Title: Evaluation of Hull-less Barley Varieties - 2017

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Objective: To evaluate the agronomic performance of hull-less barley varieties grown in

environment representative of northwestern Montana.

Results:

Stand establishment was poor with the majority of entries, but especially so for Franubet, Wanupana and Washonupana where the percent germination was zero. As a result these entries were dropped from the study. Plant height ranged from a high of 24.3 inches for Transit to a low of 18 inches for Falcon. Falcon also was the latest variety to head at 183 days (July 2), whereas X0626-T229 was the earliest at 176.7 days (June 25). X0626-T229 also was the highest yielding entry at 82.7 bu/A while Falcon had the lowest yield at 43.5 bu/A. Protein ranged from 15.6 % for X0626-T229 to 19 % for Transit. Test weights were low, ranging from a low of 47.9 for X07G30-T131 to 57.8 for Falcon. Percent plumps varied from 36.4 % with X0626-T229 to 87.7 % for MT110061.

Summary:

Most entries had poor germination which negatively impacted plant stands and yields.

Table 1. Materials and Methods.

Seeding Date:	5/1/2017	Harvest Date:	8/16/2017
Julian Date:	121	Julian Date:	228
Seeding Rate:	80 lb/A	Soil Type:	Creston SiL
Previous Crop:	peas	Soil Test:	29-16-156
Tillage:	Conventional	Fertilizer:	150-30-30

Table 2. Agronomic data from hull less barley varieties, Kalispell MT -2017

	Stand	Height	Heading	Yield	Protein	Test wt	Plump
Variety	%	inch	Julian	bu/A	%	lb/bu	%
X0626-T229	70.0	21.7	176.7	82.7	15.6	50.8	36.4
2Ab09-X06F058HL-31	73.3	19.3	179.7	77.3	16.1	52.0	38.8
MT110061	22.3	20.3	179.3	73.8	16.3	54.1	87.7
MT110065	75.0	21.0	180.0	73.1	16.5	49.3	84.9
X05013-T1	85.0	20.3	180.0	72.2	16.3	50.4	60.1
Havener	81.7	20.7	179.7	68.7	15.8	50.6	81.9
09WA-265.12	78.3	20.3	179.3	68.2	15.8	50.1	71.5
MT110066	36.7	20.0	179.0	66.7	17.4	52.1	73.2
X07G30-T131	41.7	20.7	180.3	65.1	17.1	47.9	52.9
MT110016	17.7	22.3	179.3	64.9	16.2	56.0	65.0
MT110009	21.7	22.7	180.3	61.9	17.1	52.6	51.7
Transit	66.7	24.3	179.3	59.9	19.0	54.5	61.7
Falcon	5.0	18.0	183.0	43.5	18.5	57.8	65.1
LSD P=.05	15.2	2.2	1.5	13.1	1.0	3.0	27.1
CV	21.4	6.1	0.5	11.5	3.5	3.4	25.1
Pr>F	0.0001	0.0007	0.0001	0.0008	0.0001	0.0001	0.0096