

Title: Hull-less Barley Evaluation – 2015

Objective: To evaluate the agronomic performance of hull-less barley varieties grown in environments representative of northwestern Montana.

Results:

Significant differences were observed for heading, height, yield, protein, test weight, and percent plump. Heading date averaged 172 Julian days (June 21), and ranged from 168 to 177 Julian days. The average height was 32.8 inches, ranging from 27.7 to 36.7 inches. Yields averaged 110.3 bu/A and ranged from 90.6 bu/A for PI596299 to 147.1 bu/A for X05013-T1. Protein averaged 15.1% and ranged from 13.3% for 09WA-265.12 to 16.8% for PI596299. Test weight averaged 58.4 lb/bu and ranged from 47.0 lb/bu for PI596299 to 60.1 lb/bu for both 09WA-265.12 and Goose 1. Percent plump averaged 73.9% and ranged from 39.8% for Goose 5 to 94.3% for X05013-T1.

Summary:

The highest yielding cultivars were X05013-T1 and 09WA-265.12.

Table 1. Materials and Methods - Hull-less Barley - 2015

Seeding Date:	4/23/2015	Harvest Date:	8/5/2015
Julian Date:	113	Julian Date:	217
Seeding Rate:	80 lb/A	Soil Test:	144-12-222
Previous Crop:	Canola	Soil Type:	Creston Sil
Tillage:	Conventional	Fertilizer:	250-40-90
Irrigation:	None	Herbicide:	Huskie plus 11 floz/A & Axial 16.4 floz/A

Table 2. Hull-less Barley, Kalispell, MT - 2015

Cultivar	HD Julian	HT in	YLD ¹ bu/A	PRO ² %	TWT ¹ lb/bu	PLMP %
X05013-T1	173	33.7	147.1	14.2	59.2	94.3
09WA-265.12	175	33.7	140.6	13.3	60.6	90.3
MT110065	177	33.7	123.9	14.6	57.4	69.6
X07G30-T131	174	34.3	120.4	15.6	58.8	94.0
MT110066	174	32.7	116.7	15.1	57.9	66.2
X0626-T229	168	27.7	115.5	15.5	56.9	91.2
MT110016	173	32.7	113.0	14.8	58.6	86.3
MT110061	175	33.0	112.3	14.6	58.1	67.5
MT110008	175	33.7	108.7	14.4	59.1	90.0
MT110009	176	36.7	106.5	16.3	59.2	92.2
Goose 2	168	34.3	97.1	15.3	60.3	59.2
Goose 4	168	30.7	95.4	15.2	60.1	58.3
Goose 6	168	34.0	93.7	15.1	60.2	55.1
Goose 1	168	32.3	92.7	15.9	60.6	52.9
Goose 5	168	30.7	91.3	15.2	60.2	39.8
PI596299	169	31.7	90.6	16.8	47.0	74.8
Mean	172	32.8	110.3	15.1	58.4	73.9
CV	0.5	4.1	6.6	2.2	1.2	8.1
LSD	1.6	2.3	12.2	0.6	1.2	10.0
Pr>F	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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

PLMP: percent plumps

¹ adjusted to 13% moisture

² reported on a dry matter bases