

# Research Summaries III

## Performance and Fecal Starch Analysis in Feedlot Finisher Steers Supplemented with Top-Dressed Sarsaponin

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### Introduction

SarTemp<sup>®</sup> (yucca plant extract, saponin) has traditionally been used as a tempering agent to increase moisture in corn based diets. New claims contend that SarTemp<sup>®</sup> may be useful as a feed additive to control protozoa numbers in the rumen and therefore improve starch digestion.

### Materials and Methods

In July 2010, 112 feedlot steers (average body weight 1034 ± 55 lb or 470 ± 25 kg) that had been consuming a typical High Plains finishing ration for a minimum 25 days were randomly assigned into one of four treatment pens (28 hd/pen). The pens were randomly assigned to one of two treatments: control or diet top-dressed with saponin. The objectives of this study were to 1) observe the impact of sarsaponin, a yucca plant extract, would have on feedlot cattle performance and 2) quantitatively observe the effects of the sarsaponin product on starch digestion in feedlot cattle. During the subsequent 25 days, the ration fed to test animals was top-dressed with sarsaponin (SarTemp<sup>®</sup>) daily. Recom-

mended dosage was 1.5 mL per head per day; therefore, 42 mL were drawn into a syringe and dispersed evenly across the feed in each testing pen's bunk. Body weights and rectal grab fecal samples were collected on days 0 and 25 on feed.

Fecal samples were sent to ServiTech Laboratories in Hastings, NE for chemical analysis.

### Results

No significant effects on average daily gain were observed between sarsaponin and Control animals, 2.50 and 2.38 lb (0.91 and 1.08 kg), respectively ( $P=0.14$ ). Likewise, fecal starch concentration was not different between treatments ( $P=0.53$ ).

### Significance

Results indicated that in this instance, top-dressing sarsaponin on feed for feedlot cattle did not have a significant effect on cattle performance or fecal starch values relative to cattle that did not receive daily sarsaponin supplement. Further investigation, with increased power, is warranted.