

**Table 1. Winter Annual Small Grain Forages, 2020-2021, 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: 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 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;">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. °F	Precip. in.	Irrigation 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. °F	Precip. in.	Irrigation 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.