

# 2015



## Texas Cool-Season Annual Forage Results

[varietytesting.tamu.edu](http://varietytesting.tamu.edu)

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# 2015

## Forage Variety Results

Texas Cool-Season Annual Variety Trials

[varietytesting.tamu.edu/wheat](http://varietytesting.tamu.edu/wheat)

Texas A&M AgriLife Extension Service

Clark Neely, Daniel Hathcoat,  
and David Drake

Texas A&M AgriLife Research

Amir Ibrahim, Jackie Rudd, Gerald Smith,  
Srirama Krishna Reddy, Bill Pinchak, Doug Fulford  
Russell Sutton, Jason Baker, Bryan Simoneaux,  
Geraldine Opeña, Ravindra Devkota, and Shannon Baker

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# Introduction

The statewide Cool-Season Annual Forage Variety Trial data presented in the following pages are the results from eight trials coordinated and implemented by numerous Texas A&M AgriLife Extension and Research faculty and staff. We also appreciate the cooperation from Texas County Extension Agents, producers, and private industry partners that contributed locations, property, seed, time and other assets to conduct these field trials. The purpose of this publication is to provide unbiased yield and quality data for forage producers across the state. With this information, Texas forage producers can make educated decisions regarding the most appropriate varieties for their geographic region.

## **Variety Selection:**

Selection of an appropriate cool season forage variety is one of the most important decisions a producer will make. This decision can impact the potential forage yield, forage nutritive value, disease and insect management, and maturity of the crop. It is important that producers have diversity in the varieties planted on their farms to minimize production risks. The choice of varieties depends on the intended use of the crop (forage or dual-purpose) and when forage is most needed. Even though total forage production may be similar, certain species/varieties tend to produce more forage during the fall, winter, and/or spring. Variety diversification spreads the risk associated with potentially devastating pests (leaf and stripe rust, Hessian fly, wheat curl mite, greenbugs, etc.) and yield loss from adverse environmental factors (freeze, drought, etc.).

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

When selecting a variety for the 2016 season, producers should consider the variables that limited yield in the previous growing season; which may have had a negative impact on the results presented in the following pages. We strongly encourage producers to look at multiple year averages and to look at numerous relevant variety trial locations.

Forage quality is often overlooked in an effort to maximize yield, but can vary between varieties and species and especially over time. Producers should be aware of these differences and that forage quality will influence rate of gain for livestock. Neutral detergent fiber (NDF) and acid detergent fiber (ADF) are measurements often used as indicators of intake and digestibility, respectively. NDF measures total fiber (cell wall components) and is composed of lignin, cellulose, and hemi-cellulose, whereas ADF measures only the more recalcitrant fiber components which include lignin and cellulose. Total digestible nutrients (TDN) is derived from crude protein (CP) and ADF and indicates digestible energy in forages using the following equation:

$$\text{TDN (\%)} = 81.38 + 0.36 * \text{CP} - 0.77 * \text{ADF}.$$

In vitro dry matter digestibility (IVDM) is another method of determining digestibility of a forage through incubation of ground samples in rumen fluid followed by an NDF fluid treatment. When interpreting results, ADF and NDF values are inversely related to intake potential and digestibility. Therefore, lower values are typically more desirable, while higher values are more advantageous for TDN, IVDM and CP.

## **Interpreting the Data:**

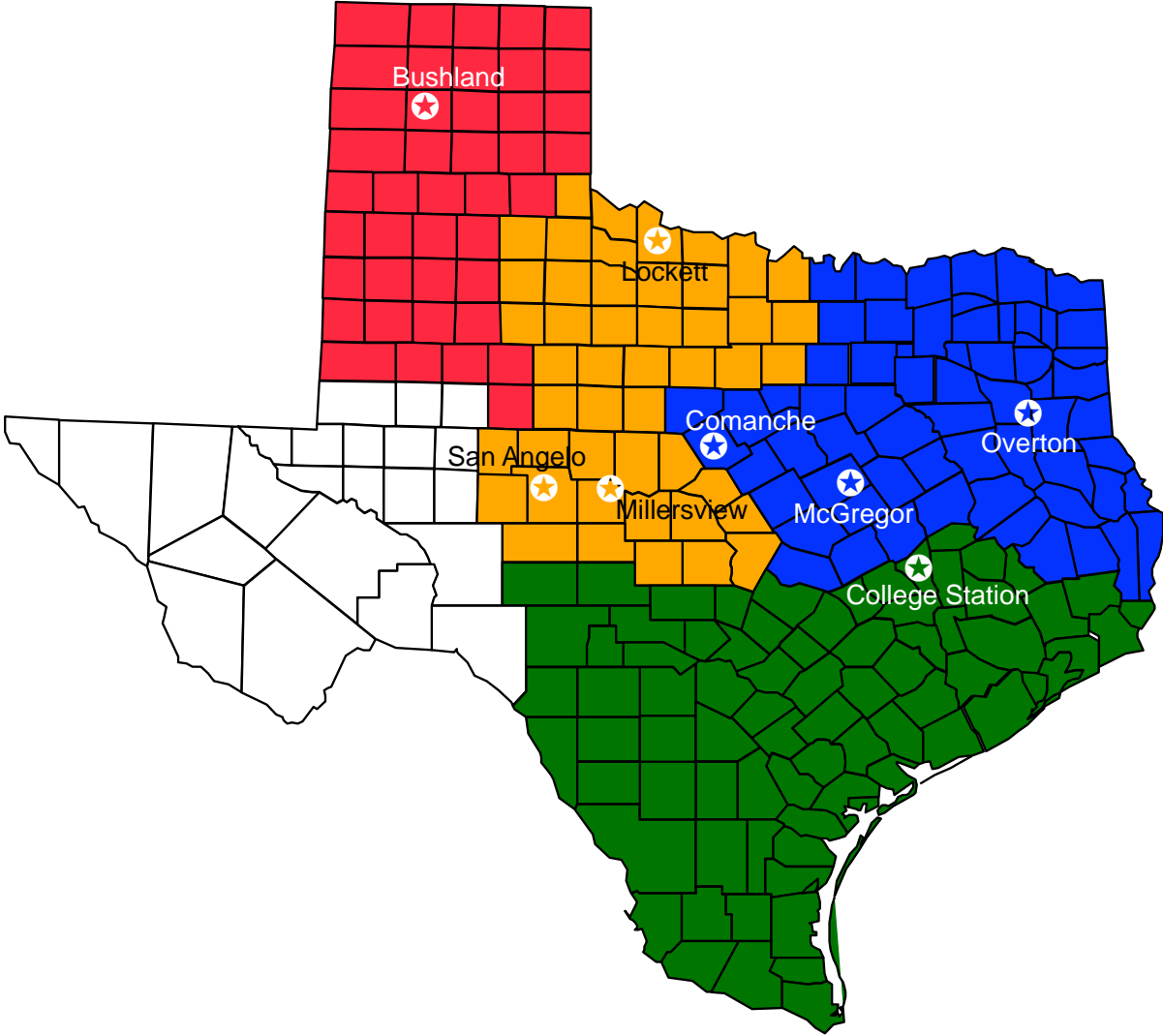
Forage yield at each location has been analyzed using appropriate statistical procedures. The statistical analysis provides the mean, CV, and LSD values. It is important to note these statistical values to prevent misinterpretation of any replicated data.

The mean is another term for the average. Therefore, a mean yield is the average of all the plots within a trial. Individual variety yields can be compared to the mean yield to determine how these varieties performed within the trial (i.e. were they above or below average?). This average can also be used as an indication of the environment for that location. A low mean yield can indicate poor growing conditions during the season; likewise, a high yield average can indicate favorable growing conditions.





The CV (Coefficient of Variation) value, expressed as a percentage, indicates the level of unexplained variability present within the trial. A high CV value indicates considerable 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 from non-uniform stands, non-uniform insect or disease pressure, variability in harvesting, or other issues. Generally, CV values in excess of 25% signify that there were problems in the trial, leading the reader to question the validity of the data as a true representation of varietal performance.

The LSD (Least Significant Difference) value is a numeric range to help the reader determine if the varieties performed differently from one another within the trial. If the LSD value is 2 ton/ac in a trial in which Variety A yielded 6 ton/ac and Variety B yielded 3 ton/ac, then Variety A is said to be significantly better. In that same trial with an LSD value of 2 ton/ac at a 0.05 (5%) significance level, the statistical inference one could say is that Variety A would yield better than Variety B in 19 out of 20 trials conducted in which there was at least a 2 ton/ac difference in yield. In this hypothetical comparison, you might have a 20<sup>th</sup> trial with a 2 ton/ac difference that there is not truly a difference between Variety A and B, but random chance caused the 2 ton difference.

# Texas Regional Map



**Legend:**

Texas High Plains	
Texas Rolling Plains	
Texas Blacklands and East Texas	
South Texas	

# 2015 Texas Region Overview

## **Texas Blacklands:**

The Texas Blacklands started off having a good growing season for winter small grains. However, as the season progressed, excessive rainfall set in during late winter and continued throughout the spring. This moisture allowed for the establishment of foliar diseases and coupled with saturated soils, contributed to overall yield reductions. The moisture made grazing and mechanical harvest difficult due to the continued periods of wet soil conditions.

## **Texas High Plains:**

Producers in the Texas High Plains struggled this winter with a continuing severe drought in the fall. Rainfall events were few and far between initially, but nearing the latter portion of the growing season, moisture was more abundant. Strong storms at the end of the season produced high winds and hail that took out some of the fields in this area. The High Plains also dealt with uncommon fungal diseases not typical for the region. Due to the wet spring, stripe rust reached threshold levels, causing some growers to apply fungicides. Head scab was also reported in some fields that were cut for silage as well. Overall, yields were above average for both irrigated and dryland fields.

## **Texas Rolling Plains:**

The Texas Rolling Plains producers experienced a dry fall and early winter much like the producers in the High Plains, but springtime brought good, timely showers to small grain fields. Insects and disease were present throughout much of the region. Stripe rust was particularly problematic this season along with root rot and above average reports of mosaic viruses. Strong storms near the end of the season produced strong winds and hail that negatively impacted some fields.

## **South Texas:**

In the southern part of the state, fall planting went as normal with good soil moisture for planting. As the fall progressed, sufficient rainfall continued allowing for good emergence and stand establishment. Excessive rainfall from the late winter through the spring left many small grain fields standing in water. Foliar diseases were plentiful in this area due to the moisture. Much like the Blacklands, grazing and mechanical harvest of small grain fields in this area became very difficult due to the prolonged wet soil conditions.



# Forage Trial Agronomic Data

Location <sup>1</sup>	Cooperator(s)	Yield Limiting Issues	Planting Date	Fertilizer Total (lb N/A)	Pesticide Applied (Date)
<b>Bushland<sup>2</sup></b>	Texas A&M AgriLife Research and Extension Center	Winterkill on Oats	9/17/14	None Required	Dimethoate 400 (1/19/15)
<b>College<sup>2</sup> Station</b>	Texas A&M Research and Extension Agronomy Farm	Some BYDV <sup>3</sup>	9/25/14	120	Weedmaster Dimethoate (1/21/15)
<b>Comanche<sup>2</sup></b>	Indian Creek Farm; Rodney Stephens	None	9/23/14	100	None Required
<b>Overton</b>	Texas A&M Research and Extension Center	None	10/8/14	--	None Required
<b>San Angelo</b>	Texas A&M AgriLife Research and Extension Center	Dry Early Fall; Grazing Damage; Heavy Stripe Rust in Spring	9/24/14	50	None Required
<b>Lockett<sup>2</sup></b>	Texas A&M AgriLife Research and Extension Center	None	9/23/14	50	None Required
<b>McGregor</b>	Texas A&M AgriLife Research Center	BYDV	9/26/14	50	MCPA Ester + Dimethoate (1/29/15)

<sup>1</sup>These locations were planted with a seeding rate of 90 lb/a. All seed was treated with Cruiser Maxx Vibrance for Cereals

<sup>2</sup>Bushland, College Station, Comanche and Lockett were the only locations that irrigation was available.

<sup>3</sup>BYDV – Barley Yellow Dwarf Virus

**2015 Small Grains Forage Trial - Total Season Forage Yield State Wide**

Class <sup>1</sup>	Variety <sup>2</sup>	Company	Dry Matter Yield (lbs/a)						
			Bushland (Irrigated)	Lockett (Irrigated)	San Angelo (Dryland)	College Station (Irrigated)	Comanche (Irrigated)	McGregor (Dryland)	
HRWW	Duster	OSU	9401	8308	5285	4050	7590	5423	
	Fannin	Syngenta	8249	5963	5570	3574	6300	6587	
	WB Grainfield	Monsanto	8198	8488	8695	5010	7950	8956	
	Razor**	Syngenta	8733	6583	7767	2400	7130	5351	
	WB Redhawk	Monsanto	9206	5945	5253	4850	6910	7780	
	TAM 114	TAMU	9823	8189	6428	3075	8270	10468	
	TAM 204**	TAMU	8476	6694	6708	4968	7240	5777	
	TAM 401**	TAMU	8651	6301	7079	4821	6900	7393	
	TX09D1172*	TAMU	9669	7311	5568	3835	7420	6697	
	TX09A001194*	TAMU	10379	7563	4816	3511	7030	5638	
	TX08A001249*	TAMU	9278	6615	5529	3550	7600	5351	
	Weathermaster 135**	Unknown	9041	7022	6249	4095	7320	5648	
	Oat	Bob	UA	---	---	4192	4888	9040	9283
Horizon 201		Plantation Seed	---	---	8096	5095	9280	9797	
Horizon 270		Plantation Seed	---	---	5250	4862	6740	12160	
Horizon 306		Plantation Seed	---	---	6394	3851	8640	8893	
Heavy Grazer 76-30		East Texas Seed	---	---	9053	3433	8500	5684	
OKAY		Noble Foundation	---	---	---	5250	8800	7938	
RAM 99016		LSU	---	---	5767	4912	8070	8194	
TAMO 411		TAMU	---	7541	6696	3686	7930	9591	
TAMO 606		TAMU	---	7194	6748	3518	7810	6286	
TX09CS031*		TAMU	5472	6807	6080	3029	7280	9521	
TX09CS1029*		TAMU	3137	5439	5137	4125	7560	7052	
TX07CS1948*		TAMU	7272	7056	6120	4177	7110	7804	
TX07CS2257*		TAMU	6501	7158	5590	4022	8530	10737	
Walken		UK	7118	7406	5656	4252	7360	8493	
Rye		Elbon	Noble Foundation	10080	8085	6728	3564	7440	9802
	Maton	Noble Foundation	10420	8278	7423	5333	8430	8370	
	Maton II	Noble Foundation	10718	8813	7210	4484	8790	6414	
	Oklon	Noble Foundation	---	---	---	5225	8620	7898	
Ryegrass	Gulf	TAMU	---	---	---	3731	8770	6653	
	Marshall	Wax Company	---	---	---	3837	8490	6599	
	Nelson	TAMU	---	---	---	3920	8830	10313	
	Prine	UF	---	---	---	4180	9270	6890	
	SunGrazer	Oregro Seeds, Inc	---	---	---	3572	9050	8519	
	TAM 90	TAMU	---	---	---	5120	9000	8022	
	TAMTBO	TAMU	---	---	---	4045	8300	7049	
	Haybet	USDA/MAES	---	---	---	---	6340	---	
SRWW	25R40	Pioneer	---	---	---	---	7660	---	
	TRIT	TAMcale 5019	TAMU	9648	8017	8866	4433	7150	8269
TAMcale 6331		TAMU	7180	8264	7476	2786	7170	6111	
Forerunner		Weaver Seed	9052	7652	---	---	---	---	
Fridge**		Elliot Plant Breeding	7920	6676	6554	5371	8680	7097	
Grazeall I		Gaylan Ward Seed	8589	7544	---	---	---	---	
NF 101		Noble Foundation	---	---	---	5121	7630	8918	
NF 201 (NF96210)		Noble Foundation	---	---	---	3358	7140	8034	
Trical 348		Syngenta	9391	7235	---	5066	7380	7913	
Texan		Gaylan Ward Seed	9607	7028	---	---	---	---	
TX12VT8220*		TAMU	10142	7294	---	---	---	---	
TX12VT8222*		TAMU	9576	7364	---	---	---	---	
TX12VT8228*		TAMU	9484	7928	---	---	---	---	
TX12VT8229*		TAMU	9905	7188	---	---	---	---	
WB		Maja	Oregon State	---	---	---	---	6920	---
		P-919**	Paramount Seeds	9103	7841	7490	3573	8490	6987
	TAMbar 501	TAMU	9443	6666	5942	4867	8350	12094	
<b>Mean</b>			<b>8753</b>	<b>7315</b>	<b>6502</b>	<b>4178</b>	<b>7889</b>	<b>7854</b>	
<b>LSD (5%)</b>			<b>1670</b>	<b>1529</b>	<b>2163</b>	<b>946</b>	<b>1844</b>	<b>3051</b>	
<b>CV (%)</b>			<b>14</b>	<b>15</b>	<b>20</b>	<b>15</b>	<b>12</b>	<b>19</b>	

\*Experimental Lines

\*\*Awnless/Beardless

<sup>1</sup>Hard Red Winter Wheat (HRWW)

Soft Red Winter Wheat (SRWW)

Triticale (TRIT)

Spring Barley (SB)

Winter Barley (WB)

<sup>2</sup>All Ryegrass Varieties are Tetraploids EXCEPT Gulf, Marshal, and TAM 90.



## 2015 Small Grains Forage Trial - Total Yield (lb/a) by Class

### 2015 State Wide

Class <sup>1</sup>	Bushland (Irrigated)	Locket (Irrigated)	Comanche (Irrigated)	San Angelo (Dryland)	McGregor (Dryland)	College Station (Irrigated)
HRWW	9092	7121	7323	6288	6685	3856
Oat	5900	6943	8045	6245	9191	4604
Rye	10406	8392	8321	7097	6607	3353
Ryegrass	---	---	8816	---	7922	4870
TRIT	9136	7472	7524	7730	7536	3717
WB	9273	7254	7923	6716	8765	4468
<b>Mean</b>	<b>8753</b>	<b>7315</b>	<b>7890</b>	<b>6502</b>	<b>7854</b>	<b>4178</b>
<b>LSD (5%)</b>	<b>947</b>	<b>782</b>	<b>1101</b>	<b>1213</b>	<b>1536</b>	<b>524</b>
<b>CV (%)</b>	<b>16</b>	<b>16</b>	<b>11</b>	<b>23</b>	<b>22</b>	<b>18</b>

### 2015 Bushland

Class <sup>1</sup>	Cut 1	Cut 2	Cut 3	Cut 4	Total
Rye	3024	3041	4341	---	10406
WB	3297	2433	3544	---	9273
TRIT	3259	2352	3525	---	9136
HRWW	3069	2602	3422	---	9092
Oat	2705	1395	1800	---	5900
<b>Mean</b>	<b>3087</b>	<b>2365</b>	<b>3301</b>	<b>---</b>	<b>8753</b>
<b>LSD (5%)</b>	<b>420</b>	<b>366</b>	<b>615</b>	<b>---</b>	<b>947</b>
<b>CV (%)</b>	<b>20</b>	<b>23</b>	<b>27</b>	<b>---</b>	<b>16</b>

### 2015 Lockett

Class <sup>1</sup>	Cut 1	Cut 2	Cut 3	Cut 4	Total
Rye	2705	2910	2777	---	8392
TRIT	2596	2923	1953	---	7472
WB	2350	1550	3353	---	7254
HRWW	2342	2315	2464	---	7121
Oat	2260	2207	2476	---	6943
<b>Mean</b>	<b>2438</b>	<b>2494</b>	<b>2383</b>	<b>---</b>	<b>7315</b>
<b>LSD (5%)</b>	<b>491</b>	<b>601</b>	<b>484</b>	<b>---</b>	<b>782</b>
<b>CV (%)</b>	<b>30<sup>a</sup></b>	<b>36<sup>a</sup></b>	<b>30<sup>a</sup></b>	<b>---</b>	<b>16</b>

### 2015 Comanche

Class <sup>1</sup>	Cut 1	Cut 2	Cut 3	Cut 4	Total
Ryegrass	1483	1676	5657	---	8816
Rye	1984	1765	4572	---	8321
Oat	1615	1463	4968	---	8045
WB	1284	1051	5588	---	7923
TRIT	1352	1346	4826	---	7524
HRWW	991	1496	4860	---	7323
SB	3365	607	2372	---	6343
<b>Mean</b>	<b>1435</b>	<b>1452</b>	<b>5004</b>	<b>---</b>	<b>7890</b>
<b>LSD (5%)</b>	<b>617</b>	<b>522</b>	<b>1136</b>	<b>---</b>	<b>1101</b>
<b>CV (%)</b>	<b>35<sup>a</sup></b>	<b>29<sup>a</sup></b>	<b>19</b>	<b>---</b>	<b>11</b>

## 2015 Small Grains Forage Trial - Total Yield (lb/a) by Class Continued

### 2015 San Angelo

Class <sup>1</sup>	Cut 1	Cut 2	Cut 3	Cut 4	Total
TRIT	468	1404	5654	---	7730
Rye	737	1339	4441	---	7097
WB	454	1530	4557	---	6716
HRWW	612	1230	4383	---	6288
Oat	537	1225	4370	---	6245
<b>Mean</b>	<b>574</b>	<b>1268</b>	<b>4499</b>	<b>---</b>	<b>6502</b>
<b>LSD (5%)</b>	<b>NS</b>	<b>224</b>	<b>930</b>	<b>---</b>	<b>1213</b>
<b>CV (%)</b>	<b>45<sup>a</sup></b>	<b>25</b>	<b>29<sup>a</sup></b>	<b>---</b>	<b>23</b>

### 2015 McGregor

Class <sup>1</sup>	Cut 1	Cut 2	Cut 3	Cut 4	Total
Oat	1309	8024	---	---	9191
WB	1153	7793	---	---	8765
Ryegrass	931	7025	---	---	7922
TRIT	685	6969	---	---	7536
HRWW	401	6281	---	---	6685
Rye	599	6119	---	---	6607
<b>Mean</b>	<b>855</b>	<b>7082</b>	<b>---</b>	<b>---</b>	<b>7854</b>
<b>LSD (5%)</b>	<b>230</b>	<b>1441</b>	<b>---</b>	<b>---</b>	<b>1536</b>
<b>CV (%)</b>	<b>43<sup>a</sup></b>	<b>23</b>	<b>---</b>	<b>---</b>	<b>22</b>

### 2015 College Station

Class <sup>1</sup>	Cut 1	Cut 2	Cut 3	Cut 4	Total
Ryegrass	194	1225	3236	204	4870
Oat	482	1447	2708	26	4604
WB	373	757	3301	13	4468
HRWW	331	840	2704	15	3856
TRIT	489	1094	2048	20	3717
Rye	186	581	2577	10	3353
<b>Mean</b>	<b>367</b>	<b>1096</b>	<b>2701</b>	<b>48</b>	<b>4178</b>
<b>LSD (5%)</b>	<b>170</b>	<b>262</b>	<b>398</b>	<b>24</b>	<b>524</b>
<b>CV (%)</b>	<b>74<sup>a</sup></b>	<b>38<sup>a</sup></b>	<b>21</b>	<b>80<sup>a</sup></b>	<b>18</b>

<sup>1</sup>Hard Red Winter Wheat (HRWW)

Triticale (TRIT)

Winter Barley (WB)

Spring Barley (SB)

<sup>a</sup>Trials with a coefficient of variation (CV)  $\geq$  25% contain excessive experimental error.

Readers should consider trials in a similar environment to confirm varietal yield.

### 2015 Small Grains Forage Trial - Bushland (Irrigated)

Rank <sup>a</sup>	Variety	Class <sup>1</sup>	Company	Dry Matter Yield (lbs/a)			
				Clip 1	Clip 2	Clip 3	Total
				11/24/14	2/13/15	4/3/15	3 Clips
1	Maton II	Rye	Noble Foundation	3302	3024	4392	10718
2	Maton	Rye	Noble Foundation	2942	3312	4166	10420
3	TX09A001194*	HRWW	TAMU	3312	2921	4145	10379
4	TX12VT8220*	TRIT	TAMU	3415	2993	3734	10142
5	Elbon	Rye	Noble Foundation	2829	2788	4464	10080
6	TX12VT8229*	TRIT	TAMU	3528	2489	3888	9905
7	TAM 114	HRWW	TAMU	3209	2932	3682	9823
8	TX09D1172*	HRWW	TAMU	3374	2716	3580	9669
9	TAMcale 5019	TRIT	TAMU	3343	2510	3796	9648
10	Texan	TRIT	Gaylan Ward Seed	3343	2078	4186	9607
11	TX12VT8222*	TRIT	TAMU	3199	2746	3631	9576
12	TX12VT8228*	TRIT	TAMU	3538	2407	3538	9484
13	TAMbar 501	WB	TAMU	3394	2726	3322	9443
14	Duster	HRWW	OSU	3796	2551	3055	9401
15	Slick Trit	TRIT	Watley Seed	3065	2428	3898	9391
16	TX08A001249*	HRWW	TAMU	2582	2849	3847	9278
17	WB Redhawk	HRWW	Monsanto	3127	2335	3744	9206
18	P-919**	WB	Paramount Seeds	3199	2140	3765	9103
19	Forerunner**	TRIT	Weaver Seed	3230	2397	3425	9052
20	Weathermaster 135**	HRWW	Unknown	2860	2849	3333	9041
21	SY Razor**	HRWW	Syngenta	2962	2366	3405	8733
22	TAM 401**	HRWW	TAMU	2664	2746	3240	8651
23	Grazeall I	TRIT	Gaylan Ward Seed	3014	2129	3446	8589
24	TAM 204**	HRWW	TAMU	3302	2582	2592	8476
25	Fannin	HRWW	Syngenta	2829	2119	3302	8249
26	WB Grainfield	HRWW	Monsanto	2808	2253	3137	8198
27	Fridge**	TRIT	Elliot Plant Breeding	3436	1615	2870	7920
28	TX07CS1948*	Oat	TAMU	2572	1903	2798	7272
29	TAMcale 6331	TRIT	TAMU	2736	2078	2366	7180
30	Walken	Oat	UK	2973	1636	2510	7118
31	TX07CS2257*	Oat	TAMU	2551	1646	2304	6501
32	TX09CS031*	Oat	TAMU	3014	1070	1389	5472
33	TX09CS1029*	Oat	TAMU	2417	720	---	3137
<b>Mean</b>				<b>3087</b>	<b>2365</b>	<b>3301</b>	<b>8753</b>
<b>LSD (5%)</b>				<b>868</b>	<b>660</b>	<b>1110</b>	<b>1670</b>
<b>CV (%)</b>				<b>20</b>	<b>20</b>	<b>24</b>	<b>14</b>

\*Experimental Lines

\*\*Awnless/Beardless

<sup>1</sup>Hard Red Winter Wheat (HRWW)

Triticale (TRIT)

Winter Barley (WB)

<sup>a</sup>Rank is based on Total Forage Weight

**2015 Small Grains Forage Trial - Bushland (Irrigated) Clip 2 (2/13/15) Forage Quality Data**

Rank <sup>a</sup>	Variety	Class <sup>1</sup>	Company	Dry Matter Yield (lb/a)	Component of Forage (%)						
					Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>^</sup>	Ash	
1	Duster	HRWW	OSU	3796	22.7	42.8	24.5	70.7	83.0	13.1	
2	TX12VT8228*	TRIT	TAMU	3538	23.9	43.9	24.4	71.2	80.3	14.7	
3	TX12VT8229*	TRIT	TAMU	3528	24.0	42.3	26.0	70.0	80.7	14.9	
4	Fridge**	TRIT	Elliot Plant Breeding	3436	20.7	48.9	28.0	67.2	77.1	14.3	
5	TX12VT8220*	TRIT	TAMU	3415	24.7	43.8	23.8	71.9	81.9	13.6	
6	TAMbar 501	WB	TAMU	3394	21.1	47.2	28.3	67.2	78.8	14.4	
7	TX09D1172*	HRWW	TAMU	3374	21.9	45.0	21.6	72.6	80.8	11.5	
8	TAMcale 5019	TRIT	TAMU	3343	25.5	41.6	24.3	71.8	82.6	13.8	
9	Texan	TRIT	Gaylan Ward Seed	3343	22.5	43.9	25.4	69.9	81.8	12.2	
10	TX09A001194*	HRWW	TAMU	3312	24.1	45.2	25.3	70.6	79.2	12.4	
11	Maton II	Rye	Noble Foundation	3302	25.2	39.0	23.2	72.6	86.5	12.7	
12	TAM 204**	HRWW	TAMU	3302	24.0	43.3	25.5	70.4	81.6	13.7	
13	Forerunner**	TRIT	Weaver Seed	3230	23.0	45.9	24.2	71.0	79.9	14.8	
14	TAM 114	HRWW	TAMU	3209	25.6	42.6	25.3	71.2	82.5	14.9	
15	P-919**	WB	Paramount Seeds	3199	24.2	42.8	25.5	70.5	82.4	14.5	
16	TX12VT8222*	TRIT	TAMU	3199	23.4	43.5	25.1	70.4	80.5	14.0	
17	WB Redhawk	HRWW	Monsanto	3127	21.9	45.9	30.1	66.1	80.6	12.7	
18	Slick Trit	TRIT	Wattley Seed	3065	25.4	42.5	23.7	72.3	82.5	13.9	
19	Grazeall I	TRIT	Gaylan Ward Seed	3014	26.2	39.9	23.5	72.7	81.2	13.2	
20	TX09CS031*	Oat	TAMU	3014	19.7	52.9	25.6	68.7	73.4	12.5	
21	Walken	Oat	UK	2973	22.7	47.1	24.5	70.7	81.1	14.6	
22	SY Razor**	HRWW	Syngenta	2962	21.0	44.7	25.2	69.5	78.8	11.8	
23	Maton	Rye	Noble Foundation	2942	22.9	41.0	25.1	70.3	84.7	12.3	
24	Weathermaster 135**	HRWW	Unknown	2860	22.5	42.1	26.3	69.2	82.1	13.4	
25	Elbon	Rye	Noble Foundation	2829	26.0	37.0	20.7	74.8	86.7	12.8	
26	Fannin	HRWW	Syngenta	2829	24.5	45.7	22.9	72.6	81.5	13.3	
27	WB Grainfield	HRWW	Monsanto	2808	22.1	42.2	26.0	69.3	82.9	12.7	
28	TAMcale 6331	TRIT	TAMU	2736	22.7	50.9	28.4	67.7	77.5	16.2	
29	TAM 401**	HRWW	TAMU	2664	24.6	42.7	23.0	72.5	82.0	13.9	
30	TX08A001249*	HRWW	TAMU	2582	22.6	42.6	23.8	71.1	80.6	11.5	
31	TX07CS1948*	Oat	TAMU	2572	22.0	44.7	23.8	70.9	81.6	13.1	
32	TX07CS2257*	Oat	TAMU	2551	19.6	43.9	23.1	70.6	80.7	13.2	
33	TX09CS1029*	Oat	TAMU	2417	19.4	55.2	28.1	66.7	69.7	11.4	
				<b>Mean</b>	<b>3087.0</b>	<b>23.1</b>	<b>44.3</b>	<b>25.0</b>	<b>70.5</b>	<b>80.8</b>	<b>13.4</b>
				<b>LSD (5%)</b>	<b>868.0</b>	<b>NS</b>	<b>6.2</b>	<b>4.9</b>	<b>5.1</b>	<b>3.3</b>	<b>2.3</b>
				<b>CV (%)</b>	<b>20.0</b>	<b>10.6</b>	<b>6.8</b>	<b>9.7</b>	<b>3.6</b>	<b>2.0</b>	<b>8.3</b>

<sup>^</sup>In Vitro True Digestibility  
<sup>\*</sup>Experimental Lines  
<sup>\*\*</sup>Awnless/Beardless  
<sup>1</sup>Hard Red Winter Wheat (HRWW)  
Triticale (TRIT)  
Winter Barley (WB)  
<sup>a</sup>Rank is based on Forage Yield

**2015 Small Grains Forage Trial - Bushland (Irrigated) Clip 3 (4/3/15) Forage Quality Data**

Rank <sup>a</sup>	Variety	Class <sup>1</sup>	Company	Dry Matter Yield (lb/a)	Component of Forage (%)						
					Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>^</sup>	Ash	
1	Maton	Rye	Noble Foundation	3312	22.6	44.8	24.6	70.6	81.9	13.0	
2	Maton II	Rye	Noble Foundation	3024	21.5	46.2	24.5	70.3	80.4	12.3	
3	TX12VT8220*	TRIT	TAMU	2993	23.4	43.0	21.8	73.0	81.9	12.2	
4	TAM 114	HRWW	TAMU	2932	23.4	43.8	23.3	71.8	81.2	13.0	
5	TX09A001194*	HRWW	TAMU	2921	24.2	44.7	23.8	71.7	80.0	14.2	
6	TX08A001249*	HRWW	TAMU	2849	23.7	45.1	23.3	72.0	79.8	13.3	
7	Weathermaster 135**	HRWW	Unknown	2849	22.5	45.1	22.7	72.0	81.1	11.9	
8	Elbon	Rye	Noble Foundation	2788	23.0	44.9	23.4	71.7	83.1	13.0	
9	TAM 401**	HRWW	TAMU	2746	23.2	45.8	23.0	72.0	80.3	12.9	
10	TX12VT8222*	TRIT	TAMU	2746	24.7	43.1	24.0	71.8	80.8	14.6	
11	TAMbar 501	WB	TAMU	2726	23.7	45.9	24.3	71.2	80.8	13.7	
12	TX09D1172*	HRWW	TAMU	2716	24.4	43.6	23.1	72.4	80.8	13.1	
13	TAM 204**	HRWW	TAMU	2582	25.8	42.8	22.2	73.5	81.4	12.8	
14	Duster	HRWW	OSU	2551	24.0	43.8	22.9	72.4	80.6	12.9	
15	TAMcale 5019	TRIT	TAMU	2510	23.5	45.6	24.3	71.1	80.1	14.4	
16	TX12VT8229*	TRIT	TAMU	2489	22.5	47.3	23.0	71.8	78.3	13.4	
17	Slick Trit	TRIT	Watley Seed	2428	25.8	38.8	22.5	73.3	83.0	14.5	
18	TX12VT8228*	TRIT	TAMU	2407	22.1	47.7	27.5	68.2	76.7	15.2	
19	Forerunner**	TRIT	Weaver Seed	2397	25.1	44.4	22.5	73.1	81.3	14.3	
20	SY Razor**	HRWW	Syngenta	2366	24.0	47.1	23.4	72.0	78.0	13.8	
21	WB Redhawk	HRWW	Monsanto	2335	22.8	45.3	23.4	71.5	80.7	11.9	
22	WB Grainfield	HRWW	Monsanto	2253	24.3	43.6	22.5	72.8	81.1	12.1	
23	P-919**	WB	Paramount Seeds	2140	22.5	46.9	24.7	70.4	82.4	14.3	
24	Grazeall I	TRIT	Gaylan Ward Seed	2129	26.0	42.9	21.5	74.2	81.7	13.7	
25	Fannin	HRWW	Syngenta	2119	23.9	46.1	23.4	71.9	80.0	13.2	
26	TAMcale 6331	TRIT	TAMU	2078	24.9	45.3	23.7	72.1	79.2	15.3	
27	Texan	TRIT	Gaylan Ward Seed	2078	24.2	44.0	23.5	72.0	82.2	14.3	
28	TX07CS1948*	Oat	TAMU	1903	19.8	45.8	21.8	71.7	80.2	13.2	
29	TX07CS2257*	Oat	TAMU	1646	19.7	46.6	20.5	72.7	80.3	13.0	
30	Walken	Oat	UK	1636	23.5	44.4	21.2	73.6	81.4	13.4	
31	Fridge**	TRIT	Elliot Plant Breeding	1615	25.5	44.2	23.2	72.7	79.7	14.4	
32	TX09CS031*	Oat	TAMU	1070	23.0	49.3	20.7	73.7	78.8	13.3	
33	TX09CS1029*	Oat	TAMU	720	---	---	---	---	---	---	
				<b>Mean</b>	<b>2365.0</b>	<b>23.5</b>	<b>44.9</b>	<b>23.1</b>	<b>72.0</b>	<b>80.6</b>	<b>13.5</b>
				<b>LSD (5%)</b>	<b>660.0</b>	<b>1.9</b>	<b>3.7</b>	<b>2.6</b>	<b>2.4</b>	<b>1.9</b>	<b>1.5</b>
				<b>CV (%)</b>	<b>19.9</b>	<b>4.0</b>	<b>4.1</b>	<b>5.5</b>	<b>1.6</b>	<b>1.2</b>	<b>5.5</b>

<sup>^</sup>In Vitro True Digestibility  
<sup>\*</sup>Experimental Lines  
<sup>\*\*</sup>Awnless/Beardless  
<sup>1</sup>Hard Red Winter Wheat (HRWW)  
 Triticale (TRIT)  
 Winter Barley (WB)  
<sup>a</sup>Rank is based on Forage Yield

## 2015 Small Grains Forage Trial - Bushland (Irrigated) Species Quality Data

### Clip 2: 2/13/15

Rank <sup>a</sup>	Class <sup>1</sup>	Dry Matter Yield (lb/a)	Component of Forage (%)					
			Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>^</sup>	Ash
1	WB	3297	22.7	45.0	26.9	68.8	80.6	14.5
2	TRIT	3259	23.8	44.3	25.2	70.6	80.6	14.1
3	HRWW	3069	23.1	43.7	25.0	70.5	81.3	12.9
4	Rye	3024	24.7	39.0	23.0	72.6	86.0	12.6
5	Oat	2705	20.7	48.7	25.0	69.5	77.3	13.0
<b>Mean</b>		<b>3087.0</b>	<b>23.1</b>	<b>44.3</b>	<b>25.0</b>	<b>70.5</b>	<b>80.8</b>	<b>13.4</b>
<b>LSD (5%)</b>		<b>419.9</b>	<b>2.3</b>	<b>3.6</b>	<b>NS</b>	<b>NS</b>	<b>2.7</b>	<b>1.2</b>
<b>CV (%)</b>		<b>19.8</b>	<b>10.1</b>	<b>8.2</b>	<b>10.4</b>	<b>3.7</b>	<b>3.4</b>	<b>9.4</b>

### Clip 3: 4/3/15

Rank <sup>a</sup>	Class <sup>1</sup>	Dry Matter Yield (lb/a)	Component of Forage (%)					
			Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>^</sup>	Ash
1	Rye	3041	22.4	45.3	24.1	70.8	81.8	12.8
2	HRWW	2602	23.8	44.7	23.1	72.2	80.4	12.9
3	WB	2433	23.1	46.4	24.5	70.8	81.6	14.0
4	TRIT	2352	24.3	44.2	23.4	72.1	80.5	14.2
5	OAT	1395	21.5	46.5	21.0	72.9	80.2	13.3
<b>Mean</b>		<b>2365.0</b>	<b>23.5</b>	<b>44.9</b>	<b>23.1</b>	<b>72.0</b>	<b>80.6</b>	<b>13.5</b>
<b>LSD (5%)</b>		<b>366.0</b>	<b>1.4</b>	<b>2.2</b>	<b>1.4</b>	<b>1.4</b>	<b>NS</b>	<b>0.9</b>
<b>CV (%)</b>		<b>22.5</b>	<b>5.8</b>	<b>4.9</b>	<b>6.0</b>	<b>1.9</b>	<b>1.9</b>	<b>6.4</b>

<sup>^</sup>In Vitro True Digestibility

<sup>1</sup>Hard Red Winter Wheat (HRWW)

Triticale (TRIT)

Winter Barley (WB)

<sup>a</sup>Rank is based on Forage Yield



### 2015 Small Grains Forage Trial - Lockett (Irrigated)

Rank <sup>a</sup>	Variety	Class <sup>1</sup>	Company	Dry Matter Yield (lbs/a)			
				Clip 1	Clip 2	Clip 3	Total
				12/5/14	2/20/15	4/2/15	3 Clips
1	Maton II	Rye	Noble Foundation	3065	3639	2109	8813
2	WB Grainfield	HRWW	Monsanto	2376	3149	2962	8488
3	Duster	HRWW	OSU	2633	2630	3045	8308
4	Maton	Rye	Noble Foundation	2253	2713	3312	8278
5	TAMcale 6331	TRIT	TAMU	2736	4355	1173	8264
6	TAM 114	HRWW	TAMU	2829	2738	2623	8189
7	Elbon	Rye	Noble Foundation	2798	2376	2911	8085
8	TAMcale 5019	TRIT	TAMU	2610	3145	2263	8017
9	TX12VT8228*	TRIT	TAMU	2633	4029	1265	7928
10	P-919**	WB	Paramount Seeds	2428	2359	3055	7841
11	Forerunner**	TRIT	Weaver Seed	2757	3414	1481	7652
12	TX09A001194*	HRWW	TAMU	2808	2451	2304	7563
13	Grazeall I	TRIT	Gaylan Ward Seed	2489	2720	2335	7544
14	TAMO 411	Oat	TAMU	3045	2018	2479	7541
15	Walken	Oat	UK	2263	2623	2520	7406
16	TX12VT8222*	TRIT	TAMU	2407	3527	1430	7364
17	TX09D1172*	HRWW	TAMU	2098	1675	3538	7311
18	TX12VT8220*	TRIT	TAMU	2602	2737	1954	7294
19	Slick Trit	TRIT	Watley Seed	3086	1372	2777	7235
20	TAMO 606	Oat	TAMU	2428	2360	2407	7194
21	TX12VT8229*	TRIT	TAMU	1882	3218	2088	7188
22	TX07CS2257*	Oat	TAMU	2541	2190	2428	7158
23	TX07CS1948*	Oat	TAMU	2078	2026	2952	7056
24	Texan	TRIT	Gaylan Ward Seed	2572	1412	3045	7028
25	Weathermaster 135**	HRWW	Unknown	2932	1755	2335	7022
26	TX09CS031*	Oat	TAMU	2150	2199	2458	6807
27	TAM 204**	HRWW	TAMU	2551	1901	2242	6694
28	Fridge**	TRIT	Elliot Plant Breeding	2777	2222	1677	6676
29	TAMbar 501	WB	TAMU	2273	741	3652	6666
30	TX08A001249*	HRWW	TAMU	2047	2017	2551	6615
31	SY Razor**	HRWW	Syngenta	2129	2993	1461	6583
32	TAM 401**	HRWW	TAMU	1831	2228	2242	6301
33	Fannin	HRWW	Syngenta	1985	1797	2181	5963
34	WB Redhawk	HRWW	Monsanto	2201	1748	1996	5945
35	TX09CS1029*	Oat	TAMU	1317	2034	2088	5439
			<b>Mean</b>	<b>2438</b>	<b>2494</b>	<b>2382</b>	<b>7315</b>
			<b>LSD (5%)</b>	<b>1024</b>	<b>965</b>	<b>830</b>	<b>1529</b>
			<b>CV (%)</b>	<b>30<sup>b</sup></b>	<b>27<sup>b</sup></b>	<b>25</b>	<b>15</b>

\*Experimental Lines

\*\*Awnless/Beardless

<sup>1</sup>Hard Red Winter Wheat (HRWW)

Triticale (TRIT)

Winter Barley (WB)

<sup>a</sup>2015 Rank is based on Total Forage Weight

<sup>b</sup>Trials with a coefficient of variation (CV)  $\geq$  25% contain excessive experimental error.

Readers should consider trials in a similar environment to confirm varietal yield.

**2015 Small Grains Forage Trial - Lockett (Irrigated) Clip 2 (2/20/15) Forage Quality Data**

Rank <sup>a</sup>	Variety	Class <sup>1</sup>	Company	Dry Matter Yield (lb/a)	Component of Forage (%)						
					Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>^</sup>	Ash	
1	Slick Trit	TRIT	Watley Seed	3086	18.4	39.8	23.1	70.2	83.1	11.9	
2	Maton II	Rye	Noble Foundation	3065	15.6	40.7	24.1	68.4	83.2	11.0	
3	TAMO 411	Oat	TAMU	3045	16.7	39.4	22.3	70.3	84.1	12.6	
4	Weathermaster 135**	HRWW	Unknown	2932	13.5	44.1	24.9	67.1	80.3	10.5	
5	TAM 114	HRWW	TAMU	2829	15.4	42.3	23.1	69.2	79.8	11.2	
6	TX09A001194*	HRWW	TAMU	2808	15.9	39.7	22.3	70.0	83.7	11.3	
7	Elbon	Rye	Noble Foundation	2798	14.5	44.8	23.4	68.6	83.2	10.8	
8	Fridge**	TRIT	Elliot Plant Breeding	2777	17.2	41.8	24.4	68.8	82.4	12.8	
9	Forerunner**	TRIT	Weaver Seed	2757	15.8	41.5	26.2	66.9	82.3	12.5	
10	TAMcale 6331	TRIT	TAMU	2736	16.8	41.5	25.1	68.1	81.6	12.0	
11	Duster	HRWW	OSU	2633	18.9	34.9	21.5	71.6	83.5	11.2	
12	TX12VT8228*	TRIT	TAMU	2633	17.0	42.9	25.0	68.3	81.5	12.9	
13	TAMcale 5019	TRIT	TAMU	2610	16.3	38.7	22.3	70.1	83.3	11.0	
14	TX12VT8220*	TRIT	TAMU	2602	17.4	38.5	23.2	69.8	83.5	10.9	
15	Texan	TRIT	Gaylan Ward Seed	2572	15.2	43.3	27.2	65.9	82.2	12.2	
16	TAM 204**	HRWW	TAMU	2551	17.0	41.0	23.3	69.6	83.1	11.5	
17	TX07CS2257*	Oat	TAMU	2541	17.1	39.4	21.5	71.0	85.2	13.0	
18	Grazeall I	TRIT	Gaylan Ward Seed	2489	15.6	42.2	24.7	68.0	81.8	11.8	
19	P-919**	WB	Paramount Seeds	2428	17.6	37.9	23.0	70.0	85.8	10.8	
20	TAMO 606	Oat	TAMU	2428	15.0	38.7	21.6	70.1	84.2	10.9	
21	TX12VT8222*	TRIT	TAMU	2407	16.6	43.4	24.8	68.3	82.9	11.7	
22	WB Grainfield	HRWW	Monsanto	2376	18.4	40.0	24.3	69.3	82.7	12.0	
23	TAMbar 501	WB	TAMU	2273	19.5	37.7	24.5	69.6	84.3	13.2	
24	Walken	Oat	UK	2263	17.2	37.8	20.2	72.0	84.7	12.4	
25	Maton	Rye	Noble Foundation	2253	16.0	42.4	24.9	67.9	82.9	10.8	
26	WB Redhawk	HRWW	Monsanto	2201	16.7	41.7	25.3	67.9	82.5	11.8	
27	TX09CS031*	Oat	TAMU	2150	15.5	44.1	23.2	69.1	83.8	12.2	
28	SY Razor**	HRWW	Syngenta	2129	17.3	37.4	22.0	70.7	81.8	11.8	
29	TX09D1172*	HRWW	TAMU	2098	14.7	42.1	22.7	69.2	81.6	11.1	
30	TX07CS1948*	Oat	TAMU	2078	16.6	41.0	24.7	68.3	83.8	12.4	
31	TX08A001249*	HRWW	TAMU	2047	18.3	35.8	21.5	71.4	84.3	11.1	
32	Fannin	HRWW	Syngenta	1985	16.3	40.8	24.1	68.7	81.7	12.4	
33	TX12VT8229*	TRIT	TAMU	1882	17.4	37.5	22.9	70.0	84.0	12.4	
34	TAM 401**	HRWW	TAMU	1831	15.7	39.9	22.4	69.8	82.2	9.9	
35	TX09CS1029*	Oat	TAMU	1317	15.0	37.3	19.7	71.6	84.3	12.0	
				<b>Mean</b>	<b>2438.1</b>	<b>16.5</b>	<b>40.3</b>	<b>23.4</b>	<b>69.3</b>	<b>83.0</b>	<b>11.7</b>
				<b>LSD (5%)</b>	<b>1023.9</b>	<b>NS</b>	<b>NS</b>	<b>3.4</b>	<b>3.2</b>	<b>2.5</b>	<b>1.7</b>
				<b>CV (%)</b>	<b>29.5<sup>b</sup></b>	<b>10.7</b>	<b>7.0</b>	<b>7.2</b>	<b>2.2</b>	<b>1.5</b>	<b>7.3</b>

<sup>^</sup>In Vitro True Digestibility

\*Experimental Lines

\*\*Awnless/Beardless

<sup>1</sup>Hard Red Winter Wheat (HRWW)

Triticale (TRIT)

Winter Barley (WB)

<sup>a</sup>Rank is based on Forage Yield

<sup>b</sup>Trials with a coefficient of variation (CV)  $\geq$  25% contain excessive experimental error.

Readers should consider trials in a similar environment to confirm varietal yield.

## 2015 Small Grains Forage Trial - Lockett (Irrigated) Species Quality Data

Clip 2: 2/20/15

Rank <sup>a</sup>	Class <sup>1</sup>	Dry Matter Yield (lb/a)	Component of Forage (%)					
			Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>^</sup>	Ash
1	Rye	2705	15.4	42.6	24.2	68.3	83.1	10.8
2	TRIT	2596	16.7	41.0	24.4	68.6	82.6	12.0
3	WB	2350	18.6	37.8	23.7	69.8	85.1	12.0
4	HRWW	2342	16.5	40.0	23.1	69.5	82.3	11.3
5	Oat	2260	16.2	39.7	21.9	70.3	84.3	12.2
<b>Mean</b>		<b>2438.1</b>	<b>16.5</b>	<b>40.3</b>	<b>23.4</b>	<b>69.3</b>	<b>83.0</b>	<b>11.7</b>
<b>LSD (5%)</b>		<b>490.9</b>	<b>1.7</b>	<b>2.9</b>	<b>1.8</b>	<b>1.6</b>	<b>1.3</b>	<b>0.9</b>
<b>CV (%)</b>		<b>30.0<sup>b</sup></b>	<b>10.6</b>	<b>7.6</b>	<b>7.9</b>	<b>2.4</b>	<b>1.6</b>	<b>7.9</b>

<sup>^</sup>In Vitro True Digestibility

<sup>1</sup>Hard Red Winter Wheat (HRWW)

Triticale (TRIT)

Winter Barley (WB)

<sup>a</sup>Rank is based on Forage Yield

<sup>b</sup>Trials with a coefficient of variation (CV)  $\geq$  25% contain excessive experimental error.

Readers should consider trials in a similar environment to confirm varietal yield.

**2015 Small Grains Forage Trial - San Angelo (Dryland)**

Rank <sup>a</sup>	Variety	Class <sup>1</sup>	Company	Dry Matter Yield (lbs/a)			
				Clip 1	Clip 2	Clip 3	Total
				12/20/14	3/13/15	4/18/15	3 Clips
1	Heavy Grazer 76-30	Oat	East Texas Seed	598	1166	5993	9053
2	TAMcale 5019	TRIT	TAMU	570	1551	6746	8866
3	WB Grainfield 80 lbs	HRWW	Monsanto	682	1324	5481	8695
4	WB Grainfield 40 lbs	HRWW	Monsanto	457	1008	6089	8304
5	Horizon 201	Oat	Plantation Seed	562	1733	5801	8096
6	SY Razor**	HRWW	Syngenta	674	1378	5865	7767
7	P-919**	WB	Paramount Seeds	346	1688	5321	7490
8	TAMcale 6331	TRIT	TAMU	424	1499	5553	7476
9	Maton	Rye	Noble Foundation	1367	1133	3848	7423
10	Maton II	Rye	Noble Foundation	430	1739	5041	7210
11	TAM 401**	HRWW	TAMU	584	1510	4809	7079
12	Weathermaster 135** Untreated	HRWW	Unknown	900	1153	4433	6861
13	TAMO 606	Oat	TAMU	813	1241	4489	6748
14	Elbon	Rye	Noble Foundation	729	1147	4433	6728
15	TAM 204**	HRWW	TAMU	582	1347	4465	6708
16	TAMO 411	Oat	TAMU	504	1401	4473	6696
17	Fridge**	TRIT	Elliot Plant Breeding	392	1163	4665	6554
18	TAM 114	HRWW	TAMU	603	1112	4713	6428
19	Horizon 306	Oat	Plantation Seed	595	1162	4761	6394
20	Weathermaster 135**	HRWW	Unknown	635	1134	4481	6249
21	WB Grainfield 60 lbs	HRWW	Monsanto	702	988	4713	6221
22	TX07CS1948*	Oat	TAMU	502	1297	4320	6120
23	TX09CS031*	Oat	TAMU	430	1194	4024	6080
24	TAMbar 501	WB	TAMU	534	1373	3792	5942
25	WB Grainfield 30 lbs	HRWW	Monsanto	736	1062	4083	5881
26	RAM 99016	Oat	LSU	617	1061	4697	5767
27	Walken	Oat	UK	483	1127	4448	5656
28	TX07CS2257*	Oat	TAMU	414	1291	3664	5590
29	Fannin	HRWW	Syngenta	316	1432	3864	5570
30	TX09D1172*	HRWW	TAMU	632	1038	3824	5568
31	TX08A001249*	HRWW	TAMU	736	1248	3544	5529
32	Duster	HRWW	OSU	720	1313	3640	5285
33	WB Redhawk	HRWW	Monsanto	478	1303	3640	5253
34	Horizon 270	Oat	Plantation Seed	754	1064	3432	5250
35	TX09CS1029*	Oat	TAMU	447	1297	3552	5137
36	TX09A001194*	HRWW	TAMU	402	1190	3200	4816
37	Bob	Oat	UA	335	896	3152	4192
<b>Mean</b>				<b>574</b>	<b>1268</b>	<b>4499</b>	<b>6502</b>
<b>LSD (5%)</b>				<b>NS</b>	<b>409</b>	<b>1677</b>	<b>2163</b>
<b>CV (%)</b>				<b>45<sup>b</sup></b>	<b>23</b>	<b>26<sup>b</sup></b>	<b>20</b>

\*Experimental Lines

\*\*Awnless/Beardless

<sup>1</sup>Hard Red Winter Wheat (HRWW)

Triticale (TRIT)

Winter Barley (WB)

<sup>a</sup>Rank is based on Total Forage Weight

<sup>b</sup>Trials with a coefficient of variation (CV)  $\geq$  25% contain excessive experimental error.

Readers should consider trials in a similar environment to confirm varietal yield.

**2015 Small Grains Forage Trial - College Station (Irrigated)**

Rank <sup>a</sup>	Variety <sup>1</sup>	Class <sup>2</sup>	Company	Dry Matter Yield (lb/a)				
				Clip 1	Clip 2	Clip 3	Clip 4	Total
				12/15/14	2/13/15	3/30/15	4/23/15	4 Clips
1	Gulf	Ryegrass	TAMU	110	1266	3718	237	5371
2	Nelson	Ryegrass	TAMU	293	1252	3521	239	5333
3	P-919**	WB	Paramount Seeds	479	1288	3463	0	5250
4	Prine	Ryegrass	UF	277	1361	3358	229	5225
5	OKAY	Oat	Noble Foundation	657	1535	2983	4	5121
6	TAMO 606	Oat	TAMU	222	1609	3265	24	5120
7	Horizon 306	Oat	Plantation Seed	828	1649	2742	27	5095
8	TAM 114	HRWW	TAMU	579	923	3305	8	5066
9	Horizon 201	Oat	Plantation Seed	565	1444	3068	21	5010
10	TAM 90	Ryegrass	TAMU	106	1358	3345	150	4968
11	RAM 99016	Oat	LSU	550	1558	2767	37	4912
12	Bob	Oat	UA	701	1355	2826	7	4888
13	TAMTBO	Ryegrass	TAMU	312	1215	3094	247	4867
14	Heavy Grazer 76-30	Oat	East Texas Seed	521	1421	2904	15	4862
15	SunGrazer Plus	Ryegrass	Oregro Seeds, Inc	169	1229	3186	146	4850
16	TAMO 411	Oat	TAMU	368	1433	3008	13	4821
17	NF 101	TRIT	Noble Foundation	609	1056	2813	7	4484
18	Duster	HRWW	OSU	299	625	3499	10	4433
19	Walken	Oat	UK	188	1412	2729	21	4252
20	WB Redhawk	HRWW	Monsanto	320	1802	1982	10	4180
21	TX07CS1948*	Oat	TAMU	130	1212	2820	15	4177
22	TX09CS1029*	Oat	TAMU	429	1581	1845	58	4125
23	Weathermaster 135**	HRWW	Unknown	120	616	3349	10	4095
24	Fannin	HRWW	Syngenta	613	909	2573	6	4050
25	TAMcale 6331	TRIT	TAMU	648	1712	1671	14	4045
26	TX07CS2257*	Oat	TAMU	458	1144	2369	52	4022
27	NF 201(NF96210)	TRIT	Noble Foundation	385	1940	1586	9	3920
28	Marshal	Ryegrass	Wax Company	73	890	2709	179	3851
29	Maton II	Rye	Noble Foundation	264	913	2655	5	3837
30	TX09D1172*	HRWW	TAMU	290	392	3145	9	3835
31	Horizon 270	Oat	Plantation Seed	916	1357	1984	27	3731
32	TAMbar 501	WB	TAMU	267	226	3140	26	3686
33	WB Grainfield	HRWW	Monsanto	421	595	2527	32	3574
34	SY Razor**	HRWW	Syngenta	294	1010	2246	24	3573
35	TAM 204**	HRWW	TAMU	253	1022	2259	37	3572
36	Fridge**	TRIT	Elliot Plant Breeding	1062	864	1509	44	3564
37	TX08A001249*	HRWW	TAMU	227	501	2743	11	3550
38	TAMcale 5019	TRIT	TAMU	196	891	2419	13	3518
39	TX09A001194*	HRWW	TAMU	105	509	2886	11	3511
40	Maton	Rye	Noble Foundation	129	591	2701	12	3433
41	Oklon	Rye	Noble Foundation	168	434	2739	17	3358
42	TAM 401**	HRWW	TAMU	451	1179	1363	17	3075
43	TX09CS031*	Oat	TAMU	198	1553	1274	48	3029
44	Elbon	Rye	Noble Foundation	183	385	2213	6	2786
45	Trical 348	TRIT	Syngenta	33	104	2192	35	2400
			<b>Mean</b>	<b>367</b>	<b>1096</b>	<b>2701</b>	<b>48</b>	<b>4178</b>
			<b>LSD (5%)</b>	<b>279</b>	<b>375</b>	<b>593</b>	<b>52</b>	<b>946</b>
			<b>CV (%)</b>	<b>54<sup>b</sup></b>	<b>25</b>	<b>14</b>	<b>77<sup>b</sup></b>	<b>15</b>

\*Experimental Lines

\*\*Awnless/Beardless

<sup>1</sup>All Ryegrass Varieties are Tetraploids EXCEPT Gulf, Marshal, and TAM 90.

<sup>2</sup>Hard Red Winter Wheat (HRWW)

Triticale (TRIT)

Winter Barley (WB)

Ryegrass entries were all Tetraploids

<sup>a</sup>Rank is based on Total Forage Weight

<sup>b</sup>Trials with a coefficient of variation (CV)  $\geq$  25% contain excessive experimental error.

Readers should consider trials in a similar environment to confirm varietal yield.

**2015 Small Grains Forage Trial - College Station (Irrigated) Clip 1 (12/15/14) Forage Quality Data**

Rank <sup>a</sup>	Variety <sup>1</sup>	Class <sup>2</sup>	Company	Dry Matter Yield (lb/a)	Component of Forage (%)						
					Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>a</sup>	Ash	
1	Fridge**	TRIT	Elliot Plant Breeding	1062	13.2	49.8	31.0	62.3	76.3	9.7	
2	Horizon 270	Oat	Plantation Seed	916	16.5	32.9	20.3	71.7	87.3	10.9	
3	Horizon 306	Oat	Plantation Seed	828	17.4	34.2	21.7	70.9	87.4	11.4	
4	Bob	Oat	UA	701	19.6	35.2	22.0	71.5	86.9	12.6	
5	OKAY	Oat	Noble Foundation	657	15.8	38.2	21.5	70.5	87.0	11.8	
6	TAMcale 6331	TRIT	TAMU	648	17.6	42.2	24.9	68.5	82.5	11.6	
7	Fannin	HRWW	Syngenta	613	17.0	49.8	25.7	67.7	82.3	13.3	
8	NF 101	TRIT	Noble Foundation	609	18.8	40.4	24.2	69.5	83.7	12.7	
9	TAM 114	HRWW	TAMU	579	16.1	49.2	27.1	66.3	84.0	13.5	
10	Horizon 201	Oat	Plantation Seed	565	17.6	30.6	19.5	72.7	87.9	10.6	
11	RAM 99016	Oat	LSU	550	18.9	32.2	20.3	72.6	87.9	11.0	
12	Heavy Grazer 76-30	Oat	East Texas Seed	521	16.7	32.7	19.6	72.3	87.1	10.8	
13	P-919**	WB	Paramount Seeds	479	17.6	39.5	24.1	69.1	87.8	12.0	
14	TX07CS2257*	Oat	TAMU	458	18.3	33.1	18.6	73.6	87.3	11.2	
15	TAM 401**	HRWW	TAMU	451	16.5	45.3	24.5	68.4	83.5	12.2	
16	TX09CS1029*	Oat	TAMU	429	18.9	31.2	19.6	73.1	87.9	10.7	
17	WB Grainfield	HRWW	Monsanto	421	16.4	46.9	24.1	68.7	83.4	12.6	
18	NF 201(NF96210)	TRIT	Noble Foundation	385	18.0	41.3	24.1	69.3	84.3	11.8	
19	TAMO 411	Oat	TAMU	368	18.7	34.6	22.3	71.0	86.5	12.1	
20	WB Redhawk	HRWW	Monsanto	320	20.7	38.9	21.5	72.2	84.8	12.2	
21	TAMTBO	Ryegrass	TAMU	312	19.1	28.7	20.4	72.5	88.1	12.3	
22	Duster	HRWW	OSU	299	19.1	40.9	23.0	70.5	85.0	12.8	
23	SY Razor**	HRWW	Syngenta	294	19.4	41.5	23.4	70.4	84.2	12.3	
24	Nelson	Ryegrass	TAMU	293	18.6	26.4	19.5	73.0	88.3	12.8	
25	TX09D1172*	HRWW	TAMU	290	19.6	43.3	23.5	70.3	85.0	13.3	
26	Prine	Ryegrass	UF	277	19.0	28.1	20.7	72.3	88.0	12.7	
27	TAMbar 501	WB	TAMU	267	18.5	42.1	26.0	68.0	85.8	12.3	
28	Maton II	Rye	Noble Foundation	264	17.5	43.0	23.0	70.0	85.7	11.7	
29	TAM 204**	HRWW	TAMU	253	18.6	45.8	23.8	69.7	83.9	12.7	
30	TX08A001249*	HRWW	TAMU	227	21.0	42.6	22.3	71.8	85.3	13.1	
31	TAMO 606	Oat	TAMU	222	19.1	34.9	21.1	72.0	87.0	11.9	
32	TX09CS031*	Oat	TAMU	198	19.5	34.1	19.8	73.1	87.5	11.5	
33	TAMcale 5019	TRIT	TAMU	196	20.7	35.3	21.5	72.3	85.8	12.1	
34	Walken	Oat	UK	188	17.7	35.1	20.7	71.8	86.7	12.0	
35	Elbon	Rye	Noble Foundation	183	18.1	46.0	24.4	69.1	85.3	12.0	
36	SunGrazer Plus	Ryegrass	Oregro Seeds, Inc	169	19.8	28.0	20.3	72.9	87.8	12.8	
37	Oklon	Rye	Noble Foundation	168	18.6	43.8	21.7	71.3	85.4	11.9	
38	TX07CS1948*	Oat	TAMU	130	18.2	34.1	19.5	72.9	86.1	11.1	
39	Maton	Rye	Noble Foundation	129	18.7	43.9	23.5	70.0	85.8	12.1	
40	Weathermaster 135**	HRWW	Unknown	120	20.2	42.4	23.9	70.2	85.0	13.2	
41	Gulf	Ryegrass	TAMU	110	20.6	29.6	20.8	72.8	87.5	13.3	
42	TAM 90	Ryegrass	TAMU	106	19.7	28.9	20.1	73.0	87.4	12.5	
43	TX09A001194*	HRWW	TAMU	105	19.6	42.7	22.4	71.2	85.4	13.1	
44	Marshal	Ryegrass	Wax Company	73	21.2	28.0	20.2	73.5	88.1	13.4	
45	Trical 348	TRIT	Syngenta	33	---	---	---	---	---	---	
				<b>Mean</b>	<b>366.9</b>	<b>18.4</b>	<b>38.0</b>	<b>22.4</b>	<b>70.8</b>	<b>85.8</b>	<b>12.0</b>
				<b>LSD (5%)</b>	<b>278.8</b>	<b>2.3</b>	<b>3.0</b>	<b>2.1</b>	<b>1.8</b>	<b>1.1</b>	<b>0.9</b>
				<b>CV (%)</b>	<b>53.9<sup>b</sup></b>	<b>6.0</b>	<b>3.9</b>	<b>4.5</b>	<b>1.2</b>	<b>0.7</b>	<b>3.5</b>

<sup>a</sup>In Vitro True Digestibility

\*Experimental Lines

\*\*Awnless/Beardless

<sup>1</sup>All Ryegrass Varieties are Tetraploids EXCEPT Gulf, Marshal, and TAM 90.

<sup>2</sup>Hard Red Winter Wheat (HRWW)

Triticale (TRIT)

Winter Barley (WB)

<sup>a</sup>Rank is based on Forage Yield

<sup>b</sup>Trials with a coefficient of variation (CV)  $\geq$  25% contain excessive experimental error.

Readers should consider trials in a similar environment to confirm varietal yield.

**2015 Small Grains Forage Trial - College Station (Irrigated) Clip 2 (2/13/15) Forage Quality Data**

Rank <sup>a</sup>	Variety <sup>1</sup>	Class <sup>2</sup>	Company	Dry Matter Yield (lb/a)	Component of Forage (%)					
					Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>a</sup>	Ash
1	NF 201(NF96210)	TRIT	Noble Foundation	1940	19.9	42.7	24.0	70.1	82.7	10.7
2	WB Redhawk	HRWW	Monsanto	1802	20.3	39.3	22.3	71.5	83.0	10.6
3	TAMcale 6331	TRIT	TAMU	1712	20.7	40.9	23.1	71.1	82.2	11.3
4	Horizon 306	Oat	Plantation Seed	1649	22.8	35.3	18.8	75.1	86.8	12.1
5	TAMO 606	Oat	TAMU	1609	20.5	34.8	19.1	74.1	86.9	11.4
6	TX09CS1029*	Oat	TAMU	1581	21.3	35.7	19.1	74.3	85.8	11.3
7	RAM 99016	Oat	LSU	1558	22.4	34.6	18.7	75.0	87.0	11.6
8	TX09CS031*	Oat	TAMU	1553	21.2	35.4	18.4	74.9	85.9	11.2
9	OKAY	Oat	Noble Foundation	1535	19.5	37.8	19.6	73.3	85.9	10.7
10	Horizon 201	Oat	Plantation Seed	1444	21.0	34.8	17.9	75.1	86.4	11.5
11	TAMO 411	Oat	TAMU	1433	21.6	35.1	20.3	73.5	86.7	11.5
12	Heavy Grazer 76-30	Oat	East Texas Seed	1421	20.5	36.5	19.4	73.8	86.9	11.3
13	Walken	Oat	UK	1412	22.3	35.3	18.4	75.2	86.8	11.9
14	Prine	Ryegrass	UF	1361	24.1	28.4	19.5	75.1	87.7	14.2
15	TAM 90	Ryegrass	TAMU	1358	24.1	31.6	20.3	74.4	86.7	13.3
16	Horizon 270	Oat	Plantation Seed	1357	20.8	32.7	18.4	74.7	86.2	11.0
17	Bob	Oat	UA	1355	23.6	36.3	19.9	74.6	86.3	12.5
18	P-919**	WB	Paramount Seeds	1288	20.0	38.2	22.0	71.6	87.0	11.1
19	Gulf	Ryegrass	TAMU	1266	24.4	31.1	19.5	75.1	87.3	13.4
20	Nelson	Ryegrass	TAMU	1252	23.9	27.4	17.7	76.4	87.8	13.2
21	SunGrazer Plus	Ryegrass	Oregro Seeds, Inc	1229	22.1	28.3	19.0	74.7	87.6	12.3
22	TAMTBO	Ryegrass	TAMU	1215	24.3	28.2	18.5	75.8	87.5	13.4
23	TX07CS1948*	Oat	TAMU	1212	21.6	35.7	17.8	75.5	86.9	11.1
24	TAM 401**	HRWW	TAMU	1179	20.9	42.2	22.4	71.7	84.0	11.2
25	TX07CS2257*	Oat	TAMU	1144	20.4	36.0	18.6	74.4	86.6	11.0
26	NF 101	TRIT	Noble Foundation	1056	21.9	40.5	21.1	73.0	82.7	12.3
27	TAM 204**	HRWW	TAMU	1022	23.2	38.8	20.8	73.7	84.5	11.9
28	SY Razor**	HRWW	Syngenta	1010	22.5	37.9	20.1	74.0	84.8	11.1
29	TAM 114	HRWW	TAMU	923	22.2	40.1	19.9	74.0	84.6	12.0
30	Maton II	Rye	Noble Foundation	913	21.0	38.9	20.5	73.2	84.4	10.9
31	Fannin	HRWW	Syngenta	909	21.8	41.3	21.2	72.9	83.8	12.3
32	TAMcale 5019	TRIT	TAMU	891	23.2	36.1	18.7	75.3	85.7	10.9
33	Marshal	Ryegrass	Wax Company	890	22.9	28.4	18.7	75.2	87.5	12.6
34	Fridge**	TRIT	Elliot Plant Breeding	864	19.9	39.8	22.9	70.9	83.0	10.9
35	Duster	HRWW	OSU	625	23.0	38.1	19.4	74.7	85.0	11.8
36	Weathermaster 135**	HRWW	Unknown	616	24.8	37.3	19.3	75.4	86.0	12.2
37	WB Grainfield	HRWW	Monsanto	595	23.2	38.8	19.2	74.9	84.8	11.7
38	Maton	Rye	Noble Foundation	591	23.8	38.8	20.4	74.3	85.6	11.4
39	TX09A001194*	HRWW	TAMU	509	25.1	37.7	19.5	75.4	85.7	12.5
40	TX08A001249*	HRWW	TAMU	501	25.1	35.8	17.6	76.8	85.6	12.0
41	Oklon	Rye	Noble Foundation	434	23.9	37.8	19.7	74.8	86.1	11.7
42	TX09D1172*	HRWW	TAMU	392	24.7	37.5	18.2	76.3	85.8	12.2
43	Elbon	Rye	Noble Foundation	385	23.3	39.3	18.9	75.2	85.8	11.6
44	TAMbar 501	WB	TAMU	226	24.8	36.8	18.9	75.7	85.8	11.6
45	Trical 348	TRIT	Syngenta	104	26.9	33.8	16.6	78.3	87.1	11.6
<b>Mean</b>				<b>1095.9</b>	<b>22.5</b>	<b>36.2</b>	<b>19.7</b>	<b>74.3</b>	<b>85.8</b>	<b>11.8</b>
<b>LSD (5%)</b>				<b>375.4</b>	<b>2.5</b>	<b>2.3</b>	<b>1.7</b>	<b>1.6</b>	<b>1.4</b>	<b>1.0</b>
<b>CV (%)</b>				<b>24.5</b>	<b>5.5</b>	<b>3.2</b>	<b>4.3</b>	<b>1.1</b>	<b>0.8</b>	<b>5.8</b>

<sup>a</sup>In Vitro True Digestibility

\*Experimental Lines

\*\*Awnless/Beardless

<sup>1</sup>All Ryegrass Varieties are Tetraploids EXCEPT Gulf, Marshal, and TAM 90.

<sup>2</sup>Hard Red Winter Wheat (HRWW)

Triticale (TRIT)

Winter Barley (WB)

<sup>a</sup>Rank is based on Forage Yield

**2015 Small Grains Forage Trial - College Station (Irrigated) Clip 3 (3/30/15) Forage Quality Data**

Rank <sup>a</sup>	Variety <sup>1</sup>	Class <sup>2</sup>	Company	Dry Matter Yield (lb/a)	Component of Forage (%)						
					Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>a</sup>	Ash	
1	Gulf	Ryegrass	TAMU	3718	17.6	41.9	28.1	66.1	82.2	13.1	
2	Nelson	Ryegrass	TAMU	3521	19.6	38.9	27.4	67.3	83.0	13.8	
3	Duster	HRWW	OSU	3499	15.3	49.2	31.5	62.7	76.2	10.7	
4	P-919**	WB	Paramount Seeds	3463	13.3	51.6	34.7	59.5	76.3	10.5	
5	Prine	Ryegrass	UF	3358	18.7	39.1	27.8	66.7	83.0	12.8	
6	Weathermaster 135**	HRWW	Unknown	3349	18.2	44.0	29.3	65.4	79.1	12.0	
7	TAM 90	Ryegrass	TAMU	3345	17.4	42.0	28.5	65.7	82.1	13.0	
8	TAM 114	HRWW	TAMU	3305	14.6	49.3	31.9	62.0	77.3	11.3	
9	TAMO 606	Oat	TAMU	3265	17.9	38.9	25.4	68.2	84.6	11.6	
10	SunGrazer Plus	Ryegrass	Oregro Seeds, Inc	3186	19.0	39.8	26.1	68.2	82.8	13.6	
11	TX09D1172*	HRWW	TAMU	3145	16.8	46.8	29.2	64.9	78.3	11.1	
12	TAMbar 501	WB	TAMU	3140	18.3	40.4	26.2	67.8	84.1	11.2	
13	TAMTBO	Ryegrass	TAMU	3094	19.6	38.2	26.3	68.2	83.6	13.6	
14	Horizon 201	Oat	Plantation Seed	3068	16.5	39.5	27.4	66.2	82.7	11.1	
15	TAMO 411	Oat	TAMU	3008	16.1	41.3	27.4	66.1	83.2	11.0	
16	OKAY	Oat	Noble Foundation	2983	15.8	42.2	26.4	66.8	83.0	10.9	
17	Heavy Grazer 76-30	Oat	East Texas Seed	2904	16.5	40.0	26.9	66.6	83.7	10.3	
18	TX09A001194*	HRWW	TAMU	2886	16.3	49.6	32.2	62.4	76.1	12.2	
19	Bob	Oat	UA	2826	17.2	41.5	26.9	66.8	82.6	11.3	
20	TX07CS1948*	Oat	TAMU	2820	15.8	43.3	25.9	67.1	81.9	9.8	
21	NF 101	TRIT	Noble Foundation	2813	16.6	47.2	32.1	62.6	75.3	10.3	
22	RAM 99016	Oat	LSU	2767	16.2	42.2	25.7	67.4	84.1	11.0	
23	TX08A001249*	HRWW	TAMU	2743	17.5	47.2	29.5	65.0	77.5	11.1	
24	Horizon 306	Oat	Plantation Seed	2742	18.0	41.2	27.1	67.0	83.1	11.2	
25	Oklon	Rye	Noble Foundation	2739	18.2	46.4	29.4	65.3	80.5	10.5	
26	Walken	Oat	UK	2729	16.2	41.6	26.0	67.2	85.7	11.9	
27	Marshal	Ryegrass	Wax Company	2709	17.6	38.9	25.9	67.8	83.5	12.2	
28	Maton	Rye	Noble Foundation	2701	16.9	49.9	31.9	62.9	76.5	9.8	
29	Maton II	Rye	Noble Foundation	2655	16.5	48.5	30.5	63.8	78.3	10.4	
30	Fannin	HRWW	Syngenta	2573	17.0	46.1	30.4	64.1	76.7	10.9	
31	WB Grainfield	HRWW	Monsanto	2527	17.7	46.1	27.4	66.6	80.0	12.1	
32	TAMcale 5019	TRIT	TAMU	2419	18.7	45.5	28.1	66.5	80.1	11.8	
33	TX07CS2257*	Oat	TAMU	2369	15.8	41.6	25.5	67.4	83.1	10.6	
34	TAM 204**	HRWW	TAMU	2259	17.5	45.2	27.7	66.4	79.5	11.3	
35	SY Razor**	HRWW	Syngenta	2246	17.3	45.2	29.4	65.0	78.1	10.6	
36	Elbon	Rye	Noble Foundation	2213	17.3	48.2	30.7	64.0	77.6	10.1	
37	Trical 348	TRIT	Syngenta	2192	20.2	45.0	27.5	67.4	82.7	12.1	
38	Horizon 270	Oat	Plantation Seed	1984	17.8	35.1	22.6	70.4	84.4	10.4	
39	WB Redhawk	HRWW	Monsanto	1982	19.0	45.0	29.7	65.3	79.1	12.2	
40	TX09CS1029*	Oat	TAMU	1845	18.1	37.2	23.4	69.9	85.6	10.7	
41	TAMcale 6331	TRIT	TAMU	1671	19.0	44.6	27.8	66.8	81.6	11.9	
42	NF 201 (NF96210)	TRIT	Noble Foundation	1586	18.1	46.3	29.1	65.5	80.1	11.1	
43	Fridge**	TRIT	Elliot Plant Breeding	1509	19.9	42.7	26.8	67.9	82.6	12.1	
44	TAM 401**	HRWW	TAMU	1363	17.7	43.5	28.0	66.2	78.7	10.7	
45	TX09CS031*	Oat	TAMU	1274	17.1	40.4	25.1	68.2	84.0	11.0	
				<b>Mean</b>	<b>2701.0</b>	<b>17.4</b>	<b>43.5</b>	<b>28.1</b>	<b>66.0</b>	<b>81.0</b>	<b>11.4</b>
				<b>LSD (5%)</b>	<b>593.1</b>	<b>2.3</b>	<b>3.8</b>	<b>2.7</b>	<b>2.5</b>	<b>2.5</b>	<b>1.3</b>
				<b>CV (%)</b>	<b>14.1</b>	<b>6.6</b>	<b>4.4</b>	<b>4.7</b>	<b>1.8</b>	<b>1.5</b>	<b>5.6</b>

<sup>a</sup>In Vitro True Digestibility

\*Experimental Lines

\*\*Awnless/Beardless

<sup>1</sup>All Ryegrass Varieties are Tetraploids EXCEPT Gulf, Marshal, and TAM 90.

<sup>2</sup>Hard Red Winter Wheat (HRWW)

Triticale (TRIT)

Winter Barley (WB)

<sup>a</sup>Rank is based on Forage Yield



**2015 Small Grains Forage Trial - College Station (Irrigated) Clip 4 (4/23/15) Forage Quality Data**

Rank <sup>a</sup>	Variety <sup>1</sup>	Class <sup>2</sup>	Company	Dry Matter Yield (lb/a)	Component of Forage (%)						
					Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>a</sup>	Ash	
1	TAMTBO	Ryegrass	TAMU	247	10.4	46.7	31.7	60.7	75.0	9.9	
2	Nelson	Ryegrass	TAMU	239	9.7	46.4	31.2	60.8	74.5	8.7	
3	Gulf	Ryegrass	TAMU	237	9.0	49.7	34.4	58.1	71.8	8.8	
4	Prine	Ryegrass	UF	229	8.5	48.1	32.2	59.7	73.4	8.9	
5	Marshal	Ryegrass	Wax Company	179	7.3	50.3	33.1	58.5	71.0	8.1	
6	TAM 90	Ryegrass	TAMU	150	9.7	50.4	33.4	59.1	72.3	8.9	
7	SunGrazer Plus	Ryegrass	Oregro Seeds, Inc	146	7.8	49.3	32.8	58.9	72.7	8.7	
8	TX09CS1029*	Oat	TAMU	58	12.4	51.3	30.5	62.4	75.4	10.2	
9	TX07CS2257*	Oat	TAMU	52	12.1	51.9	32.0	61.1	73.5	9.9	
10	TX09CS031*	Oat	TAMU	48	10.5	55.2	29.5	62.4	74.2	9.4	
11	Fridge**	TRIT	Elliot Plant Breeding	44	14.0	52.0	31.6	62.1	74.6	11.0	
12	RAM 99016	Oat	LSU	37	11.4	54.1	32.0	60.9	73.2	10.4	
13	TAM 204**	HRWW	TAMU	37	15.1	49.8	32.0	62.1	72.6	10.9	
14	Trical 348	TRIT	Syngenta	35	15.3	49.2	29.8	63.9	76.7	10.9	
15	WB Grainfield	HRWW	Monsanto	32	14.9	48.7	31.0	62.9	74.2	11.6	
16	Horizon 306	Oat	Plantation Seed	27	13.8	50.8	30.0	63.2	75.7	10.5	
17	Horizon 270	Oat	Plantation Seed	27	11.6	56.4	31.2	61.6	73.8	10.9	
18	TAMbar 501	WB	TAMU	26	11.1	54.5	33.0	60.0	70.8	9.8	
19	TAMO 606	Oat	TAMU	24	12.5	53.6	32.8	60.6	73.0	10.6	
20	SY Razor**	HRWW	Syngenta	24	15.0	52.6	33.0	61.4	70.2	10.4	
21	Walken	Oat	UK	21	11.4	54.3	28.7	63.4	78.6	13.4	
22	Horizon 201	Oat	Plantation Seed	21	13.4	52.0	32.6	61.1	74.2	10.4	
23	Oklon	Rye	Noble Foundation	17	14.1	54.6	31.6	62.1	72.7	9.3	
24	TAM 401**	HRWW	TAMU	17	15.4	50.4	31.4	62.8	70.3	9.9	
25	Heavy Grazer 76-30	Oat	East Texas Seed	15	13.5	49.9	31.0	62.4	74.4	10.3	
26	TX07CS1948*	Oat	TAMU	15	13.4	50.5	31.0	62.4	72.7	10.0	
27	TAMcale 6331	TRIT	TAMU	14	14.3	52.5	31.7	62.1	73.5	10.1	
28	TAMO 411	Oat	TAMU	13	13.7	51.8	31.5	62.0	75.0	10.7	
29	TAMcale 5019	TRIT	TAMU	13	16.0	49.9	30.0	64.1	74.4	10.6	
30	Maton	Rye	Noble Foundation	12	14.3	54.3	34.1	60.3	71.6	9.4	
31	TX08A001249*	HRWW	TAMU	11	15.3	51.8	32.4	61.9	71.2	10.8	
32	TX09A001194*	HRWW	TAMU	11	15.2	52.2	31.3	62.7	71.1	10.4	
33	Weathermaster 135**	HRWW	Unknown	10	16.7	45.1	29.6	64.6	75.5	12.4	
34	Duster	HRWW	OSU	10	14.2	53.5	34.4	60.1	70.1	11.3	
35	WB Redhawk	HRWW	Monsanto	10	15.6	49.7	31.7	62.6	70.6	10.1	
36	NF 201(NF96210)	TRIT	Noble Foundation	9	13.5	56.2	32.2	61.4	70.4	9.7	
37	TX09D1172*	HRWW	TAMU	9	15.4	51.0	32.1	62.2	72.4	10.8	
38	TAM 114	HRWW	TAMU	8	14.5	52.6	32.4	61.7	72.4	11.0	
39	NF 101	TRIT	Noble Foundation	7	14.7	52.7	35.1	59.7	68.3	9.9	
40	Bob	Oat	UA	7	13.3	53.8	31.5	61.9	73.5	10.4	
41	Fannin	HRWW	Syngenta	6	15.3	51.9	34.0	60.7	70.2	10.5	
42	Elbon	Rye	Noble Foundation	6	14.5	53.2	31.3	62.5	73.8	9.5	
43	Maton II	Rye	Noble Foundation	5	15.7	52.3	31.2	63.0	74.1	10.1	
44	OKAY	Oat	Noble Foundation	4	12.2	54.7	30.6	62.2	74.9	10.9	
45	P-919**	WB	Paramount Seeds	0	---	---	---	---	---	---	
				<b>Mean</b>	<b>48.1</b>	<b>13.1</b>	<b>51.6</b>	<b>31.8</b>	<b>61.6</b>	<b>73.1</b>	<b>10.2</b>
				<b>LSD (5%)</b>	<b>51.5</b>	<b>2.3</b>	<b>4.0</b>	<b>3.0</b>	<b>2.8</b>	<b>2.4</b>	<b>1.2</b>
				<b>CV (%)</b>	<b>76.6<sup>b</sup></b>	<b>8.6</b>	<b>3.8</b>	<b>4.7</b>	<b>2.3</b>	<b>1.7</b>	<b>6.0</b>

<sup>a</sup>In Vitro True Digestibility

\*Experimental Lines

\*\*Awnless/Beardless

<sup>1</sup>All Ryegrass Varieties are Tetraploids EXCEPT Gulf, Marshal, and TAM 90.

<sup>2</sup>Hard Red Winter Wheat (HRWW)

Triticale (TRIT)

Winter Barley (WB)

<sup>a</sup>Rank is based on Forage Yield

<sup>b</sup>Trials with a coefficient of variation (CV)  $\geq$  25% contain excessive experimental error.

Readers should consider trials in a similar environment to confirm varietal yield.

**2015 Small Grains Forage Trial - College Station (Irrigated) Species Quality Data**

**Clip 1: 12/15/14**

Rank <sup>a</sup>	Class <sup>1</sup>	Dry Matter Yield (lb/a)	Component of Forage (%)					
			Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>^</sup>	Ash
1	TRIT	489	17.8	42.1	24.6	68.9	83.0	11.6
2	Oat	482	18.1	33.8	20.5	72.1	87.2	11.4
3	WB	373	18.1	40.8	25.1	68.6	86.8	12.1
4	HRWW	331	18.7	44.1	23.8	69.8	84.3	12.9
5	Ryegrass	194	19.6	28.3	20.3	72.8	87.9	12.8
6	Rye	186	18.1	44.3	23.6	69.7	85.6	11.9
<b>Mean</b>		<b>367.0</b>	<b>18.4</b>	<b>38.0</b>	<b>22.4</b>	<b>70.8</b>	<b>85.8</b>	<b>12.1</b>
<b>LSD (5%)</b>		<b>170.2</b>	<b>1.6</b>	<b>2.7</b>	<b>1.6</b>	<b>1.6</b>	<b>1.3</b>	<b>0.6</b>
<b>CV (%)</b>		<b>73.7<sup>p</sup></b>	<b>9.1</b>	<b>7.7</b>	<b>7.9</b>	<b>2.5</b>	<b>1.7</b>	<b>5.4</b>

**Clip 2: 2/13/15**

Rank <sup>a</sup>	Class <sup>1</sup>	Dry Matter Yield (lb/a)	Component of Forage (%)					
			Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>^</sup>	Ash
1	Oat	1447	21.4	35.4	18.9	74.5	86.6	11.4
2	Ryegrass	1225	23.7	29.1	19.0	75.2	87.4	13.2
3	TRIT	1094	22.3	38.8	20.9	73.4	84.2	11.3
4	HRWW	840	23.0	38.7	20.0	74.3	84.8	11.8
5	WB	757	22.4	37.5	20.5	73.7	86.4	11.3
6	Rye	581	22.7	39.0	20.0	74.2	85.3	11.3
<b>Mean</b>		<b>1095.9</b>	<b>22.5</b>	<b>36.2</b>	<b>19.7</b>	<b>74.3</b>	<b>85.8</b>	<b>11.8</b>
<b>LSD (5%)</b>		<b>261.5</b>	<b>1.6</b>	<b>1.8</b>	<b>1.4</b>	<b>1.5</b>	<b>1.0</b>	<b>0.7</b>
<b>CV (%)</b>		<b>38.0<sup>p</sup></b>	<b>8.0</b>	<b>5.3</b>	<b>7.9</b>	<b>2.2</b>	<b>1.2</b>	<b>6.1</b>

**Clip 3: 3/30/15**

Rank <sup>a</sup>	Class <sup>1</sup>	Dry Matter Yield (lb/a)	Component of Forage (%)					
			Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>^</sup>	Ash
1	WB	3301	15.8	46.0	30.4	63.6	80.2	10.9
2	Ryegrass	3236	18.5	39.8	27.1	67.1	82.9	13.2
3	Oat	2708	16.8	40.4	25.8	67.5	83.7	10.9
4	HRWW	2704	17.1	46.4	29.7	64.7	78.0	11.3
5	Rye	2577	16.9	48.9	31.0	63.6	77.4	10.1
6	TRIT	2048	18.7	45.4	28.7	66.0	80.4	11.4
<b>Mean</b>		<b>2701.0</b>	<b>17.4</b>	<b>43.5</b>	<b>28.1</b>	<b>66.0</b>	<b>81.0</b>	<b>11.4</b>
<b>LSD (5%)</b>		<b>397.9</b>	<b>1.3</b>	<b>2.4</b>	<b>1.8</b>	<b>1.7</b>	<b>1.7</b>	<b>0.7</b>
<b>CV (%)</b>		<b>21.4</b>	<b>8.1</b>	<b>6.0</b>	<b>6.9</b>	<b>2.8</b>	<b>2.3</b>	<b>6.5</b>

**Clip 4: 4/23/15**

Rank <sup>a</sup>	Class <sup>1</sup>	Dry Matter Yield (lb/a)	Component of Forage (%)					
			Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>^</sup>	Ash
1	Ryegrass	204	8.9	48.7	32.7	59.4	73.0	8.9
2	Oat	26	12.5	52.9	31.0	62.0	74.4	10.6
3	TRIT	20	14.6	52.4	31.7	62.2	72.9	10.2
4	HRWW	15	15.2	50.8	32.1	62.1	71.7	10.8
5	WB	13	11.1	54.5	33.0	60.0	70.8	9.8
6	Rye	10	14.8	53.3	32.2	61.9	73.2	9.7
<b>Mean</b>		<b>48.1</b>	<b>13.1</b>	<b>51.6</b>	<b>31.8</b>	<b>61.6</b>	<b>73.1</b>	<b>10.2</b>
<b>LSD (5%)</b>		<b>24.1</b>	<b>1.3</b>	<b>2.7</b>	<b>1.8</b>	<b>1.6</b>	<b>2.1</b>	<b>0.9</b>
<b>CV (%)</b>		<b>79.8<sup>p</sup></b>	<b>9.1</b>	<b>4.8</b>	<b>5.3</b>	<b>2.4</b>	<b>2.7</b>	<b>8.2</b>

<sup>^</sup>In Vitro True Digestibility

<sup>1</sup>Hard Red Winter Wheat (HRWW)

Triticale (TRIT)

Winter Barley (WB)

<sup>a</sup>Rank is based on Forage Yield

<sup>b</sup>Trials with a coefficient of variation (CV) ≥ 25% contain excessive experimental error.

Readers should consider trials in a similar environment to confirm varietal yield.

**2015 Small Grains Forage Trial - Comanche (Irrigated)**

Rank <sup>a</sup>	Variety <sup>1</sup>	Class <sup>2</sup>	Company	Dry Matter Yield (lb/a)			
				Clip 1	Clip 2	Clip 3	Total
				12/16/14	2/18/15	4/15/15	3 Clips
1	Horizon 201	Oat	Plantation Seed	2696	1234	5347	9278
2	Prine	Ryegrass	UF	1907	2142	5221	9270
3	SunGrazer Plus	Ryegrass	Oregro Seeds, Inc	1342	1625	6084	9051
4	Bob	Oat	UA	2251	1389	5400	9040
5	TAM 90	Ryegrass	TAMU	1690	1613	5698	9000
6	Nelson	Ryegrass	TAMU	1136	1730	5962	8828
7	OKAY	Oat	Noble Foundation	1769	1484	5538	8791
8	Maton II	Rye	Noble Foundation	2382	2552	3853	8787
9	Gulf	Ryegrass	TAMU	1490	1752	5525	8766
10	Fridge**	TRIT	Elliot Plant Breeding	1538	619	6518	8675
11	Horizon 306	Oat	Plantation Seed	2091	1712	4836	8639
12	Oklon	Rye	Noble Foundation	1708	1380	5531	8619
13	TX07CS2257*	Oat	TAMU	1560	1942	5028	8531
14	Heavy Grazer 76-30	Oat	East Texas Seed	2191	1627	4682	8500
15	Marshal	Ryegrass	Wax Company	1276	1461	5757	8495
16	P-919**	WB	Paramount Seeds	1561	1717	5217	8495
17	Maton	Rye	Noble Foundation	2031	1889	4515	8435
18	TAMbar 501	WB	TAMU	1066	562	6728	8355
19	TAMTBO	Ryegrass	TAMU	1537	1406	5356	8299
20	TAM 114	HRWW	TAMU	994	1266	6010	8270
21	RAM 99016	Oat	LSU	1449	1551	5072	8071
22	WB Grainfield	HRWW	Monsanto	1189	1425	5345	7959
23	TAMO 411	Oat	TAMU	1277	1730	4920	7927
24	TAMO 606	Oat	TAMU	922	1274	5615	7811
25	25R40	SRWW	Pioneer	760	619	6278	7657
26	NF 101	TRIT	Noble Foundation	1274	1380	4982	7636
27	TX08A001249*	HRWW	TAMU	888	1115	5603	7607
28	Duster	HRWW	OSU	808	1071	5705	7584
29	TX09CS1029*	Oat	TAMU	1769	1531	4268	7568
30	Elbon	Rye	Noble Foundation	1813	1240	4389	7442
31	TX09D1172*	HRWW	TAMU	816	1138	5464	7419
32	Trical 348	TRIT	Syngenta	132	526	6714	7372
33	Walken	Oat	UK	1431	1107	4822	7361
34	Weathermaster 135**	HRWW	Unknown	791	1660	4868	7319
35	TX09CS031*	Oat	TAMU	799	1646	4833	7277
36	TAM 204**	HRWW	TAMU	1048	1464	4731	7243
37	TAMcale 6331	TRIT	TAMU	1712	2223	3239	7173
38	TAMcale 5019	TRIT	TAMU	1568	1491	4087	7145
39	NF 201(NF96210)	TRIT	Noble Foundation	1886	1839	3416	7141
40	SY Razor**	HRWW	Syngenta	1122	1655	4352	7129
41	TX07CS1948*	Oat	TAMU	898	1106	5103	7107
42	TX09A001194*	HRWW	TAMU	950	1741	4336	7028
43	Maja	WB	Oregon State	1226	873	4819	6918
44	WB Redhawk	HRWW	Monsanto	1390	2204	3313	6907
45	TAM 401**	HRWW	TAMU	1009	1867	4189	6893
46	Horizon 270	Oat	Plantation Seed	1500	1149	4085	6735
47	Haybet	SB	USDA/MAES	3365	606	2372	6343
48	Fannin	HRWW	Syngenta	889	1350	4064	6303
<b>Mean</b>				<b>1435</b>	<b>1452</b>	<b>5004</b>	<b>7889</b>
<b>LSD (5%)</b>				<b>811</b>	<b>483</b>	<b>1454</b>	<b>1844</b>
<b>CV (%)</b>				<b>28<sup>b</sup></b>	<b>17</b>	<b>14</b>	<b>12</b>

\*Experimental Lines

\*\*Awnless/Beardless

<sup>1</sup>All Ryegrass Varieties are Tetraploids EXCEPT Gulf, Marshal, and TAM 90.

<sup>2</sup>Hard Red Winter Wheat (HRWW)

Soft Red Winter Wheat (SRWW)

Triticale (TRIT)

Spring Barley (SB)

Winter Barley (WB)

<sup>a</sup>Rank is based on Total Forage Weight

<sup>b</sup>Trials with a coefficient of variation (CV)  $\geq$  25% contain excessive experimental error.

Readers should consider trials in a similar environment to confirm varietal yield.

**2015 Small Grains Forage Trial - Comanche (Irrigated) Clip 1 (12/16/14) Forage Quality Data**

Rank <sup>a</sup>	Variety <sup>1</sup>	Class <sup>2</sup>	Company	Dry Matter Yield (lb/a)	Component of Forage (%)					
					Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>a</sup>	Ash
1	Haybet	SB	USDA/MAES	3370	18.9	41.9	27.0	67.4	85.8	11.1
2	Horizon 201	Oat	Plantation Seed	2690	21.0	33.6	20.0	73.5	89.1	11.3
3	Maton II	Rye	Noble Foundation	2380	25.7	33.6	21.5	74.0	88.4	12.4
4	Bob	Oat	UA	2250	19.2	29.7	19.0	73.7	88.2	10.6
5	Heavy Grazer 76-30	Oat	East Texas Seed	2190	22.1	31.4	19.7	74.1	89.7	11.0
6	Horizon 306	Oat	Plantation Seed	2090	18.9	32.5	20.4	72.4	89.3	10.5
7	Maton	Rye	Noble Foundation	2040	22.1	36.0	20.5	73.6	87.8	11.9
8	Prine	Ryegrass	UF	1910	21.4	26.4	18.3	75.0	88.6	12.6
9	NF 201(NF96210)	TRIT	Noble Foundation	1890	22.4	35.5	21.0	73.3	88.1	11.3
10	Elbon	Rye	Noble Foundation	1810	20.8	36.8	20.8	72.9	87.9	11.4
11	TX09CS1029*	Oat	TAMU	1770	17.7	31.4	18.2	73.8	89.4	9.9
12	OKAY	Oat	Noble Foundation	1760	20.0	32.8	18.2	74.6	89.2	10.3
13	TAMcale 6331	TRIT	TAMU	1710	20.8	35.5	20.7	72.9	86.8	10.7
14	Oklon	Rye	Noble Foundation	1710	23.7	36.6	20.4	74.2	87.8	11.7
15	TAM 90	Ryegrass	TAMU	1690	22.6	29.5	20.4	73.8	88.8	13.6
16	TAMcale 5019	TRIT	TAMU	1570	22.0	32.4	19.5	74.3	87.3	10.9
17	P-919**	WB	Paramount Seeds	1560	22.1	32.6	20.6	73.4	89.7	12.2
18	TX07CS2257*	Oat	TAMU	1560	22.4	32.1	18.5	75.2	88.7	11.2
19	Fridge**	TRIT	Elliot Plant Breeding	1540	20.6	39.5	24.9	69.7	84.2	10.9
20	TAMTBO	Ryegrass	TAMU	1540	22.8	28.6	20.0	74.2	88.8	13.0
21	Horizon 270	Oat	Plantation Seed	1500	20.5	32.2	19.6	73.6	89.6	11.5
22	Gulf	Ryegrass	TAMU	1490	23.4	29.3	18.9	75.3	88.7	13.6
23	RAM 99016	Oat	LSU	1450	21.4	34.7	20.7	73.2	89.5	11.1
24	Walken	Oat	UK	1430	21.7	32.1	20.2	73.7	88.6	11.5
25	WB Redhawk	HRWW	Monsanto	1390	20.6	36.3	20.2	73.3	86.2	10.6
26	SunGrazer Plus	Ryegrass	Oregro Seeds, Inc	1340	21.5	28.7	19.7	73.9	88.2	12.8
27	Marshal	Ryegrass	Wax Company	1280	19.6	25.5	18.4	74.3	88.9	12.2
28	NF 101	TRIT	Noble Foundation	1270	19.1	38.3	22.5	70.9	83.4	12.1
29	TAMO 411	Oat	TAMU	1270	20.0	32.9	20.1	73.1	89.5	11.1
30	Maja	WB	Oregon State	1230	21.5	37.5	22.3	72.0	87.6	12.2
31	WB Grainfield	HRWW	Monsanto	1190	21.2	36.8	19.6	73.9	85.3	11.3
32	Nelson	Ryegrass	TAMU	1130	21.0	25.9	18.1	75.0	88.8	12.3
33	SY Razor**	HRWW	Syngenta	1120	21.6	35.5	20.8	73.1	85.6	11.4
34	TAMbar 501	WB	TAMU	1060	25.3	34.7	21.9	73.6	88.4	12.1
35	TAM 204**	HRWW	TAMU	1050	24.6	36.9	21.7	73.6	87.1	11.9
36	TAM 401**	HRWW	TAMU	1010	19.9	34.9	20.7	72.6	86.7	10.9
37	TAM 114	HRWW	TAMU	990	22.8	35.4	20.5	73.8	86.5	11.5
38	TX09A001194*	HRWW	TAMU	950	22.7	34.9	19.2	74.8	86.3	11.3
39	TAMO 606	Oat	TAMU	920	20.1	33.7	20.8	72.6	88.3	10.9
40	Fannin	HRWW	Syngenta	890	20.5	38.8	20.8	72.7	86.0	11.8
41	TX08A001249*	HRWW	TAMU	890	21.5	34.6	19.4	74.2	86.8	11.4
42	TX07CS1948*	Oat	TAMU	890	20.7	32.5	19.6	73.8	88.4	11.4
43	TX09D1172*	HRWW	TAMU	820	25.8	33.8	20.9	74.5	87.2	11.6
44	Duster	HRWW	OSU	810	22.3	37.2	19.9	74.1	85.9	11.6
45	TX09CS031*	Oat	TAMU	800	22.3	32.7	18.5	75.2	88.6	11.5
46	Weathermaster 135**	HRWW	Unknown	790	22.1	36.0	19.9	74.0	85.7	11.5
47	25R40	SRWW	Pioneer	760	23.0	32.7	19.1	74.9	87.3	10.9
48	Trical 348	TRIT	Syngenta	130	23.9	32.9	18.9	75.5	87.3	12.1
<b>Mean</b>				<b>1435.3</b>	<b>21.5</b>	<b>33.6</b>	<b>20.2</b>	<b>73.6</b>	<b>87.7</b>	<b>11.6</b>
<b>LSD (5%)</b>				<b>810.6</b>	<b>NS</b>	<b>4.4</b>	<b>2.5</b>	<b>2.4</b>	<b>2.1</b>	<b>1.5</b>
<b>CV (%)</b>				<b>28.1<sup>b</sup></b>	<b>11.3</b>	<b>6.3</b>	<b>6.1</b>	<b>1.6</b>	<b>1.1</b>	<b>6.5</b>

<sup>a</sup>In Vitro True Digestibility

\*Experimental Lines

\*\*Awnless/Beardless

<sup>1</sup>All Ryegrass Varieties are Tetraploids EXCEPT Gulf, Marshal, and TAM 90.

<sup>2</sup>Hard Red Winter Wheat (HRWW)

Soft Red Winter Wheat (SRWW)

Spring Barley (SB)

Triticale (TRIT)

Winter Barley (WB)

<sup>a</sup>Rank is based on Forage Yield

<sup>b</sup>Trials with a coefficient of variation (CV)  $\geq$  25% contain excessive experimental error.

Readers should consider trials in a similar environment to confirm varietal yield.

**2015 Small Grains Forage Trial - Comanche (Irrigated) Clip 2 (2/18/15) Forage Quality Data**

Rank <sup>a</sup>	Variety <sup>1</sup>	Class <sup>2</sup>	Company	Dry Matter Yield (lb/a)	Component of Forage (%)						
					Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>a</sup>	Ash	
1	Maton II	Rye	Noble Foundation	2560	16.9	39.7	23.5	69.4	83.5	8.3	
2	TAMcale 6331	TRIT	TAMU	2230	15.8	39.0	22.1	70.0	82.5	8.2	
3	WB Redhawk	HRWW	Monsanto	2210	17.4	36.5	20.9	71.5	83.6	8.9	
4	Prine	Ryegrass	UF	2140	18.7	25.8	14.6	76.9	88.4	10.6	
5	TX07CS2257*	Oat	TAMU	1940	15.7	31.0	16.7	74.2	88.6	8.3	
6	Maton	Rye	Noble Foundation	1890	18.4	37.5	21.5	71.4	84.6	8.6	
7	TAMbar 501	WB	TAMU	1870	21.9	32.3	17.6	75.7	87.9	10.0	
8	NF 201(NF96210)	TRIT	Noble Foundation	1840	17.4	37.0	21.7	70.9	84.4	8.2	
9	Gulf	Ryegrass	TAMU	1750	22.3	27.1	18.5	75.1	88.1	12.7	
10	TX09A001194*	HRWW	TAMU	1740	18.1	36.7	18.4	73.7	85.3	8.5	
11	Nelson	Ryegrass	TAMU	1730	17.4	26.7	14.9	76.2	86.7	10.9	
12	TAMO 411	Oat	TAMU	1730	15.1	30.0	16.7	74.0	87.4	8.4	
13	Horizon 306	Oat	Plantation Seed	1720	14.3	30.5	16.6	73.7	87.5	8.9	
14	P-919**	WB	Paramount Seeds	1720	13.5	32.9	17.7	72.6	87.0	7.3	
15	Weathermaster 135**	HRWW	Unknown	1660	18.9	35.4	19.7	73.0	84.9	9.2	
16	SY Razor**	HRWW	Syngenta	1650	17.7	34.9	18.6	73.4	84.6	8.5	
17	TX09CS031*	Oat	TAMU	1640	16.1	34.6	16.6	74.4	86.7	9.1	
18	Heavy Grazer 76-30	Oat	East Texas Seed	1630	17.1	29.8	16.6	74.7	87.6	8.5	
19	SunGrazer Plus	Ryegrass	Oregro Seeds, Inc	1620	19.5	25.0	15.2	76.7	87.7	11.0	
20	TAM 204**	HRWW	TAMU	1610	21.7	37.7	21.4	72.7	84.7	10.2	
21	RAM 99016	Oat	LSU	1550	15.0	31.1	14.8	75.4	86.1	8.5	
22	TX09CS1029*	Oat	TAMU	1530	15.7	32.1	16.6	74.3	87.2	7.7	
23	TAMcale 5019	TRIT	TAMU	1490	18.5	32.1	18.5	73.8	84.5	8.9	
24	OKAY	Oat	Noble Foundation	1480	20.2	32.1	18.2	74.7	87.9	9.9	
25	Marshal	Ryegrass	Wax Company	1460	21.8	26.9	17.0	76.1	88.3	11.6	
26	TAM 114	HRWW	TAMU	1460	20.8	33.5	18.8	74.4	85.3	9.8	
27	WB Grainfield	HRWW	Monsanto	1420	18.0	33.3	17.6	74.3	85.6	8.7	
28	TAMTBO	Ryegrass	TAMU	1400	21.8	26.3	17.1	76.0	88.9	12.0	
29	Bob	Oat	UA	1390	16.7	30.8	17.7	73.8	86.8	9.6	
30	NF 101	TRIT	Noble Foundation	1380	18.9	37.4	21.0	72.1	84.0	9.5	
31	Oklon	Rye	Noble Foundation	1380	19.8	35.2	20.6	72.6	86.0	9.4	
32	Fannin	HRWW	Syngenta	1350	15.6	36.9	18.9	72.4	84.4	8.9	
33	TAMO 606	Oat	TAMU	1270	17.3	30.7	16.8	74.7	87.8	9.6	
34	TAM 90	Ryegrass	TAMU	1260	21.6	32.2	19.7	74.0	87.7	12.8	
35	Elbon	Rye	Noble Foundation	1240	17.0	34.9	19.5	72.5	85.1	8.9	
36	Horizon 201	Oat	Plantation Seed	1230	17.8	30.3	16.7	75.0	88.2	10.0	
37	Horizon 270	Oat	Plantation Seed	1150	17.6	34.5	16.8	74.7	87.0	9.6	
38	TX09D1172*	HRWW	TAMU	1140	21.4	37.0	19.4	74.2	86.3	10.9	
39	TX08A001249*	HRWW	TAMU	1120	23.5	36.3	20.8	73.9	85.9	10.8	
40	TX07CS1948*	Oat	TAMU	1110	17.9	31.6	16.3	75.3	88.0	9.3	
41	Walken	Oat	UK	1110	15.4	28.7	15.2	75.2	88.4	8.2	
42	Duster	HRWW	OSU	1070	21.8	33.9	19.6	74.2	85.4	10.5	
43	Maja	WB	Oregon State	870	18.6	36.0	19.8	72.8	86.9	9.5	
44	Fridge**	TRIT	Elliot Plant Breeding	620	19.4	33.7	18.6	74.0	85.7	9.3	
45	25R40	SRWW	Pioneer	620	21.4	32.4	16.1	76.7	85.6	9.5	
46	Haybet	SB	USDA/MAES	610	13.7	36.5	21.5	69.8	85.8	8.7	
47	TAM 401**	HRWW	TAMU	560	13.9	38.5	19.9	71.1	82.5	8.0	
48	Trical 348	TRIT	Syngenta	520	25.4	31.2	16.8	77.6	87.9	10.6	
				<b>Mean</b>	<b>1451.7</b>	<b>18.1</b>	<b>32.9</b>	<b>18.2</b>	<b>73.9</b>	<b>86.3</b>	<b>9.4</b>
				<b>LSD (5%)</b>	<b>482.6</b>	<b>5.4</b>	<b>4.0</b>	<b>3.4</b>	<b>2.3</b>	<b>1.6</b>	<b>1.7</b>
				<b>CV (%)</b>	<b>16.5</b>	<b>13.9</b>	<b>5.6</b>	<b>8.8</b>	<b>1.5</b>	<b>0.9</b>	<b>8.6</b>

<sup>a</sup>In Vitro True Digestibility

\*Experimental Lines

\*\*Awnless/Beardless

<sup>1</sup>All Ryegrass Varieties are Tetraploids EXCEPT Gulf, Marshal, and TAM 90.

<sup>2</sup>Hard Red Winter Wheat (HRWW)

Soft Red Winter Wheat (SRWW)

Spring Barley (SB)

Triticale (TRIT)

Winter Barley (WB)

<sup>a</sup>Rank is based on Forage Yield

**2015 Small Grains Forage Trial - Comanche (Irrigated) Clip 3 (4/15/15) Forage Quality Data**

Rank <sup>a</sup>	Variety <sup>1</sup>	Class <sup>2</sup>	Company	Dry Matter Yield (lb/a)	Component of Forage (%)						
					Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>a</sup>	Ash	
1	TAMO 411	Oat	TAMU	6728	11.4	54.3	35.3	58.3	71.5	9.8	
2	SY Razor**	HRWW	Syngenta	6714	10.7	55.9	33.6	59.4	66.0	6.4	
3	Elbon	Rye	Noble Foundation	6518	7.5	63.6	41.1	52.4	63.0	6.4	
4	OKAY	Oat	Noble Foundation	6278	12.5	54.4	33.1	60.4	74.1	9.5	
5	WB Redhawk	HRWW	Monsanto	6084	10.6	56.5	33.8	59.2	66.8	8.2	
6	Trical 348	TRIT	Syngenta	6010	9.5	58.3	36.1	57.0	69.8	7.9	
7	Maton	Rye	Noble Foundation	5962	10.3	59.7	39.7	54.5	65.3	7.3	
8	Heavy Grazer 76-30	Oat	East Texas Seed	5757	12.1	53.5	35.6	58.3	72.5	9.5	
9	TAMcale 5019	TRIT	TAMU	5705	8.5	63.4	35.5	57.1	67.8	8.5	
10	TAM 204**	HRWW	TAMU	5698	10.3	59.6	33.5	59.3	66.9	8.4	
11	TAM 90	Ryegrass	TAMU	5615	7.9	56.2	37.2	55.6	69.8	8.7	
12	TX08A001249*	HRWW	TAMU	5603	8.6	58.7	33.3	58.8	64.6	6.4	
13	NF 101	TRIT	Noble Foundation	5538	7.7	60.0	33.9	58.1	62.3	6.9	
14	NF 201(NF96210)	TRIT	Noble Foundation	5531	9.7	60.2	38.0	55.6	65.6	8.1	
15	Fridge**	TRIT	Elliot Plant Breeding	5525	9.3	61.3	37.2	56.1	69.3	9.6	
16	TX09D1172*	HRWW	TAMU	5464	9.8	58.8	33.3	59.3	67.1	8.7	
17	Bob	Oat	UA	5400	11.8	51.8	35.6	58.2	72.4	9.8	
18	TAMbar 501	WB	TAMU	5356	8.9	52.2	37.0	56.1	69.4	8.6	
19	WB Grainfield	HRWW	Monsanto	5347	9.6	59.1	36.1	57.1	66.0	7.4	
20	Fannin	HRWW	Syngenta	5345	10.0	57.6	35.1	58.0	66.5	8.0	
21	25R40	SRWW	Pioneer	5221	9.9	54.5	31.2	61.0	68.4	6.2	
22	Oklon	Rye	Noble Foundation	5217	9.0	61.5	41.2	52.9	66.2	7.1	
23	TX07CS1948*	Oat	TAMU	5103	12.1	52.3	33.0	60.3	71.9	9.6	
24	RAM 99016	Oat	LSU	5072	11.0	54.9	37.2	56.7	69.9	9.4	
25	TX07CS2257*	Oat	TAMU	5028	12.1	51.3	31.6	61.4	74.0	9.7	
26	Maton II	Rye	Noble Foundation	4982	7.3	67.0	43.0	50.9	61.8	7.4	
27	TAM 401**	HRWW	TAMU	4920	8.0	60.8	34.4	57.8	62.0	6.7	
28	Weathermaster 135**	HRWW	Unknown	4868	12.0	53.3	29.9	62.7	70.8	9.4	
29	Horizon 201	Oat	Plantation Seed	4836	13.3	50.6	34.5	59.6	73.4	10.3	
30	TX09CS031*	Oat	TAMU	4833	11.4	54.9	31.7	61.1	73.2	9.0	
31	Walken	Oat	UK	4822	11.6	51.3	29.3	63.0	80.4	10.6	
32	Haybet	SB	USDA/MAES	4819	8.5	58.1	31.9	59.9	73.9	9.1	
33	SunGrazer Plus	Ryegrass	Oregro Seeds, Inc	4731	9.3	53.3	34.5	58.1	73.4	9.6	
34	Horizon 306	Oat	Plantation Seed	4682	13.9	51.6	31.9	61.8	74.9	10.1	
35	Maja	WB	Oregon State	4515	10.1	50.7	31.4	60.9	71.0	7.9	
36	TAMcale 6331	TRIT	TAMU	4389	9.9	64.1	36.3	57.0	66.6	8.9	
37	P-919**	WB	Paramount Seeds	4352	7.3	55.8	34.6	57.4	68.0	8.7	
38	TX09A001194*	HRWW	TAMU	4337	10.4	58.5	32.5	60.1	67.0	7.5	
39	TX09CS1029*	Oat	TAMU	4268	13.8	50.1	31.6	62.0	76.0	9.3	
40	TAM 114	HRWW	TAMU	4189	7.5	60.6	36.4	56.1	65.4	8.1	
41	TAMO 606	Oat	TAMU	4087	11.9	51.9	35.5	58.3	72.9	10.1	
42	Gulf	Ryegrass	TAMU	4085	9.6	55.3	34.7	58.1	73.2	9.6	
43	Duster	HRWW	OSU	4064	10.5	57.6	31.9	60.6	67.7	8.3	
44	Marshal	Ryegrass	Wax Company	3853	9.6	53.1	35.0	57.9	73.9	10.5	
45	Nelson	Ryegrass	TAMU	3416	12.3	48.8	31.0	61.9	76.1	10.5	
46	Prine	Ryegrass	UF	3313	11.6	51.4	32.4	60.6	75.0	10.6	
47	TAMTBO	Ryegrass	TAMU	3239	12.5	50.4	34.0	59.7	76.4	10.6	
48	Horizon 270	Oat	Plantation Seed	2372	12.7	51.4	31.4	61.8	74.8	9.2	
				<b>Mean</b>	<b>5004.0</b>	<b>10.3</b>	<b>56.0</b>	<b>34.5</b>	<b>58.5</b>	<b>69.9</b>	<b>8.7</b>
				<b>LSD (5%)</b>	<b>1453.8</b>	<b>3.0</b>	<b>4.9</b>	<b>4.0</b>	<b>3.8</b>	<b>3.7</b>	<b>1.7</b>
				<b>CV (%)</b>	<b>14.3</b>	<b>14.4</b>	<b>4.3</b>	<b>5.8</b>	<b>3.2</b>	<b>2.6</b>	<b>9.6</b>

<sup>a</sup>In Vitro True Digestibility

\*Experimental Lines

\*\*Awnless/Beardless

<sup>1</sup>All Ryegrass Varieties are Tetraploids EXCEPT Gulf, Marshal, and TAM 90.

<sup>2</sup>Hard Red Winter Wheat (HRWW)

Soft Red Winter Wheat (SRWW)

Spring Barley (SB)

Triticale (TRIT)

Winter Barley (WB)

<sup>a</sup>Rank is based on Forage Yield

<sup>b</sup>Trials with a coefficient of variation (CV)  $\geq$  25% contain excessive experimental error.

Readers should consider trials in a similar environment to confirm varietal yield.

**2015 Small Grains Forage Trial - Comanche (Irrigated) Species Quality Data**

**Clip 1: 12/16/14**

Rank <sup>a</sup>	Class <sup>1</sup>	Dry Matter Yield (lb/a)	Component of Forage (%)					
			Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>^</sup>	Ash
1	SB	3365	18.9	41.9	27.0	67.4	85.8	11.1
2	Rye	1984	22.8	35.4	20.9	73.5	88.0	11.9
3	Oat	1615	20.6	32.4	19.5	73.7	89.0	11.0
4	Ryegrass	1483	21.8	27.7	19.1	74.5	88.7	12.9
5	TRIT	1352	21.8	35.8	21.1	73.0	86.4	11.4
6	WB	1284	23.0	35.0	21.6	73.0	88.5	12.2
7	HRWW	991	21.8	36.0	20.2	73.7	86.2	11.4
<b>Mean</b>		<b>1435.3</b>	<b>21.5</b>	<b>33.6</b>	<b>20.2</b>	<b>73.6</b>	<b>87.7</b>	<b>11.6</b>
<b>LSD (5%)</b>		<b>616.5</b>	<b>2.8</b>	<b>2.8</b>	<b>1.7</b>	<b>1.6</b>	<b>1.4</b>	<b>0.9</b>
<b>CV (%)</b>		<b>35.0<sup>b</sup></b>	<b>10.5</b>	<b>6.7</b>	<b>6.8</b>	<b>1.8</b>	<b>1.3</b>	<b>6.2</b>

**Clip 2: 2/18/15**

Rank <sup>a</sup>	Class <sup>1</sup>	Dry Matter Yield (lb/a)	Component of Forage (%)					
			Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>^</sup>	Ash
1	Rye	1765	17.4	37.3	21.5	71.1	84.4	8.6
2	Ryegrass	1676	20.4	26.8	16.5	76.0	88.0	11.5
3	HRWW	1496	18.6	35.7	19.3	73.2	84.7	9.2
4	Oat	1463	16.6	31.3	16.6	74.6	87.5	9.0
5	TRIT	1346	18.8	35.2	20.1	72.7	84.9	9.0
6	WB	1051	18.0	33.7	18.4	73.7	87.3	9.0
7	SB	607	13.7	36.5	21.5	69.8	85.8	8.7
<b>Mean</b>		<b>1451.7</b>	<b>18.1</b>	<b>32.9</b>	<b>18.2</b>	<b>73.9</b>	<b>86.3</b>	<b>9.4</b>
<b>LSD (5%)</b>		<b>522.1</b>	<b>3.4</b>	<b>2.8</b>	<b>2.1</b>	<b>1.8</b>	<b>1.3</b>	<b>1.2</b>
<b>CV (%)</b>		<b>29.3<sup>b</sup></b>	<b>15.1</b>	<b>6.9</b>	<b>9.4</b>	<b>1.9</b>	<b>1.2</b>	<b>10.2</b>

**Clip 3: 4/15/15**

Rank <sup>a</sup>	Class <sup>1</sup>	Dry Matter Yield (lb/a)	Component of Forage (%)					
			Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>^</sup>	Ash
1	Ryegrass	5657	10.4	52.6	34.1	58.8	74.0	10.0
2	WB	5588	8.8	52.9	34.3	58.1	69.5	8.4
3	Oat	4968	12.3	52.5	33.4	60.1	73.7	9.7
4	HRWW	4860	9.8	58.1	33.6	59.0	66.4	7.8
5	TRIT	4826	9.1	61.3	36.9	56.3	66.8	8.2
6	RYE	4572	8.4	63.4	41.3	52.6	63.3	7.0
7	SB	2372	8.5	58.1	31.9	59.9	73.9	9.1
<b>Mean</b>		<b>5004.1</b>	<b>10.3</b>	<b>56.0</b>	<b>34.5</b>	<b>58.5</b>	<b>69.9</b>	<b>8.7</b>
<b>LSD (5%)</b>		<b>1136.3</b>	<b>2.0</b>	<b>3.4</b>	<b>3.1</b>	<b>2.8</b>	<b>3.2</b>	<b>1.2</b>
<b>CV (%)</b>		<b>18.5</b>	<b>15.5</b>	<b>4.9</b>	<b>7.2</b>	<b>3.9</b>	<b>3.7</b>	<b>10.8</b>

<sup>^</sup>In Vitro True Digestibility

<sup>1</sup>Hard Red Winter Wheat (HRWW)

Spring Barley (SB)

Triticale (TRIT)

Winter Barley (WB)

<sup>a</sup>Rank is based on Forage Yield

<sup>b</sup>Trials with a coefficient of variation (CV) ≥ 25% contain excessive experimental error.

Readers should consider trials in a similar environment to confirm varietal yield.



**2015 Small Grains Forage Trial - McGregor (Dryland)**

Rank <sup>a</sup>	Variety <sup>1</sup>	Class <sup>2</sup>	Company	Dry Matter Yield (lb/a)		
				Clip 1	Clip 2	Total
				12/17/14	4/30/15	2 Clips
1	Heavy Grazer 76-30	Oat	East Texas Seed	1350	10870	12160
2	TAMO 411	Oat	TAMU	1264	11055	12094
3	TX07CS2257*	Oat	TAMU	1062	9822	10737
4	TAMO 606	Oat	TAMU	1295	9279	10468
5	NF 201(NF96210)	TRIT	Noble Foundation	728	9760	10313
6	Fridge**	TRIT	Elliot Plant Breeding	1604	8456	9802
7	Horizon 306	Oat	Plantation Seed	1773	8069	9797
8	TAMbar 501	WB	TAMU	1065	8762	9591
9	TX09CS031*	Oat	TAMU	831	8893	9521
10	Bob	Oat	UA	1371	7900	9283
11	Horizon 201	Oat	Plantation Seed	1605	7348	8956
12	OKAY	Oat	Noble Foundation	1726	7187	8918
13	Marshal	Ryegrass	Wax Company	670	8077	8893
14	TAM 204**	HRWW	TAMU	770	7697	8519
15	Walken	Oat	UK	1289	7569	8493
16	Nelson	Ryegrass	TAMU	1120	7410	8370
17	Duster	HRWW	OSU	885	7441	8269
18	RAM 99016	Oat	LSU	1261	7146	8194
19	Oklon	Rye	Noble Foundation	654	7519	8034
20	TAM 90	Ryegrass	TAMU	809	7116	8022
21	P-919**	WB	Paramount Seeds	1242	6825	7938
22	TAM 114	HRWW	TAMU	965	7087	7913
23	Prine	Ryegrass	UF	1399	6586	7898
24	TX07CS1948*	Oat	TAMU	1080	6939	7804
25	SunGrazer Plus	Ryegrass	Oregro Seeds, Inc	1036	6748	7780
26	TAMTBO	Ryegrass	TAMU	759	6702	7393
27	Gulf	Ryegrass	TAMU	726	6532	7097
28	TX09CS1029*	Oat	TAMU	1140	6242	7052
29	TAMcale 6331	TRIT	TAMU	875	6205	7049
30	SY Razor**	HRWW	Syngenta	954	6094	6987
31	WB Redhawk	HRWW	Monsanto	203	6680	6890
32	TX09D1172*	HRWW	TAMU	73	6641	6697
33	Horizon 270	Oat	Plantation Seed	1273	5538	6652
34	Maton II	Rye	Noble Foundation	747	5785	6599
35	WB Grainfield	HRWW	Monsanto	99	6497	6587
36	NF 101	TRIT	Noble Foundation	572	5992	6414
37	TAMcale 5019	TRIT	TAMU	296	6083	6286
38	Elbon	Rye	Noble Foundation	526	5803	6111
39	TAM 401**	HRWW	TAMU	274	5450	5777
40	Maton	Rye	Noble Foundation	469	5368	5684
41	Weathermaster 135**	HRWW	Unknown	177	5486	5648
42	TX09A001194*	HRWW	TAMU	77	5592	5638
43	Fannin	HRWW	Syngenta	277	4989	5423
44	Trical 348	TRIT	Syngenta	35	5317	5351
45	TX08A001249*	HRWW	TAMU	64	5326	5351
<b>Mean</b>				<b>855</b>	<b>7082</b>	<b>7854</b>
<b>LSD (5%)</b>				<b>289</b>	<b>2967</b>	<b>3051</b>
<b>CV (%)</b>				<b>24</b>	<b>20</b>	<b>19</b>

\*Experimental Lines

\*\*Awnless/Beardless

<sup>1</sup>All Ryegrass Varieties are Tetraploids EXCEPT Gulf, Marshal, and TAM 90.

<sup>2</sup>Hard Red Winter Wheat (HRWW)

Soft Red Winter Wheat (SRWW)

Triticale (TRIT)

Spring Barley (SB)

Winter Barley (WB)

<sup>a</sup>Rank is based on Total Forage Weight



**2015 Small Grains Forage Trial - McGregor (Dryland) Clip 1 (12/17/14) Forage Quality Data**

Rank <sup>a</sup>	Variety <sup>1</sup>	Class <sup>2</sup>	Company	Dry Matter Yield (lb/a)	Component of Forage (%)						
					Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>a</sup>	Ash	
1	Horizon 306	Oat	Plantation Seed	1773	25.1	33.8	21.0	74.2	86.7	13.4	
2	OKAY	Oat	Noble Foundation	1726	24.8	33.8	20.5	74.5	87.3	13.2	
3	Horizon 201	Oat	Plantation Seed	1605	25.8	33.2	20.8	74.7	87.5	13.9	
4	Fridge**	TRIT	Elliot Plant Breeding	1604	25.6	38.5	24.4	71.8	84.9	14.2	
5	Prine	Ryegrass	UF	1399	25.5	30.5	21.1	74.3	87.3	15.0	
6	Bob	Oat	UA	1371	26.3	33.4	20.4	75.2	87.0	14.0	
7	Heavy Grazer 76-30	Oat	East Texas Seed	1350	26.2	32.5	19.6	75.7	87.4	13.2	
8	TAMO 606	Oat	TAMU	1295	26.7	34.3	19.7	75.8	87.4	14.3	
9	Walken	Oat	UK	1289	25.4	33.3	20.2	75.0	87.5	13.6	
10	Horizon 270	Oat	Plantation Seed	1273	24.9	33.3	19.1	75.6	86.8	13.6	
11	TAMO 411	Oat	TAMU	1264	25.7	33.2	20.3	75.0	86.7	13.5	
12	RAM 99016	Oat	LSU	1261	27.3	32.5	20.0	75.8	87.3	13.5	
13	P-919**	WB	Paramount Seeds	1242	25.6	34.8	22.0	73.7	87.7	13.1	
14	TX09CS1029*	Oat	TAMU	1140	25.9	31.2	20.0	75.3	87.9	13.1	
15	Nelson	Ryegrass	TAMU	1120	24.1	31.9	21.8	73.3	87.0	15.3	
16	TX07CS1948*	Oat	TAMU	1080	24.7	32.3	19.2	75.5	87.4	12.8	
17	TAMbar 501	WB	TAMU	1065	26.7	34.0	22.3	73.8	87.3	13.8	
18	TX07CS2257*	Oat	TAMU	1062	25.5	31.8	18.9	76.0	87.2	12.9	
19	SunGrazer Plus	Ryegrass	Oregro Seeds, Inc	1036	26.2	30.8	22.3	73.7	87.6	15.6	
20	TAM 114	HRWW	TAMU	965	26.5	37.3	22.2	73.8	85.8	13.7	
21	SY Razor**	HRWW	Syngenta	954	27.2	37.1	22.4	73.9	85.8	13.8	
22	Duster	HRWW	OSU	885	25.5	38.5	22.3	73.4	85.1	14.1	
23	TAMcale 6331	TRIT	TAMU	875	28.7	34.1	21.8	74.9	87.0	13.7	
24	TX09CS031*	Oat	TAMU	831	27.5	32.8	20.6	75.4	86.6	13.3	
25	TAM 90	Ryegrass	TAMU	809	26.1	33.4	22.2	73.7	86.1	15.4	
26	TAM 204**	HRWW	TAMU	770	28.0	36.6	20.7	75.5	86.6	13.9	
27	TAMTBO	Ryegrass	TAMU	759	25.5	33.0	21.7	73.8	86.0	14.8	
28	Maton II	Rye	Noble Foundation	747	27.7	36.1	21.5	74.8	88.2	13.4	
29	NF 201(NF96210)	TRIT	Noble Foundation	728	28.7	35.2	20.9	75.6	87.5	14.5	
30	Gulf	Ryegrass	TAMU	726	25.9	32.2	22.1	73.7	86.3	15.8	
31	Marshal	Ryegrass	Wax Company	670	27.8	31.9	20.6	75.5	86.9	15.0	
32	Oklon	Rye	Noble Foundation	654	28.0	34.6	20.4	75.8	87.4	13.6	
33	NF 101	TRIT	Noble Foundation	572	28.5	36.0	21.7	74.9	85.6	14.3	
34	Elbon	Rye	Noble Foundation	526	26.7	35.4	20.8	75.0	87.2	13.4	
35	Maton	Rye	Noble Foundation	469	27.2	35.5	20.6	75.3	87.8	13.3	
36	TAMcale 5019	TRIT	TAMU	296	29.6	33.7	19.9	76.7	86.5	13.8	
37	Fannin	HRWW	Syngenta	277	29.2	36.3	20.7	76.0	86.1	14.5	
38	TAM 401**	HRWW	TAMU	274	29.0	36.1	21.0	75.7	86.4	14.3	
39	WB Redhawk	HRWW	Monsanto	203	27.7	37.6	21.3	74.9	86.2	13.9	
40	Weathermaster 135**	HRWW	Unknown	177	29.9	34.7	20.1	76.7	86.7	14.6	
41	WB Grainfield	HRWW	Monsanto	99	27.2	36.2	20.1	75.7	85.5	14.1	
42	TX09A001194*	HRWW	TAMU	77	29.0	35.9	20.1	76.4	84.7	14.0	
43	TX09D1172*	HRWW	TAMU	73	28.9	35.2	20.5	76.0	86.2	14.6	
44	TX08A001249*	HRWW	TAMU	64	29.9	35.3	20.5	76.4	87.2	15.5	
45	Trical 348	TRIT	Syngenta	35	---	---	---	---	---	---	
				<b>Mean</b>	<b>854.8</b>	<b>26.9</b>	<b>34.3</b>	<b>20.9</b>	<b>75.0</b>	<b>86.8</b>	<b>14.0</b>
				<b>LSD (5%)</b>	<b>288.6</b>	<b>2.3</b>	<b>2.9</b>	<b>1.4</b>	<b>1.6</b>	<b>1.6</b>	<b>1.2</b>
				<b>CV (%)</b>	<b>24.1</b>	<b>4.3</b>	<b>4.2</b>	<b>3.3</b>	<b>1.0</b>	<b>0.9</b>	<b>4.1</b>

<sup>a</sup>In Vitro True Digestibility

\*Experimental Lines

\*\*Awnless/Beardless

<sup>1</sup>All Ryegrass Varieties are Tetraploids EXCEPT Gulf, Marshal, and TAM 90.

<sup>2</sup>Hard Red Winter Wheat (HRWW)

Triticale (TRIT)

Winter Barley (WB)

<sup>a</sup>Rank is based on Forage Yield

**2015 Small Grains Forage Trial - McGregor (Dryland) Clip 2 (4/30/15) Forage Quality Data (Single Replication)**

Rank <sup>a</sup>	Variety <sup>1</sup>	Class <sup>2</sup>	Company	Dry Matter Yield (lb/a)	Component of Forage (%)						
					Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>a</sup>	Ash	
1	TAMO 411	Oat	TAMU	11055	4.1	57.6	36.2	54.9	54.8	9.6	
2	Heavy Grazer 76-30	Oat	East Texas Seed	10870	5.3	57.1	36.6	55.1	61.2	7.6	
3	TX07CS2257*	Oat	TAMU	9822	4.9	58.1	34.3	56.7	54.3	6.7	
4	NF 201 (NF96210)	TRIT	Noble Foundation	9760	4.5	60.7	39.2	52.8	52.3	7.8	
5	TAMO 606	Oat	TAMU	9279	6.3	55.6	36.8	55.3	63.0	8.8	
6	TX09CS031*	Oat	TAMU	8893	5.1	56.6	34.2	56.9	61.3	8.2	
7	TAMbar 501	WB	TAMU	8762	5.1	58.9	38.0	54.0	55.7	9.7	
8	Fridge**	TRIT	Elliot Plant Breeding	8456	5.6	66.1	41.5	51.4	55.5	5.3	
9	Marshal	Ryegrass	Wax Company	8077	5.7	56.8	35.2	56.3	63.3	7.5	
10	Horizon 306	Oat	Plantation Seed	8069	3.9	53.8	36.3	54.9	60.1	7.9	
11	Bob	Oat	UA	7900	5.0	53.0	36.1	55.4	60.7	7.9	
12	TAM 204**	HRWW	TAMU	7697	4.1	65.9	40.4	51.8	49.1	10.5	
13	Walken	Oat	UK	7569	6.9	61.4	37.9	54.6	65.9	9.9	
14	Oklon	Rye	Noble Foundation	7519	5.3	64.5	39.4	52.9	53.5	7.2	
15	Duster	HRWW	OSU	7441	3.9	64.3	42.9	49.8	47.9	11.7	
16	Nelson	Ryegrass	TAMU	7410	3.8	51.0	36.4	54.7	65.4	5.3	
17	Horizon 201	Oat	Plantation Seed	7348	4.8	51.2	34.1	56.8	63.2	8.1	
18	OKAY	Oat	Noble Foundation	7187	4.8	59.5	37.7	54.1	57.1	9.2	
19	RAM 99016	Oat	LSU	7146	5.0	54.1	34.8	56.3	58.6	8.7	
20	TAM 90	Ryegrass	TAMU	7116	4.5	60.8	40.5	51.8	55.2	8.6	
21	TAM 114	HRWW	TAMU	7087	5.4	58.8	43.4	49.9	49.7	11.4	
22	TX07CS1948*	Oat	TAMU	6939	5.5	52.8	29.5	60.6	63.3	10.1	
23	P-919**	WB	Paramount Seeds	6825	3.5	67.0	47.0	46.5	50.6	9.8	
24	SunGrazer Plus	Ryegrass	Oregro Seeds, Inc	6748	4.5	57.8	38.1	53.6	61.3	7.8	
25	TAMTBO	Ryegrass	TAMU	6702	5.9	52.6	36.2	55.6	64.0	7.1	
26	WB Redhawk	HRWW	Monsanto	6680	5.6	46.2	34.0	57.2	52.0	8.1	
27	TX09D1172*	HRWW	TAMU	6641	6.2	56.7	34.8	56.8	52.8	8.4	
28	Prine	Ryegrass	UF	6586	5.8	55.1	37.5	54.5	63.9	7.8	
29	Gulf	Ryegrass	TAMU	6532	3.4	58.5	41.5	50.6	59.0	4.9	
30	WB Grainfield	HRWW	Monsanto	6497	5.2	62.0	37.1	54.7	56.6	10.2	
31	TX09CS1029*	Oat	TAMU	6242	5.0	54.9	34.4	56.7	60.7	8.2	
32	TAMcale 6331	TRIT	TAMU	6205	4.5	64.0	41.5	51.1	49.0	8.0	
33	SY Razor**	HRWW	Syngenta	6094	5.1	50.2	33.9	57.1	53.6	7.0	
34	TAMcale 5019	TRIT	TAMU	6083	4.8	64.4	37.0	54.6	55.2	8.2	
35	NF 101	TRIT	Noble Foundation	5992	4.1	67.8	44.1	48.9	49.7	10.1	
36	Elbon	Rye	Noble Foundation	5803	4.5	62.9	39.5	52.6	53.1	6.5	
37	Maton II	Rye	Noble Foundation	5785	3.7	68.7	44.7	48.3	46.7	6.3	
38	TX09A001194*	HRWW	TAMU	5592	8.5	54.9	35.1	57.4	56.0	10.0	
39	Horizon 270	Oat	Plantation Seed	5538	5.3	54.0	34.8	56.5	60.5	8.9	
40	Weathermaster 135**	HRWW	Unknown	5486	8.8	55.9	34.1	58.3	57.6	8.9	
41	TAM 401**	HRWW	TAMU	5450	5.3	57.7	33.1	57.8	54.4	8.9	
42	Maton	Rye	Noble Foundation	5368	3.7	69.3	41.8	50.5	49.6	7.5	
43	TX08A001249*	HRWW	TAMU	5326	5.3	57.3	37.0	54.8	55.6	8.5	
44	Trical 348	TRIT	Syngenta	5317	5.0	58.2	39.1	53.0	59.7	6.5	
45	Fannin	HRWW	Syngenta	4989	5.8	58.7	39.3	53.2	52.4	9.6	
				<b>Mean</b>	<b>7082.0</b>	---	---	---	---	---	---
				<b>LSD (5%)</b>	<b>2967.4</b>	---	---	---	---	---	---
				<b>CV (%)</b>	<b>20.3</b>	---	---	---	---	---	---

<sup>a</sup>In Vitro True Digestibility

\*Experimental Lines

\*\*Awnless/Beardless

<sup>1</sup>All Ryegrass Varieties are Tetraploids EXCEPT Gulf, Marshal, and TAM 90.

<sup>2</sup>Hard Red Winter Wheat (HRWW)

Triticale (TRIT)

Winter Barley (WB)

<sup>a</sup>Rank is based on Forage Yield

## 2015 Small Grains Forage Trial - McGregor (Dryland) Species Quality Data

### Clip 1: 12/17/14

Rank <sup>a</sup>	Class <sup>1</sup>	Dry Matter Yield (lb/a)	Component of Forage (%)					
			Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>^</sup>	Ash
1	Oat	1309	25.8	33.0	20.0	75.3	87.2	13.4
2	WB	1153	26.1	34.4	22.1	73.8	87.5	13.4
3	Ryegrass	931	25.9	31.9	21.7	74.0	86.8	15.3
4	TRIT	685	28.2	35.4	21.5	75.0	86.5	14.0
5	Rye	599	27.2	35.7	21.0	75.0	87.7	13.4
6	HRWW	401	28.2	36.4	21.0	75.4	86.0	14.2
<b>Mean</b>		<b>854.8</b>	<b>26.9</b>	<b>34.3</b>	<b>20.9</b>	<b>75.0</b>	<b>86.8</b>	<b>14.0</b>
<b>LSD (5%)</b>		<b>230.3</b>	<b>1.3</b>	<b>1.4</b>	<b>0.9</b>	<b>1.0</b>	<b>0.8</b>	<b>0.5</b>
<b>CV (%)</b>		<b>42.9<sup>b</sup></b>	<b>5.2</b>	<b>4.3</b>	<b>4.7</b>	<b>1.4</b>	<b>1.0</b>	<b>4.2</b>

### Clip 2: 4/30/15

Rank <sup>a</sup>	Class <sup>1</sup>	Dry Matter Yield (lb/a)	Component of Forage (%)					
			Crude Protein	Neutral Detergent Fiber	Acid Detergent Fiber	TDN	IVDM <sup>^</sup>	Ash
1	Oat	8024	5.1	55.7	35.3	56.1	60.3	8.5
2	WB	7793	4.3	63.0	42.5	50.2	53.1	9.8
3	Ryegrass	7025	4.8	56.1	37.9	53.9	61.7	7.0
4	TRIT	6969	4.8	63.7	40.3	52.1	53.5	7.6
5	HRWW	6281	5.8	57.4	37.1	54.9	53.2	9.4
6	RYE	6119	4.0	67.0	42.0	50.5	49.8	6.7
<b>Mean</b>		<b>7082.0</b>	<b>5.1</b>	<b>58.5</b>	<b>37.7</b>	<b>54.2</b>	<b>56.6</b>	<b>8.3</b>
<b>LSD (5%)</b>		<b>1441.1</b>	<b>1.4</b>	<b>5.3</b>	<b>3.8</b>	<b>3.1</b>	<b>4.4</b>	<b>1.6</b>
<b>CV (%)</b>		<b>22.7</b>	<b>20.2</b>	<b>6.9</b>	<b>7.6</b>	<b>4.4</b>	<b>5.9</b>	<b>14.8</b>

<sup>^</sup>In Vitro True Digestibility

<sup>1</sup>Hard Red Winter Wheat (HRWW)

Triticale (TRIT)

Winter Barley (WB)

<sup>a</sup>Rank is based on Forage Yield

<sup>b</sup>Trials with a coefficient of variation (CV)  $\geq$  25% contain excessive experimental error.

Readers should consider trials in a similar environment to confirm varietal yield.

### 2015 Ryegrass Forage Trial - Overton (Dryland)

		Dry Matter Yield (lb/a)					2015	2012-2015
2015		Clip 1	Clip 2	Clip 3	Clip 4	Total	Average	
Rank <sup>a</sup>	Variety	1/27/15	3/25/15	4/21/15	5/29/15	4 Clips	3 Years	
1	B-13.0414 <sup>*b</sup>	1404	3960	2641	2709	10714	---	
2	TAMTBO	470	3650	3979	2539	10638	8265	
3	Lonestar	956	3387	3204	2501	10048	7235	
4	M2CVS*	638	3141	3224	2746	9749	7094	
5	Nelson	745	3495	2973	2424	9637	7639	
6	Jackson	771	3267	2784	2666	9488	7400	
7	Winterhawk	827	3788	2338	2488	9441	6681	
8	TARX 10-1*	647	2915	2859	2916	9337	7144	
9	Prine	737	3448	2952	2184	9321	7033	
10	ME-4*	906	2939	2875	2598	9318	6561	
11	TARX 10-6*	628	2968	2869	2519	8984	6642	
12	Flying A	858	2878	2625	2594	8955	7629	
13	GO-FLN2 <sup>*b</sup>	380	2783	3008	2745	8916	---	
14	B-14.1187 <sup>*b</sup>	683	3376	2567	2289	8915	---	
15	GO-TT2 <sup>*b</sup>	536	2508	3809	1989	8842	---	
16	TAM 90	611	2470	3478	2079	8638	6754	
17	Marshall	714	3315	2566	2000	8595	7412	
18	Diamond T	685	3158	2465	2199	8507	7288	
19	Tetrastar	578	2389	3284	2220	8471	6777	
20	ME-94*	795	3201	2423	1867	8286	6412	
21	Big Boss	703	2905	2429	2243	8280	7124	
22	Maximus	418	2291	3295	2132	8136	6417	
23	Jumbo	540	2877	2539	2162	8118	7628	
24	07-WW*	707	2868	2437	2072	8084	5930	
25	Bill <sup>b</sup>	380	2788	2559	2282	8009	---	
26	Attain <sup>b</sup>	502	2016	3068	2375	7961	---	
27	Gulf	551	2524	2780	2103	7958	6515	
28	B-14.0047 <sup>*b</sup>	460	2708	2294	2336	7798	---	
29	Ed <sup>b</sup>	413	2583	2510	2156	7662	---	
30	Fria <sup>b</sup>	427	2371	2623	2199	7620	---	
31	Passerel Plus	641	2335	2654	1936	7566	6268	
32	Meroa <sup>b</sup>	373	2181	2707	2124	7385	---	
<b>Mean</b>		<b>646</b>	<b>2921</b>	<b>2838</b>	<b>2325</b>	<b>8731</b>	<b>---</b>	
<b>LSD (5%)</b>		<b>481</b>	<b>874</b>	<b>736</b>	<b>572</b>	<b>1650</b>	<b>---</b>	
<b>CV (%)</b>		<b>63<sup>c</sup></b>	<b>25</b>	<b>22</b>	<b>21</b>	<b>16</b>	<b>---</b>	

\*Experimental Line - Not commercially available

<sup>a</sup>Rank is based on Total Forage Weight

<sup>b</sup>Entry not tested over last 3 years.

<sup>c</sup>Trials with a coefficient of variation (CV)  $\geq$  25% contain excessive experimental error.

Readers should consider trials in a similar environment to confirm varietal yield.

**2015 Small Grains Forage Trial - Overton (Dryland)**

Rank <sup>a</sup>	Variety	Class <sup>1</sup>	Company	Dry Matter Yield (lb/a)			
				Clip 1	Clip 2	Clip 3	Total
				1/27/15	3/25/15	4/21/15	3 Clips
1	TX RYE Experimental	Rye	TAMU	247	1666	4767	6680
2	Heavy Grazer 76-30	Oat	East Texas Seed	188	1222	4650	6060
3	Elbon	Rye	Noble Foundation	245	1781	2893	4919
4	Rymin	Rye	Hancock Seed Co.	103	719	3206	4028
<b>Mean</b>				<b>156</b>	<b>1078</b>	<b>3103</b>	<b>4337</b>
<b>LSD (5%)</b>				<b>109</b>	<b>215</b>	<b>1105</b>	<b>1166</b>
<b>CV (%)</b>				<b>55<sup>b</sup></b>	<b>16</b>	<b>28<sup>b</sup></b>	<b>21</b>

<sup>a</sup>Rank is based on Total Forage Weight

<sup>b</sup>Trials with a coefficient of variation (CV)  $\geq$  25% contain excessive experimental error. Readers should consider trials in a similar environment to confirm varietal yield.

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