



Result Demonstration Report

2004-2005 Wheat Variety Test

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Summary

Thirty-two currently available wheat varieties were planted by David and Mary Holubec on November 8, 2004 in McCulloch County (at Melvin, Texas). These varieties were raised using normal dryland wheat production practices. Yields from these varieties was fairly uniform resulting in a LSD of 8.47 bushels, which means that varieties have to have a yield difference of at least 8.47 bushels to be statistically different. A number of good varieties could be selected and planted on small acreage to determine how they would perform under different management. 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 48,518 acres of wheat are planted annually in McCulloch County. The average dryland wheat yield for the county is 22.55 bushels per acre (1980-2001). 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 Gillespie County. Utilization of new varieties, that are equal to or exceed currently available varieties, should increase production and income of county producers.

Materials and Methods

Cooperating County Producers:	David and Mary Holubec
Location:	West of Brady off FM 3022 and CR 158, Holubec Farm
Planting Date:	November 8, 2004
Seeding Rate:	65 lbs/ac
Drill Spacing:	6 inches
Soil Moisture Condition at Planting:	Good
Fertilizer Applied:	40-30-15 plus 10 Sulfur per acre
Herbicides:	Finesse
Insecticides:	None

Results and Discussion:

Early in the growing season there was good soil moisture and temperatures that allowed for growth. Many producers in the area of the test plot received five to six inches of rain in late August through late September. The lack of rainfall through most of the critical developmental stage from bloom through grain fill reduced the grain yields on this test plot.

Hardeman Grain 9 (HG-9), Abilene Ag Exp.1, Longhorn, Lockett, and Deliver were beardless varieties included in this test. All of these varieties have a longer maturity period and were green when other varieties were mature. Because of this long maturity the deer aggressively grazed these plot after head emergence, resulting in low grain yields.

In each variety of wheat three separate plots were harvested with a small plot combine and then weighted. The grain yields from these samples are reported in Table 1 on the next page.

Economic Analysis

The difference in yield between TAM 112 and OK 101 was 23.12 bushels. The difference in gross income between the highest and lowest varieties was \$71.67 per acre using a selling price of \$3.10 per bushel. In this test, the higher income of the top yielding variety was significant enough to justify its selection over OK 101.

Conclusions

Thirty-two currently available wheat varieties were planted by David and May Holubec on November 8 2004 in McCulloch County (at Melvin, Texas). These varieties were raised using normal dryland wheat production practices. Yields from these varieties was fairly uniform resulting in a LSD of 8.47 bushels, which means that varieties have to have a yield difference of at least 8.47 bushels to be statistically different. A number of good varieties could be selected and planted on small acreage to determine how they would perform under different management. 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 Holubec's Wheat Test (McCulloch Co., 2005)

Variety	Yield Per Acre (pounds)	Yield Per Acre (bushels)	Gross Return Per Acre (\$3.10/bu.)
TAM 112	3696	61.60 a	190.96
AgriPro 502 CL	3267	54.45 ab	168.78
TAM 303	3131	52.18 bc	161.76
TAM 111	3047	50.79 bcd	157.44
Jagalene	2973	49.54 bcde	153.58
Stanton	2966	49.44 bcde	153.26
TAM 110	2941	49.02 bcde	151.96
Thunderbolt	2918	48.64 bcdef	150.77
Trego	2911	48.52 bcdefg	150.42
Fannin	2845	47.41 bcdefgh	146.98
Coronado	2813	46.88 bcdefghi	145.32
2145	2805	46.76 bcdefghij	144.95
TAM 110 CL	2792	46.53 bcdefghij	144.23
TAM 111 + Cutter + Sturdy 2K	2726	45.44 cdefghij	140.86
2145 + Coronado + Fannin	2712	45.20 cdefghij	140.13
Overley	2702	45.03 cdefghij	139.59
TAM 107	2665	44.42 cdefghij	137.70
Cutter	2653	44.22 cdefghij	137.08
Ogallala	2619	43.66 defghij	135.34
TAM 202	2617	43.62 defghij	135.21
TAM W 101	2610	43.51 defghij	134.87
Jagger	2605	43.42 defghij	134.59
Sturdy 2K	2590	43.16 efghij	133.81
TAM 105	2444	40.74 fghij	126.29
Endurance	2437	40.62 fghij	125.92
OK 102	2408	40.13 ghij	124.40
Cisco	2400	40.00 hij	124.01
Dumas	2362	39.36 hij	122.03
Fannin + Cutter + Sturdy 2K	2332	38.86 ij	120.48
OK 101	2309	38.48 j	119.29

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