

2017 Medic and Legume Forage Variety Trial

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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.
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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 25, 2016
Seeding Rate: 8-14 lbs./acre, as per supplier's request when available.
Inoculation: All varieties were inoculated by the seed supplier or were planted uninoculated.

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: No fertilizer was applied to the legume plots to take advantage of residual applied phosphorus.

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

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

Results:

2.

Table 1 2017 Luling Foundation Winter Forage Variety Trial

	Cutting	Cutting		
Variety	3/6/2017	4/29/2017	Total	
Legumes				
Devine Little Burr Medic	1307	2904	4211	а
Armadillo Burr Medic	1016	1597	2614	b-e
Cuf 101 Alfalfa	871	1307	2178	def
Cibola Alfalfa	726	1016	1742	ef

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

Luling Foundation Winter Forage									xas a GRI]	LIFE			
Variety Trials								E	EXTE	NSIO	N		
Multi-Year Summary													
													Current
Legume VarietyTrials													Varieties*
													3Yr or More
Variety	2001	2002	2003	2005	2006	2007	2008	2010	2014	2015	2016	2017	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
Austrian Winter Peas		6488		3339	3340	5953				3049			4434
Armadillo Burr Medic	11093	878	5171	5953	1307	4501	1597	6534	3484	2904	5372	2614	4284
Whistler Field Pea								4719	4646	3485			4283
Devine Little Burr Medic	10002		4251	5082	3049	2759	2759	4646	3775	2505	3630	4211	4243
Cibola Alfalfa						8131	2904	3630		2904		1742	3862
Apache Arrowleaf Clover			4939	3049	3049	8422	2178		726	871			3319
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 VarietyTrials													
Variety	2001	2002	2003	2005	2006	2007	2008	2010	2014	2015	2016	2017	
AU Sunup Crimson Clover											4066		
Bolta Balansa Clover				2904									
Bigbee Berseem Clover		1260											
Calipso Berseem Clover				4646									

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

		I	I	1	1			I		1	I		
Blackhawk Arrowleaf Clover									0				
Barblanca White Clover								581					
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							
Legume VarietyTrials													
Variety	2001	2002	2003	2005	2006	2007	2008	2010	2014	2015	2016	2017	
Red Clover					3340		2033						
Yuchi Arrowleaf Clover		207											
Baralfa 9242 Alfalfa								3485					
Cuf 101 Alfalfa										1742		2178	
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									
Jemelong Burr Medic	6759	Froze		4356	3194		2033						
Kelson Snail Medic								6607					
KO-6-23 Blend						5227							
Maranoa Medic Mix					1452								
Mogul Barrel Medic				5082									
Parabinga Barrell Medic			4733	7115	2614		1742						

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Paraggio Barrel Medic				5372									
Schimitar Burr Medic								5227	2614				
Silver Snail Medic				5517									
Uekert Medic						2614							
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							
Legume VarietyTrials													
Variety	2001	2002	2003	2005	2006	2007	2008	2010	2014	2015	2016	2017	
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							

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.

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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