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Weaning Calves' Response to a Medicated Top Dressing

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Summary

Adding a medicated top dressing to a weaning calf ration did not reduce calf sickness, but increased weight gains the second and third weeks of a three-week weaning trial.

Introduction

Beef industry economics is forcing beef producers to get calves on feed and gaining as soon after weaning as possible. There are many types of starter rations, top dressing, and management practices but the value of some is questionable. This trial was designed to compare the performance of post-weaning calves receiving a medicated top dressing with those that did not.

Experimental Procedure

The trial began September 30, 1976, when 168 Polled Hereford calves born in March and April were weighed and weaned. At weaning all calves were shipped approximately six miles then randomly allotted into four lots.

All lots received the same basic ration (Table 8.1) plus 2 lbs/hd/day of molasses. Two lots (84 head) received $\frac{1}{2}$ lb/hd/day of medicated top dressing in addition. The other two lots (84 head) received $\frac{1}{2}$ lb/hd/day rolled milo in addition to make the rations TDN equivalent. All cattle received the same amount of feed.

Calves were judged sick when rectal temperatures exceeded 103 F. Those with an elevated temperature were treated according to veterinarian recommendations. Temperatures were taken at all slight indications of sickness. Temperatures were taken daily of calves with raised temperatures until temperature returned to normal. All lots received the same clinical treatments.

The calves were weighed every seven days. The calf height was taken with the last weight to establish a weight-height ratio--a measure of fatness.

Results and Discussion

Calves receiving the medicated top dressing had higher average daily gains (ADG) and mean weights when compared to the non-medicated groups. (Table 8.2). The differences became larger as the trial progressed, but the medicated top dressing had no significant effect on number of

calves that became sick. All calves that were judged sick were treated and recovered.

Data of all calves showed the weight-to-height ratio (measure of conditioning) was slightly related ($P < .07$) to the number of sick calves. The more conditioned calves were less susceptible to sickness.

In this trial the addition of a medicated top dressing to a calf weaning ration resulted in increased weight gains.

Table 8.1 . Rations used in test of medicated top dressing.

Item	Lots A and C (Controls)		Lots B and D	
Basic ration	Prairie hay	30%	Prairie hay	30%
	Rolled oats	42%	Rolled oats	42%
	Rolled milo	20.5%	Rolled milo	20.5%
	Soy bean meal	7.3%	Soy bean meal	7.3%
	Molasses	2 lb/hd/day	Molasses	2 lb/hd/day
Top dressing	Rolled milo	100%	Rolled milo	49.38%
			Milk replacer	46.91%
			Oreomycin 700	2.22%
			Vitamin A	0.49%
			Animal fat	0.99%

Milk Replacer Content: (Milk fat .01%), (Protein 27.037%), (Ash 6.149%), (Sodium .371%), (Carbohydrate 62.519%), (Potassium 1.186%), (Thiamine Hydrochloride .00037%), (Riboflavin .00074%), (Nicotinamide .0037%), (Pyridoxine Hydrochloride .00018%), (Calcium Pantothenate .0037%), (Folic Acid .00009%), (Ascorbic Acid .05555%).

Table 8.2 . Performance Chart.

Item	Period	Top Dressing	
		Non-medicated	Medicated
ADG	1st week	-1.071 lbs/day	-1.072 lbs/day
	2nd week	1.454 lbs/day	2.848 lbs/day
	3rd week	.568 lbs/day	1.828 lbs/day
Mean	1st week	344.1 lbs.	343.1 lbs.
	2nd week	345.1 lbs.	363.7 lbs.
	3rd week	358.4 lbs.	376.5 lbs.