

Cody--A New Oat for Wyoming

by Dale W. Bohmont
Assistant Agronomist

SHORT, **STRONG STRAW**, high yield, and resistance to many diseases have been incorporated into a new white oat named Cody. Well adapted to Wyoming's growing conditions, this variety is being released in cooperation with the U. S. Department of Agriculture.

HISTORY

Cody (C. I. 3916)¹ is the result of a Victoria-Richland X Bannock cross. The original cross of Victoria by Richland was made by T. R. Stanton, Bureau of Plant Industry, U. S. Department of Agriculture, in the spring of 1930. Later Bannock was added to its parentage by F. A. Coffman, also of the Bureau of Plant Industry. The crosses were made to combine the excellent grain characters, short, stiff straw, and resistance to stem rust of Richland, plus the resistance to crown rust and smut of Victoria, with Bannock—a high-yielding, smut-resistant, midseason oat. To a large extent these objectives have been accomplished.

Cody has been tested in Wyoming since 1944. Adaptation trials have been conducted in four separate irrigated farming areas and in four dryland farming areas with outstanding results. In all tests the average yield of Cody has been superior to the recommended varieties of the region for the period tested. This variety was considered for release by the Wyoming Agricultural Experiment Station in 1946-47, yet because of the sudden development of Victoria blight (*Helminthosporium victoriae*) in the North Central states in that growing season, the release of this susceptible variety was delayed. The cool evenings and normal growing conditions of Wyoming, however, are not conducive to development of this disease; hence blight is not considered a production problem in this state.

DESCRIPTION

Cody is a short, strong-strawed, white oat averaging 32.9 inches in height under irrigated conditions and 29.5 inches under dryland conditions. It is approximately 10 inches shorter strawed than Markton and Bannock; this in itself is an important factor in resistance to lodging as well as a desirable quality in harvesting. Cody is resistant to crown rust, smut, and stem rust. It is very susceptible to Victoria blight, a disease which has caused much damage in the midwestern states. A midseason oat, Cody heads approximately 3 days earlier than Bannock and slightly later than Markton.

¹ "C. I." number is the accession number assigned by the U. S. D. A.

The average date of heading at Laramie for the 5-year period 1945-1949 has been July 17. In addition to the long, attractive head of Cody, the kernels are plump, yellowish-white, and of excellent quality. The bushel weight of this variety has been heavier than Bannock, Markton, or Bruncker, averaging 36.8 lbs. per bushel for the past 5 years.

YIELD DATA

The yields of Cody have been outstanding under both irrigated and dryland farming conditions of Wyoming. It is, however, best suited to irrigated farming areas, since short-strawed varieties are desirable where excessive straw and lodging are problems under very favorable soil conditions.

A comparison of the yields of Cody at four irrigated stations is given in Table 1.

TABLE 1—COMPARISON OF YIELD TESTS OF CODY OATS UNDER IRRIGATED CONDITIONS IN WYOMING

(Yield in bushels per acre)

Variety	C. I. No.	Laramie '45-'49	Torrington '44-'49	Afton '44-'49	Powell '48-'49	Av. 19 Station yrs.
Cody	3916	111.2	90.2	73.1	67.7	88.0
Markton	2053	92.2	82.6	64.1	62.6	77.2
Bannock	2592	107.3	82.4	62.2	67.7	81.1

It will be noted that Cody has consistently outyielded the recommended varieties of Bannock and Markton at all stations tested. The average of Cody for all irrigated station yields for the period was 88.0 bushels per acre compared to Bannock—with an average yield of 81.1 bushels, and Markton—with an average yield of 77.2 bushels for the same test period.

The yield of Cody at four dryland stations for the period 1944 through 1949 is shown on Table 2.

TABLE 2—COMPARISON OF YIELD TESTS OF CODY OATS UNDER DRYLAND CONDITIONS IN WYOMING

(Yield in bushels per acre)

Variety	C. I. No.	Gillette '44-'48	Archer '44-'48	Sheridan '46-'49	Albin ² '47-'49	Av. 17 Station yrs.
Cody	3916	52.5	43.5	58.4	46.9	50.4
Markton	2053	50.6	38.6	69.3	43.2	50.4
Bruncker	2054	48.9	36.5	54.9	39.3	44.9

² Varietal tests grown on the John Ecklund Farm, Albin, Wyo.

Here again it will be noted that Cody equalled or exceeded the yield of the recommended dryland varieties of Markton and Brunner. The average yield of Cody in all dryland tests for the period was 50.4 bushels per acre compared to Markton, which also averaged 50.4 bushels, and Brunner, with an average yield of 44.7 bushels for the same test period.

SUMMARY

Cody (C. I. 3916) is a high-yielding, short, strong-stawed white oat. It is resistant to crown rust, smut, and stem rust. Cody is susceptible to Victoria blight, but the disease has not been found in Wyoming to date.

Cody is a recommended oat for irrigated and dryland farming conditions in Wyoming, having proved superior to the recommended varieties in yield trials at eight locations. It is especially adapted to irrigated areas of high fertility.



Comparison in Height of Victory Oats and Cody at the Wyoming Agricultural Experiment Station, 1949. The Height of Victory is 51.0 inches and Cody's Height is 36.7 inches. Cody Yielded 140.3 Bushels to the Acre; Victory, 125.3 Bushels.

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UNIVERSITY OF WYOMING
AGRICULTURAL EXPERIMENT STATION

H. M. BRIGGS, Director
LARAMIE

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