



Combined effects of Actisaf[®] Sc 47 and Safmannan[®] on health and performance of beef cattle grazing pastures

Objective: To evaluate the effect of Actisaf[®] Sc 47 and Safmannan[®] on treatment success and cost, as well as on digestive performance.

Trial design

Comparative field trial
Location: USA

Species/life stage

Beef cattle
Grazing heifers and steers

Main criteria

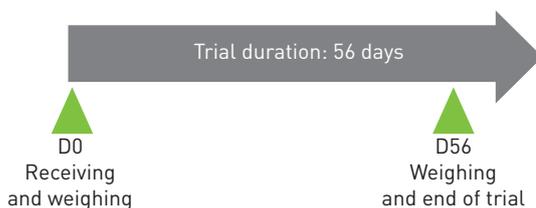
Treatment success rate, treatment cost, ADG, body weight (BW).

Reference

J. D. Rivera et al. 2019. Applied Animal Science.

Protocol

	Control	Actisaf [®] Sc 47 + Safmannan [®] (5 g/h/d of each product)
Number of pastures	8	8
Number of animals per pasture	15	15
Total number of animals	120	120

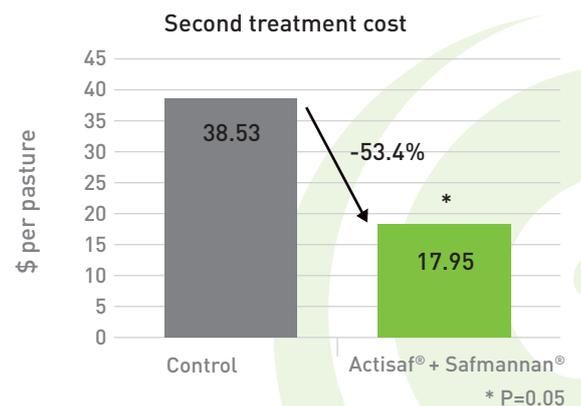
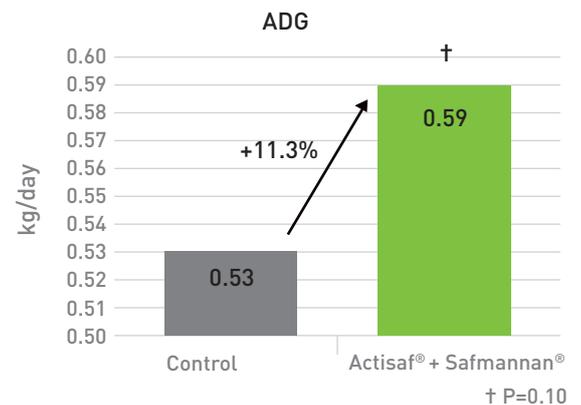


Conclusion

The trial demonstrates that supplementation with Actisaf[®] Sc 47 and Safmannan[®] improved treatment success rates, resulting in reduced health costs. It also led to better growth and a higher final weight.

Main results

- ↑ ADG: +60 g/day
- ↓ 2nd treatment cost: -20.58 \$/pasture
- ↑ Body weight at D56: +3.3 kg
- ↑ Treatment success: +9.5 %
- ROI: \$7.12/head





Introduction

Bovine respiratory disease (BRD) is one of the major challenges of recently received beef cattle. It can result in major economic losses from additional medicine costs, and losses associated with performance and carcass quality. With increasing concern about antibiotic use in food production, prevention methods must be adopted by farmers to reduce antibiotic resistance and treatment costs. Yeast has the potential to improve the performance and health of newly received cattle, helping farmers to increase profitability and successfully negotiate this critical phase.

Materials and methods

A total of 240 beef cattle (heifers and steers) were purchased from an order buyer in Waynesboro, Tennessee and shipped 624 km to the Mississippi State University.

They were immediately unloaded and allowed access to pasture and water. Mass metaphylaxis was not practised in this study.

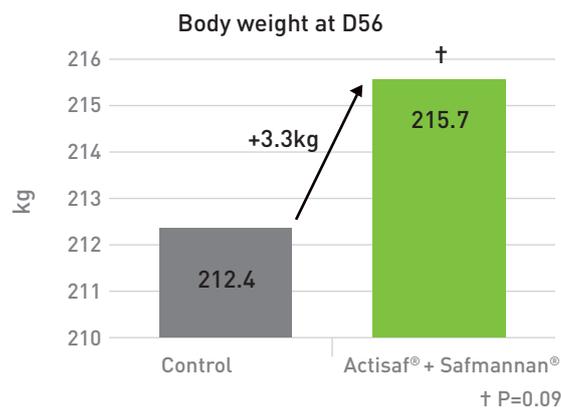
The animals were vaccinated for clostridial, IBR PI3, BRSV, BVD and given an anthelmintic, before being randomly assigned to pastures and treatments:

- **Control group:** animals were fed the basal diet.
- **Supplemented group:** animals were fed the basal diet and supplemented with Actisaf® Sc 47 (5g/head/day) + Safmannan® (5g/head/day) added to a vitamin and mineral premix with targeted intake of 0.68kg/ animal daily.

Results and discussion

Initial BW was similar among the two groups ($P = 0.72$). A tendency was noted for increased BW on d 56 ($P = 0.09$) for supplemented group.

A tendency ($P=0.10$) was also observed for the overall ADG (D0-56) in the supplemented group.



Conclusion

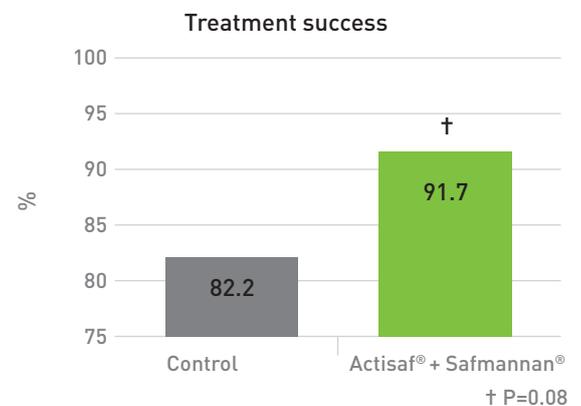
Supplementation with Actisaf® Sc 47 and Safmannan® shows a tendency to increase performance (ADG and final weight) as well as benefit health responses with more treatment success and a lower medical cost on the second treatment.

Keywords Beef cattle, Actisaf® Sc 47, Safmannan®, BRD, ADG, health status, zootechnical performance

Reference Effects of yeast and yeast cell wall on performance and health of newly received beef steers and heifers grazing bahiagrass pastures. Applied Animal Science, 35:339–346. USA, 2019

Actisaf® Sc 47, as a yeast probiotic, has a beneficial effect on the growth and viability of the rumen microflora and enhances the rumen fermentation process. This results in a better feed conversion rate and therefore better performance.

Safmannan® inhibits colonization by pathogenic bacteria of the gastrointestinal tract, which can mitigate subsequent infections. A tendency ($P=0.08$) was noted with regard to treatment success, with supplemented cattle having a greater success rate compared with the control group.



Additionally, the supplemented group had a lower medicine cost ($P=0.05$) for second treatments compared to the control group.

Total medicine cost was numerically lower for the supplemented group (\$19.89 vs. \$21.17; $P=0.18$).