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LASALOCID SODIUM SUPPLEMENTATION FOR GRAZING STEERS

L. B. Embry and M. J. Goetz Department of Animal Science Report CATTLE 81-1

Summary

Yearling steers grazing alfalfa-brome pastures and supplemented with 2 lb. daily of a pelleted corn supplement gained 1.69 lb. daily over a 146day grazing period (May 29 to October 22, 1980). There was no improvement from supplementing with lasalocid sodium at 200 mg. daily. Lasalocid at 300 mg. or monensin (Rumensin) at 200 mg. daily resulted in similar daily gains with improvement of 9.6% over the control group.

Introduction

Lasalocid sodium (Bovatec) is a feed additive which has been reported to promote growth and improve feed utilization by cattle. The product appears to function by stimulating a more favorable and efficient microbial fermentation of the feed, thus improving rate and efficiency of production. Other research has also indicated the product to be an effective coccidiostat for cattle.

A previous experiment (CATTLE 80-10) with feedlot steers fed a high-grain ration resulted in 4.3% greater gains with 8.3% less feed (ADG, 3.23 lb. with 7.63 lb. feed per 1b. gain for the control group). In the experiment reported here, lasalocid was tested for its effects on weight gain of grazing steers. The product was fed at two levels and compared to a nonmedicated control and to monensin (Rumensin).

Procedures

The experiment was conducted using 64 steers (48 Hereford and 16 Hereford-Angus). They were allotted to 16 pasture paddocks of 4 steers each on basis of weight and breed group. Initial weights were following an overnight stand without feed and water (about 16 hours) and about 20 hours without feed and water for the final shrunk weights. Intermediate weights during the pasture season were without shrinking the steers.

The steers were implanted with 36 mg. Ralgro at the beginning of the experiment. They were given an injection of Clostri-Bac-4 (clostridium chauvoei, septicum, novyi and sordelli).

Experimental treatments, each replicated four times, and dosage level of test products were as follows:

- 1. Corn grain (control)
- 2. Corn grain with 200 mg. lasalocid per head daily
- 3. Corn grain with 300 mg. lasalocid per head daily
- 4. Corn grain with 200 mg. monensin per head daily.

The corn grain supplement was used as the carrier for the appropriate levels of the test products. It was pelleted and hand fed daily at 2 lb. per head in feed bunks for each paddock. Trace mineral salt and dicalcium phosphate were provided separately on a free-access basis.

The pastures were alfalfa-brome mixtures with a stand of about 50% alfalfa. Each paddock for the four steers was 3.9 acres. The paddocks were grazed continuously with the same four steers during the 146-day experiment (May 29 to October 22, 1980).

Results

Results of the experiment are shown in table 1. A mechanical problem with the pelleting mill resulted in a delay of 1 week in feeding of the supplemental feeds. Heavy rains made it necessary to omit 2 days of supplementation near the end of the first month on pasture. Otherwise, the supplements were fed 2 lb. per head daily during the experiment.

Two steers had to be removed from the experiment because of urinary calculi. One was in the control group and the other one was from the monensin treatment. Data for these two treatments are for 15 steers. However, a steer similar in weight replaced each steer to equalize growing pressure in each paddock.

The average daily gain of 1.69 lb. daily over the 146-day experiment represents good performance for the pasture and 2 lb. daily of a corn grain supplement. No improvement was obtained from lasalocid at 200 mg. daily. Steers supplemented with 300 mg. of lasalocid or 200 mg. monensin daily gained at the same daily rate (1.83 lb.). The improvement over controls amounted to 9.6%.

Supplement and pasture days per unit of gain are reflections of differences in weight gain since they were constant among treatment groups.

Treatment	Control	200 mg. lasalocid	300 mg. lasalocid	200 mg. monensin
Init. shrunk wt., 1b.	564	16 571	569	574
-				
Final shrunk wt., 1b.	790	789	815	817
Avg. daily gain, 1b.	1.69	1.67	1.83	1.83
Avg. daily supplement, 1b.	1.85	1.85	1.85	1.85
Feed/100 1b. gain				
Pasture days	70	60	55	54
Supplement	118	111	101	101

Table 1. Pasture Performance of Steers (May 29 to October 22, 1980--146 days)