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**Tests With Wheat, Barley,
and Oats**

Outlying Testing Report 7



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CONCLUSIONS

Conclusions are based on only one year's work and should not be considered as recommendations.

1. Federation wheat yielded well at Quincy. Pilcrow was high at Eltopia. Yield differences for wheat were small at Othello.
2. Victory was the highest yielding oat variety at Quincy. Shasta yielded well at Eltopia and Othello.
3. Of the 6-row barleys, Velvon and Harlan yielded relatively well at all three locations, but the differences were not great. The yield of Hannchen (2-row barley) was comparable to the 6-row varieties at all three locations, but it lodged quite badly.

Of the varieties tested, Pilcrow wheat, Shasta oats, and Harlan barley are not at present listed as recommended for irrigated central Washington. Many things other than yield (such as lodging, date of maturity, threshability, etc.) must be considered. These and many other promising small grain varieties are under extensive tests at Prosser. For descriptions of the different recommended varieties see "Wheat Oat Barley Varieties Recommended for Washington," Extension Miscel-

laneous Publication 14, April 1954. For further information see your County Extension Agent.

OUTLYING TESTING IN WASHINGTON

Outlying Testing is a joint project of the Experiment Stations and Extension Service of the State College of Washington. The program is conducted in cooperation with local farmers. In Eastern Washington work is being done in Franklin, Adams, and Grant counties of the Columbia Basin. Trials have been conducted on dry beans, wheat, barley, oats, field corn, grain sorghum, and peas. In 1956 fifteen trials were conducted on small grain varieties, pea fertility, bean fertility, corn fertility, and corn varieties. In addition a few trials were started but were not carried to completion. The locations represent a wide range of climatic and soil conditions in the Basin. The locations of all trials are listed in Table 2.

1956 GRAIN VARIETY TRIALS

Four varieties each of wheat, oats, and barley were planted at three locations -- in Block 11, near Eltopia, in Block 49 near Othello, and in Block 73 near Quincy. Idaed wheat was one of the four wheat varieties planted, but due apparently to a faulty seed lot, it did not produce a normal stand and is therefore not included in the results. The cooperators, location,

and soil type for each trial are listed in Table 2. Each of the trials had been previously cropped under irrigation, and in 1956, were fertilized approximately according to recommendations. The trials were established March 28 to 30 and harvested in late July and early August.

The yield for each variety (each value is an average of four plots) and the calculated average gross income for each grain at each location are presented in Table 1. In all cases, wheat returned more per acre than oats or barley. In general, oats returned more than barley.

Grain	ELYDIA		OIHILLO		QUINCY	
	Gross Income Av. for each bushel	Yield bu./ac.	Gross Income Av. for each bushel	Yield bu./ac.	Gross Income Av. for each bushel	Yield bu./ac.
Wheat	\$99.60	47.5	\$98.50	75.2	\$140.94	75.2
Oats	41.3	41.3	41.3	90.1	41.3	90.1
Barley	32.3	32.3	32.3	97.2	32.3	97.2
	28.2	28.2	28.2	104.6	28.2	104.6
	24.1	24.1	24.1	107.4	24.1	107.4

Table 1. Locations of 1954 Columbia Basin Quality Testing Trials.

Table 1. Yield of Each Variety and Average Gross Income Per Acre for Wheat, Oats and Barley

Grain	Variety	ELTOPIA		OTHELLO		QUINCY	
		Yield bu./ac.	Gross Income Av. for each grain	Yield bu./ac.	Gross income Av. for each grain	Yield bu./ac./	Gross income Av. for each grain
<u>Wheat</u>	Marfed	48.8	\$99.60	47.5	\$88.50	76.2	\$148.94
	Federation	47.6		49.3		90.1	
	Pilcrow	59.2		49.8		76.5	
<u>Oats</u>	Cody	88.0	\$74.17	80.0	\$65.44	153.8	\$114.84
	Shasta	118.0		96.1		155.6	
	Markton	80.6		80.7		135.0	
	Victory	99.8		79.2		168.0	
<u>Barley</u>	Gem	37.4	\$40.68	52.3	\$51.38	100.5	\$100.17
	Hannchen	48.5		52.3		97.2	
	Harlan	39.1		64.3		104.6	
	Velvon	44.4		59.5		107.1	

Information provided by F. A. Gilman and the Office of Conservation and Survey, Dept. of Agronomy, State College of Washington.

System of units used given in 1954

Table 2. Locations of 1956 Columbia Basin Outlying Testing Trials.

Farm Cooperator	Location	Block No.	County	Soil Type ¹	Type of Trial
Sid Flanagan	Quincy	73	Grant	Haywood silt loam (Warden-Wheeler) ²	Grain varieties
Ralph Parks	Othello	49	Adams	Ephrata sandy loam (Ephrata)	Grain varieties
Dale Worshem	Eltopia	16	Franklin	Taunton fine sandy loam (Burke)	Grain varieties
Everett Mietzner	Quincy	73	Grant	Renslow silt loam (Warden-Wheeler)	Pea fertility
Ken Goodrich	Moses Lake	42	Grant	Sagemoor silt loam (Sagemoor)	Pea fertility
Willis Suhrbier	Stratford	70	Grant	Scooteney gravelly silt loam (Ephrata)	Pea fertility
Bob Holloway	Quincy	75	Grant	Timmerman very fine sandy loam (Ephrata)	Bean fertility
Murphy Black	Quincy	72	Grant	Haywood silt loam (Warden-Wheeler)	Bean fertility
D. E. Nelson	Warden	44	Grant	Warden silt loam (Warden-Wheeler)	Bean fertility
Howard Risenmay	Othello	49	Adams	Scootenay-Ringold complex v. fi. sandy loam, (Ephrata)	Bean fertility
Clarence Snekvik	Othello	49	Adams	Ephrata v. fi. sandy loam (Ephrata)	Bean fertility
Jim Persons	Mesa	12	Franklin	Glade v. fi. sandy loam, (Ephrata)	Bean fertility
Al Woolman	Moses Lake	42	Grant	Timmerman sandy loam (Ephrata)	Corn fertility
Ken Schroeder	Winchester	73	Grant	Babcock silt loam (Ephrata)	Corn varieties
Max Pyles	Eltopia	15	Franklin	Taunton v. fi. sandy loam (Burke)	Corn varieties

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Information provided by R. A. Gilkeson and the Office of Conservation and Survey, Dept., of Agronomy, State College of Washington.

2

Series names used prior to 1955

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