Urea and Soybean Meal Compared for Cows on Winter Bluestem Pasture 1968-1969 (Project 253)

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This test compared urea supplement (hand-fed), urea supplement (self-fed), and soybean meal (SBM) supplement (hand-fed) with cows on winter bluestem pasture. The supplements were formulated to supply the same amount of protein and total digestible nutrients. Salt was fed free choice with the hand-fed supplement.

The self-fed supplement presented many problems because limiting intake of the supplement to 3.0 lbs. per head per day required from .30 lb. to .85 lb. of salt per head per day.

Supplement compositions are shown in table 12; test results, in table 11.

The SBM supplement was superior to the urea supplements in maintaining cows' weight, percentage of calves weaned, and percentage of cows breeding back.

Self-feeding the urea supplement produced lighter calves and fewer cows breeding back than did hand-feeding the urea supplement.

Table 11. Results From Supplementing Winter Bluestem Pasture with Indicated Supplements

	Urea supplement	Urea self-fed	Soybean meal supplement	
1968-Fall cows' wt., lb.	869	826	864	
1969-Spring cows' wt., lb.	598	574	655 937	
1969-Fall cows' wt., lb.	939	898		
1969-% Calf crop weaned	87.5	87.5	91.7	
1969-Adj. calf weaning wt., lb.	408	365	396	
1969-% Cows bred	95.8	87.5	100	

Table 12. Composition of Indicated Supplements

Urea supplement,	lbs.	Urea self-fed, lbs	1.	Soybean mea supplement,	lbs.
Sorghum grain Urea Dicalcium phosphate	940 42 18 1000	Sorghum grain Urea Dicalcium phosphate Salt	625 28 12 335 1000	Sorghum grain SBM Dicalcium phosphate	655 327 18 1000
Pounds of Supplement per cow daily	3,2		4.1		3.0

¹Salt was used to limit consumption to 3 lb./head/day. Salt needed varied from .30 to .85 lb./head/day.