



2016 Medic and Legume Forage Variety Trial

Texas A&M AgriLife Extension Service

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Cooperator: The Luling Foundation Farm

Location: Luling, Texas

Situation:

The year around availability of high quality forage is a constant challenge for beef cattle producers. Most winter pastures consist of small grains, such as oats, ryegrass, or wheat, and are annual plants that need to be re-seeded every year. Winter pastures are grown extensively in South Central Texas to provide supplemental feed to stocker cattle, heifers, and mature cows.

Legumes provide an attractive alternative to these winter forages as they provide high quality forage that may re-seed itself annually. Additionally, legumes fix nitrogen in the air and make nitrogen available for other plants to utilize. Concerns for establishing legumes include expensive establishment, and they can be easily killed by a freeze or with certain broadleaf herbicides available on the market to producers.

Objectives:

- 1) Demonstrate proper management practices.
- 2) Compare establishment, yields, and other characteristics of several medic, clover, and legume varieties.

Method:

Cooperator: Luling Foundation Farm

Tillage: The seed bed was disked twice and a firm seed bed was established. The seed was planted with a drill, and then a roller-packer followed to improve the seed-soil contact.

Planting Date: October 21, 2015

Seeding Rate: 6-75 lbs./acre, as per supplier's request when available.

Inoculation: All varieties were inoculated by the seed supplier or was planted un-

inoculated.

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: 400 lbs of 10-20-10 were applied on 11/16/2015.

Harvest: The plots were harvested on February 11 and April 12, 2016. These results are listed in Table 1.

Multiple Year Averages: An average of the previous year's harvest is compiled in Table 2.

Results:

Table 1

2016 Luling Foundation Winter Forage Variety Trial

Variety	Cutting	Cutting	Total	
	2/11/2016	4/12/2016		
Legumes				
Armadillo Burr Medic	3920.4	1452.0	5372	<i>b</i>
AU Sunup Crimson Clover	2323.2	1742.4	4066	<i>bc</i>
Lynx 58 LXG Winter Pea	1742.4	2032.8	3775	<i>c</i>
Devine Little Burr Medic	2613.6	1016.4	3630	<i>bc</i>
Lynx 58LX HCTD Winter Pea	2032.8	1452.0	3485	<i>bc</i>

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Missing data estimates are included in columns:Yates=2

Table2. Luling Foundation Legume Variety Trial Multi-Year Summary.



Luling Foundation Winter Forage Variety Trials Multi-Year Summary

Variety	2001	2002	2003	2005	2006	2007	2008	2010	2014	2015	2016	Current Varieties* 3Yr or More
												Average
Blanch Fleur White Vetch				6679	5083	5808	2323	6534				5285
Jester Barrel Medic			5699	6824	3194	7696	2468	5082				5161
BioMaster Forage Pea				5662	4791	5953	3194	5663		2614		4646
Armadillo Burr Medic	11093	878	5171	5953	1307	4501	1597	6534	3484	2904	5372	4436
Austrian Winter Peas		6488		3339	3340	5953				3049		4434
Cibola Alfalfa						8131	2904	3630		2904		4392
Whistler Field Pea								4719	4646	3485		4283
Devine Little Burr Medic	10002		4251	5082	3049	2759	2759	4646	3775	2505	3630	4246
Parabinga Barrell Medic			4733	7115	2614		1742					4051
Apache Arrowleaf Clover			4939	3049	3049	8422	2178		726	871		3319
Jemelong Burr Medic	6759	Froze		4356	3194		2033					3268
Cefalu Arrowleaf Clover					3194	8857	2178	2033	0			3252
Nitro Persian Clover				5663	2178		1597	3049				3122
Antas Sub Clover				3775	3775	4647	1016	1670				2977
Ball Clover			3722		1597	4066	1307	1597				2458
Legume Variety Trials												
Variety	2001	2002	2003	2005	2006	2007	2008	2010	2014	2015	2016	
AU Sunup Crimson Clover											4066	
Bolta Balansa Clover				2904								
Bigbee Berseem Clover		1260										
Calipso Berseem Clover				4646								
Blackhawk Arrowleaf Clover									0			
Barblanca White Clover								581				

Variety	2001	2002	2003	2005	2006	2007	2008	2010	2014	2015	2016
Cherokee Red Clover		1182									
Crimson Clover		489									
Durana White Clover					726	4066					
FLMD Red Clover								1452			
Hubam Sweet Clover				4211							
Kendland Red Clover		1140									
Manna Berseem Clover					4501	8857					
Palastine Strawberry Clover							1307				
Patriot White Clover					1888	4792					
Red Clover					3340		2033				
Yuchi Arrowleaf Clover		207									
Baralfa 9242 Alfalfa								3485			
Cuf 101 Alfalfa										1742	
Highline Alfalfa			4797	3630							
Medina Alfalfa								3194			
Pegasis Alfalfa								3485			
Rio Grande Alfalfa			4588	3485		8567					
Angel Strand Medic									2759		
Bee Black Medic				5227	2468	6679					
Caliph Barrel Medic				6244							
Herald Strand Medic				6389							
Kelson Snail Medic								6607			
KO-6-23 Blend						5227					
Maranoa Medic Mix					1452						
Mogul Barrel Medic				5082							
Paraggio Barrel Medic				5372							
Schimitar Burr Medic								5227	2614		
Silver Snail Medic				5517							
Uekert Medic						2614					

Variety	2001	2002	2003	2005	2006	2007	2008	2010	2014	2015	2016
Medic LO-6-Med						1089					
Walter's Mix Medic						4574	871				
Barvicos Vetch					4501	6389					
Hairy Vetch		965									
Lana Vetch				3049							
Popany Vetch					5808	4937					
Faba Bean						5953					
50% Lynx Winter Pea										3485	
Lynx Winter Pea										2468	
Lynx LXG Winter Pea											3775
Lynx 58LX HCTD Winter Pea											3485
Magnum Rack Builder Deer Pea						10164					
PKS M02 Winter Pea						3920					
Nutrigreen Pea						3775					
Secada Peas				8422		5372					
Frontier Bolanza						2323		2323			
Barblanca LO-6-Bar						3049					

* Reported in pounds of dry matter per acre.

Conclusions:

The plot was planted into dry conditions in the Luling area. The following growing season included ample moisture, with average heat. Spring rains continued to allow for moist conditions for the plots.

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 multiple years are needed to give producers a true indication of trends that can be expected with different varieties.

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Disclaimer Clause:

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