

**2023-2024 AgriLife Small Grains Silage Trial at Bushland**

Contact: Jourdan Bell, Carla Naylor, or Kevin Helfin

Planted 10/22/2023

Seeding Rate: Wheat and Triticale 1.2 M seeds/acre, Rye 0.8 M seeds/acre

Fertilizer: 80 lbs. N and 35 lbs. P

Herbicides: Prowl H20 3/5/2024

Fungicides: Prosaro 4/19/2024

Irrigation: 9.5 inches to Boot and 12 inches to Soft-Dough

Precipitation: 4.5 inches (planting - 5/22/2024)

Emergence and Vigor Ratings (0-5) Rating Scale: 0=no stand, 1=poor, 3=good, 4=very good, 5=excellent

Feekes Scale

3	Tillering
4	Leaf Sheaths Lengthening
5	Leaf Sheaths Erected
6	First Node
7	Second Node

Entry	Variety	Company/Developer	Type	11/8/2023	2/8/2024	3/12/2024	3/27/2024	Boot (Feekes 10)				Soft-Dough			
				Emergence Rating	Vigor Rating	Feekes Stage	Feekes Stage	Harvest Date	Ht (in.)	Yield (lbs/ac) DM Basis	Yield (tons/ac) DM Basis	Harvest Date	Ht (in.)	Yield (lbs/ac) DM Basis	Yield (tons/ac) DM Basis
14	TAM 205	Warner/Texas A&M AgriLife	HRWW	4.0	3.7	5.3	6.8	4/26/2024	33	7,912	4.0	6/4/2024	37	18,050	9.0 ± 0.3
6	DynaGro 7322 + Foothold	Nutrien/Texas A&M AgriLife	HRWW	4.0	3.7	5.5	5.5	4/26/2024	29	8,985	4.5	6/5/2024	35	17,210	8.6 ± 0.7
5	AP Sunbird	AgriPro/Syngenta	HRWW	3.7	3.7	6.0	6.5	4/26/2024	29	8,273	4.1	6/4/2024	33	16,799	8.4 ± 0.2
11	TAM 115	Wattley/Texas A&M AgriLife	HRWW	4.0	3.7	6.5	7.0	4/26/2024	30	7,565	3.8	6/4/2024	38	16,753	8.4 ± 0.6
1	AP exp 243	AgriPro/Syngenta	HRWW	4.0	3.7	5.5	7.0	4/26/2024	32	8,287	4.1	6/3/2024	35	16,732	8.4 ± 0.4
9	DynaGro 7322 Untreated	Nutrien/Texas A&M AgriLife	HRWW	4.7	3.7	5.5	6.0	4/26/2024	30	9,103	4.6	6/6/2024	35	16,662	8.3 ± 0.2
3	AP Prolific	AgriPro/Syngenta	HRWW	3.0	2.8	6.0	7.0	4/26/2024	32	6,488	3.2	6/4/2024	34	16,575	8.3 ± 0.6
4	AP Roadrunner	AgriPro/Syngenta	HRWW	3.7	3.7	5.5	6.8	4/24/2024	29	7,657	3.8	6/4/2024	35	16,560	8.3 ± 0.2
17	XH2001A	WestBred/Bayer	HRWW	3.0	2.3	4.5	6.5	4/26/2024	31	6,326	3.2	6/5/2024	36	16,157	8.1 ± 0.0
7	DynaGro 7322 + Avodigen	Nutrien/Texas A&M AgriLife	HRWW	4.3	3.7	5.5	6.0	4/26/2024	30	8,200	4.1	6/4/2024	35	16,062	8.0 ± 1.1
2	AP Longjack	AgriPro/Syngenta	HRWW	4.7	4.0	5.0	6.5	4/26/2024	30	7,199	3.6	6/4/2024	36	15,899	7.9 ± 0.3
40	WT 50	Warner Seed	Wheat-Triticale	4.2	4.0	5.0	5.0	4/29/2024	45	9,855	4.9	6/11/2024	52	15,654	7.8 ± 0.9
16	WB4792	WestBred/Bayer	HRWW	3.0	3.0	6.0	7.0	4/26/2024	30	7,175	3.6	6/5/2024	36	15,526	7.8 ± 0.5
8	DynaGro 7322+ Topguard	Nutrien/Texas A&M AgriLife	HRWW	4.3	3.0	5.5	6.0	4/26/2024	30	7,878	3.9	6/4/2024	34	15,437	7.7 ± 0.7
21	Jackalope	Ehmke	Rye	1.3	2.8	4.0	6.0	4/18/2024	33	7,132	3.6	6/4/2024	44	15,326	7.7 ± 2.0
10	TAM 114	Texas A&M AgriLife	HRWW	3.3	3.3	6.0	6.5	4/26/2024	31	9,454	4.7	6/3/2024	34	15,267	7.6 ± 1.1
19	XG4104A	WestBred/Bayer	HRWW	3.7	3.3	6.5	6.5	4/26/2024	29	7,615	3.8	6/4/2024	35	14,970	7.5 ± 0.1
20	XH4016A	WestBred/Bayer	HRWW	3.3	4.0	6.0	7.0	4/26/2024	31	7,303	3.7	6/4/2024	36	14,914	7.5 ± 1.1
18	XG4110A	WestBred/Bayer	HRWW	4.0	3.7	6.5	7.0	4/18/2024	28	7,469	3.7	6/3/2024	37	14,899	7.4 ± 0.4
39	Nex Trit Plus	West Gaines Seed	Triticale	3.7	4.2	4.5	6.0	4/26/2024	42	9,046	4.5	6/11/2024	53	14,539	7.3 ± 1.0
12	TAM 116	Warner/Texas A&M AgriLife	HRWW	4.0	3.7	5.5	6.5	4/26/2024	29	8,905	4.5	6/4/2024	34	14,218	7.1 ± 0.1
13	TAM 204	Wattley/Texas A&M AgriLife	HRWW	3.7	3.5	5.5	6.5	4/26/2024	31	8,731	4.4	6/3/2024	35	13,875	6.9 ± 0.2
37	SlickTrit II	Wattley Seed	Triticale	4.0	3.2	4.0	5.0	5/4/2024	46	10,944	5.5	6/11/2024	52	13,708	6.9 ± 1.5
34	TX20AT2015	Texas A&M AgriLife	Triticale	3.3	3.7	4.3	6.3	4/26/2024	44	9,639	4.8	6/11/2024	52	13,689	6.8 ± 0.7
36	Triplecale	Warner Seed	Triticale	4.3	4.5	4.5	6.0	4/26/2024	43	8,367	4.2	6/11/2024	49	13,243	6.6 ± 0.4
33	TX20AT2005	Texas A&M AgriLife	Triticale	3.7	3.8	4.5	6.5	4/26/2024	42	8,619	4.3	6/11/2024	52	13,194	6.6 ± 0.7
27	KWS H240	KWS	Rye	2.0	4.2	4.5	7.0	4/23/2024	37	8,715	4.4	6/4/2024	44	13,166	6.6 ± 1.0
38	Titan	Wattley Seed/Texas A&M AgriLife	Triticale	4.7	4.3	5.0	6.0	4/23/2024	37	8,740	4.4	6/11/2024	50	13,122	6.6 ± 0.1
30	ThunderCale V	Ehmke	Triticale	3.7	4.0	4.5	6.0	4/26/2024	36	9,888	4.9	6/11/2024	44	12,861	6.4 ± 0.9
28	KWS H95075	KWS	Rye	1.7	4.0	6.0	8.0	4/8/2024	30	5,677	2.8	6/4/2024	43	12,708	6.4 ± 1.2
31	Thundertall	Ehmke	Triticale	2.3	2.5	4.0	5.5	5/3/2024	38	9,658	4.8	6/11/2024	53	12,679	6.3 ± 1.3
35	TX20AT2018	Texas A&M AgriLife	Triticale	3.7	3.7	4.5	6.5	4/26/2024	45	9,586	4.8	6/11/2024	49	12,646	6.3 ± 0.4
15	TX18DH858	Texas A&M AgriLife	HRWW	3.7	4.3	6.0	6.5	4/22/2024	32	9,615	4.8	6/3/2024	38	12,315	6.2 ± 0.8
23	ThunderGreen	Ehmke	Rye	1.0	2.3	4.0	6.0	4/26/2024	38	10,522	5.3	6/5/2024	43	12,303	6.2 ± 0.4
24	KWS AVIATOR	KWS	Rye	2.0	3.5	4.0	6.5	4/26/2024	41	8,307	4.2	6/4/2024	45	12,174	6.1 ± 0.9
25	KWS PROGAS	KWS	Rye	2.0	4.0	5.0	6.0	4/26/2024	37	7,039	3.5	6/4/2024	44	11,465	5.7 ± 1.1
29	KWS H238	KWS	Rye	2.7	4.5	4.5	6.0	4/23/2024	37	9,060	4.5	6/5/2024	41	11,464	5.7 ± 0.3
26	KWS H10129	KWS	Rye	2.3	3.7	4.0	6.0	4/24/2024	37	7,993	4.0	6/4/2024	44	11,327	5.7 ± 0.7
22	OORye	Ehmke	Rye	3.0	4.2	5.0	6.0	4/12/2024	36	7,195	3.6	6/3/2024	49	11,147	5.6 ± 0.6
32	Thundertall II	Ehmke	Triticale	4.0	3.8	4.5	6.0	5/3/2024	46	10,007	5.0	6/11/2024	51	10,870	5.4 ± 0.8
								<b>Trial Average</b>	35	8,403	4.2	<b>Trial Average</b>	42	14,304	7.2 ± 0.7
								<b>p-value</b>	<0.0001	<0.0001	<0.0001	<b>p-value</b>	<0.0001	0.0004	0.0004
								<b>CV</b>	7.8	9.8	9.8	<b>CV</b>	5.3	11.8	11.8
								<b>LSD</b>	4.4	1342	0.67	<b>LSD</b>	3.6	3141	1.6

Not Signif. Diff.

**2023-2024 AgriLife Small Grains Silage Trial at Bushland - Boot Nutrient Composition**

Planted 10/22/2023

Seeding Rate: Wheat and Triticale 1.2 M seeds/acre, Rye 0.8 M seeds/acre

Entry	Variety	Type	Nutrient Composition at Boot (DM Basis)										
			Harvest Date	% CP	% ADF	% NDF	% Lignin	% NDFD30	% WSC	% Starch	% TDN	Milk/Ton	Tons TDN/ac
23	ThunderGreen	Rye	4/26/2024	16	33	57	4	37	10	0.3	62	3057	3.3
37	SlickTrit II	Triticale	5/4/2024	13	37	61	5	37	9	0.5	58	2723	3.2
15	TX18DH858	HRWW	4/22/2024	14	31	52	4	34	16	1.0	63	3166	3.0
40	WT 50	Wheat-Triticale	4/29/2024	13	34	58	4	37	11	0.8	61	2953	3.0
30	ThunderCale V	Triticale	4/26/2024	15	35	58	4	38	9	1.0	60	2909	3.0
32	Thundertall II	Triticale	5/3/2024	13	36	59	4	36	9	0.4	59	2805	3.0
10	TAM 114	HRWW	4/26/2024	14	33	56	4	36	12	0.9	61	2981	2.9
31	Thundertall	Triticale	5/3/2024	14	35	59	4	36	9	0.6	60	2775	2.9
9	DynaGro 7322 Untreated	HRWW	4/26/2024	15	31	54	4	36	14	1.1	63	3194	2.9
29	KWS-H238	Rye	4/23/2024	15	31	55	3	37	11	0.6	63	3168	2.9
34	TX20AT2015	Triticale	4/26/2024	14	37	61	4	38	9	0.6	59	2772	2.8
6	DynaGro 7322 + Foothold	HRWW	4/26/2024	14	32	55	4	36	15	1.3	62	3085	2.8
12	TAM 116	HRWW	4/26/2024	13	33	56	4	37	14	1.3	63	3103	2.8
27	KWS H240	Rye	4/23/2024	15	31	55	4	37	12	0.4	64	3190	2.8
35	TX20AT2018	Triticale	4/26/2024	14	38	61	5	38	8	0.3	57	2654	2.7
38	Titan	Triticale	4/23/2024	14	33	56	4	38	12	0.8	62	3117	2.7
13	TAM 204	HRWW	4/26/2024	14	32	55	4	35	16	1.2	62	3073	2.7
39	Nex Trit Plus	Triticale	4/26/2024	14	35	60	4	40	9	0.7	60	2890	2.7
33	TX20AT2005	Triticale	4/26/2024	15	32	56	4	36	13	0.3	62	3037	2.7
7	DynaGro 7322 + Avodigen	HRWW	4/26/2024	14	30	53	3	36	16	1.2	64	3246	2.6
24	KWS AVIATOR	Rye	4/26/2024	16	33	58	4	38	10	0.5	62	3068	2.6
5	CP15CW3388#011	HRWW	4/26/2024	14	32	55	4	36	15	1.2	62	3042	2.6
1	AP exp 243	HRWW	4/26/2024	13	33	56	4	36	15	1.4	62	3007	2.6
36	Triplecale	Triticale	4/26/2024	15	35	58	4	37	10	0.5	60	2853	2.5
26	KWS H10129	Rye	4/24/2024	16	32	56	4	38	10	0.2	63	3118	2.5
8	DynaGro 7322+ Topguard	HRWW	4/26/2024	15	30	53	3	36	16	1.4	63	3193	2.5
14	TAM 205	HRWW	4/26/2024	13	32	55	4	36	14	1.1	63	3109	2.5
4	AP Roadrunner	HRWW	4/24/2024	15	32	54	4	37	14	1.0	62	3125	2.4
11	TAM 115	HRWW	4/26/2024	15	31	55	4	36	14	0.9	63	3126	2.4
19	XG4104A	HRWW	4/26/2024	14	32	55	4	35	15	1.1	62	3064	2.4
18	XG4110A	HRWW	4/18/2024	15	31	53	4	36	15	0.9	63	3231	2.4
22	OORye	Rye	4/12/2024	20	28	51	3	37	11	0.6	65	3357	2.3
21	Jackalope	Rye	4/18/2024	19	29	53	3	38	11	0.3	64	3321	2.3
20	XH4016A	HRWW	4/26/2024	15	32	55	4	34	14	0.9	62	2984	2.2
16	WB4792	HRWW	4/26/2024	14	33	56	4	36	14	0.9	62	3015	2.2
2	Ap Longjack	HRWW	4/26/2024	14	33	56	4	36	14	1.3	61	3010	2.2
25	KWS PROGAS	Rye	4/26/2024	15	34	59	4	36	8	0.5	60	2812	2.1
3	Ap Prolific	HRWW	4/26/2024	13	33	57	4	36	14	1.3	62	3053	2.0
17	XH2001A	HRWW	4/26/2024	16	31	54	3	36	14	0.9	63	3121	2.0
28	KWS H95075	Rye	4/8/2024	19	30	53	3	36	11	0.5	64	3215	1.8
<b>Trial Average</b>				15	33	56	4	36	12	0.8	62	3043	2.6
<b>CV (%)</b>				12	8	5	11.2	5	24	47.8	3	6	15.4
<b>p-value</b>				<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
<b>LSD</b>				1.2	1.9	2.4	0.4	1.8	2.1	0.3	1.9	160.2	0.3

**2023-2024 AgriLife Small Grains Silage Trial at Bushland - Late Soft-Dough Nutrient Composition**

Planted 10/22/2023

Seeding Rate: Wheat and Triticale 1.2 M seeds/acre, Rye 0.8 M seeds/acre

Entry	Variety	Type	Nutrient Composition at late Soft Dough (DM Basis)										
			Harvest Date	% CP	% ADF	% NDF	% Lignin	% NDFD30	% WSC	% Starch	% TDN	Milk/Ton	Tons TDN/ac
14	TAM 205	HRWW	6/4/2024	10	33	51	5	20	11	18.8	60	2499	5.4
5	CP15CW3388#011	HRWW	6/4/2024	11	29	45	5	15	11	24.7	62	2602	5.2
6	DynaGro 7322 + Foothold	HRWW	6/5/2024	11	32	49	5	17	10	22.5	60	2463	5.1
11	TAM 115	HRWW	6/4/2024	10	33	51	5	20	10	19.7	60	2522	5.0
9	DynaGro 7322 Untreated	HRWW	6/6/2024	12	31	48	5	18	11	21.8	60	2585	5.0
3	Ap Prolific	HRWW	6/4/2024	10	32	48	6	16	12	21.2	60	2483	5.0
4	AP Roadrunner	HRWW	6/4/2024	11	32	49	5	19	10	20.3	60	2536	4.9
1	AP exp 243	HRWW	6/3/2024	10	33	51	5	19	11	19.0	59	2428	4.9
7	DynaGro 7322 + Avodigen	HRWW	6/4/2024	11	31	48	5	18	10	22.3	61	2601	4.9
2	Ap Longjack	HRWW	6/4/2024	11	32	47	5	18	10	22.0	60	2585	4.8
17	XH2001A	HRWW	6/5/2024	10	34	52	6	18	12	17.5	58	2330	4.7
21	Jackalope	Rye	6/4/2024	10	33	53	6	22	11	14.2	61	2641	4.6
16	WB4792	HRWW	6/5/2024	10	35	53	6	20	10	18.1	59	2399	4.6
10	TAM 114	HRWW	6/3/2024	11	33	51	5	20	10	17.7	59	2511	4.5
19	XG4104A	HRWW	6/4/2024	11	31	48	5	17	11	22.2	60	2530	4.5
8	DynaGro 7322 + Topguard	HRWW	6/4/2024	11	34	52	6	20	10	18.7	58	2399	4.5
12	TAM 116	HRWW	6/4/2024	11	29	45	5	17	11	25.1	63	2788	4.5
20	XH4016A	HRWW	6/4/2024	10	34	50	6	17	10	20.3	58	2352	4.3
40	WT 50	Wheat-Triticale	6/11/2024	8	40	60	7	20	8	14.5	55	1988	4.3
18	XG4110A	HRWW	6/3/2024	10	35	53	6	19	13	14.1	57	2304	4.3
13	TAM 204	HRWW	6/3/2024	11	31	49	5	18	11	21.7	61	2572	4.2
39	Nex Trit Plus	Triticale	6/11/2024	9	39	59	6	19	8	15.2	55	1935	4.0
34	TX20AT2015	Triticale	6/11/2024	10	36	55	6	18	10	18.0	57	2136	3.9
28	KWS H95075	Rye	6/4/2024	10	32	51	6	18	10	19.5	61	2540	3.9
27	KWS H240	Rye	6/4/2024	10	34	53	6	19	11	15.7	60	2471	3.8
30	ThunderCale V	Triticale	6/11/2024	10	35	53	5	20	9	19.2	58	2361	3.8
37	SlickTrit II	Triticale	6/11/2024	9	42	63	7	22	7	10.8	54	1896	3.7
36	Triplecale	Triticale	6/11/2024	10	39	58	6	20	8	15.2	55	2035	3.7
15	TX18DH858	HRWW	6/3/2024	11	33	49	5	18	10	21.5	59	2452	3.6
38	Titan	Triticale	6/11/2024	9	39	59	6	20	10	12.0	55	2014	3.6
23	ThunderGreen	Rye	6/5/2024	9	37	58	6	22	10	12.9	58	2374	3.6
24	KWS AVIATOR	Rye	6/4/2024	9	37	58	6	22	10	11.9	58	2378	3.5
33	TX20AT2005	Triticale	6/11/2024	9	41	61	7	22	9	11.2	54	1919	3.5
31	Thundertall	Triticale	6/11/2024	9	39	60	6	19	8	13.3	54	1853	3.4
25	KWS PROGAS	Rye	6/4/2024	10	34	54	5	22	10	16.2	60	2518	3.4
26	KWS H10129	Rye	6/4/2024	9	35	56	6	22	10	12.7	59	2447	3.4
29	KWS-H238	Rye	6/5/2024	10	35	56	6	21	10	13.8	58	2368	3.3
35	TX20AT2018	Triticale	6/11/2024	9	42	62	7	17	9	12.3	52	1647	3.3
22	OORye	Rye	6/3/2024	10	37	57	7	18	10	11.1	57	2168	3.2
32	Thundertall II	Triticale	6/11/2024	10	40	62	7	19	9	9.7	53	1826	2.9
<b>Trial Average</b>				10	35	53	6	19	10	17.2	58	2336	4.2
<b>CV (%)</b>				12	8	5	11.2	5	24	47.8	3	6	15.4
<b>p-value</b>				0.0050	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
<b>LSD</b>				1.2	1.9	2.4	0.4	1.8	2.1	0.3	1.9	160.2	0.3