Result Demonstration Report

Project/Demonstration Title
Texas A&M AgriLife Extension Service
Haskell County
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Summary

A 31 variety forage trial was demonstrated and a forage field day was held on April 4th in Haskell County. Plots of each forage variety were replicated and 12" strips were clipped from each plot with green and dry weights measured. The objective was met to determine lbs. per acre of each variety in relation to cattle grazing. Plots were planted October 2, 2015. Heavy rains washed the original plots out and plots were replanted November 12, 2015. Three clippings had originally been planned to report weights but due to late plantings only two were taken.

Objective

Haskell County continues to be one of the largest producers in the state for forage acreage designed for winter grazing. According to the 2015 Texas Agrilife Extension Ag Increment Report revenue from cattle in Haskell County are estimated at $18,000,000. The objective of this demonstration is to determine forage varieties and yields per acre of each. Producers from Haskell and Knox Counties came together for a brief meeting to discuss various varieties of forage and what could be done to determine the yields.31 varieties of forage were picked. The forage trial was made up of various varieties of wheat, rye, triticale, oats and barley.

Materials and Methods

Soils samples taken from acreage on Kenneth Baker Farms located right off of Hwy 222 in Haskell County indicated 3 gallons of 10-34-0 and 40 lbs of nitrogen were needed to meet proper fertility needs. A seven row planter was used with a seeding rate of 55 lbs. to the acre for planting two separate plots of each variety. Plots were planted on October 2, 2015. Heavy rains forced a replant because seed had washed out. Plots were replanted on November 12, 2015.

The first clipping was taken after 112 days of growth on March 4, 2016. Each plot had one 12" strip removed from the ground up to include all growth. Forage was collected and placed in a bag to be weighed and green weight was recorded. The forage was then placed in ovens to dry and remove moisture content which gave us the final dry weight of forage. The same day the first clipping was taken the plots were mowed at 4" uniformly to simulate grazing. The second clipping was taken 30 days later on April 5, 2016. The clippings from each plot were taken at 4" from the base of the plant to account for the previous mowing of plots. Again 12" strip samples were taken and green and dry weights were recorded.

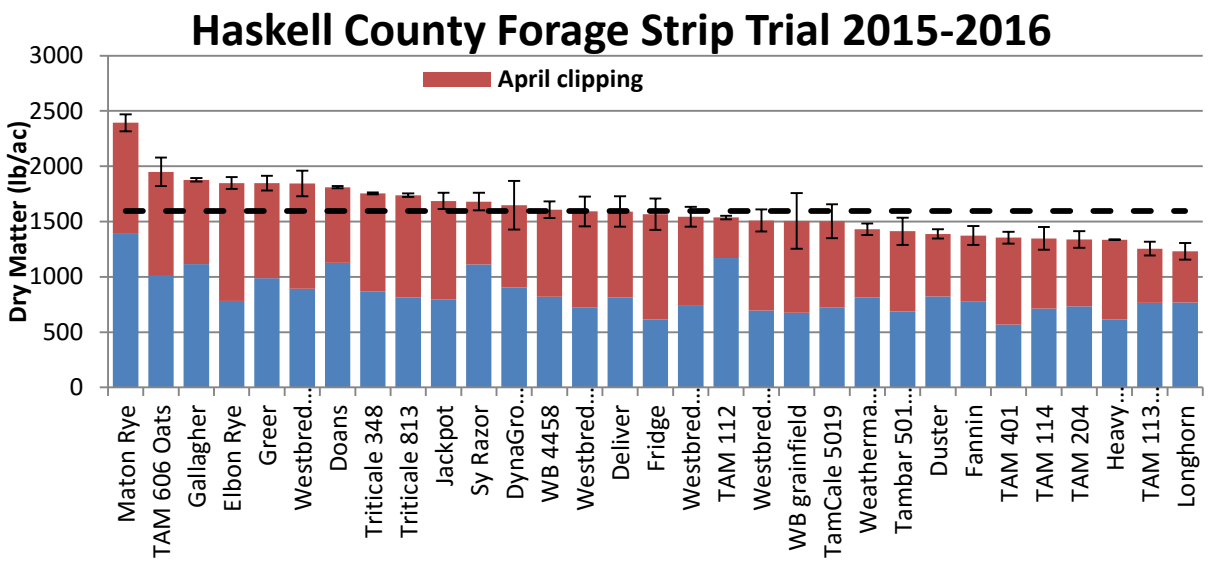
Results and Discussion

Triticale, rye, oats, barley and wheat are represented in the forage trials. A field day was held on April 4,' 2016 with Clark Neely as guest speaker. Many of the wheat varieties had some degree of rust damage. Clark discussed striped rust and control methods for each wheat variety. Plots were marked with signs for visual representation. The results of the forage trial are listed below.

Each forage variety list the total weight of forage that was produced from each clipping and ranked by the total weights per acre from both clippings. Rust rankings for each wheat variety are also listed below as to the severity they were infected. Maton Rye produced the most forage of all the forages with TAM 606 Oats taking second. The wheat variety of Gallagher produced the most forage compared to other wheat varieties. Triticale 348 was the top triticale and Tambar 501 was out produced by Maton Rye by 900 lbs.

Variety							
	Avg March	Avg April	SE April	Total (Mar + April)	Average of total forage yield		
Maton Rye	1395	998	76.28	2393	1597		
TAM 606 Oats	1009	941	129.32	1950	1597		
Gallagher	1116	761	16.04	1877	1597		
Elbon Rye	783	1066	54.28	1849	1597		
Greer	989	858	67.64	1847	1597		
Westbred 4721	893	951	115.34	1844	1597		
Doans	1128	684	9.66	1811	1597		
Triticale 348	865	889	7.61	1754	1597		
Triticale 813	814	925	15.01	1739	1597		
Jackpot	796	891	72.37	1687	1597		
Sy Razor	1114	567	80.18	1681	1597		
DynaGro underwood	905	742	220.61	1647	1597		
WB 4458	820	787	74.02	1607	1597		
Westbred 4515	722	871	134.46	1593	1597		
Deliver	815	777	138.78	1591	1597		
Fridge	614	953	141.25	1567	1597		
Westbred 4303	745	798	89.03	1543	1597		
TAM 112	1171	366	16.86	1537	1597		
Westbred Winter Hawk	696	814	99.10	1510	1597		
WB grainfield	676	829	252.89	1506	1597		
TamCale 5019	721	782	152.56	1503	1597		
Weathermaster 135	814	617	51.61	1431	1597		
Tambar 501 barley	687	726	122.74	1413	1597		
Duster	824	564	42.15	1388	1597		
Fannin	779	595	85.53	1374	1597		
TAM 401	568	786	54.69	1354	1597		
TAM 114	714	633	103.01	1347	1597		
TAM 204	732	607	75.66	1338	1597		
Heavy Grazer Oats	616	720	1.44	1336	1597		
TAM 113 untreated	765	490	61.89	1255	1597		
Longhorn	767	464	74.63	1232	1597		

Forage Trial	*Ranking*
Longhorn	*5*
Deliver	*3*
SY Razor	*1*
Weathermaster 135	*3*
TAM 201 Beardless	*2*
TAM 401 Beardless	*1*
Fannin	*2*
Tam 112	*5*
TAM 113 Untreated	*2*
TAM 114	*2*
WB Grainfield	*2*
Westbred Winterhawk	*3*
WB 4458	*2*
Jackpot	*2*
Doans	*1*
Gallagher	*2*
Greer	*1*
DynaGro Underwood	*2*
Duster	*3*
Westbred 403	*2*
Westbred 4515	*1*
Westbred 4721	*1*
Border Doans	*2*
Ranking: 1-5	
1-No Striped Rust	
5-Heavy Striped Rust	



Conclusions

The objectives of the project were met to determine lbs. per acre of each forage variety. The weights of forage produced met the project outcome. The results will all be mailed to our local Haskell County producers for options on forage selection next year. We will continue the forage plots next year with new varieties as well as look at dual purpose varieties for forage and seed.

Acknowledgements

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