

2018-2019 Wheat Triticale Mixture Trial

Table 1. Background information

Location	Wilbarger	Foard	Haskell
Precipitation (Aug-May)	23"	23"	47.8"
Producer cooperators	Bruce Gillis	Ronnie Allen	Mike Urbanzck
County Extension Agents	Langdon Reagan	Michael Bowman	Josh Kouns/Jerry Coplen/ Jonathon Reyes
GPS	34.179296, -99.055502	33.984488, -99.679716	33.354880, -99.517570
Irri/dryland	Dryland	Dryland	Dryland
Planting	10/3/2018	11/9/2018	10/4/2018
Clipping 1	12/20/2018	5/30/2019	2/4/2019
Clipping 2	2/5/2019	NA	3/7/2019
Clipping 3	3/6/2019	NA	4/11/2019
Clipping 4	4/11/2019	NA	NA
Treatment	Mixture of wheat (W) and triticale (T) seeding rates ratios. Seeding rate of 90 lb/ac was used as a base rate. For example for 50W:50T treatment, wheat seeds at 45 lb/ac and triticale seeds at 45 lb/ac were mixed. Wheat variety was TAM401 (early maturity), while triticale variety was SY TRIT 348 (Awnless and full maturity). 100 #N was applied after the second clipping.		
Take-home message	Early maturity wheat and full maturity triticale were mixed to extend grazing season in dryland trial. 2018/2019 season was significantly wetter year than average year in the Rolling Plains. Total forage dry matter (DM) was higher in the treatment with higher triticale ratio in all location. In 2018 (dry year), total forage yields among all treatments were similar, indicating that there was no yield advantage of triticale in the mixtures in the dry year. In 2019 (wet year), total forage yield was higher in the plots with higher triticale ratio. This indicates that triticale would increase total forage yield if there is enough soil moisture.		

Table 2. Forage dry matter (lb/ac)

Wilbarger County					
	12/20	2/5	3/6	4/11	Total
0W:100T	95	749	1549	8867	11260
30W:70T	85	924	1659	7360	10028
50W:50T	90	910	1494	7296	9790
70W:30T	67	910	1200	6139	8317
100W:0T	41	1092	833	6142	8108
Mean	75	917	1347	7161	9501
P	NS	NS	0.0267	NS	NS
Haskell County					
		2/4	3/7	4/11	Total
0W:100T	-	24	451	11404	11879
30W:70T	-	86	939	10399	11424
50W:50T	-	93	599	7434	8127
70W:30T	-	112	699	8356	9167
100W:0T	-	176	790	5516	6481
Mean	-	98	696	8622	9416
P	-	0.0028	0.0137	0.0397	0.0349
Foard County					
				5/30	Total
0W:100T	-	-	-	11631	11631
30W:70T	-	-	-	9495	9495
50W:50T	-	-	-	8637	8637
70W:30T	-	-	-	6948	6948
100W:0T	-	-	-	5369	5369
Mean	-	-	-	8416	8416
P	-	-	-		

Values highlighted with pink are significantly similar to the highest value.



Figure 1. Photos taken on April 17, 2019 at Haskell County trial site. Maturity stage of triticale was before boot stage with good amount of leafy materials, while TAM401 was at heading. Treatments with higher triticale ratio visually showed greater amount of forage than treatments with higher wheat ratio.