



2017 Small Grain Forage Variety Trial

Texas A&M AgriLife 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 South Central Texas 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: The Luling Foundation Farm

Tillage: The seed bed was disked 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 25, 2016

Seeding Rates:

Oats	96 lbs/acre
Wheat, Triticale	80 lbs/acre
Ryegrass	30 lbs/acre

Plot size: Plot sizes were 12 feet wide, and had a length of 50 feet, with three replications randomly located in the field. The plots were harvested on two 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.

Fertilizer: 250 lbs. of 24-8-0 were applied on 11/2/2016.

Harvest: The plots were harvested two times, on March 6, and April 29, 2017. These results are listed in Table 1.

Multiple Year Averages: An average of previous years' harvest is compiled in Table 2 to include multiple years' average dry matter yield.

Results:


Table 1.

2017 Luling Foundation Winter Forage Variety Trial

Variety	Cutting	Cutting	Total	
	3/6/2017	4/29/2017		
Small Grains				
Prine Ryegrass	2614	1016	3630	<i>ab</i>
Sungrazer Ryegrass	2614	1016	3630	<i>ab</i>
Maximus Ryegrass/Barsica Rape Blend	2323	1016	3340	<i>a-d</i>
Credence Ryegrass	2759	581	3340	<i>a-d</i>
McKinley Ryegrass	2614	726	3340	<i>a-d</i>
Maximus Ryegrass/T Raptor Rape Blend	1742	1597	3340	<i>a-d</i>
Andes Ryegrass	2033	1016	3049	<i>a-d</i>
Kodiak Ryegrass	2178	871	3049	<i>a-d</i>
Sungrazer Plus Ryegrass	2323	726	3049	<i>a-d</i>
New Dawn Ryegrass	2468	436	2904	<i>b-e</i>
Augusta Ryegrass	2033	726	2759	<i>b-e</i>
Heavy Grazer II Oat	2468	145	2614	<i>b-e</i>
TAMO 411 Oat	2323	145	2468	<i>b-e</i>
Fannin Wheat	1597	726	2323	<i>c-f</i>
TAMCALE 5019 Triticale	2033	145	2178	<i>def</i>

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Table 2.

Luling Foundation Winter Forage Variety Trials													
Multi-Year Summary													Current
													Varieties*
Small Grains**													3Yr or More
Variety	2001	2002	2003	2005	2006	2007	2008	2010	2014	2015	2016	2017	Average
TAMCALE 6331 Triticale					7696	9583	7841	8276	6244	7624			7877
Blizzard Ryegrass	13013		4622	7841	7696	10600	3340	6824	4211				7268
TAMO 406 Oats								9148	4501	6534	8567		7188
Jumbo Ryegrass				8276	6534	11906	3630	7550	5082	6970	6244		7024
Fannin Wheat				10600					5663	8276	8131	2323	6999
VNS Ryegrass	9678	5303	5035	7115	5227	11616	3485	8131					6949
Maximus Ryegrass				8422	5082	12632	3340	7768	4792	6970	5808		6852
TAMO 411 Oats										8276	9583	2468	6776
Prine Ryegrass			5472	6534	9002	13694	4356		4501			3630	6741
Sungrazer Ryegrass				7260	6970	10600	3340			7550	6098	3630	6493
Heavy Grazer 76-30 Oats						7405	5518		6244				6389
Sungrazer Plus Ryegrass				6534	5082	10890	3340		4937	7695	8131	3049	6207
Tsunami Ryegrass						9728	3194	6389	3775	6099			5837
TAMCALE 5019 Triticale					6389						7696	2178	5421
Credence Ryegrass										7115	5518	3340	5324
TAM 90 Ryegrass				8277			3775		3630				5227
Andes Ryegrass									5082	5517		3049	4549
Abundant Ryegrass									4646				
Angus 1 Ryegrass										5808			
Attain Ryegrass											4574		
Augusta Ryegrass												2759	
Barextra Italian Ryegrass							1742						

Conclusions:

The plot was planted into dry conditions in the Luling area. The following growing season included limited moisture, with below average growing conditions. Spring rains came late to affect the conditions for the plots. Rust damage was heavy on the oat, wheat, and triticale varieties.

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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