

2012 Confection Sunflower Variety Strip Test

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Introduction

Variety performance evaluations conducted by the Wyoming Agricultural Experiment Station (WAES) are a continuous and ongoing program.

Objectives

Testing of Dahlgren & Company, Inc. confection sunflower varieties was conducted to help growers select varieties adapted to the region.

Materials and Methods

The experiment was at the Powell Research and Extension Center (PREC) during 2012. The soil was a Garland clay loam (fine, mixed, mesic; Typic Haplargid) and had a cropping history of: 2011, beans; 2010, barley; and 2009, beets. Fertilizer was applied April 25 at the rate of 140 lb/acre N and 50 lb/acre P₂O₅ in the form of urea (46-0-0) and diammonium phosphate (11-52-0).

Six sunflower varieties were planted in 0.36-acre strips replicated three times on May 21. The seeding depth was 2 inches. Weeds were controlled by a pre-plant incorporated application of ethalfluralin (2 pt Sonalan[®]) and EPTC (2.5 pt Eptam[®]). Furrow irrigations were April 28, June 26, July 7, July 16, July 26, August 5, August 20,

and September 12. Measurements included plant population, flowering date, test weight, percent moisture, seed size, and yield. Plots were harvested October 15 using a Case IH 1440 combine.

Results and Discussion

A warm growing season resulted in an early harvest. Results are presented in Table 1. The highest yielding entry was 9592 at 3,655 lbs/acre, while the lowest was 9-61259 at 2,208 lbs/acre after dockage. 9579 planted at a higher plant population yielded 100 lbs/acre more but was not statistically different. Results are posted annually at <http://www.uwyo.edu/plantsciences/uwplamt/trials.html>

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Contact Information

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Key words: sunflower, variety trial

Table 1. 2012 University of Wyoming, Powell R&E, Sunflower Variety Strip Test

Variety	Plants/acre	Flowering	Yield	harvest	test	over
		date	lbs/acre @10%	%	weight	20/64
Dahlgren				moisture	lbs/bu	%
9592	17,130	29-Jul	3655	11.5	22.9	91
9569	17,922	28-Jul	3531	10.2	22.8	70
0089	15,942	2-Aug	3420	16.1	21.4	64
9579 high pop	20,001	26-Jul	3308	10.6	20.3	88
9579	18,714	26-Jul	3205	13	20.1	87
9592CL*			2444	16.1	21.1	89
9_61259	13,169	23-Jul	2208	17.8	18.8	89
Average	17,146		3110	13.6	21.1	83
LSD(0.05)	1,972		426.1	1.8	0.7	8
CV%	6.3		7.7	7.5	1.9	5.4

*due to limited seed only two rows were planted and harvested.

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