

2010 Texas Cool-Season Forage Yield Results



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2010

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Introduction

During the 2009-10 cropping season, Texas producers harvested 5 million acres of cool-season forage hay according to the National Agricultural Statistics Service (NASS). This figure does not include those acres that were grown for dual-purpose or grazed out. Many of the cool-season small grains make excellent forage crops for livestock producers because of both the quality and quantity that these crops can yield.

The Forage Variety Trial data presented in the following pages is coordinated and implemented by numerous Texas AgriLife Extension and Research faculty and staff. We also appreciate the cooperation from numerous Texas County Extension Agents, producers, and private industry partners that contribute locations, property, and seed to conduct these field trials. The purpose of this publication is to provide unbiased yield data for forage producers across the state. With this information, Texas forage producers can make an educated decision about the most appropriate varieties for their geographic region. This is the first publication for a state wide variety trial. The only location presented with multiple years of data is Overton, TX.

Variety Selection:

Selection of small grain varieties is one of the most important decisions a producer will make. This decision impacts the potential yield (forage and grain), forage quality, disease and insect management, and maturity. It is important that producers have diversity in the varieties planted on their farms. This depends on the intended use of the crop (grain, forage, dual-purpose, etc). Variety diversification spreads the risk associated with potentially devastating pests (rusts, Hessian fly, wheat curl mite, greenbugs, etc.) and yield loss from adverse environmental factors (freeze, drought, hail, etc.).

Producers should select no fewer than 2 varieties to plant on their farms and preferably more, depending on size, location, and purpose of fields. Variety selection should be based upon sound data produced from university trials, county agent strip trials, and other reliable sources. Varieties should be chosen based on multiple years of data (yield, pest resistance, grain and forage quality and maturity). High yields over multiple years and multiple locations demonstrate a variety's ability to perform well over diverse environmental factors. Stable yield performance of quality grain or forage is the best variety selection tool. It is important to consider decreasing yields over a 2 or 3 year time frame, which may reflect a change in disease and/or insect resistance.

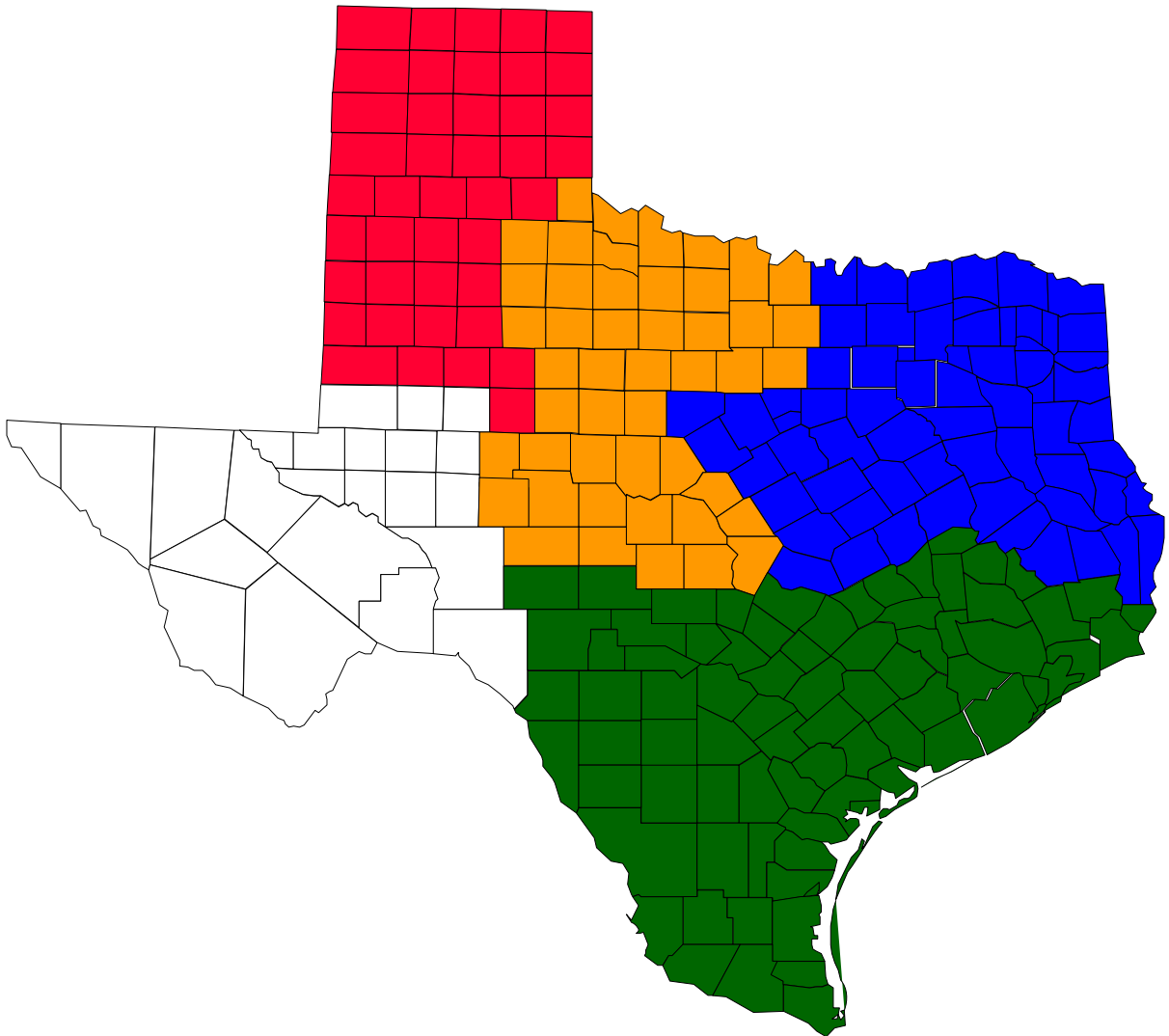
When selecting a variety for the 2010-11 season, producers need to consider the 2009-10 season, recognizing the unusually wet, cold conditions that impacted yield and quality. It is strongly encouraged that producers look at the 3-year averages, where available, for the varieties and to look at numerous relevant variety trial locations.

Interpreting the Data:

Forage yield at each location has been statistically analyzed using the recommended procedures. The statistical analysis provides the mean, coefficient of variation (CV), and least significant difference (LSD) values. It is important to note these statistical values to prevent misinterpretation of the data.

The mean is another term for the average. Therefore, a mean value is the average for a variety across all replications within the trial. The CV value, expressed at a percentage, indicates the level of unexplained variability present within the trial. A high CV value indicates a lot of variability existed within the trial not related to normal variations that might be expected between the varieties in the test. This variability may be the result of non-uniform stands, non-uniform insect or disease pressure, variability in harvesting, or other issues. High CV values indicate a great deal of variation due to factors other than the genetic variation between varieties. CV values in excess of 30% should cause the person using the data to understand that there were problems in the trial that will cause questions about the validity of the data as a true representation of varietal performance. The LSD value indicates if the varieties performed differently from one another within the trial. If the LSD value is 250 lb/ac in a trial in which Variety A yielded 2000 lb/ac and Variety B yielded 1749 lb/a, then Variety A is said to be significantly better. In a trial with an LSD value of 250 lb/ac at a 0.05 (or 5%) level the statistical inference is that Variety A would yield better than Variety B in 19 out of 20 trials conducted in which there was a 250 lb/ac difference in yield. In this hypothetical comparison, you might have one trial out of 20 with a 250-pound difference, where there is not truly a difference between varieties A and B, but random chance caused the 250-pound difference.

Texas Regions Map



Legend:

Texas High Plains



Texas Rolling Plains



Texas Blacklands and East Texas



South Texas



2010 Texas Region Overview

Texas Blacklands:

The Texas Blacklands, especially the Southern Blacklands, experienced several rainfall episodes from November 2009 to May 2010. Total rainfall amounts in both Commerce and Hillsboro, TX were around 11 inches. In the northern Blacklands, the rain prevented planting near Paris and Clarksville and delayed some trials around Leonard. Temperatures fell below 32°F on March 20-21 for almost 12 hours. Low to moderate disease pressure from leaf rust, stripe rust, and *Barley yellow dwarf virus* (BYDV) were observed throughout the region.

Texas Rolling Plains:

The Texas Rolling Plains started off dry in the fall limiting the amount of forage produced, but timely rains in the spring allowed this year's crop to produce good yields. Rust pressure (both leaf and stripe) and BYDV was moderate to high in the Rolling Plains.

South Texas:

The South Texas locations had saturated conditions almost all season long. Rainfall totals in Castroville and College Station from November 2009 to May 2010 were 12-14 inches. Cold temperatures occurred in late February, but yield losses were not significant. Most of the yield-limiting factors came from the severe stripe rust that infected the plants prior to heading, followed by moderate to severe leaf rust infection prior to maturity.

Texas Location Details and Issues

Location ¹	Yield Limiting Issues	Planting Date	Fertilizer (Total) (lb N/a)	Pesticide Applied	Date Appl.	Page Number
College Station	Fall armyworms; Greenbugs early; Roundup drift	9/21/2009	120	Dimethoate 4EC (3/4 pint/a)	10/8/2009 2/10/2010	6
Leonard	Excessive Rainfall; Not planted	-	-	-	-	-
Menard²	Cold wet winter; freeze damage on oats and barley, BYDV	9/28/2009	120	Buctril 4 EC (1 pint/a)	11/3/2009	7
Millersview	Cold wet winter Dry late spring	9/28/2009	30	Buctril 4 EC (1 pint/a)	11/3/2009	8
Overton²	Cold wet fall; dry late spring; freeze damage on oats	9/29/2009	180	Glean (1/3 oz/a)	11/9/2009	9 and 10
Stephenville³	Cold wet fall; some freeze injury on oats	10/19/2009	80	none	-	11
Vernon	Low forage producing oats and barley were due to freeze	9/22/2009	80	none	-	12

¹These locations were planted with a seeding rate of 75 lb/a, under conventionally tilled field conditions.

²Menard and Overton were the only locations that were capable of being irrigated; however with the rainfall Overton did not require supplemental irrigation.

³Stephenville was over-seeded into Tifton 85

College Station 2010

2010	Rank	Variety	Classification ¹	Source	Dry Matter Yields				
					Total Forage Production	1st Clipping	2nd Clipping	3rd Clipping	4th Clipping
					12/10/2009	2/16/2010	3/5/2010	3/31/2010	
				lb/a	lb/a	lb/a	lb/a	lb/a	
1	P-919	WB	PS ²	14,348	2,123	2,726	4,746	4,335	
2	Pennbar 66	WB	Penn State	12,337	1,243	979	3,109	4,366	
3	TX05CS542*	Oat	TAMU	11,741	1,952	1,520	3,365	4,905	
4	TX05CS347-1*	Oat	TAMU	10,936	1,067	1,389	4,188	4,292	
5	TAMcale 5019	TRIT	AgriPro	10,729	1,383	2,829	3,292	3,225	
6	TAMcale 6331	TRIT	AgriPro	10,654	1,399	2,033	3,242	3,980	
7	TAMO 406	Oat	TAMU	10,401	1,060	2,288	2,242	4,811	
8	TX05A001822*	HRWW	TAMU	9,716	1,154	2,252	2,963	3,347	
9	TX05CS556*	Oat	TAMU	9,710	1,623	1,962	2,775	3,350	
10	TX02A0252*	HRWW	TAMU	9,626	1,221	1,798	2,865	3,742	
11	Weathermaster 135**	HRWW	Unknown	8,709	1,093	941	2,784	3,890	
12	TAM203	HRWW	AgriPro	8,427	921	1,498	2,227	3,782	
13	TX06A001263*	HRWW	TAMU	8,211	595	1,634	2,646	3,336	
14	TX07CS3697*	Oat	TAMU	8,045	996	1,228	2,683	3,138	
15	TAMO 606	Oat	TAMU	7,809	874	1,279	3,104	2,552	
16	Fannin	HRWW	AgriPro	7,762	792	1,179	2,204	3,587	
17	Sturdy 2K	HRWW	TAMU	7,074	701	520	2,027	3,826	
18	LA 99016	Oat	LSU	7,006	1,460	934	1,859	2,753	
19	TX02U7682*	Oat	TAMU	6,953	1,296	1,520	1,378	2,760	
20	TAM401	HRWW	AgriPro	6,826	1,175	1,915	1,923	1,814	

Mean **9,351** **1,206** **1,621** **2,781** **3,590**

*Experimental Lines **CV (%)** **25.5** **45.8** **50.7** **44.3** **38.1**

Awnless/Beardless **LSD (5%) **3,376** **781** **1,161** **1,741** **1,935**

¹Hard Red Winter Wheat (HRWW)

Soft Red Winter Wheat (SRWW)

Triticale (TRIT)

Winter Barley (WB)

²Paramount Seeds (PS)

Menard 2010¹

2010 Rank	Variety	Classification ²	Source ⁴	Dry Matter Yields				
				Total Forage Production ³	1st Clipping December	2nd Clipping February	3rd Clipping March	4th Clipping April
				lb/a	lb/a	lb/a	lb/a	lb/a
1	TAMBAR 501	WB	TAMU	12,300	2,160	1,698	1,555	8,584
2	RSI 348**	TRIT	RSI	12,255	1,799	595	1,480	8,975
3	AGRTS 101	TRIT	-	12,037	2,303	1,171	1,828	7,906
4	TAM 203	HRWW	AgriPro	11,430	2,363	998	2,086	6,981
5	P-919**	WB	PS	11,376	2,396	892	1,866	7,113
6	TAMO 406	OAT	TAMU	11,188	2,235	739	2,149	6,803
7	Penbar 66	WB	Penn State	11,115	2,232	734	1,639	7,243
8	Doans	HRWW	AgriPro	10,915	1,785	614	1,802	7,328
9	Santa Fe	HRWW	WestBred	10,660	2,249	1,492	2,502	5,910
10	Pete**	HRWW	OSU	10,646	2,154	1,123	1,493	6,999
11	TAMcale 6331	TRIT	AgriPro	10,525	1,663	844	1,892	6,971
12	TX05CS347-1*	OAT	TAMU	10,480	2,275	648	1,756	6,448
13	Walken	OAT	JSC	10,474	2,212	960	1,788	6,474
14	Deliver	HRWW	OSU	10,359	2,090	1,209	1,269	7,000
15	LA 99016	OAT	LSU	10,195	1,987	595	1,545	6,664
16	Walken + Austrian Winter Pea	OAT + W.PEA	-	9,902	1,613	1,113	1,753	6,537
17	Endurance	HRWW	OSU	9,833	2,498	1,132	1,205	6,131
18	Duster	HRWW	OSU	9,764	2,131	897	1,908	5,725
19	TAM 304	HRWW	TAMU	9,702	1,942	1,171	1,679	6,081
20	TX05A001822*	HRWW	TAMU	9,598	1,573	801	1,527	6,498
21	Fannin	HRWW	AgriPro	9,392	1,951	902	1,988	5,454
22	Dan	WB	VT	9,335	2,145	528	1,531	5,659
23	Weathermaster 135**	HRWW	Unknown	9,293	2,252	1,008	1,932	5,109
24	TAMO 606	OAT	TAMU	9,280	2,065	888	1,815	5,399
25	Sturdy 2K	HRWW	TAMU	9,083	1,938	744	1,544	5,600
26	Fannin + Gaucho (seed trt)	HRWW	AgriPro	9,069	2,252	803	1,928	4,889
27	TX06A001263*	HRWW	TAMU	9,037	2,222	710	1,079	5,735
28	TX07CS3697*	OAT	TAMU	9,015	2,122	581	1,889	5,004
29	Horizon 314	OAT	UF	8,981	2,574	576	1,884	4,522
30	TX05CS542*	OAT	TAMU	8,527	2,609	509	1,336	4,582
31	TAM 112	HRWW	TAMU	8,421	1,553	446	1,459	5,409
32	TX02U7682*	OAT	TAMU	8,352	2,488	398	1,875	3,988
33	Pio 25R56**	SRWW	Pioneer	8,272	1,682	1,487	1,502	5,088
34	TAMcale 5019	TRIT	AgriPro	8,052	1,555	557	1,294	5,204
35	Coronado	HRWW	AgriPro	7,924	1,560	686	1,317	5,047
36	Magnolia	SRWW	AgriPro	7,604	1,993	1,228	1,761	3,851
37	TX02A0252*	HRWW	TAMU	7,572	1,411	1,113	1,500	4,661
38	Nora	OAT	UA	7,501	2,044	1,147	1,680	3,777
39	TAM 401**	HRWW	AgriPro	7,244	1,364	700	1,322	4,558
40	TX05CS556*	OAT	TAMU	6,530	1,647	638	1,358	3,525

Mean 9,581 2,027 877 1,668 5,886

*Experimental Lines **CV (%) 20.9 31.2 - 25.7 30.4**

Awnless/Beardless **LSD (5%) 2,802 - - 2,500

¹This location had supplemental irrigation with a 90 lb/a seeding rate

²Hard Red Winter Wheat (HRWW)

Soft Red Winter Wheat (SRWW)

Triticale (TRIT)

Winter Barley (WB)

Winter Pea (W Pea)

³Clippings were made during the following timings:

Winter Harvest: 12/8-19/2009

Regrowth: 2/16/2010

Prior to First Hollow Stem Harvest: 2/19 - 3/4/2010

Hay Harvest: 4/26 - 5/12/2010

Harvest ranges due to non - uniform rate of growth.

⁴Justin Seed Co. (JSC)

Paramount Seeds (PS)

Resource Seeds Inc. (RSI)

Millersview 2010

2010	Rank	Variety	Classification ¹	Source ³	Dry Matter Yields			
					Total Forage Production ²	1st Clipping December	2nd Clipping February	3rd Clipping April
					lb/a	lb/a	lb/a	lb/a
1	Fannin + Gaucho (seed trt)	HRWW	AgriPro		7,140	968	522	6,618
2	TAMBAR 501	WB	TAMU		6,995	-	808	6,188
3	TX06A001263*	HRWW	TAMU		6,662	-	465	6,196
4	TAM 304	HRWW	TAMU		6,325	-	327	5,998
5	Santa Fe	HRWW	WestBred		6,287	-	481	5,806
6	Fannin	HRWW	AgriPro		6,203	930	485	5,719
7	TAMcale 6331	TRIT	AgriPro		6,169	-	444	5,725
8	Coronado	HRWW	AgriPro		5,951	-	380	5,571
9	Duster	HRWW	OSU		5,677	-	399	5,278
10	Dan	WB	VT		5,671	-	491	5,180
11	TAMO 406	OAT	TAMU		5,636	-	784	4,852
12	Walken + Austrian Winter Pea	OAT + W.PEA	-		5,517	-	912	4,605
13	Jackpot	HRWW	AgriPro		5,487	-	294	5,193
14	P-919**	WB	PS		5,465	-	706	4,759
15	Deliver	HRWW	OSU		5,443	-	286	5,156
16	RSI 348**	TRIT	RSI		5,365	-	414	4,951
17	Doans	HRWW	AgriPro		5,365	-	301	5,063
18	TAM 203	HRWW	AgriPro		5,362	-	348	5,014
19	Walken	OAT	JSC		5,240	-	859	4,382
20	TAMcale 5019	TRIT	AgriPro		5,191	-	351	4,840
21	Horizon 314	OAT	UF		5,185	-	801	4,384
22	TX02A0252*	HRWW	TAMU		5,113	-	357	4,756
23	AGRTS 101	TRIT	-		4,961	-	340	4,622
24	Penbar 66	WB	Penn State		4,957	-	486	4,471
25	Sturdy 2K	HRWW	TAMU		4,949	-	300	4,649
26	TX05CS556*	OAT	TAMU		4,899	-	516	4,383
27	Weathermaster 135**	HRWW	Unknown		4,867	-	434	4,433
28	LA 99016	OAT	LSU		4,852	-	952	3,900
29	TX07CS3697*	OAT	TAMU		4,628	-	856	3,771
30	TAM 112	HRWW	TAMU		4,457	-	334	4,123
31	Endurance	HRWW	OSU		4,409	-	322	4,087
32	Nora	OAT	UA		4,296	-	832	3,464
33	TX05CS347-1*	OAT	TAMU		4,223	-	829	3,393
34	Pete**	HRWW	OSU		4,128	-	241	3,886
35	TAMO 606	OAT	TAMU		3,977	-	841	3,136
36	TX02U7682*	OAT	TAMU		3,900	-	744	3,155
37	Rye	Cereal Rye	-		3,739	-	473	3,266
38	TAM 401**	HRWW	AgriPro		3,695	-	404	3,291
39	TX05A001822*	HRWW	TAMU		3,594	-	308	3,286
40	TX05CS542*	OAT	TAMU		3,555	-	652	2,904

Mean **5,138** **949** **527** **4,611**

*Experimental Lines **CV (%)** **32.3** **4.2** **33.8** **35.1**

¹Hard Red Winter Wheat (HRWW) **LSD (5%)** - - - -

Soft Red Winter Wheat (SRWW)

Triticale (TRIT)

Winter Barley (WB)

Winter Pea (W Pea)

²Clippings were made during the following timings:

Winter Harvest: 12/19/2009 - Only Fannin and Fannin + Gaucho -

Deer grazed all other plots too close to harvest

Prior to First Hollow Stem Harvest: 3/3-18/2010

Hay Harvest: 4/30 - 5/14/2010

Harvest ranges due to non - uniform rate of growth.

³Justin Seed Co. (JSC)

Paramount Seeds (PS)

Resource Seeds Inc. (RSI)

Overton 2010

2010	Rank	Variety	Classification ¹	Source ²	Dry Matter Yields					
					Total Forage Production	1st Clipping	2nd Clipping	3rd Clipping	4th Clipping	3 Year Average
					1/27/2010	3/17/2010	4/20/2010	5/24/2010		
					lb/a	lb/a	lb/a	lb/a	lb/a	
1	NF95307A*	Cereal Rye	NF		7,225	1,036	3,424	2,765	-	6,972
2	Maton	Cereal Rye	NF		6,968	539	2,628	3,801	-	-
3	TAMTBO	Ryegrass	TAMU		6,857	1,169	1,579	3,664	445	9,746
4	Maton II	Cereal Rye	NF		6,760	1,128	2,751	2,881	-	6,602
5	Pennbar 66	WB	Penn State		6,632	364	1,757	4,511	-	-
6	NF96210*	TRIT	NF		6,103	997	2,367	2,739	-	5,402
7	NF96213*	TRIT	NF		5,988	656	2,597	2,735	-	5,856
8	NFBates RS4*	Cereal Rye	NF		5,808	413	2,537	2,858	-	6,770
9	TAMcale 5019	TRIT	AgriPro		5,801	174	2,564	3,063	-	5,195
10	NF96131*	SRWW	NF		5,605	746	2,279	2,580	-	-
11	SW JS79	SRWW	JSC		5,596	493	2,680	2,423	-	-
12	Heavy Grazer 76-30	Oat	ETSC		5,498	551	2,435	2,512	-	5,088
13	NF9513AA	SRWW	NF		5,427	595	2,552	2,280	-	5,502
14	TAMsoft 700	SRWW	AgriPro		5,370	865	2,198	2,307	-	-
15	Sturdy 2K	HRWW	TAMU		5,354	338	2,031	2,985	-	5,163
16	TAMcale 6331	TRIT	AgriPro		5,325	452	2,044	2,829	-	5,006
17	Coker 9553	SRWW	AgriPro		5,219	304	2,286	2,629	-	-
18	Magnolia	SRWW	AgriPro		5,189	743	2,146	2,300	-	-
19	TAM401	HRWW	AgriPro		5,094	1,037	1,957	2,100	-	5,058
20	P-919	WB	PS		4,946	460	1,904	2,582	-	-
21	Fannin	HRWW	AgriPro		4,939	752	2,106	2,081	-	4,733
22	TX06A001263*	HRWW	TAMU		4,859	564	2,011	2,284	-	-
23	TX02A252*	HRWW	TAMU		4,803	284	2,195	2,324	-	4,581
24	USG 3295	SRWW	USG		4,762	814	1,955	1,993	-	-
25	TX05A001822	HRWW	TAMU		4,587	326	1,769	2,492	-	-
26	Weathermaster 135**	HRWW	Unknown		4,453	326	2,155	1,972	-	-
27	MBS 327	SRWW	MBS Seeds		4,369	420	1,503	2,446	-	4,776
28	TAM203	HRWW	AgriPro		4,208	301	1,533	2,374	-	4,467

Mean 5,491 602 2,212 2,661 445 5,682

*Experimental Lines CV (%) 14 44 25 14 - -

**Awnless/Beardless LSD (5%) 878 315 641 432 - -

¹Hard Red Winter Wheat (HRWW)

Soft Red Winter Wheat (SRWW)

Winter Barley (WB)

Triticale (TRIT)

²East TX Seed Co. (ETSC)

Justin Seed Co. (JSC)

Noble Foundation (NF)

Paramount Seeds (PS)

Uni-South Genetics (USG)

Overton 2010 Oats

2010	Rank	Variety	Source ¹	Dry Matter Yields				
				Total Forage Production	1st Clipping 1/27/2010	2nd Clipping 3/17/2010	3rd Clipping 4/20/2010	3 Year Average
				lb/a	lb/a	lb/a	lb/a	lb/a
1	NF 95418*	NF		6,594	601	2,141	3,852	6,551
2	TX05CS347-1*	TAMU		6,385	735	1,885	3,765	-
3	LA05006-65-S1*	LSU		6,378	1,063	1,514	3,801	-
4	TX07CS1237*	TAMU		6,329	1,598	1,736	2,995	-
5	Harrison	LSU		6,305	1,721	1,668	2,916	5,634
6	TX07CS2765*	TAMU		6,148	1,610	1,447	3,091	-
7	LA0346-S7-S1*	LSU		6,089	1,368	1,561	3,160	-
8	LA976-59-S1*	LSU		6,056	1,286	1,598	3,172	-
9	NF 27*	NF		5,917	1,350	1,498	3,069	5,728
10	TX07CS2783*	TAMU		5,719	896	2,191	2,632	-
11	TX05CS556*	TAMU		5,718	1,917	1,355	2,446	-
12	Dallas	TAMU		5,558	794	1,342	3,422	5,411
13	LA 99016	LSU		5,545	545	1,111	3,889	5,623
14	TAMO 406	TAMU		5,535	601	1,301	3,633	5,236
15	TX05CS542*	TAMU		5,387	1,271	1,751	2,365	5,188
16	TX07CS3697*	TAMU		5,344	1,097	1,107	3,140	-
17	Horizon	UF		5,333	523	1,171	3,639	-
18	TAMO 405	TAMU		5,305	556	1,594	3,155	5,363
19	TX02U7682*	TAMU		5,244	1,600	1,277	2,367	5,035
20	Ozark	UA		5,212	595	1,760	2,857	-
21	Plot Spike	LSU		5,085	819	1,243	3,023	5,270
22	Heavy Grazer 76-30	ETSC		5,016	349	1,216	3,451	5,278
23	TX07CS2609*	TAMU		5,003	673	1,402	2,928	-
24	TAMO 606	TAMU		4,964	522	1,294	3,148	5,244
25	FL0522-92-S1	UF		4,882	524	1,647	2,711	-
26	Walken	JSC		4,879	288	1,201	3,390	-
27	LA 99017	LSU		4,609	379	854	3,376	4,851
28	Nora	UA		4,454	1,235	1,282	1,937	-
29	Bob	UA		4,084	497	1,001	2,586	-
30	Mac	California		3,588	1,387	638	1,563	-

		Mean	5,422	947	1,426	3,049	5,416
*Experimental Lines		CV (%)	13	52	24	12	-
¹ East TX Seed Co. (ETSC)		LSD (5%)	817	577	396	418	-
Justin Seed Co. (JSC)							
Noble Foundation (NF)							

Stephenville 2010

				Dry Matter Yields
				Total Forage Production
				4/28/2010
2010				
Rank	Variety	Classification ¹	Source ²	lb/a
1	TAMcale 6331	TRIT	AgriPro	4,633
2	Jackpot	HRWW	AgriPro	4,162
3	TAMsoft 700	SRWW	AgriPro	4,068
4	Maton Rye	Cereal Rye	NF	3,987
5	Doans	HRWW	AgriPro	3,765
6	TAM 203	HRWW	AgriPro	3,443
7	P-919	WB	PS	3,343
8	Fuller	HRWW	KSU	3,195
9	Coronado	HRWW	AgriPro	3,149
10	TAM 401	HRWW	AgriPro	2,970
11	LA 99016	Oat	LSU	2,935
12	Slic Trit	TRIT	WSC	2,902
13	TAMO 405	Oat	TAMU	2,781
14	TAM 112	HRWW	TAMU	2,778
15	Beef Builder	Ryegrass	FSG	2,771
16	TAMO 406	Oat	TAMU	2,637
17	TAM 304	HRWW	TAMU	2,497
18	TAMTBO	Ryegrass	TAMU	2,442
19	TAMBAR 501	WB	TAMU	2,348
20	TAMO 606	Oat	TAMU	2,307
21	Heavy Grazer 76-30	Oat	ETS	2,135
			Mean	3,107
			CV (%)	22.5
			LSD (5%)	1,164

¹Hard Red Winter Wheat (HRWW)
 Soft Red Winter Wheat (SRWW)
 Winter Barley (WB)
 Triticale (TRIT)

²East TX Seed Co. (ETSC)
 Forbes Seed and Grain (FSG)
 Noble Foundation (NF)
 Watley Seed Co. (WSC)



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