

Table 1. Winter Annual Small Grain Forages, 2014-2015, Agricultural Science Center at Clovis

Investigators: B. Niece, M.A. Marsalis, A. Scott, and A. Mesbah

Test Description

Location:	Management Practices:	Growing Conditions:																																																																						
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: 15-Oct <u>Forage Harvest - Single harvest per plot</u> Harvest Dates: 17-Apr to 8-May (Mechanically harvested all of each plot based on stage of maturity. Clipping height was 1 to 2 in.) Production Inputs: <table border="0" style="margin-left: 20px;"> <thead> <tr> <th></th> <th style="text-align: center;">Rate</th> <th style="text-align: center;">Date</th> </tr> <tr> <th></th> <th style="text-align: center;">lb/ac</th> <th></th> </tr> </thead> <tbody> <tr> <td>Fertilizer:</td> <td></td> <td></td> </tr> <tr> <td>Nitrogen</td> <td style="text-align: center;">19</td> <td style="text-align: center;">Carryover</td> </tr> <tr> <td>Nitrogen</td> <td style="text-align: center;">30</td> <td style="text-align: center;">13-Oct</td> </tr> <tr> <td>P</td> <td style="text-align: center;">30</td> <td style="text-align: center;">13-Oct</td> </tr> <tr> <td>S</td> <td style="text-align: center;">3.8</td> <td style="text-align: center;">13-Oct</td> </tr> <tr> <td>Zn</td> <td style="text-align: center;">2 qt/ac</td> <td style="text-align: center;">13-Oct</td> </tr> <tr> <td>Nitrogen</td> <td style="text-align: center;">85</td> <td style="text-align: center;">12-Feb</td> </tr> <tr> <td>S</td> <td style="text-align: center;">15</td> <td style="text-align: center;">12-Feb</td> </tr> </tbody> </table>		Rate	Date		lb/ac		Fertilizer:			Nitrogen	19	Carryover	Nitrogen	30	13-Oct	P	30	13-Oct	S	3.8	13-Oct	Zn	2 qt/ac	13-Oct	Nitrogen	85	12-Feb	S	15	12-Feb	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Average Temp. °F</th> <th style="text-align: center;">Precip. in.</th> <th style="text-align: center;">Irrigation in.</th> </tr> </thead> <tbody> <tr><td>October</td><td style="text-align: center;">60</td><td style="text-align: center;">0.35</td><td style="text-align: center;">1.70</td></tr> <tr><td>November</td><td style="text-align: center;">41</td><td style="text-align: center;">0.22</td><td style="text-align: center;">1.20</td></tr> <tr><td>December</td><td style="text-align: center;">38</td><td style="text-align: center;">0.04</td><td style="text-align: center;">0.00</td></tr> <tr><td>January</td><td style="text-align: center;">31</td><td style="text-align: center;">1.23</td><td style="text-align: center;">0.00</td></tr> <tr><td>February</td><td style="text-align: center;">38</td><td style="text-align: center;">0.64</td><td style="text-align: center;">0.78</td></tr> <tr><td>March</td><td style="text-align: center;">45</td><td style="text-align: center;">0.61</td><td style="text-align: center;">3.30</td></tr> <tr><td>April</td><td style="text-align: center;">53</td><td style="text-align: center;">0.61</td><td style="text-align: center;">5.80</td></tr> <tr><td>May†</td><td style="text-align: center;">58</td><td style="text-align: center;">2.41</td><td style="text-align: center;">0.00</td></tr> </tbody> </table> <p>†May 1-8</p> <table border="0" style="margin-left: 20px;"> <tr> <td style="text-align: right;">Seasonal Precipitation</td> <td style="text-align: right;">6.11 in.</td> </tr> <tr> <td style="text-align: right;">Total Irrigation</td> <td style="text-align: right;">12.78 in.</td> </tr> </table>		Average Temp. °F	Precip. in.	Irrigation in.	October	60	0.35	1.70	November	41	0.22	1.20	December	38	0.04	0.00	January	31	1.23	0.00	February	38	0.64	0.78	March	45	0.61	3.30	April	53	0.61	5.80	May†	58	2.41	0.00	Seasonal Precipitation	6.11 in.	Total Irrigation	12.78 in.
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Test Design: Replications: 3 Plot Length: 10 ft. Plot Width: 6.73 ft. Rows per Plot: 11 Drill Row Spacing: 6.25 in.																																																																								
Seeding Rate: All Entries: 100 lb/a	Herbicides: Affinity BroadSpec 0.6 oz/ac 19-Mar Lo-Vol 6 12.0 oz/ac 19-Mar																																																																							
Field Notes:	Insecticides: Lorsban 1 pt/ac 19-Mar																																																																							

Table 2. Forage Harvest - Winter Annual Small Grain Forages - 2014-2015 Various Dates - NMSU Agricultural Science Center at Clovis

Company Name	Variety Name	Species [†]	Harvest Date	Dry Forage T/ac	65% Moisture Forage T/ac	Moisture at Harvest %	Milk/Ton lb/ton	Milk/Acre lb/ac
Ehmke Seed	ThunderTall	T	8-May	7.6 ***	21.7 ***	80.7	2735	20701 ***
Watley Seed Co.	SlickTrit II	T	8-May	7.6 ***	21.6 *	81.8 *	2582	19556 *
Curtis & Curtis Seed	X3	T	8-May	7.3 *	20.9 *	79.1	2476	18112 *
Curtis & Curtis Seed	Smoothgrazer Plus	W/T	8-May	7.3 *	20.8 *	79.2	2545	18564 *
Curtis & Curtis Seed	Smoothgrazer	W/T	8-May	7.1 *	20.4 *	77.9	2395	17105 *
Watley Seed Co.	SlickTrit	T	8-May	6.9 *	19.7 *	79.5	2615	18165 *
Curtis & Curtis Seed	Maximizer Plus	W/T	8-May	6.9 *	19.7 *	80.1	2539	17507 *
Curtis & Curtis Seed	Maximizer	W/T	8-May	6.8 *	19.3 *	79.6	2397	16262
Watley Seed Co.	WS-5	T	8-May	6.6 *	18.8 *	80.5	2528	16512
Ehmke Seed	ThunderTall II	T	8-May	6.3 *	18.0 *	79.5	2635	16624
Curtis & Curtis Seed	X2	T	8-May	6.3 *	17.9 *	82.4 *	2575	16136
Curtis & Curtis Seed	X4	T	8-May	6.2 *	17.7 *	75.4	2437	15052
Ehmke Seed	ThunderCale V	T	29-Apr	5.8	16.7	82.0 *	3253 *	18925 *
Ehmke Seed	ThunderCale MAES	T	29-Apr	5.8	16.5	81.2 *	3361 *	19320 *
Agricultural Development Co.	60 A	T	29-Apr	5.5	15.8	81.3 *	2761	15117
Ehmke Seed	ThunderCale	T	22-Apr	5.2	14.8	82.4 *	3260 *	16946 *
Ehmke Seed	ThunderCale F	T	29-Apr	5.2	14.8	80.5	3278 *	17002 *
Ehmke Seed	Short Beard Thunder	T	22-Apr	5.0	14.3	82.0 *	3470 *	17328 *
Ehmke Seed	ThunderGreen II	R	17-Apr	4.7	13.5	83.8 ***	3437 *	16236
Ehmke Seed	ThunderGreen DL	R	17-Apr	4.5	13.0	83.8 ***	3496 ***	15858
Trial Mean				6.2	17.8	80.6	2839	17351
LSD (0.05)				1.4	4.1	0.03	255	4004
CV				13.9	13.9	2.3	5.4	14.0
F Test				<0.0003	<0.0003	<0.0005	<0.0001	0.4298

[†]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.

* Not significantly different from the highest numerical value in the column based on the 5% LSD.

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

Table 3. Forage Harvest - Winter Annual Small Grain Forages - 2014-2015 Various Dates - NMSU Agricultural Science Center at Clovis

Company Name	Variety Name	Species [†]		Harvest Date	dNDF					RFQ
					CP	ADF	NDF	Dig. 48h	TDN	
					% of DM	% of DM	% of DM	% of NDF	% of DM	
Ehmke Seed	ThunderTall	1	T	8-May	12.9	40.6 *	63.1 *	58.2	60.2	111
Watley Seed Co.	SlickTrit II	18	T	8-May	13.5	42.2 ***	63.4 *	57.0	58.2	105
Curtis & Curtis Seed	X3	15	T	8-May	12.6	41.8 *	64.2 ***	54.9	57.0	100
Curtis & Curtis Seed	Smoothgrazer Plus	11	W/T	8-May	12.0	41.1 *	63.3 *	55.9	57.8	103
Curtis & Curtis Seed	Smoothgrazer	10	W/T	8-May	12.2	41.7 *	63.9 *	54.2	55.9	97
Watley Seed Co.	SlickTrit	17	T	8-May	13.7	39.9 *	60.9 *	56.6	58.7	110
Curtis & Curtis Seed	Maximizer Plus	13	W/T	8-May	13.1	41.9 *	63.9 *	55.7	57.8	102
Curtis & Curtis Seed	Maximizer	12	W/T	8-May	12.9	41.5 *	63.3 *	54.0	56.0	98
Watley Seed Co.	WS-5	19	T	8-May	13.8	41.6 *	63.2 *	55.6	57.6	103
Ehmke Seed	ThunderTall II	2	T	8-May	13.8	40.5 *	61.8 *	56.1	59.0	108
Curtis & Curtis Seed	X2	14	T	8-May	13.2	40.9 *	61.7 *	55.8	58.2	106
Curtis & Curtis Seed	X4	16	T	8-May	12.6	39.4 *	61.3 *	54.2	56.5	102
Ehmke Seed	ThunderCale V	4	T	29-Apr	15.1	33.0	52.6	65.0	66.6 *	154
Ehmke Seed	ThunderCale MAES	9	T	29-Apr	15.5	30.1	50.3	65.2	68.1 *	163 *
Agricultural Development	60 A	20	T	29-Apr	14.5	38.1 *	57.5	59.7	60.3	123
Ehmke Seed	ThunderCale	3	T	22-Apr	14.9	31.9	51.9	64.2	66.8 *	154
Ehmke Seed	ThunderCale F	5	T	29-Apr	14.5	32.2	51.7	63.8	67.1 *	155
Ehmke Seed	Short Beard Thunder	6	T	22-Apr	15.7	29.7	49.2	68.5 ***	69.2 *	174 ***
Ehmke Seed	ThunderGreen II	7	R	17-Apr	17.2 *	32.2	53.3	66.3 *	69.0 *	160 *
Ehmke Seed	ThunderGreen DL	8	R	17-Apr	19.2 ***	30.9	51.0	66.9 *	69.8 ***	168 *
Trial Mean					14.1	37.6	58.6	59.4	61.5	125
LSD (0.05)					2.4	2.7	3.3	2.9	3.3	15
CV					9.6	4.4	3.5	3.0	3.2	7.2
F Test					<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

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