



## Result Demonstration Report

---

### 2003-2004 Wheat Variety Test

Tommy Antilley and Billy Warrick \*

Robert Lee, Texas      Coke County      Precinct 3

#### Summary

Eleven wheat varieties and one fertility plot were planted with the assistance of Coke County Farm Bureau directors on November 6, 2003 in Coke County (in Robert Lee, 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 11,425 acres of wheat are planted annually in Coke County. The average dryland wheat yield for the county is 20.52 bushels per acre (1989-2000). 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 Coke County. Utilization of new varieties, that are equal to or exceed currently available varieties, should increase production and income of county producers.

\* Tommy Antilley, Coke County Extension Agent and  
Dr. Billy Warrick, Extension Agronomist (San Angelo, Texas).

## Materials and Methods

Cooperating County Producers: Phelan Wrinkle  
Location: Robert Lee, Texas  
Planting Date: November 6, 2004  
Seeding Rate: 70 pounds per acre  
Drill Spacing: 10 inches  
Soil Moisture Condition at Planting: Adequate  
Fertilizer Applied: 30 # nitrogen top dressed on Lockett- Dec. 2, 2003

## Results and Discussion

Many producers in the area of the test plot received five to six inches of rain in late September and early October. Soil moisture was still adequate when plots were planted on November 6. Plots received good rains early but were dry during the critical seed production period. Fertility as shown by soil test for the plot showed very low nitrogen levels. The lack of rainfall through most of the critical developmental stage from bloom through grain fill impacted yields on this test plot. This plot was impacted by freezing temperatures on March 30 and again April 9; the reduction in yield was estimated to be approximately 10 percent.

In each variety of wheat a hand harvested samples was collected to determine yield on May 28, 2004. The grain yields from these samples are reported in the table on the next page.

### Economic Analysis

The difference in yield between TAM 111 and Thunderbolt was 21.10 bushels. The difference in gross income between the highest and lowest varieties was \$78.11 per acre using a selling price of \$3.70 per bushel. In this test, the higher income of the top yielding variety was significant enough to justify its selection over Thunderbolt. The difference between the Lockett that received 30# nitrogen top dressed was 1.92 bushels or \$ 8.92 with \$ 3.70 grain price.

## Conclusions

Twelve wheat varieties were planted on Phelan Wrinkle farm on November 6, 2003 in Coke County (in Robert Lee, 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.

Table 1. Agronomic Data from Robert Lee Wheat Test (Coke Co., 2004)

Variety	Yield Per Acre (pounds)	Yield Per Acre (bushels)	Gross Return Per Acre (\$3.70/bu.)
TAM 111	1746	29.10	\$107.69
Jagalene	1382	23.03	\$85.20
Weathermaster 135 (treated)	1228	20.47	\$75.74
Coronado	940	15.67	\$57.99
Cutter	931	15.51	\$57.39
WinMaster	844	14.07	\$52.07
Abilene Ag #1	777	12.95	\$47.93
Lockett (fertilized)	691	11.51	\$42.60
Weathermaster 135	691	11.51	\$42.60
Hardeman Grain (HG-9)	624	10.39	\$38.46
Lockett	576	9.59	\$35.50
Thunderbolt	480	8.00	\$29.58

### Acknowledgments

Sincere appreciation is expressed to Coke Farm Bureau directors John Stephens, Bobby Roberts and Sudduth Paige for establishing the dryland wheat variety test. Also, a word of thanks to all the seed companies that donated seed for the test plot.