Evaluation of spring wheat at EARC under dryland recrop conditions.

Project director:
Chengci Chen

Cooperators/personnel:
Jamie Sherman
Liz Elmore
Mike Giroux
Andrew Hogg
Luther Talbert
Hua Young Heo
Abdelaziz Nilahyane
Rebecca Garza
Calla Kowatch
Thomas Gross
Ronald Brown
Benton Carr

OBJECTIVES: To evaluate the performance of experimental lines and varieties of barley, durum, and spring wheat 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 P_2O_5 (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 below. Yield and test weight were adjusted to 12% moisture content.

Table 6. 2017 Spring wheat yield and protein under recrop condition, EARC, Sidney MT.

Variety	Plant height	Days to heading	TW †	Protein	Grain Yield †
	(cm)	(julian)	(lb/bu)	(%)	(bu/a)
Brennan	51	164	63.5	15.5	35.8
Choteau	56	166	62.5	15.0	32.6
Duclair	60	166	61.1	14.2	36.3
Egan	62	168	59.8	15.5	33.0
Fortuna	73	165	62.0	14.2	31.8
Lanning	61	166	62.1	14.1	39.1
MT1543	60	165	61.0	14.3	33.6
MT1570	57	165	62.7	15.4	29.2
Reeder	66	168	62.5	14.4	35.7
SY Soren	60	166	63.8	14.7	33.7
Vida	62	166	61.9	13.7	40.9
WB 9879 CLP	58	168	62.2	15.4	34.3
Mean	60.6	166.1	62.1	14.7	34.6
CV (%)	6.4	0.8	1.4	3.9	11.9
LSD	6.6	2.3	1.5	1.0	7.0

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

^0: no lodging - 9: plants lying flat on ground