



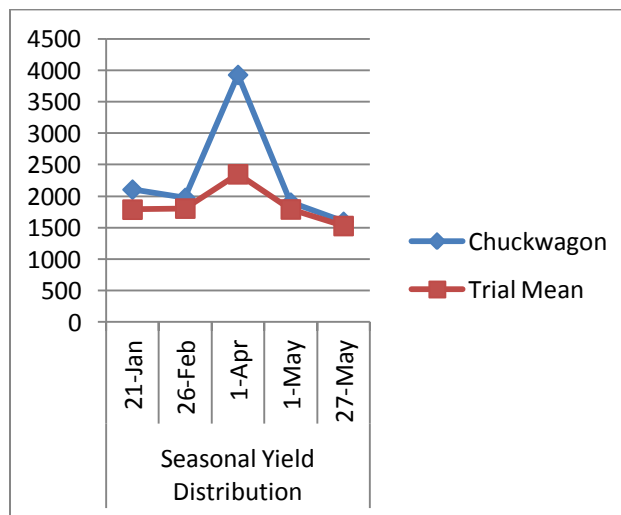
CHUCKWAGON TETRAPLOID ANNUAL RYEGRASS

Bullet Points

- ✓ Excellent mid-season yields
- ✓ Superior Rust Resistance
- ✓ Quick transition allows maximum growth of Bermudagrass
- ✓ Top Performer in many trial locations across the South.

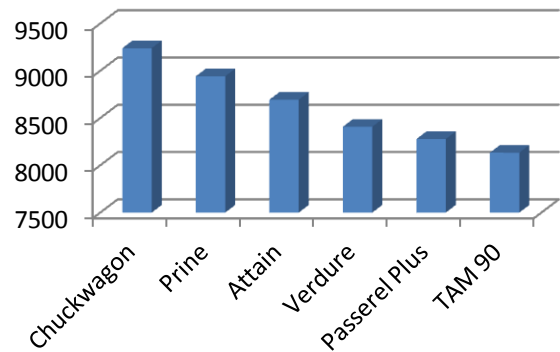
Application

Chuckwagon performs best in situations where maximum yield is desired in mid-spring. One unique feature of Chuckwagon is that the variety transitions out quickly in late spring, rather than hanging on and competing the bermudagrass as it comes out of dormancy. This allows for maximum production from every acre of over the course of the whole grazing season, from the Annual Ryegrass and the Bermuda combined.



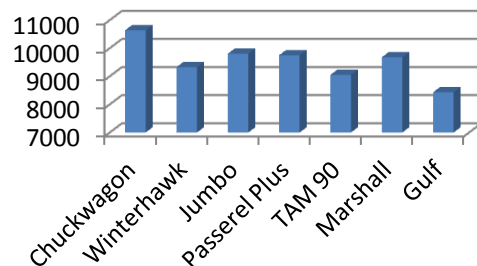
Trial at Overton, TX, 2009 Harvests

Griffin, GA Ryegrass Forage Performance

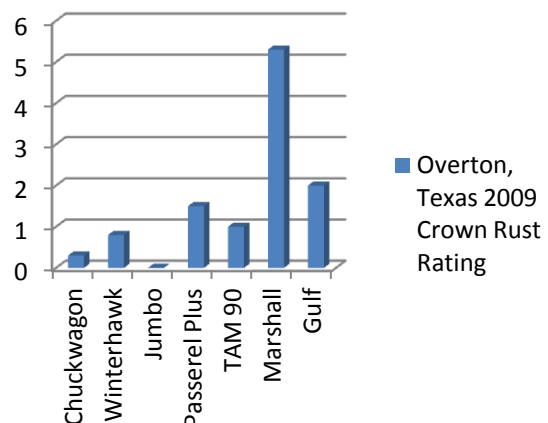


Dry matter yield per acre

Overton Texas 2007-2009 3 year average yields



Overton, Texas 2009 Crown Rust Rating



LSD = 0.09. Scale 0-9 where 9 = plant death due to disease.

Virginia Tech, Southern Piedmont AREC - Blackstone, VA 2012-13 Nutritional Data

Variety	Yield			19-Apr-13				5-Jun-13				Average				Total Yield	
	19-Apr-13	5-Jun-13	Total 2012-13	ADF	NDF	CP	TDN	ADF	NDF	CP	TDN	ADF	NDF	CP	TDN	CP	TDN
Fria ¹	3925	3627	7552	34	53	13	63	39	62	9	57	36	57	11	60	861	4525
M2CVS	3379	3122	7499	29	46	14	68	38	61	9	58	34	54	12	63	885	4695
Chuckwagon	4039	3291	7330	31	49	13	66	39	61	10	58	34	54	12	62	883	4547
Diamond_T	3808	3314	7122	32	50	13	65	38	62	10	58	35	55	12	61	822	4356
FLPE-2XLATE	3644	3267	6912	33	52	12	64	40	63	10	56	36	58	11	60	771	4139
ME-94	3429	3373	6802	30	49	12	66	39	61	10	57	35	55	11	62	748	4180
MO-1	3292	3491	6783	30	46	13	67	37	60	10	59	34	54	11	63	773	4250
TAMTBO	3208	3493	6701	30	47	13	67	39	61	10	57	35	55	11	61	769	4101
Lonestar	3707	2899	6605	35	54	12	62	38	61	11	58	36	57	11	60	752	3971
C2-DM	3600	2917	6517	33	50	13	64	36	60	11	60	34	54	12	62	777	4036
Grits	3490	2978	6467	32	52	12	64	37	61	10	59	35	56	11	62	733	3965
Marshall	3174	3174	6348	28	45	12	69	38	62	10	58	33	53	11	63	679	4013
Tetrastar	3304	3009	6313	31	48	13	66	39	62	10	58	34	55	12	62	736	3905
FLME	3300	2848	6148	33	51	12	64	36	58	11	61	34	55	11	63	707	3841
Jackson	3220	2927	6147	32	50	14	64	37	60	10	59	34	55	12	62	731	3793
Nelson_Tetraploid	3019	3078	6097	30	46	13	67	37	60	11	59	34	53	12	63	751	3800
DH3-Oregro	2711	3312	6023	31	49	14	66	37	61	10	59	35	56	12	62	721	3710
DH3-Allied	3237	2785	6022	35	54	12	61	37	61	11	59	36	57	12	60	710	3624
ME-4	3115	2877	5991	30	47	13	67	37	61	10	59	33	54	12	63	715	3776
Flying_A	3106	2829	5935	33	51	13	64	37	61	11	59	35	56	12	61	693	3641
Winterhawk	2760	2950	5711	31	48	13	66	38	62	10	58	35	56	11	62	639	3479
Brmultra_II	2027	3463	5490	27	42	14	70	38	61	10	58	34	54	11	62	610	3420
Hercules	2381	3061	5441	29	45	14	68	37	60	11	59	34	54	12	63	655	3410
Passerel_Plus	2607	2487	5096	31	49	13	66	36	60	11	60	34	54	12	63	601	3202
Average	3228	3107	6377	31	49	13	66	38	61	10	58	34	55	12	62	738	3932
CV (%)	24	16	21	7	7	9	4	4	3	9	3	4	3	6	3	22	19
LSD (0.05)²	ns	ns	ns	3.1	1.6	ns	3.5	2.2	ns	ns	ns	2.0	2.3	ns	2.3	ns	ns
LSD (0.10)	ns	ns	ns	2.6	3.9	ns	2.9	1.8	ns	ns	2.1	1.7	1.9	ns	1.9	ns	ns

DM yield (P = 0.10).

²LSD, Fisher's protected least significant difference.

Cultural Practices

Date	Practice
03-Oct-12	Plowed and Disk
04-Jan-12	Fertilized with 60 lb/A of N and K ₂ O and field cultivated
05-Jan-12	Seeded with Carter walk-behind seeder
21-Feb-13	Fertilized with 60 lb/A of N and K ₂ O
19-Apr-13	Harvested yield strip (5 x 20 ft) with Wintersteiger forage harvester
20-Apr-13	Fertilized with 60 lb/A of N and K ₂ O
05-Jun-13	Harvested yield strip (5 x 20 ft) with Wintersteiger forage harvester