

Evaluation of barley at EARC under dryland recrop conditions.

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OBJECTIVES: To evaluate the performance of experimental lines and varieties of barley for recrop condition in eastern Montana.

MATERIALS AND METHODS:

Location: EARC dryland farm

Soil type: Williams Clay Loam

Previous crop: pea in 2016 - small grain in 2015

Residual soil N (lb/a): 31

Soil test P₂O₅ (lb/a): 23.2

Applied fertilizer: 200lbs 46-0-0 + 50lbs 11-52-0

Planted: April 21, 2017

Harvested: August 10, 2017

Precipitation April – August 2016: 3.92 in

RESULTS:

Agronomic data are shown in the following table. Yield and test weight were adjusted to 12% moisture content.

Table 5. 2017 barley yield, protein, and plump under dryland **recrop** condition, EARC Sidney, MT.

Variety	Plant height (cm)	Days to heading (julian)	Lodging (0 to 9 [^])	Plump >6/6 4 (%)	TW † (lb/bu)	Protein (%)	Grain Yield † (bu/a)
09WA-265.12	56	172	0	31.0	58.3	12.7	44.1
Balster	53	172	0	52.0	49.7	14.1	60.5
Bill Coors 100	47	172	0	71.5	52.0	14.3	47.7
Champion	53	172	0	41.0	51.9	13.5	50.9
Claymore	52	175	0	50.3	49.1	13.7	46.5
Conrad	47	179	0	57.0	50.9	14.9	47.6
Copeland	51	173	0	58.3	50.3	14.5	47.0
Eslick	40	179	0	27.7	51.1	13.5	53.5
Genie	46	178	0	69.3	51.6	12.3	58.1
Growler	49	177	0	51.3	47.8	15.3	40.7
Haxby	51	173	0	61.3	55.2	13.3	44.3
Haybet	58	173	0	12.7	49.0	14.8	46.7
Hays	49	174	0	22.3	45.6	15.0	47.2
Hockett	54	176	0	74.0	53.2	13.0	58.4
Lavina	54	174	0	21.0	46.2	14.6	48.1
Merit 57	51	176	0	40.7	47.0	13.9	47.7
Metcalfe	53	174	0	68.0	53.3	13.2	55.8
Moravian165	55	171	0	64.0	52.1	12.9	48.5
MT090190	56	173	0	69.7	52.9	12.3	50.6
MT124027	53	174	0	55.7	50.7	13.2	38.1
MT124073	58	175	0	62.7	50.8	14.2	57.2
MT124128	51	173	0	94.0	55.3	12.9	36.5
Odyssey	48	179	0	63.0	50.0	13.3	47.5
Oreana	47	175	0	70.3	53.5	12.7	52.8
Synergy	52	176	0	75.0	51.2	13.2	50.1
Mean	51.3	174.4	0.0	54.6	51.2	13.6	49.0
CV (%)	8.0	1.4	-	17.6	1.9	6.6	21.1
LSD	6.7	3.9	0.0	14.8	1.6	1.5	16.3

Location: EARC Dryland Farm, MT

Previous crop: Fallow

Planted: 4/19/2017

Harvested: 8/7/2017

Soil Test N Avail (lb/a): 57.5

Soil Type: Williams Clay Loam

Soil Test P2O5 (lb/a): 34

Precip 2017: 3.92"

N added (lb/a): 55

Plot Width (ft): 5'

Irrigation (sprinkler): n/a n/a

†Test Weight and Grain Yield adjusted to 12.0% moisture basis