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2002 Summer Annual Forage Trial, Richfield, UT

Location: 38' 42' N, 112' 03' W Elevation: 5300ft. Soil: Musinia sandy loam (Mo)

Seeded June 10, 2002 in 30 inch rows. Seeding rate: BMR sorghums 16lbs/acre, grain sorghum 8lbs/acre, pearl millet 5lbs/acre, & corn 34,000 plts/acre. RCB design with 3 replications. Plots 2 rows X 20ft. Soil Test: pH = 8.2, ECe = 2.5, P ppm = 70, K ppm = 400. 180lbs of N added as am. sulfate in 2 apps. Frost free period Jun. 10 - Oct. 10. Precipitation: Jun. 0.03, Jul. 0.74, Aug. 0.19, Sept. 1.67, & Oct. 1.45 inches. Furrow irrigations: 6-10, 7-2, 7-22, 8-8, & 9-2. Seed provided by Russel Christensen, Richfield, UT, Cowley Farms, Venice, UT, and Production Plus Seed, Plainview, TX. Updated 5-9-2003

Harvested at boot to early head stage, August 26, 2002

Brand	Hybrid/Species	Dry Matter tons/acre	tons/ac @ 70% Moisture	% Moisture at harvest	Height inches	% Crude Protein	NDF	NDF dig 48 hr	IVTDMD 48 hr
Pro+Plus	RedTop+Plus BMR/MS Cane Sorghum	3.24	10.80	84.9	59				
Pro+Plus	PP202M/Pearl Millet	2.67	8.90	84.4	48	15.7	56.1	63.3	79.4
Pro+Plus	Nutri+Plus BMR/Sorghum X Sudan	2.64	8.80	81.9	64	10.5	52.6	63.6	80.9
Pro+Plus	PP102M/Pearl Millet	2.15	7.17	82.2	47	15.4	56.5	66.0	80.8
Pro+Plus	Silo+Plus BMR/Sorghum	2.02	6.73	83.0	53				
	*Significance of F test (P)	0.26							

Harvested at dough stage for Sorghum and dent for Corn, October 15-25, 2002

Pro+Plus	Nutri+Plus BMR/Sorghum X Sudan	6.73	22.43	61.5	86	7.4	44.9	59.6	81.8
Pioneer	3211 117 day/Corn	6.45	21.50	69.5	83				
Dekalb	607 RR 110 day/Corn	6.43	21.43	59.5	87				
Pro+Plus	Silo+Plus BMR/Sorghum	5.68	18.93	69.8	72	7.5	48.8	71.1	86.2
Pro+Plus	RedTop+Plus BMR/MS Cane Sorghum	5.34	17.80	69.4	76	7.6	48.8	69.8	85.3
Pro+Plus	PP202M/Pearl Millet	5.20	17.33	53.2	81	12.1	55.6	62.6	79.2
Pro+Plus	PP777-Bronze/Grain Sorghum	4.53	15.10	58.4	45	9.3	55.6	66.9	81.5
Pro+Plus	PP799E-Red/Grain Sorghum	4.21	14.03	62.9	45				
Pro+Plus	PP102M/Pearl Millet	4.20	14.00	51.5	66	11.6	60.4	57.0	74.0
Pro+Plus	PP 599-White/Grain Sorghum	4.15	13.83	68.4	51				
	*Significance of F test (P)	0.16		0.02	0.01				
USU Silage Corn Trial Mean, Utah Co. 2002		6.02	20.06			7.6	49.7	67.7	83.9

NDF = neutral detergent fiber (total cell wall or fiber); NDF dig 48hr = neutral detergent fiber digestibility in rumen fluid, 48hr.

IVTDMD 48hr = in vitro true dry matter digestibility in rumen fluid, 48hr.

*Significance of F test (P) shows the probability level that numbers within a column are significantly different. Lower values correspond to higher probabilities of observing significant differences. A value of 0.05 or less is a common bench mark.