EFFECT OF BAMBERMYCIN ON WEIGHT GAIN OF SUMMER STOCKER CATTLE

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Story in Brief

One hundred eighteen stocker steers grazing summer forages were supplemented with 25% crude protein supplements containing either 125 mg monensin, 20 mg bambermycin or no feed additive. Cattle were fed 2.5 pounds of supplement daily for 90 days beginning July 6. Treatment groups grazed separately and were rotated among pastures to minimize possible pasture effects. Gains for control, monensin and bambermycin supplemented cattle were 1.75, 1.93 and 1.51 lb/head/day, respectively.

(Key Words: Bambermycin, Stocker Cattle, Monensin, Grazing Trial.)

Introduction

Numerous studies have demonstrated improved animal performance and profitability of supplementing stocker cattle with high protein feeds in summer (Lusby and Horn, 1983; Gill et al., 1984; Cantrell et al., 1985; McCollum, 1987). Other research trials have also found added benefits to the addition of monensin (Rumensin®), lasalocid (Bovatec®) or chlortetracycline to these high protein summer supplements (McCollum, 1988). The objective of this field trial was to determine the effect of bambermycin (Gainpro®) as a feed additive to grazing summer stocker cattle receiving a high protein supplement.

Materials and Methods

One-hundred-eighteen healthy, previously received stocker steers were individually identified, weighed, and randomly allotted to one of three treatments. Cattle were previously received during March-May weighing 375 to 425 pounds. They were implanted, castrated, dewormed and vaccinated for IBR, BVD, PI3, Lepto 5, 7-way clostridial and mass medicated with Micotil®. Cattle were supplemented with 3 pounds of 14% crude protein pellets including lasalocid until the start of the trial. Average initial weight of the cattle was 474 pounds. Cattle were fed 25% crude protein pasture supplements (OSU Supergold) containing monensin (125mg per head per day), bambermycin (20mg per head per day), or no feed additive (control). Supplements were fed daily at a rate of 2.5 lb/head.

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Treatment groups were maintained separately while being rotated through three similar, adjacent, approximately 55-acre pastures of mostly bermudagrass with fescue and native grasses included. Cattle were rotated every two weeks. Feed samples were taken three times during the 90 day trial (July 6 to October 4, 1994) and assayed to determine drug levels. Cattle were reimplanted with Synovex-S® and dewormed again in late July. In addition to pasture rotation to minimize pasture effect, treatment groups were commingled the last 24 hours of the trial prior to the final weighing. All weights were taken without shrink.

Results and Discussion

Control cattle gained 1.75 lb per head per day for the 90 days of the trial (Table 1) versus monensin cattle at 1.93 lb per head per day ($P<.04$) compared with "control" cattle and cattle consuming bambermycin at 1.51 lb per head per day ($P<.005$) compared with "control" cattle. Feed sample assays recovered 96% and 93% of feed label levels of monensin and bambermycin respectively. Forage availability across pastures was similar at all times. There was no indication that any treatment group had any advantage or disadvantage relative to the others during the trial as a whole or at any particular time during the trial. These data indicate the need for further study of bambermycin as a feed additive option to be included in protein supplements for summer stocker cattle.

Literature Cited

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Table 1. Effect of monensin or bambermycin on stocker weight gains.[a]

Item	Control	Monensin	Bambermycin
No. of animals	40	39	39
Initial weight, lb (7-6-94)	474	474	474
Daily gain, lb (90 days)	1.75[b]	1.93[c]	1.51[d]

[a] Least squares means.
[b,c,d] Means on the same row with different superscripts differ (P<.05).