

Table 1. Winter Annual Small Grain Forages, 2015-2016, Agricultural Science Center at Clovis

Investigators: B. Niece, 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: 16-Oct <u>Forage Harvest - Single harvest per plot</u> Harvest Dates: 14-Apr to 6-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;">84</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;">14-Oct</td> </tr> <tr> <td>P₂O₅</td> <td style="text-align: center;">40</td> <td style="text-align: center;">14-Oct</td> </tr> <tr> <td>Zn</td> <td style="text-align: center;">2 qt/ac</td> <td style="text-align: center;">14-Oct</td> </tr> <tr> <td>S</td> <td style="text-align: center;">5.1</td> <td style="text-align: center;">14-Oct</td> </tr> <tr> <td>Nitrogen</td> <td style="text-align: center;">66</td> <td style="text-align: center;">11-Feb</td> </tr> <tr> <td>S</td> <td style="text-align: center;">11.9</td> <td style="text-align: center;">11-Feb</td> </tr> </tbody> </table>		Rate	Date		lb/ac		Fertilizer:			Nitrogen	84	carryover	Nitrogen	40	14-Oct	P ₂ O ₅	40	14-Oct	Zn	2 qt/ac	14-Oct	S	5.1	14-Oct	Nitrogen	66	11-Feb	S	11.9	11-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;">58.5</td><td style="text-align: center;">8.20</td><td style="text-align: center;">0.30</td></tr> <tr><td>November</td><td style="text-align: center;">44.5</td><td style="text-align: center;">0.86</td><td style="text-align: center;">0.00</td></tr> <tr><td>December</td><td style="text-align: center;">39.0</td><td style="text-align: center;">0.61</td><td style="text-align: center;">0.00</td></tr> <tr><td>January</td><td style="text-align: center;">35.7</td><td style="text-align: center;">0.08</td><td style="text-align: center;">0.00</td></tr> <tr><td>February</td><td style="text-align: center;">42.7</td><td style="text-align: center;">0.16</td><td style="text-align: center;">0.71</td></tr> <tr><td>March</td><td style="text-align: center;">49.3</td><td style="text-align: center;">0.02</td><td style="text-align: center;">3.70</td></tr> <tr><td>April</td><td style="text-align: center;">53.6</td><td style="text-align: center;">0.49</td><td style="text-align: center;">7.90</td></tr> <tr><td>May†</td><td style="text-align: center;">51.1</td><td style="text-align: center;">0.16</td><td style="text-align: center;">0.00</td></tr> </tbody> </table> <p>†May 1-6</p> <table border="0" style="margin-left: 20px;"> <tr> <td style="text-align: right;">Seasonal Precipitation</td> <td style="text-align: right;">10.58 in.</td> </tr> <tr> <td style="text-align: right;">Total Irrigation</td> <td style="text-align: right;">12.61 in.</td> </tr> </table>		Average Temp. °F	Precip. in.	Irrigation in.	October	58.5	8.20	0.30	November	44.5	0.86	0.00	December	39.0	0.61	0.00	January	35.7	0.08	0.00	February	42.7	0.16	0.71	March	49.3	0.02	3.70	April	53.6	0.49	7.90	May†	51.1	0.16	0.00	Seasonal Precipitation	10.58 in.	Total Irrigation	12.61 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 1 Entry: 120 lb/a	Herbicides: Affinity BroadSpec: 0.6 oz/ac 4-Mar Lo-Vol 6: 12.0 oz/ac 4-Mar Prowl H2O: 3 pt/ac 4-Mar																																																																							
Field Notes:	Insecticides: Lorsban: 1 pt/ac 4-Mar																																																																							

Table 2. Forage Harvest - Winter Annual Small Grain Forages - 2015-2016 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
Curtis & Curtis Seed	X 3	T	6-May	8.5 ***	24.3 ***	74.9	2834	24146
Ehmke Seed	ThunderTall II	T	6-May	7.9 *	22.7 *	76.5	2680	21279
Curtis & Curtis Seed	Smoothgrazer Plus	W/T	3-May	7.7 *	22.1 *	76.0	2981	23043
Watley Seed Co.	SlickTrit II @ 120 lbs/ac	T	6-May	7.6 *	21.8	77.2	2886	21962
Curtis & Curtis Seed	X 2	T	6-May	7.5 *	21.4	75.2	2706	20268
Watley Seed Co.	SlickTrit II	T	6-May	7.4 *	21.0	79.6	2769	20352
Ehmke Seed	ThunderTall	T	6-May	7.3 *	20.6	79.1	2914	21127
Curtis & Curtis Seed	Smoothgrazer	W/T	3-May	7.2 *	20.6	74.7	2924	21111
Univ of Nebraska	NE 422 T	T	3-May	6.8	19.4	78.2	2946	19944
Gayland Ward Seed Co.	Exp. 2	T	3-May	6.8	19.3	79.3	2860	19362
Univ of Nebraska	NE 96 T 441	T	3-May	6.8	19.3	78.5	3043	20540
Curtis & Curtis Seed	Maximizer Plus	W/T	3-May	6.3	18.0	79.5	2703	17056
Gayland Ward Seed Co.	Exp. 5	W	27-Apr	6.3	18.0	74.8	3147	19763
Curtis & Curtis Seed	Maximizer	W/T	27-Apr	6.2	17.8	76.9	3033	18865
Gayland Ward Seed Co.	Exp. 4	T	22-Apr	6.0	17.0	81.5 *	3329	19808
AgriPro	SY Monument	W	27-Apr	5.8	16.6	73.9	3438	19975
Univ of Nebraska	Panhandle	W	27-Apr	5.7	16.4	74.3	3343	19055
Watley Seed Co.	TAM 204	W	22-Apr	5.7	15.9	74.4	3652	20816
Curtis & Curtis Seed	X 4	W	27-Apr	5.6	15.9	74.2	2984	16621
Gayland Ward Seed Co.	Exp. 1	T	18-Apr	5.6	15.9	80.4	3522	19547
Ehmke Seed	ShortBeard Thunder	T	18-Apr	5.5	15.8	80.2	3634	20096
Ehmke Seed	ThunderCale V	T	22-Apr	5.5	15.8	81.3 *	3453	19026
Univ of Nebraska	NT 11406	T	22-Apr	5.1	14.7	80.5	3499	17950
Univ of Nebraska	NT 094231	T	22-Apr	5.1	14.6	78.6	3579	18324
Univ of Nebraska	Robidoux	W	22-Apr	5.1	14.5	76.4	3599	18247
Ehmke Seed	ThunderGreen II	R	18-Apr	5.1	14.5	82.4 *	3414	17275
Univ of Nebraska	NT 05421	T	18-Apr	4.9	14.0	81.5 *	3517	17198
Univ of Nebraska	NE 10589	W	22-Apr	4.8	13.7	77.8	3579	17215
Univ of Nebraska	NE 07531	W	22-Apr	4.8	13.7	77.1	3375	16200
Univ of Nebraska	NT 01451	T	18-Apr	4.7	13.3	81.0 *	3734 *	17400
Gayland Ward Seed Co.	Exp. 3	T	18-Apr	4.5	12.9	78.6	3561	16025
Univ of Nebraska	NT 11428	T	18-Apr	4.4	12.6	81.1 *	3607	15907
Gayland Ward Seed Co.	Exp. 6	B	14-Apr	4.3	12.2	83.0 ***	3905 ***	16674 ***
Univ of Nebraska	NT 07403	T	14-Apr	4.2	12.1	80.9 *	3714	15673
Univ of Nebraska	NT 06422	T	14-Apr	4.2	12.0	81.4 *	3599	15152
Univ of Nebraska	NE 426 GT	T	18-Apr	4.1	11.8	79.1	3731 *	15372
Trial Mean				5.9	16.7	78.3	3283	18844
LSD (0.05)				0.9	2.6	0.02	187	339
CV				9.4	9.4	1.7	3.5	4.7
F Test				<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

[†]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 - 2015-2016 Various Dates - NMSU Agricultural Science Center at Clovis

Company Name	Variety Name	Species [†]	Harvest Date	CP	ADF	NDF	dNDF	TDN	RFQ
				% of DM	% of DM	% of DM	% of NDF	% of DM	
Curtis & Curtis Seed	X 3	T	6-May	10.9	38.7	61.5	60.0	61.3	119
Ehmke Seed	ThunderTall II	T	6-May	11.1	40.2 *	62.7 *	58.0	59.4	110
Curtis & Curtis Seed	Smoothgrazer Plus	W/T	3-May	11.9	37.4	59.3	60.9	63.3	127
Watley Seed Co.	SlickTrit II @ 120 lbs/ac	T	6-May	10.9	39.7 *	62.8 *	61.3	61.9	119
Curtis & Curtis Seed	X 2	T	6-May	8.6	41.7 ***	65.1 ***	59.3	59.6	108
Watley Seed Co.	SlickTrit II	T	6-May	11.9	40.9 *	63.1 *	60.0	60.4	113
Ehmke Seed	ThunderTall	T	6-May	11.3	39.3 *	61.1	62.1	62.2	123
Curtis & Curtis Seed	Smoothgrazer	W/T	3-May	11.4	37.0	59.0	58.5	62.8	123
Univ of Nebraska	NE 422 T	T	3-May	11.1	38.4	60.4	60.8	62.8	124
Gayland Ward Seed Co.	Exp. 2	T	3-May	11.7	38.3	59.8	60.7	61.6	122
Univ of Nebraska	NE 96 T 441	T	3-May	11.6	37.3	58.9	62.7	63.9	131
Curtis & Curtis Seed	Maximizer Plus	W/T	3-May	12.7	38.5	59.3	56.4	60.0	114
Gayland Ward Seed Co.	Exp. 5	W	27-Apr	11.2	33.9	54.8	62.7	65.4	142
Curtis & Curtis Seed	Maximizer	W/T	27-Apr	13.1	36.2	58.2	62.6	63.8	132
Gayland Ward Seed Co.	Exp. 4	T	22-Apr	13.4	35.2	57.0	66.6		148
AgriPro	SY Monument	W	27-Apr	11.2	31.9	51.7	67.6	68.9	165
Univ of Nebraska	Panhandle	W	27-Apr	11.3	33.6	55.0	66.4	67.7	152
Watley Seed Co.	TAM 204	W	22-Apr	14.3	28.5	46.5	70.3	71.6	191
Curtis & Curtis Seed	X 4	W	27-Apr	11.9	36.9	59.4	61.7	63.2	127
Gayland Ward Seed Co.	Exp. 1	T	18-Apr	13.6	32.0	53.5	68.8	69.9	165
Ehmke Seed	ShortBeard Thunder	T	18-Apr	13.1	31.3	52.6	71.0	71.3	173
Ehmke Seed	ThunderCale V	T	22-Apr	13.5	33.5	54.6	69.2	68.9	161
Univ of Nebraska	NT 11406	T	22-Apr	14.5 *	32.7	54.8	69.2	69.6	168
Univ of Nebraska	NT 094231	T	22-Apr	13.4	31.5	52.9	69.0	70.7	169
Univ of Nebraska	Robidoux	W	22-Apr	14.0	30.2	50.2	69.9	70.9	178
Ehmke Seed	ThunderGreen II	R	18-Apr	15.3 *	32.6	55.4	66.7	68.7	154
Univ of Nebraska	NT 05421	T	18-Apr	13.9	32.0	52.1	69.1	69.8	169
Univ of Nebraska	NE 10589	W	22-Apr	14.9 *	30.1	49.7	68.7	70.8	177
Univ of Nebraska	NE 07531	W	22-Apr	13.3	34.1	54.7	66.4	68.1	155
Univ of Nebraska	NT 01451	T	18-Apr	15.7 *	29.8	50.3	72.2	72.5 *	185
Gayland Ward Seed Co.	Exp. 3	T	18-Apr	13.1	31.7	50.7	68.8	70.5	174
Univ of Nebraska	NT 11428	T	18-Apr	14.7 *	31.5	52.2	70.2	71.0	173
Gayland Ward Seed Co.	Exp. 6	B	14-Apr	16.7 ***	28.0	46.7	76.2 ***	74.5 ***	208 ***
Univ of Nebraska	NT 07403	T	14-Apr	14.5 *	29.1	48.8	70.4	72.4 *	187
Univ of Nebraska	NT 06422	T	14-Apr	15.0 *	29.3	49.3	70.6	70.8	181
Univ of Nebraska	NE 426 GT	T	18-Apr	14.7 *	28.6	48.0	71.2	72.6 *	190
				Trial Mean	12.9	34.2	55.3	65.7	152
				LSD (0.05)	2.3	2.6	3.5	2.3	14
				CV	11.1	4.7	3.9	2.2	5.9
				F Test	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

[†]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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