

the higher rainfall areas and produces a better pastry flour at a low protein level.

Development

The new variety was selected from a cross of 27-15 x Rio-Rex made at Washington in 1944 by O. A. Vogel, Agronomist, Agricultural Research Service, United States Department of Agriculture. Burt is selection Number 41 made from lines grown in 1948.

Burt was named in honor of the late Dr. Burton B. Bayles, wheat breeder and agronomist in the United States Department of Agriculture.

Burt was developed at the State College of Washington, Pullman, and tested in Oregon cooperatively by the U.S. Department of Agriculture and Oregon Agricultural Experiment Station agronomists at Pendleton and Moro.

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BURT

*a hard white
winter wheat*

Agricultural Experiment Station
Oregon State College
Corvallis

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Burt is a hard white winter wheat for the medium and low rainfall areas. It is the first hard white bread-type winter wheat released jointly by Washington and Oregon.

This new wheat yields more bushels per acre than other hard winter varieties. Burt also resists smut.

Description

Burt has a bearded common-type head with white chaff. The straw is short, stiff, and resistant to lodging. The grain is hard, white, large and high in test weight.

Yielding Ability

In 64 trials by state and federal workers in eastern Washington Burt yields averaged 17 per cent more than Rio. In the same trials Elmar and Brevor yielded 13 and 15 per cent more than Rio.

In 52 trials in Oregon Burt yielded 19 per cent more than Rio, and slightly more than Brevor. Yields of Burt and Elmar are similar.

Comparative Yields of Burt and Important Commercial Varieties

	Rio	Elmar	Brevor	Burt
Washington				
Av. yield, bu.	39.8	44.8	45.6	46.5
Av. yield, % Rio 100		113	115	117
Oregon				
Av. yield, bu.	32.2	37.9	35.3	38.2
Av. yield, % Rio 100		118	110	119

Winter Hardiness

Burt is similar to Elmar, Omar and Brevor in winter hardiness. It is less hardy than Rio and most other Turkey type wheats.

Smut Resistance

In tests by the Smut Research Laboratory, Burt proved highly resistant to all races of common and dwarf smut. However, to keep new races of smut from getting started, all seed should be treated with hexachlorobenzene (HCB) or other smut-controlling chemicals.

Milling and Baking Qualities

Burt milled better than Rio in tests by the Western Wheat Quality Laboratory and commercial millers. The flour has a strong gluten with bread-baking qualities similar to Rio and other strong gluten hard red winter varieties grown in Washington and Oregon. This wheat may be more attractive in some major foreign markets than medium to high protein club varieties now grown.

Shatter Resistance and Threshability

Burt shatters less than most Turkey wheats, but slightly more than Elmar and Omar. It threshes easily and is usually remarkably free of white caps and unthreshed spikelets.

Recommended Areas

Burt is generally recommended in areas of 14 inches or less rainfall in Washington and Oregon. In higher rainfall areas, where protein content of Burt is usually low, the variety Omar is better. Omar generally yields more in