



Result Demonstration Report

2000-2001 Wheat Variety Test

Cooperators: Rodrick and Malcolm Bredemeyer

Winters, Texas Runnels County Precinct 2

Rick Minzenmayer, Mike Mauldin, and Billy Warrick *

Summary

Twenty-nine wheat varieties were planted by Rodrick and Malcolm Bredemeyer on December 15, 2000 in northern Runnels County (1.0 miles south of Winters, Texas). These varieties were raised using normal dryland wheat production practices. When reviewing the test results, producers should keep in mind that this is only one year's data. Year to year consistency should be a primary consideration in selecting varieties of wheat to be planted.

Problem

Over 82,600 acres of wheat are planted annually in Runnels County. The average dryland wheat yield for the county is 20.60 bushels per acre (1989-1998). Several new varieties of wheat become available each year and when combined with the varieties already available makes planting seed selection increasingly difficult. Producers need local data to help in selecting consistently high yielding adapted varieties.

Objectives

Variety tests provide producers with the opportunity of comparing new varieties of wheat with varieties of wheat that have been successfully grown under varying weather conditions in Runnels County. Utilization of new varieties, that are equal to or exceed currently available varieties, should increase production and income of county producers.

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Materials and Methods

Cooperating County Producers:	Rodrick and Malcolm Bredemeyer
Location:	1.0 miles south of Winters, Texas
Planting Date:	December 15, 2000
Seeding Rate:	70 pounds per acre
Drill Spacing:	8 inch double disk drill with packer wheels
Soil Moisture Condition at Planting:	Good
Fertilizer Applied:	50 lbs. of nitrogen + 10 lbs. of P ₂ O ₅ + 8 lbs. of Sulfur
Herbicide Applied:	Finesse was applied in January 2001

Results and Discussion:

In each variety of wheat, three hand harvested samples were collected. The grain yields from these samples were then analyzed and the statistical separation of these are reported in the table on the next page. All varieties that have the same letter after it are statistically the same (that means yield difference reported are not stable enough to choose one variety over the other from this data). All yields that have the same letter after it should be considered the same regardless of the yield difference reported. Due to the variability in yield between each of the hand harvested samples, a large difference in yield was necessary to be significant.

Economic Analysis

The difference in yield between Big Dawg and Coronado was significantly better than TAM 200, 2158, Tomahawk and Hondo. The difference in gross income between the highest and lowest varieties was over \$55 per acre using a selling price of \$2.65 per bushel. The higher income of the top two yielding varieties was significant enough to justify their selection over TAM 200, 2158, Tomahawk and Hondo.

Conclusions

Twenty-nine wheat varieties were planted by Rodrick and Malcolm Bredemeyer on December 15, 2000 in northern Runnels County (1.0 miles south of Winters, Texas). These varieties were raised using normal dryland wheat production practices. When reviewing the test results, producers should keep in mind that this is only one year's data. Year to year consistency should be a primary consideration in selecting varieties of wheat to be planted.

Rodrick and Malcolm Bredemeyer's Wheat Variety Test
Runnels County, 2000-2001

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Table 1. Agronomic Data from Rodrick and Malcolm Bredemeyer's farm (Runnels Co., 2001)

Variety	Yield Per Acre (pounds)	Yield Per Acre (bushels)	Statistical Difference (same letter means no difference in yield)
Big Dawg	2187.6	36.5	a
Coronado	2162.0	36.0	ab
TAM 107	2136.4	35.6	abc
Custer	2098.0	35.0	abcd
Jagger	2098.0	35.0	abcd
TAM 202	2072.5	34.5	abcd
TAM 110	2046.9	34.1	abcd
Oro Blanco	1982.9	33.0	abcd
Thunderbolt	1982.9	33.0	abcd
TAM 302	1855.0	30.9	abcd
Ogallala	1816.6	30.3	abcde
Pecos	1791.0	29.9	abcde
Rowdy	1752.6	29.2	abcde
Weathermaster 135	1739.8	29.0	abcde
WinTex	1727.0	28.8	abcde
HG-9	1727.0	28.8	abcde
Lockett	1714.3	28.6	abcde
Trego	1688.7	28.1	abcde
TAM 400	1675.9	27.9	abcde
WinMaster	1675.9	27.9	abcde
Longhorn	1624.7	27.1	abcde
Abilene Ag #1	1586.3	26.4	abcde
Hickok	1522.4	25.4	bcdef
TAM 200	1496.8	24.9	cdef

Table 1. Agronomic Data from Rodrick and Malcolm Bredemeyer's farm continued

Variety	Yield Per Acre (pounds)	Yield Per Acre (bushels)	Statistical Difference (same letter means no difference in yield)
2158	1445.6	24.1	def
Tomahawk	1177.0	19.6	ef
Hondo	933.9	15.6	f

Acknowledgements

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