THE EFFECT OF AUREOMYCIN® IN COMBINATION WITH BOVETEC® IN A MINERAL MIXTURE ON STEERS GRAZING NATIVE GRASS¹

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Summary

Three hundred twelve mixed-breed steers (590 lb) were allotted randomly to eight native grass pastures on April 20. pastures were grazed until July 13. The steers in four pastures received a basic mineral mix with 800 mg of Bovatec® per lb. The other four pastures received the basic mineral mixture with Bovatec plus 1.6 lb Aureomycin 50 per 50 lb of mineral. The steers receiving the mineral with Aureomycin had greater mineral consumption (P < 0.04). Including Aureomycin in the mineral increased gain by 2%; however, the response was not statistically significant.

(Key Words: Bovatec, Ionophore, Aureomycin, Antibiotic, Native Grass.)

Introduction

Feed additives such as Bovatec® or Rumensin® are used in mineral mixtures for cattle grazing native grass during the summer. Also, Aureomycin® has been added to mineral mixtures resulting in excellent improvement in gain. As combination clearances by FDA become available, efficacy of these combination need to be evaluated. Therefore, this research studies the use of Bovatec by itself or in combination with Aureomycin by evaluating

the effect on steer gains while grazing native pasture during the summer.

Experimental Procedures

Three hundred twelve mixed-breed steers (590 lb) were allotted randomly to eight pastures on April 20. The pastures were grazed until July 13 (stocking rate = one steer per two acres). The pastures were native tallgrass prairie that had been burned in early April. The steers in four pastures received a basic mineral with 800 mg of Bovatec/lb. The steers in the other four pastures received the same basic mineral with Bovatec, plus 1.6 lb Aureomycin 50 added for each 50 lb of the base mineral offered. The steers were checked weekly for foot rot and eye problems, and any steer that required treatment for either problem was recorded.

Results and Discussion

The combination of Bovatec and Aureomycin in the mineral resulted in an increase in daily mineral intake (.356 vs .213 lb/day, P<0.04, Table 1). The combination of Bovatec and Aureomycin improved gain by 2% over Bovatec alone; however, the response was not statistically significant. The incidence of foot rot was low in the study; therefore, it is difficult to make meaningful comparisons between treatments in this regard.

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Table 1. Effects of Aureomycin in Mineral on Steers Grazing Native Grass for 83 Days

Items	Aureomycin Bovatec	Bovatec	SE
No. steers	143	169	
No pastures	4	4	
Average starting wt, lb	590	589	
ADG, lb	3.209	3.147	0.044
Mineral intake, lb	0.356^{a}	0.213 ^b	0.023
Incidences of:			
Foot rot, %	0	0.6	0.44
Bovatec, mg/d	285	170	19.3
Aureomycin, mg/d	570	0	

^{a,b}Means in the same row with unlike superscripts are different (P<0.04).