

Kansas Agricultural Experiment Station Research Reports

Volume 0
Issue 1 *Cattleman's Day (1993-2014)*

Article 1029

1986

Effect of salinomycin on performance of grazing stocker heifers

Lyle W. Lomas

Follow this and additional works at: <https://newprairiepress.org/kaesrr>



Part of the [Other Animal Sciences Commons](#)

Recommended Citation

Lomas, Lyle W. (1986) "Effect of salinomycin on performance of grazing stocker heifers," *Kansas Agricultural Experiment Station Research Reports*: Vol. 0: Iss. 1. <https://doi.org/10.4148/2378-5977.2432>

This report is brought to you for free and open access by New Prairie Press. It has been accepted for inclusion in Kansas Agricultural Experiment Station Research Reports by an authorized administrator of New Prairie Press. Copyright 1986 the Author(s). Contents of this publication may be freely reproduced for educational purposes. All other rights reserved. Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned. K-State Research and Extension is an equal opportunity provider and employer.



K**S****U**

Effect of Salinomycin¹ on Performance of Grazing Stocker Heifers

Lyle Lomas²

Summary

The effect of feeding 0, 25, 50, 100, or 150 mg of salinomycin per head daily on performance of stocker heifers grazing smooth brome grass pasture was evaluated in a 126-day trial. Feeding 100 or 150 mg of salinomycin per head daily produced the fastest gain.

Introduction

Salinomycin, an experimental feed additive, is a polyether ionophore that alters rumen microbial population and fermentation patterns. Although it improves the performance of finishing cattle, only limited data are available concerning its use in grazing stocker cattle.

Experimental Procedures

Eighty Charolais crossbred yearling heifers were used to evaluate the effect of salinomycin on the performance of grazing stocker cattle. Salinomycin was fed at 0, 25, 50, 100, or 150 mg per head daily in 2 lb of ground corn. The five treatments were replicated twice, using ten 10-acre smooth brome grass pastures, with eight heifers per pasture. The study began on April 17, 1985 and was terminated on August 21 (126 days). Both initial and final weights were the average of two nonshrunk weights taken on consecutive days. Treatment groups were rotated among pasture plots at 14-day intervals to minimize effects of differences in forage availability and/or quality.

Results

Heifers that received 100 or 150 mg of salinomycin per head daily had the highest average daily gains and gained significantly more weight ($P < .01$) than those fed 25 mg of salinomycin per head daily (Table 29.1). There were no significant differences ($P > .05$) in rate of gain between any of the other salinomycin levels.

¹Salinomycin is an experimental feed additive produced by the A. H. Robins Co., Richmond, VA who provided the feed additive and partial financial assistance to conduct this study.

²Southeast Kansas Branch Experiment Station.

Table 29.1. Effect of Salinomycin on Performance of Grazing Heifers (126 days)

Item	Salinomycin Level (mg/hd/day)				
	0	25	50	100	150
Initial Wt., lb	574	573	575	573	574
Final Wt., lb	753	731	751	766	762
Total Gain, lb	179 ^{ab}	158 ^a	176 ^{ab}	193 ^b	188 ^b
Average Daily Gain, lb	1.42 ^{ab}	1.25 ^a	1.40 ^{ab}	1.53 ^b	1.49 ^b

^{ab} Means with different superscripts differ significantly ($P < .01$).

