2006 Small Grain Forage Variety Trial

Gonzales County Extension Service
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Cooperator: The Luling Foundation Farm

Location: Luling, Texas

Situation:
The year round availability of high quality forage is a constant challenge for beef cattle producers. Winter pastures are grown extensively in Gonzales County to provide supplemental feed to stocker cattle, heifers, and mature cows. Most winter pastures consist of oats, wheat, or ryegrass.
Major considerations in selecting small grain forage varieties include yield potential, season of optimal growth, and disease resistance. Leaf rust is a problem in most years, with some years much worse than others.

Objectives:
1) To demonstrate proper management practices.
2) To compare yields, disease resistance and other characteristics of several small grain forage varieties.

Method:

Cooperator: Luling Foundation Research Farm
Tillage: The seed bed was disced twice, and a firm seed bed was established. The seed was drilled, and then a roller-packer followed to improve the seed-soil contact.
Planting Date: October 21 and 25, 2005
Fertilizer: 250 lbs of 24-8-4 (60-20-10) was applied on October 31, 2005.
Seeding Rates:

Oats, Wheat, Triticale,	80 lbs/acre
Ryegrass	30 lbs/acre

Plot size: Plot sizes were 10 feet wide, and had a length of 50 feet, with three replications randomly located in the field. The plots were harvested on three occasions with a sub-sample size collected of 1 square foot. Following the harvest of each sub-sample, the plots were shredded in an effort to simulate grazing and reduce lodging.

Harvest: The plots were harvested two times, on February 13, and April 13, 2006.

These results are listed in Table 1.

Multiple Year Averages: An average of previous year's harvests are compiled in Table 2.

Results:

2006 Luling Foundation Winter Forage Variety Trial

Variety	Cutting 2-13-06	Cutting 4-21-06	Total	
Prine Ryegrass	3630	5372	9002	*a*
Bob Oats	3920	4936	8857	*ab*
Caudillo Wheat	4937	3630	8567	*abc*
Blizzard Ryegrass	3485	4211	7696	*abc*
TAMCALE 6331 Triticale	3485	4211	7696	*abc*
TAMO 405 Oats	3630	3775	7405	*a-d*
TAMO 397 Oats	3195	4065	7260	*a-e*
Sungrazer Ryegrass	3050	3920	6970	*a-f*
Jumbo Ryegrass	3340	3194	6534	*a-g*
TAMCALE 5019 Triticale	2759	3630	6389	*a-h*
Horizon 314 Oats	2614	3775	6389	*a-h*
Shiwa Ryegrass	3267	2468	5445	*a-i*
VNS Ryegrass	2033	3194	5227	*a-i*
Maximus Ryegrass	2468	2614	5082	*a-i*
Sungrazer Plus Ryegrass	2033	3049	5082	*a-i*
Passerel Plus Ryegrass	2033	2323	4356	*a-i*

Mean total listed followed by the same letter do not significantly differ (P=.05, Student-Newman-Kuels)

Table 2. Luling Foundation Winter Forage Variety Trials Multi-Year Summary.

Variety	2001Total	2002Total	2003Total	2004Total	2005 Total	2006 Total	3 Yr. or More Average
Jumbo Ryegrass				25347	8276	6534	**13386**
Beef Builder Ryegrass	12388	6972	5120	21350			**11458**
Sungrazer Plus Ryegrass				22075	6534	5082	**11230**
Sungrazer Ryegrass				19061	7260	6970	**11097**
Blizzard Ryegrass	13013		4622	20557	7841	7696	**10746**
Prine Ryegrass			5472	20487	6534	9002	**10374**
TAMO 397 Oats	9891	6786	4215	10467	8712	7260	**7889**
VNS Ryegrass	9678	5303	5035	17735	7115	5227	**8349**
Big Mac Oats	9816		6701	10249			**8922**
Bob Oats	12252	7861	5187			8857	**8539**
Horizon 314 Oats			5197	11624	8422	6389	**7908**
TAMO 397 Oats and Beef Builder Ryegrass	12251	6575	5373				**8066**
Rustmaster Ryegrass	9562	4729	4495				**6262**
Best For Triploid Ryegrass					5372		
Beef Builder III Ryegrass		8255		20357			
Hurricane Ryegrass					7260		
Marshal Ryegrass			4436	20770			
Maximus Ryegrass					8422	5082	
Passerl Plus Ryegrass				14253		4356	
Shiwa Ryegrass						5445	
TAM 90 Ryegrass					8277		
Charisma Forage Oat			4138		7986		
Coronado Oats	11660						
Dusky Oats					9148		
Harrington Experimental Variety Oats					8276		
Horizon 321 Oats					12632		
Horizon 474 Oats				11304	10599		
TAMO 405 Oats						7405	
Bob Oats and VNS Ryegrass		7815					
Bob Oats and Blizzard Ryegrass	14137		4573				
Horizon 314 Oats and Prine Ryegrass			4836				
Common Triticale	8895						
TAMCALE 5019 Triticale						6389	
TAMCALE 6331 Triticale						7696	
Trit IV Triticale			3787				
Triticale 241-366		6924					
Triticale T2000		5956					
T-XTRI Triticale			4539				
Wintermaster Triticale					9874		

Table 2, Continued

Variety	2001 Total	2002 Total	2003 Total	2004 Total	2005 Total	2006 Total	
Caudillo Wheat						8567	
Cutter Wheat				7403			
Fannin Wheat					10600		
Mit Wheat	5473	4245					
Elbon Rye		4761					
Wintermore Rye					7405		

Conclusions:

Following a very dry summer, the plot was planted following a 4 inch rain in the Luling area. The winter was extremely dry with minimal rain during the entire growing season.

Producers should note that the totals accumulated from this study represent results under the conditions that were present during this trial, and may not see the same results under their own growing conditions. Results over more years are needed to give producers a true indication of trends that can be expected with different varieties.

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