23.7	65.4	14.5	47.0	91.8
Conrad	175	21.3	64.6	16.2	43.8	71.0
Merit	171	22.7	64.5	15.1	43.2	82.8
Champion	171	25.3	63.2	14.3	47.3	87.3
MT124073	173	23.3	62.7	15.0	45.6	87.0
MT124118	169	23.7	62.1	14.5	46.7	85.7
Craft	170	24.7	61.8	15.3	47.5	90.3
MT124555	171	23.0	61.7	14.3	46.7	92.2
MT124127	171	23.0	61.6	14.3	47.5	90.2
MT124677	168	15.0	61.5	13.7	45.7	83.6
MT124112	168	22.0	61.4	13.7	46.0	86.6
MT124728	172	21.3	60.7	14.5	44.1	77.0
MT124673	168	23.0	60.0	13.5	47.0	87.4
MT124016	176	22.7	59.9	13.8	43.3	84.7
MT124008	171	22.7	59.9	14.9	43.9	75.2
Lavina	169	23.0	59.9	15.4	41.4	56.5
MT124025	175	24.3	58.5	14.6	44.8	85.5
MT124645	170	22.3	58.3	15.0	44.8	86.8
Haxby	169	21.3	57.9	14.7	46.6	70.9
ME4	171	22.0	57.8	15.6	44.9	88.4
MT124069	172	22.3	57.7	15.1	45.0	85.3
ME3	169	23.7	57.7	14.2	45.8	94.9
MT124015	175	22.7	57.7	15.1	45.6	84.2
MT124454	170	23.7	57.2	15.0	46.1	81.5
ME2	169	22.3	57.2	15.0	46.0	84.9
MT124071	171	23.0	56.3	13.6	45.1	83.7
MT124370	178	22.0	55.8	14.3	44.6	81.7
MT124026	174	23.0	55.3	15.1	44.4	79.4

HD: heading, HT: height, YLD: yield, PRO: protein, TWT: test weight, PLMP: percent plump

[1] adjusted to 13% moisture

[2] reported on a dry matter bases

Table 2. continued

Cultivar	HD Julian	HT in	YLD[1] bu/A	PRO[2] %	TWT[1] lb/bu	PLMP %
Harrington	171	22.7	55.1	15.0	44.9	92.2
MT124716	174	22.0	54.9	15.3	43.4	73.3
AC Metcalfe	174	24.0	54.8	16.2	44.4	80.4
MT124361	171	22.7	54.8	14.4	45.5	78.8
MT124018	171	23.7	54.7	14.7	44.7	90.0
ME1	171	24.0	54.3	15.6	44.7	87.5
MT124027	176	21.7	54.1	14.5	43.4	82.3
MT124007	173	23.0	54.0	14.5	45.9	82.7
MT124001	171	23.7	53.8	15.1	43.2	72.4
MT124380	174	21.0	53.7	13.6	45.4	85.2
Moravian 115	173	21.0	51.9	15.7	40.4	88.4
Stockford	170	21.7	51.7	14.5	43.5	91.8
Haybet	168	22.7	51.0	15.3	39.6	37.5
MT124148	176	21.0	49.5	14.9	43.6	59.5
Mean	171	22.7	59.2	14.5	45.0	83.3
LSD	2.9	3.0	8.84	na	na	na

HD: heading, HT: height, YLD: yield, PRO: protein, TWT: test weight, PLMP: percent plump, na: nonreplicated data

[1] adjusted to 13% moisture

[2] reported on a dry matter bases