

**Table 1. Winter Annual Small Grain Forages, 2016-2017, Agricultural Science Center at Clovis**

**Investigators:** B. Niece, A. Scott, and A. Mesbah

**Test Description**

<b>Location:</b>	<b>Management Practices:</b>	<b>Growing Conditions:</b>																																																																										
County/Area: Curry Longitude: -103.22 Latitude: 34.60 Elevation: 4435 ft. Soil Name: Olton Soil Texture: clay loam Soil Depth: >60 in.	Previous Crop: fallow Planting Date: 14-Oct <u>Forage Harvest - Single harvest per plot</u> Harvest Dates: 10-Apr to 4-May (Mechanically harvested all of each plot based on stage of maturity. Clipping height was 1 to 2 in.)  Production Inputs: <table style="margin-left: 40px; border: none;"> <thead> <tr> <th></th> <th style="text-align: center;">Rate</th> <th style="text-align: center;">Date</th> </tr> <tr> <th style="text-align: left;">Fertilizer:</th> <th style="text-align: center;">lb/ac</th> <th></th> </tr> </thead> <tbody> <tr> <td>Nitrogen</td> <td style="text-align: center;">52</td> <td style="text-align: center;">carryover</td> </tr> <tr> <td>Nitrogen</td> <td style="text-align: center;">40</td> <td style="text-align: center;">10-Oct</td> </tr> <tr> <td>P<sub>2</sub>O<sub>5</sub></td> <td style="text-align: center;">25</td> <td style="text-align: center;">10-Oct</td> </tr> <tr> <td>Nitrogen</td> <td style="text-align: center;">52</td> <td style="text-align: center;">17-Feb</td> </tr> </tbody> </table> Herbicides: <table style="margin-left: 40px; border: none;"> <tbody> <tr> <td>Affinity BroadSpec</td> <td style="text-align: center;">0.6 oz/ac</td> <td style="text-align: center;">4-Mar</td> </tr> <tr> <td>Lo-Vol 6</td> <td style="text-align: center;">12.0 oz/ac</td> <td style="text-align: center;">4-Mar</td> </tr> <tr> <td>Prowl H2O</td> <td style="text-align: center;">3 pt/ac</td> <td style="text-align: center;">4-Mar</td> </tr> </tbody> </table> Insecticides: <table style="margin-left: 40px; border: none;"> <tbody> <tr> <td>Lorsban</td> <td style="text-align: center;">1 pt/ac</td> <td style="text-align: center;">4-Mar</td> </tr> </tbody> </table>		Rate	Date	Fertilizer:	lb/ac		Nitrogen	52	carryover	Nitrogen	40	10-Oct	P <sub>2</sub> O <sub>5</sub>	25	10-Oct	Nitrogen	52	17-Feb	Affinity BroadSpec	0.6 oz/ac	4-Mar	Lo-Vol 6	12.0 oz/ac	4-Mar	Prowl H2O	3 pt/ac	4-Mar	Lorsban	1 pt/ac	4-Mar	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="border-top: 1px solid black; border-bottom: 1px solid black;"></th> <th style="border-top: 1px solid black; border-bottom: 1px solid black; text-align: center;">Average Temp. °F</th> <th style="border-top: 1px solid black; border-bottom: 1px solid black; text-align: center;">Precip. in.</th> <th style="border-top: 1px solid black; border-bottom: 1px solid black; text-align: center;">Irrigation in.</th> </tr> </thead> <tbody> <tr><td>October</td><td style="text-align: center;">61.5</td><td style="text-align: center;">0.01</td><td style="text-align: center;">2.00</td></tr> <tr><td>November</td><td style="text-align: center;">49.5</td><td style="text-align: center;">1.00</td><td style="text-align: center;">0.00</td></tr> <tr><td>December</td><td style="text-align: center;">35.5</td><td style="text-align: center;">0.17</td><td style="text-align: center;">0.00</td></tr> <tr><td>January</td><td style="text-align: center;">36.5</td><td style="text-align: center;">1.11</td><td style="text-align: center;">0.00</td></tr> <tr><td>February</td><td style="text-align: center;">45.8</td><td style="text-align: center;">0.36</td><td style="text-align: center;">1.40</td></tr> <tr><td>March</td><td style="text-align: center;">51.7</td><td style="text-align: center;">0.93</td><td style="text-align: center;">4.60</td></tr> <tr><td>April</td><td style="text-align: center;">55.5</td><td style="text-align: center;">0.49</td><td style="text-align: center;">9.40</td></tr> <tr><td>May†</td><td style="text-align: center;">53.5</td><td style="text-align: center;">0.00</td><td style="text-align: center;">0.00</td></tr> <tr> <td colspan="2" style="border-top: 1px solid black; text-align: right;">Seasonal Precipitation</td> <td colspan="2" style="text-align: center;">4.07 in.</td> </tr> <tr> <td colspan="2" style="text-align: right;">Total Irrigation</td> <td colspan="2" style="text-align: center;">17.40 in.</td> </tr> </tbody> </table>		Average Temp. °F	Precip. in.	Irrigation in.	October	61.5	0.01	2.00	November	49.5	1.00	0.00	December	35.5	0.17	0.00	January	36.5	1.11	0.00	February	45.8	0.36	1.40	March	51.7	0.93	4.60	April	55.5	0.49	9.40	May†	53.5	0.00	0.00	Seasonal Precipitation		4.07 in.		Total Irrigation		17.40 in.	
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<b>Test Design:</b> Replications: 3 Plot Length: 8 ft. Plot Width: 6.73 ft. Rows per Plot: 11 Drill Row Spacing: 6.25 in.		†May 1-4																																																																										
<b>Seeding Rate:</b> All Entries: 100 lb/a 1 Entry: 120 lb/a																																																																												
<b>Field Notes:</b>																																																																												

**Table 2. Forage Harvest - Winter Annual Small Grain Forages - 2016-2017 Various Dates - NMSU Agricultural Science Center at Clovis**

Company Name	Variety Name	Species <sup>†</sup>	Harvest Date	Dry	65%	Moisture	Milk/	Milk/
				Forage	Moisture	at	Ton	Acre
				T/ac	T/ac	%	lb/ton	lb/ac
Watley Seed Co.	SlickTrit II - 100#	T	4-May	7.0	20.1	78.3	2714	19128
Watley Seed Co.	SlickTrit II - 120#	T	4-May	6.9	19.7	77.7	2742	18954
Watley Seed Co.	TAM 204	W	2-May	6.8	19.3	76.3	2664	18025
Curtis and Curtis	Maximizer Plus	W/T	28-Apr	6.4	18.2	78.7	2713	17262
UNL Husker Genetics	441 T	T	28-Apr	6.1	17.4	80.3	2904	17660
TriCal Forage	Trical 348	T	26-Apr	6.1	17.3	79.7	2844	17253
UNL Husker Genetics	422 T	T	2-May	6.0	17.1	78.7	3013	18065
Ehmke Seed	ThunderTall	T	28-Apr	5.9	14.7	80.3	2848	16687
Curtis and Curtis	X3	T	28-Apr	5.6	16.1	80.7	2672	15077
Curtis and Curtis	Smoothgrazer	W/T	26-Apr	5.2	15.0	80.7	2857	14980
Sharp Brothers Seed Co.	Trical 718	T	17-Apr	5.1	14.7	78.3	3027	15581
UNL Husker Genetics	NT 13416	T	17-Apr	5.1	14.7	80.7	3108	15996
TriCal Forage	Trical Flex 719	T	17-Apr	5.1	14.7	80.7	3005	15416
Ehmke Seed	ThunderCale V	T	17-Apr	5.1	11.1	82.0	3185	16306
Ehmke Seed	ThunderCale	T	17-Apr	5.0	10.2	81.7	3201	16040
Curtis and Curtis	Maximizer	W/T	26-Apr	4.8	13.9	82.3	2826	13703
UNL Husker Genetics	NT 05421	T	17-Apr	4.8	13.7	82.0	3039	14620
UNL Husker Genetics	NT 11428	T	17-Apr	4.8	13.7	80.7	3283	15714
UNL Husker Genetics	NT 01451	T	17-Apr	4.8	13.6	81.0	3393	16139
Ehmke Seed	ThunderTall II	T	26-Apr	4.7	11.0	83.0	3021	14250
AgriPro	SY Grit	W	17-Apr	4.7	7.7	76.0	3271	15299
UNL Husker Genetics	Ruth	W	17-Apr	4.6	13.2	77.0	3427	15774
TriCal Forage	SY TF 813	T	17-Apr	4.6	13.1	81.0	3042	13926
UNL Husker Genetics	NT 09423	T	17-Apr	4.5	12.9	79.7	3303	14964
Curtis and Curtis	X4	W/T	21-Apr	4.5	12.9	78.0	2755	12447
TriCal Forage	SY TF 131	T	17-Apr	4.5	12.8	80.0	2911	13044
TriCal Forage	Trical Gainer 154	T	10-Apr	4.4	12.7	82.7	3556	15812
UNL Husker Genetics	NT 11406	T	17-Apr	4.4	12.6	80.0	3442	15212
UNL Husker Genetics	Panhandle	W	17-Apr	4.4	12.5	77.7	3357	14644
UNL Husker Genetics	Robidoux	W	17-Apr	4.3	12.3	78.0	3462	14962
AgriPro	SY Monument	W	21-Apr	4.2	6.6	77.3	3290	13908
UNL Husker Genetics	NT 13443	T	17-Apr	4.2	11.9	81.5	3218	13387
Ehmke Seed	ThunderGreen	R	17-Apr	4.1	7.0	84.3	3458	14105
Curtis and Curtis	Smoothgrazer	W/T	17-Apr	4.0	11.4	82.0	2845	11399
Ehmke Seed	ThundercCale F	T	17-Apr	4.0	7.3	81.7	3269	13040
UNL Husker Genetics	NB 10444	B	10-Apr	3.9	10.5	84.0	4097	15943
TriCal Forage	SY TF 135	T	10-Apr	3.8	11.0	80.3	3553	13673
Ehmke Seed	Short Beard Thunder	T	10-Apr	3.8	7.4	81.7	3908	14972
Sharp Brothers Seed Co.	Trical 135	T	10-Apr	3.8	10.9	81.0	3421	13054
TriCal Forage	Trical 336	T	10-Apr	3.8	10.7	83.0	3650	13688
UNL Husker Genetics	NT 06422	T	10-Apr	3.7	10.5	82.3	3911	14407
UNL Husker Genetics	NT 07403	T	10-Apr	3.7	10.5	81.0	3610	13288
TriCal Forage	NS 09PG105	T	10-Apr	3.6	10.2	81.3	3384	12044
UNL Husker Genetics	NB 10425	B	10-Apr	3.3	9.5	84.0	4298	14351
UNL Husker Genetics	426 GT	T	10-Apr	3.0	8.6	79.9	3272	9873
Trial Mean				4.7	12.7	80.3	3222	15279
LSD (0.05)				2.0	2.0	1.98	2	2
CV				12.0	12.1	1.7	6.7	21.9
F Test				<.0001	<.0001	<.0001	<.0001	<.0001

<sup>†</sup>B=barley; T=triticale; W=wheat, R=Rye

Plots were harvested at Feekes stage 10.0-10.3; 10.0=sheath of flag leaf completely grown out, ear not visible; 10.3= half of heading process complete.

\*\*\* Highest numerical value in the column.

Unless otherwise indicated, all entries planted at 100 lb/ac rate.

**Table 3. Forage Harvest - Winter Annual Small Grain Forages - 2016-2017 Various Dates - NMSU Agricultural Science Center at Clovis**

Company Name	Variety Name	Species <sup>†</sup>	Harvest Date	CP	ADF	NDF	dNDF	TDN	RFQ
				% of DM	% of DM	% of DM	% of NDF	% of DM	
Watley Seed Co.	SlickTrit II - 100#	T	4-May	12.0	39.6	62.1	56.9	60.0	111
Watley Seed Co.	SlickTrit II - 120#	T	4-May	11.5	40.3	63.0	57.8	60.3	112
Watley Seed Co.	TAM 204	W	2-May	12.2	38.9	62.7	56.3	59.4	108
Curtis and Curtis	Maximizer Plus	W/T	28-Apr	13.1	39.7	61.4	58.3	59.9	113
UNL Husker Genetics	441 T	T	28-Apr	14.1	38.5	61.8	61.4	62.1	121
TriCal Forage	Trical 348	T	26-Apr	11.6	39.4	62.8	60.0	61.5	116
UNL Husker Genetics	422 T	T	2-May	13.7	36.2	58.5	61.5	63.7	136
Ehmke Seed	ThunderTall	T	28-Apr	14.1	39.1	62.4	60.1	61.5	117
Curtis and Curtis	X3	T	28-Apr	13.7	40.8	63.4	58.5	59.3	109
Curtis and Curtis	Smoothgrazer	W/T	26-Apr	13.2	38.7	61.5	60.9	61.5	120
Sharp Brothers Seed Co.	Trical 718	T	17-Apr	14.3	38.0	60.0	62.5	63.7	129
UNL Husker Genetics	NT 13416	T	17-Apr	16.6	36.1	58.2	62.3	64.9	134
TriCal Forage	Trical Flex 719	T	17-Apr	15.3	38.6	61.2	62.9	63.4	127
Ehmke Seed	ThunderCale V	T	17-Apr	15.1	35.7	58.8	64.9	65.7	139
Ehmke Seed	ThunderCale	T	17-Apr	16.7	35.5	58.2	63.8	66.0	139
Curtis and Curtis	Maximizer	W/T	26-Apr	13.5	39.3	61.9	61.0	61.1	118
UNL Husker Genetics	NT 05421	T	17-Apr	15.7	36.0	58.4	61.8	64.0	131
UNL Husker Genetics	NT 11428	T	17-Apr	15.4	35.5	58.1	67.3	66.8	146
UNL Husker Genetics	NT 01451	T	17-Apr	16.1	34.7	57.4	67.8	68.2	151
Ehmke Seed	ThunderTall II	T	26-Apr	15.0	37.4	60.2	63.7	63.5	130
AgriPro	SY Grit	W	17-Apr	15.9	32.9	54.5	65.0	66.8	150
UNL Husker Genetics	Ruth	W	17-Apr	16.2	31.7	53.3	68.1	68.7	162
TriCal Forage	SY TF 813	T	17-Apr	14.5	37.6	60.1	62.6	63.9	129
UNL Husker Genetics	NT 09423	T	17-Apr	14.8	35.1	57.4	66.4	67.1	146
Curtis and Curtis	X4	W/T	21-Apr	13.3	39.2	61.4	58.5	60.4	115
TriCal Forage	SY TF 131	T	17-Apr	14.7	39.1	61.7	61.0	62.3	121
TriCal Forage	Trical Gainer 154	T	10-Apr	16.3	32.0	54.0	69.7	70.3	166
UNL Husker Genetics	NT 11406	T	17-Apr	17.2	32.5	55.6	68.3	68.9	157
UNL Husker Genetics	Panhandle	W	17-Apr	15.0	33.8	55.7	67.5	67.8	153
UNL Husker Genetics	Robidoux	W	17-Apr	16.4	32.2	54.0	68.5	69.1	162
AgriPro	SY Monument	W	21-Apr	14.7	33.3	54.3	66.5	66.9	153
UNL Husker Genetics	NT 13443	T	17-Apr	15.9	35.3	57.5	64.8	66.1	143
Ehmke Seed	ThunderGreen	R	17-Apr	17.9	33.3	57.7	68.8	69.0	154
Curtis and Curtis	Smoothgrazer	W/T	17-Apr	14.2	38.0	61.2	60.8	61.4	120
Ehmke Seed	ThundercCale F	T	17-Apr	17.4	34.2	55.5	66.4	66.7	150
UNL Husker Genetics	NB 10444	B	10-Apr	19.3	26.4	46.8	81.4	76.7	224
TriCal Forage	SY TF 135	T	10-Apr	15.6	33.2	54.5	70.8	70.2	166
Ehmke Seed	Short Beard Thunder	T	10-Apr	16.7	27.9	49.3	76.8	74.5	201
Sharp Brothers Seed Co.	Trical 135	T	10-Apr	15.2	34.0	56.5	67.9	68.6	154
TriCal Forage	Trical 336	T	10-Apr	17.8	30.7	52.0	71.6	71.4	177
UNL Husker Genetics	NT 06422	T	10-Apr	18.3	27.8	49.0	76.1	74.6	201
UNL Husker Genetics	NT 07403	T	10-Apr	16.0	31.4	53.8	69.6	71.1	169
TriCal Forage	NS 09PG105	T	10-Apr	15.6	34.1	55.9	68.4	68.1	155
UNL Husker Genetics	NB 10425	B	10-Apr	19.8	24.9	44.0	86.1	79.1	249
UNL Husker Genetics	426 GT	T	10-Apr	14.9	34.2	56.1	66.2	66.8	154
	Trial Mean			15.3	35.1	57.3	65.5	66.1	146
	LSD (0.05)			2.0	2.0	2.0	2.0	2.0	2
	CV			8.7	6.3	4.6	5.6	4.0	11.1
	F Test			<.0001	<.0001	<.0001	<.0001	<.0001	<.0001

<sup>†</sup>B=barley; T=triticale; W=wheat; R=Rye

Plots were harvested at Feekes stage 10.0-10.3; 10.0=sheath of flag leaf completely grown out, ear not visible; 10.3=half of heading process complete.

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