

**Table 1. Winter Annual Small Grain Forages, 2020-2021, 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: 22-Oct <u>Forage Harvest - Single harvest per plot</u> Harvest Dates: 27-April to 24-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;">75 lb/ac</td> <td style="text-align: center;">carryover</td> </tr> <tr> <td>Nitrogen</td> <td style="text-align: center;">90 lb/ac</td> <td style="text-align: center;">22-Feb</td> </tr> <tr> <td>S</td> <td style="text-align: center;">16.3 lb/ac</td> <td style="text-align: center;">22-Feb</td> </tr> <tr> <td>Herbicides:</td> <td></td> <td></td> </tr> <tr> <td>Lo-Vol 6</td> <td style="text-align: center;">1.0 pt/ac</td> <td style="text-align: center;">15-Mar</td> </tr> <tr> <td>Prowl H<sub>2</sub>O</td> <td style="text-align: center;">3 pt/ac</td> <td style="text-align: center;">15-Mar</td> </tr> <tr> <td>Affinity BS</td> <td style="text-align: center;">0.6 oz/ac</td> <td style="text-align: center;">15-Mar</td> </tr> <tr> <td>Insecticides:</td> <td></td> <td></td> </tr> <tr> <td>Govern</td> <td style="text-align: center;">1 pt/ac</td> <td style="text-align: center;">15-Mar</td> </tr> </tbody> </table>		Rate	Date		lb/ac		Fertilizer:			Nitrogen	75 lb/ac	carryover	Nitrogen	90 lb/ac	22-Feb	S	16.3 lb/ac	22-Feb	Herbicides:			Lo-Vol 6	1.0 pt/ac	15-Mar	Prowl H <sub>2</sub> O	3 pt/ac	15-Mar	Affinity BS	0.6 oz/ac	15-Mar	Insecticides:			Govern	1 pt/ac	15-Mar	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Average</th> <th></th> <th></th> </tr> <tr> <th></th> <th style="text-align: center;">Temp.</th> <th style="text-align: center;">Precip.</th> <th style="text-align: center;">Irrigation</th> </tr> <tr> <th></th> <th style="text-align: center;">°F</th> <th style="text-align: center;">in.</th> <th style="text-align: center;">in.</th> </tr> </thead> <tbody> <tr> <td>November</td> <td style="text-align: center;">50.5</td> <td style="text-align: center;">0.04</td> <td style="text-align: center;">1.00</td> </tr> <tr> <td>December</td> <td style="text-align: center;">38.5</td> <td style="text-align: center;">0.00</td> <td style="text-align: center;">1.80</td> </tr> <tr> <td>January</td> <td style="text-align: center;">36.4</td> <td style="text-align: center;">0.17</td> <td style="text-align: center;">0.00</td> </tr> <tr> <td>February</td> <td style="text-align: center;">35.4</td> <td style="text-align: center;">0.06</td> <td style="text-align: center;">1.50</td> </tr> <tr> <td>March</td> <td style="text-align: center;">47.3</td> <td style="text-align: center;">0.06</td> <td style="text-align: center;">4.50</td> </tr> <tr> <td>April</td> <td style="text-align: center;">53.6</td> <td style="text-align: center;">0.22</td> <td style="text-align: center;">7.80</td> </tr> <tr> <td>May†</td> <td style="text-align: center;">64.1</td> <td style="text-align: center;">0.53</td> <td style="text-align: center;">4.70</td> </tr> <tr> <td colspan="4">†May 1-24</td> </tr> <tr> <td>Seasonal Precipitation</td> <td></td> <td style="text-align: center;">1.08 in.</td> <td></td> </tr> <tr> <td>Total Irrigation</td> <td></td> <td style="text-align: center;">21.30 in.</td> <td></td> </tr> </tbody> </table>		Average				Temp.	Precip.	Irrigation		°F	in.	in.	November	50.5	0.04	1.00	December	38.5	0.00	1.80	January	36.4	0.17	0.00	February	35.4	0.06	1.50	March	47.3	0.06	4.50	April	53.6	0.22	7.80	May†	64.1	0.53	4.70	†May 1-24				Seasonal Precipitation		1.08 in.		Total Irrigation		21.30 in.	
	Rate	Date																																																																																								
	lb/ac																																																																																									
Fertilizer:																																																																																										
Nitrogen	75 lb/ac	carryover																																																																																								
Nitrogen	90 lb/ac	22-Feb																																																																																								
S	16.3 lb/ac	22-Feb																																																																																								
Herbicides:																																																																																										
Lo-Vol 6	1.0 pt/ac	15-Mar																																																																																								
Prowl H <sub>2</sub> O	3 pt/ac	15-Mar																																																																																								
Affinity BS	0.6 oz/ac	15-Mar																																																																																								
Insecticides:																																																																																										
Govern	1 pt/ac	15-Mar																																																																																								
	Average																																																																																									
	Temp.	Precip.	Irrigation																																																																																							
	°F	in.	in.																																																																																							
November	50.5	0.04	1.00																																																																																							
December	38.5	0.00	1.80																																																																																							
January	36.4	0.17	0.00																																																																																							
February	35.4	0.06	1.50																																																																																							
March	47.3	0.06	4.50																																																																																							
April	53.6	0.22	7.80																																																																																							
May†	64.1	0.53	4.70																																																																																							
†May 1-24																																																																																										
Seasonal Precipitation		1.08 in.																																																																																								
Total Irrigation		21.30 in.																																																																																								
<b>Test Design:</b> Replications: 3 Plot Length: 7 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 4 entries: 120 lb/a																																																																																										
<b>Field Notes:</b>																																																																																										

**Table 2. Forage Harvest - Winter Annual Small Grain Forages - 2020-2021 - NMSU Agricultural Science Center at Clovis**

Company Name	Variety Name	Species <sup>†</sup>	Harvest Date	Dry	65% Moisture	Moisture	Milk/Ton	Milk/Acre
				Forage T/ac	Forage T/ac	at Harvest %		
Watley Seed	Slicktrit II	triticale	24-May	7.5 ***	21.5 ***	79.0	3141	23622 ***
Curtis & Curtis	Bearded Triticale	triticale	18-May	7.1 *	20.4 *	78.3	3255	23239 *
Univ of Nebraska	NT14433 M-19	triticale	10-May	6.8 *	19.5 *	74.0	3180	21766 *
Ehmke Seed	Thunder Tall	triticale	18-May	6.3	17.1	78.0	3529	22222 *
Curtis & Curtis	Smoothgrazer	w/t	10-May	6.2	17.7	74.3	3482	21534 *
Texas A&M Agrilife	TX14VT70526	triticale	6-May	6.1	17.4	75.3	3580	21791 *
Agri Pro**	AP roadrunner	wheat	10-May	6.0	17.3	71.0	3886 *	23416 *
Ehmke Seed	ThunderCale V	triticale	6-May	6.0	17.1	77.3	3727	22406 *
Ehmke Seed	Thunder Tall II	triticale	20-May	6.0	17.1	79.7	3265	19459
Univ of Nebraska	NE96T441	triticale	10-May	5.9	16.8	74.0	3419	20055 *
Curtis & Curtis	Trical 813	triticale	10-May	5.8	16.7	75.7	3562	20773 *
Curtis & Curtis	Smoothgrazer Plus	w/t	10-May	5.8	16.6	76.0	3432	19929 *
Ehmke Seed	ShortBeard Thunder	triticale	6-May	5.7	16.2	77.3	3797 *	21520 *
Agri Pro**	APH15T22413	wheat	10-May	5.5	15.7	69.3	3850 *	21144 *
Ehmke Seed	Fredo	triticale	6-May	5.3	15.1	79.0	3962 *	20861 *
Univ of Nebraska	P-919 Y-20	triticale	27-Apr	5.2	14.9	84.3 ***	4016 ***	20926 *
Univ of Nebraska	NT 12404-1	triticale	30-Apr	5.1	14.5	81.3 *	3682	18702
Texas A&M Agrilife	TX16VT68295	triticale	3-May	4.8	13.6	76.3	3695	17547
Ehmke Seed	Thunder Green	rye	30-Apr	4.6	13.3	82.7 *	3615	16804
Agri Pro**	AP Everrock	wheat	6-May	4.6	13.2	75.0	4002 *	18455
Agri Pro**	10BC328-17-5	wheat	6-May	4.6	13.0	73.0	3897 *	17787
Ehmke Seed	ThunderCale	triticale	3-May	4.5	12.8	78.7	3750	16851
Trial Mean				5.7	16.2	76.8	3623	20491
LSD (0.05)				1.1	3.24	0.03	248	4043
CV				12.0	12.0	2.5	4.2	12.0
F Test				<.0001	<.0001	<.0001	<.0001	0.02

<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	Slicktrit II	tritiale	24-May	14.5	33.5 ***	55.0 ***	68.1	64.7	149
Curtis & Curtis	Bearded Triticale	tritiale	18-May	16.5	32.3 *	53.4 *	71.4	65.9	160
Univ of Nebraska	NT14433 M-19	tritiale	10-May	15.1	31.5 *	53.1 *	66.5	65.4	152
Ehmke Seed	Thunder Tall	tritiale	18-May	16.7	28.2	50.6	74.8	69.4	182
Curtis & Curtis	Smoothgrazer	w/t	10-May	16.2	28.7	49.5	74.3	68.8	181
Texas A&M Agrilife	TX14VT70526	tritiale	6-May	15.3	27.3	49.0	73.5	70.3	185
Agri Pro**	AP roadrunner	wheat	10-May	16.5	24.4	43.9	82.3 *	73.7 *	226 *
Ehmke Seed	ThunderCale V	tritiale	6-May	16.1	27.9	47.9	78.0	71.9	201
Ehmke Seed	Thunder Tall II	tritiale	20-May	16.4	30.9 *	53.9 *	69.6	66.3	157
Univ of Nebraska	NE96T441	tritiale	10-May	16.4	28.2	49.7	70.7	68.3	174
Curtis & Curtis	Trical 813	tritiale	10-May	15.6	28.8	50.0	74.8	69.9	184
Curtis & Curtis	Smoothgrazer Plus	w/t	10-May	16.3	28.9	51.2	72.2	68.3	172
Ehmke Seed	ShortBeard Thunder	tritiale	6-May	16.9	25.9	45.3	80.5 *	72.6 *	214 *
Agri Pro**	APH15T22413	wheat	10-May	16.8	25.2	44.9	83.4 *	73.1 *	222 *
Ehmke Seed	Fredo	tritiale	6-May	18.9 ***	24.5	43.2	84.3 *	74.6 *	235 *
Univ of Nebraska	P-919 Y-20	tritiale	27-Apr	18.5 *	25.3	44.5	84.5 ***	75.3 ***	233 *
Univ of Nebraska	NT 12404-1	tritiale	30-Apr	18.1 *	26.4	47.8	77.0	71.3	198
Texas A&M Agrilife	TX16VT68295	tritiale	3-May	16.6	26.3	46.1	76.7	71.5	203
Ehmke Seed	Thunder Green	rye	30-Apr	18.5 *	26.5	50.0	75.2	70.6	186
Agri Pro**	AP Everrock	wheat	6-May	17.2	23.5	42.5	84.2 *	75.1 *	239 ***
Agri Pro**	10BC328-17-5	wheat	6-May	16.8	24.4	43.4	81.3 *	73.9 *	227 *
Ehmke Seed	ThunderCale	tritiale	3-May	17.8 *	26.2	46.7	77.4	72.2	204
Trial Mean				16.7	27.5	48.2	76.4	70.6	194
LSD (0.05)				1.3	2.8	3.2	4.9	3.0	25
CV				4.5	6.2	4.0	3.9	2.6	7.9
F Test				<.0001	<.0001	<.0001	<.0001	<.0001	<.0001

<sup>†</sup>B=barley; T=tritiale; 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

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