

2014 Winter Wheat Variety Trial Nursery: Goshen County Dryland

J. Nachtman¹

Variety performance evaluations conducted by the Wyoming Agricultural Experiment Station (WAES) are a continuous and ongoing program. WAES evaluates many varieties/lines of winter wheat each year in cooperation with the Crop Research Foundation of Wyoming (CRFW), University of Nebraska–Lincoln, Colorado State University, Montana State University, and private seed companies.

Objectives

Our objective is to test new and existing winter wheat varieties to help growers select ones adapted to the region.

Materials and Methods

The experiment was located on the Lou and Marti Hubbs farm in southeast Wyoming near Hawk Springs. The experimental design consisted of five replications in a randomized complete block. Measurements taken included: heading date (not shown), plant height, grain yield, test weight, and moisture. Fertilizer was applied to three reps at 86 pounds nitrogen, 20 pounds phosphorus, and 40 pounds sulfur per acre. The other two remained unfertilized. Data for fertilized and unfertilized were combined for

the table. Forty-three winter wheat varieties were seeded September 18, 2013, in plots 5 by 25 feet using a hoe drill with a row spacing of 14 inches. Seeding depth was 1.5 inches, and the seeding rate was 50 pounds per acre. Herbicides were applied by the cooperator. Plots were harvested July 22, 2014, using an ALMACO plot combine.

Results and Discussion

Results are presented in Table 1. The highest yielding entries were Cowboy and Denali hard red winter wheat at 58 bushels/acre. Wheat yields were above average with excellent moisture during the growing season. Results for this trial and many others are available at: www.uwyo.edu/plantsciences/uwplant/trials.html

Acknowledgments: Appreciation is extended to the cooperators who allowed us to place trials on their land.

Contact: Jerry Nachtman at nachtman@uwyo.edu or 307-837-2000.

Keywords: winter wheat, variety trial

PARP: VIII

¹James C. Hageman Sustainable Agriculture Research and Extension Center.

Table 1. 2014 Goshen County, Wyoming, dryland winter wheat variety test.

Brand	Variety	Grain Yield (bu/acre)	Moisture (%)	Bushel Wt. (lb/bu)	Plant Height (in)
CRFW	Cowboy	58	11	61	20
PlainsGold™	Denali	58	11	62	22
PlainsGold	Hatcher	52	10	62	18
Husker Genetics™	Overland	52	11	61	20
-----	Warhorse (SS)	52	11	61	20
Limagrain Cereal Seeds	LCS Wizard	51	11	61	20
Husker Genetics	Panhandle (NE05548)	49	10	61	21
Limagrain Cereal Seeds	LCS Mint	47	11	62	19
-----	Judee (SS)	47	11	60	18
-----	NHH11569	47	10	60	19
Husker Genetics	Robidoux	45	11	61	18
-----	NE10589	45	10	61	19
-----	NW03666 (W)	44	11	61	20
PlainsGold	Antero (W)	44	11	61	18
-----	Bearpaw (SS)	44	10	60	17
WestBred®	Winterhawk	43	11	61	18
-----	Mattern	43	11	59	19
-----	Freeman	42	10	60	18
AGSECO Inc.	TAM 113	42	10	60	19
PlainsGold	Byrd	41	10	60	19
-----	Alliance	41	10	60	18
-----	NW09627 (W)	41	11	59	17
-----	NE09521	40	11	60	18
-----	NW07505 (W)	39	11	60	19
-----	Goodstreak	39	11	61	19
-----	NE09517	39	12	60	19
-----	NE07531	38	10	60	18
Husker Genetics	Settler CL	38	11	60	19
WestBred	WB-Grainfield	38	10	61	19
-----	NX04Y2107 (W)	38	11	59	17
PlainsGold	Brawl Cl Plus	37	11	61	18
Limagrain Cereal Seeds	T158	37	10	61	17
Limagrain Cereal Seeds	T163	37	10	61	18
NuPride Genetics	Camelot	37	11	60	18
-----	Buckskin	35	11	60	19
WestBred	WB4458	35	11	60	18
-----	Pronghorn	35	10	61	18
-----	Turkey	34	10	60	21
-----	NI09710H	34	10	57	18
Limagrain Cereal Seeds	LCH10-13	34	11	60	17
-----	Scout 66	30	11	58	19
-----	Wesley	30	11	57	17
-----	NE10478	30	11	59	18
Average of all entries		41	11	60	19
LSD 0.05%		7	1	2	2

(W) hard white winter wheat; (SS) solid stem for sawfly resistance; LSD (least significant difference)