



Result Demonstration Report

2004-2005 Small Grain Forage Test

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Coke County

Precinct 3

Summary

Eleven small grain varieties were planted with the assistance of Coke County Farm Bureau directors on December 15, 2004 in Coke County (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 small grain to be planted.

Problem

Over 11,425 acres of wheat are planted annually in Coke County. Most of this acreage is utilized for forage grazing. Often when varieties are introduced there is no information available on forage production. The primary questions from livestock producers focus on fall and spring forage potential and how they compare to current varieties grown. Local testing is needed to answer these questions.

Objectives

Variety tests provide producers with the opportunity of comparing new varieties of small grain with varieties of small grain 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.

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Materials and Methods

Cooperating County Producers:	Phelan Wrinkle
Location:	Robert Lee, Texas
Planting Date:	December 15, 2004
Seeding Rate:	60 pounds per acre
Drill Spacing:	10 inches
Soil Moisture Condition at Planting:	Adequate
Fertilizer Applied:	None

Results and Discussion

The small grains would normally be planted by mid-September to obtain maximum fall forage production, however this plot could not be planted until mid-December due to wet fields resulting from fall rains. Following planting, there were scattered showers through mid-February and slight showers until mid-March followed by dry weather until harvesting.

Since this is a strip test no statistical analysis could be conducted. Visually and by dry weight oats produced more spring forage than the other small grains planted in this test. Dry weight was based on a 70 percent moisture factor and livestock gain was determined using a 15 to 1 ratio of forage to red meat gain. Three samples from each variety was harvested on April 27 to determine the total forage production of each small grain. The forage yields from these samples are reported in the table on the next page.

Economic Analysis

The income from the forage was based on a 30 cent per pound of red meat produced. Using the 15 to 1 ratio of forage to red meat gain the best variety resulted in an income of \$36.21. The lowest income from the forage produced was \$11.97, which is a difference of \$24.24 per acre. With that much difference in forage production and income it justifies the time and trouble necessary to conduct on farm testing.

Conclusions

If a producer uses small grain for forage only, oats should be considered for its spring forage potential. The Big Mac Oats and the 314 Oats provided the most forage in this test under these growing conditions. 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 small grain to be planted. From other work conducted in the area the Rye and Triticale would provide the most fall forage production if it was planted by mid-October. Wheat is selected by many producers because of its capability to be grazed and then take the livestock off in February and produce a grain crop. Additional testing will be needed to determine the best small grain to select for early and late planting dates.

Table 1. Agronomic Data from Small Grain Forage Test (Coke Co., 2005)

Variety	Forage Yield Per Acre (pounds)	Red Meat Value Gain \$0.30/lbs.
Big Mac Oats	1811	\$36.21
314 Oats	1406	\$28.12
Abilene Ag #1 Wheat	1238	\$24.75
Bob Oats	1118	\$22.37
Triticale	1090	\$21.80
Weathermaster 135 Wheat	1087	\$21.73
Wintermore Rye	960	\$19.20
474 Oats	943	\$18.85
Coronado Wheat	735	\$14.71
Cutter Wheat	684	\$13.67
WinMaster Wheat	599	\$11.97

NOTE: Forage yield was determined using a 70 percent moisture content. The plot was harvested on April 27, 2005. Livestock gain was determined using a 15 to 1 ratio of forage to red meat gain.

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