

**Table 1. Winter Annual Small Grain Forages, 2019-2020, 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: 1-Nov <u>Forage Harvest - Single harvest per plot</u> Harvest Dates: 24-April to 18-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 colspan="3"><b>Fertilizer:</b></td> </tr> <tr> <td>Nitrogen</td> <td style="text-align: center;">44 lb/ac</td> <td>carryover</td> </tr> <tr> <td>Nitrogen</td> <td style="text-align: center;">30 lb/ac</td> <td>at plant</td> </tr> <tr> <td>Phos</td> <td style="text-align: center;">40 lb/ac</td> <td>at plant</td> </tr> <tr> <td>S</td> <td style="text-align: center;">3.3 lb/ac</td> <td>at plant</td> </tr> <tr> <td>Nitrogen</td> <td style="text-align: center;">90 lb/ac</td> <td>2-Mar</td> </tr> <tr> <td>S</td> <td style="text-align: center;">16.3 lb/ac</td> <td>2-Mar</td> </tr> <tr> <td colspan="3"><b>Herbicides:</b></td> </tr> <tr> <td>Lo-Vol 6</td> <td style="text-align: center;">1.0 pt/ac</td> <td>23-Mar</td> </tr> <tr> <td>Prowl H<sub>2</sub>O</td> <td style="text-align: center;">3 pt/ac</td> <td>23-Mar</td> </tr> <tr> <td>Affinity BS</td> <td style="text-align: center;">0.6 oz/ac</td> <td>23-Mar</td> </tr> <tr> <td colspan="3"><b>Insecticides:</b></td> </tr> <tr> <td>Govern</td> <td style="text-align: center;">1 pt/ac</td> <td>23-Mar</td> </tr> </tbody> </table>		Rate	Date		lb/ac		<b>Fertilizer:</b>			Nitrogen	44 lb/ac	carryover	Nitrogen	30 lb/ac	at plant	Phos	40 lb/ac	at plant	S	3.3 lb/ac	at plant	Nitrogen	90 lb/ac	2-Mar	S	16.3 lb/ac	2-Mar	<b>Herbicides:</b>			Lo-Vol 6	1.0 pt/ac	23-Mar	Prowl H <sub>2</sub> O	3 pt/ac	23-Mar	Affinity BS	0.6 oz/ac	23-Mar	<b>Insecticides:</b>			Govern	1 pt/ac	23-Mar	<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>November</td> <td style="text-align: center;">43.1</td> <td style="text-align: center;">0.78</td> <td style="text-align: center;">0.00</td> </tr> <tr> <td>December</td> <td style="text-align: center;">39.8</td> <td style="text-align: center;">0.55</td> <td style="text-align: center;">0.00</td> </tr> <tr> <td>January</td> <td style="text-align: center;">38.2</td> <td style="text-align: center;">0.73</td> <td style="text-align: center;">0.00</td> </tr> <tr> <td>February</td> <td style="text-align: center;">38.0</td> <td style="text-align: center;">0.37</td> <td style="text-align: center;">0.00</td> </tr> <tr> <td>March</td> <td style="text-align: center;">51.0</td> <td style="text-align: center;">1.19</td> <td style="text-align: center;">2.00</td> </tr> <tr> <td>April</td> <td style="text-align: center;">53.9</td> <td style="text-align: center;">0.43</td> <td style="text-align: center;">6.90</td> </tr> <tr> <td>May†</td> <td style="text-align: center;">65.5</td> <td style="text-align: center;">0.05</td> <td style="text-align: center;">1.25</td> </tr> <tr> <td colspan="4" style="border-top: 1px solid black;">†May 1-18</td> </tr> <tr> <td style="text-align: right;">Seasonal Precipitation</td> <td></td> <td style="text-align: center;">4.10 in.</td> <td></td> </tr> <tr> <td style="text-align: right;">Total Irrigation</td> <td></td> <td style="text-align: center;">10.15 in.</td> <td></td> </tr> </tbody> </table>		Average Temp. °F	Precip. in.	Irrigation in.	November	43.1	0.78	0.00	December	39.8	0.55	0.00	January	38.2	0.73	0.00	February	38.0	0.37	0.00	March	51.0	1.19	2.00	April	53.9	0.43	6.90	May†	65.5	0.05	1.25	†May 1-18				Seasonal Precipitation		4.10 in.		Total Irrigation		10.15 in.	
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<b>Test Design:</b> Replications: 3 Plot Length: 5 ft. Plot Width: 6.25 ft. Rows per Plot: 11 Drill Row Spacing: 6.25 in.																																																																																											
<b>Seeding Rate:</b> All Entries: 100 lb/a																																																																																											
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**Table 2. Forage Harvest - Winter Annual Small Grain Forages - 2019-2020 - NMSU Agricultural Science Center at Clovis**

Company Name	Variety Name	Species <sup>†</sup>	Harvest Date	Dry	65%	Moisture	Milk/Ton	Milk/Acre
				Forage T/ac	Moisture Forage T/ac	at Harvest %		
Watley Seed Co.	Slicktrit II	triticale	18-May	7.2 ***	20.6 ***	75.7	2238	16177 *
Ehmke Seed	Thunder Tall	triticale	11-May	6.6 *	19.0 *	78.7 *	2499	16727 *
Texas A&M Agrilife	TX16VT68295	triticale	29-Apr	6.2	17.8	76.0	2953 *	18495 ***
Curtis & Curtis	Maximizer Plus	w/t	11-May	6.2	17.7	76.0	2316	14220
Texas A&M Agrilife	TX14VT70526	triticale	29-Apr	6.1	17.4	78.0 *	2564	15593 *
Watley Seed	T-011	triticale	29-Apr	6.0	17.2	75.6	2901 *	17389 *
Watley Seed	T-009	triticale	7-May	5.9	17.0	77.7	2690 *	15998 *
Ehmke Seed	Thunder Cale	triticale	29-Apr	5.9	17.0	78.0 *	2766 *	16270 *
Ehmke Seed	Thunder Tall II	triticale	11-May	5.9	16.9	79.0 *	2370	13969
Texas A&M Agrilife	TX12VT8222-3	triticale	29-Apr	5.8	16.6	76.7	2601	15112
Ehmke Seed	Thunder Cale V	triticale	29-Apr	5.8	16.6	80.0 *	2798 *	16228 *
Texas A&M Agrilife	TX17AT03	triticale	29-Apr	5.8	16.6	77.0	2430	14063
Ehmke Seed	Shortbeard Thunder	triticale	29-Apr	5.7	16.2	79.3 *	2958 ***	16739 *
Curtis & Curtis	Maximizer	w/t	7-May	5.6	16.0	76.3	2478	13835
Agri Pro	Bob Dole**	wheat	4-May	5.6	15.9	77.7	2512	14023
Curtis & Curtis	Smoothgrazer	w/t	4-May	5.6	15.9	79.3 *	2841 *	15766 *
Texas A&M Agrilife	TX14VT70473	triticale	29-Apr	5.5	15.8	76.3	2310	12821
Ehmke Seed	Thunder Green	rye	24-Apr	5.5	15.7	79.0 *	2734 *	15007
Ehmke Seed	Fredro	triticale	4-May	5.3	15.2	80.3 *	2455	13033
Agri Pro	SY Wolverine**	wheat	4-May	5.3	15.0	77.7	2704 *	14146
Curtis & Curtis	Smoothgrazer Plus	w/t	4-May	5.2	14.7	81.7 ***	2410	12391
Texas A&M Agrilife	TX17AT10	triticale	29-Apr	5.0	14.3	79.3 *	2641 *	13151
Agri Pro	09BC308-14-16**	wheat	29-Apr	4.5	12.9	75.3	2921 *	13323
Agri Pro	SY Grit**	wheat	4-May	4.2	12.0	78.3 *	2622	11028
Dyna-Gro	Long Branch	wheat	4-May	4.1	11.7	79.0 *	2853 *	11739
Trial Mean				5.6	16.1	77.9	2623	14689
LSD (0.05)				1.0	2.75	0.03	329	3190
CV				10.4	10.4	3.0	7.7	13.2
F Test				<.0001	<.0001	<.0001	<.0001	0.0017

<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.

\*\* Planted 120 lb/ac

\* Not significantly different from the highest value

**Table 3. Forage Harvest - Winter Annual Small Grain Forages - 2019-2020 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	triticale	18-May	13.3	38.3 ***	58.6 ***	63.7	54.0	99
Ehmke Seed	Thunder Tall	triticale	11-May	15.6	36.8 *	56.0	67.9	57.0	115
Texas A&M Agrilife	TX16VT68295	triticale	29-Apr	17.6 *	32.1	50.4	72.9 *	62.5 ***	148 ***
Curtis & Curtis	Maximizer Plus	w/t	11-May	13.8	38.2 *	57.3 *	66.5	54.9	105
Texas A&M Agrilife	TX14VT70526	triticale	29-Apr	16.4	36.2	55.7	69.8	57.6	120
Watley Seed	T-011	triticale	29-Apr	17.0 *	32.5	51.3	73.6 *	61.8 *	144 *
Watley Seed	T-009	triticale	7-May	17.1 *	34.8	54.8	71.9 *	59.2 *	127
Ehmke Seed	Thunder Cale	triticale	29-Apr	17.4 *	34.4	53.9	71.1 *	60.2 *	133 *
Ehmke Seed	Thunder Tall II	triticale	11-May	15.1	37.2 *	57.3 *	65.4	55.5	107
Texas A&M Agrilife	TX12VT8222-3	triticale	29-Apr	14.7	35.4	54.8	68.6	58.5	120
Ehmke Seed	Thunder Cale V	triticale	29-Apr	16.8	34.1	53.0	73.6 *	60.5 *	135 *
Texas A&M Agrilife	TX17AT03	triticale	29-Apr	15.7	35.7	55.9	69.2	56.2	112
Ehmke Seed	Shortbeard Thunder	triticale	29-Apr	18.0 *	32.9	52.3	73.4 *	62.4 *	145 *
Curtis & Curtis	Maximizer	w/t	7-May	15.6	36.7 *	54.9	70.1	56.7	117
Agri Pro	Bob Dole**	wheat	4-May	15.2	36.3 *	55.7	69.2	57.0	118
Curtis & Curtis	Smoothgrazer	w/t	4-May	17.4 *	34.8	53.9	71.2 *	61.0 *	137 *
Texas A&M Agrilife	TX14VT70473	triticale	29-Apr	14.6	37.6 *	57.2 *	62.7	54.9	104
Ehmke Seed	Thunder Green	rye	24-Apr	18.8 ***	32.8	54.5	69.5	60.1 *	127
Ehmke Seed	Fredro	triticale	4-May	17.2 *	35.2	56.2 *	66.9	56.5	113
Agri Pro	SY Wolverine**	wheat	4-May	16.3	34.7	54.1	72.4 *	59.4 *	129 *
Curtis & Curtis	Smoothgrazer Plus	w/t	4-May	15.6	36.8 *	57.0 *	69.8	55.8	110
Texas A&M Agrilife	TX17AT10	triticale	29-Apr	16.8	34.4	55.1	66.6	59.0 *	121
Agri Pro	09BC308-14-16**	wheat	29-Apr	17.3 *	33.4	50.9	74.1 ***	62.0 *	147 *
Agri Pro	SY Grit**	wheat	4-May	17.2 *	35.8	54.0	70.9 *	58.2	126
Dyna-Gro	Long Branch	wheat	4-May	17.2 *	33.4	52.9	73.3 *	61.2 *	138 *
Trial Mean				16.3	35.2	54.7	69.8	58.5	124
LSD (0.05)				2.0	2.0	2.4	3.6	4.0	20
CV				7.4	3.4	2.7	3.2	4.1	9.7
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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Unless otherwise indicated, all entries planted at 100 lb/ac rate.