

# INFLUENCE OF ASPERGILLUS ORYZAE FERMENTATION EXTRACT ON LOW QUALITY ROUGHAGE UTILIZATION

H.W. Essig, E.G. Morrison, J.L. Holliman, and L.J. Smithson

Amaferm<sup>®</sup> treatment resulted in similar weight and body condition score changes as feeding 1.67 pounds/ head/day during third trimester and early lactation. During the summer months Amaferm treatment results in cows gaining 96 more pounds and half a body condition score as compared to control cows.

### SUMMARY

**DOSE OF AMAFERM USED** 2 g per head, per day

Including Amaferm in a winter feeding program resulted in cows having similar weight gains and body condition scores as cows that received a cottonseed meal, protein supplement. Including Amaferm in a summer grazing program of cow-calf pairs resulted in cows that gained nearly 100 pounds more and were a half of a body condition score greater than cows fed a plain mineral supplement. In addition, Amaferm fed pairs weaned slightly (10 pounds) heavier calves than their contemporaries.

# VALUE

Amaferm has similar results as feeding a cottonseed meal, protein-type supplement on a low-quality forage diet. Amaferm treatment during the winter feeding period was equivalent to feeding 0.6 pounds/day of crude protein (1.5 pound of cottonseed meal). Amaferm during lactation and summer grazing has both a significant weight gain and body condition score advantages when compared t0 mineral supplements without Amaferm. Amaferm has the potential to increase weaning weights.

### PROTOCOL

### **Type of Animals/Experimental Units**

• Beef cows, breed unknown.

### Number of animals/experimental units

• 39 in total, 19 control and 20 VitaFerm<sup>®</sup> treatment.



#### POWER UP PERFORMANCE. MAXIMIZEDIGESTIBILITY.

MODE OF ACTION

# **PROTOCOL (CONTINUED)**

## **Trial Design**

• Completely randomized design, 10 month period December to October.

### Treatments

- 1. Control
- 2. VitaFerm<sup>®</sup> Cow-calf supplement (with 2 g/h/d Amaferm<sup>®</sup>)

# **Diet Information (general)**

- Winter graze dormant bermuda grass pasture and fed Coastal bermuda grass hay free-choice.
- Summer graze bermuda grass pasture.

# **Data Collection**

• Initial, intermediate and final BW, body condition score, and calf weaning weights.

# **DISCUSSION OF RESULTS**

- There was no negative control. The positive control of 1.5 pounds/head/day of cottonseed meal has been shown to maintain cows during winter months. Feeding Amaferm appears equivalent to the positive control.
- During summer grazing VitaFerm mineral supplementation supported nearly 100 pounds of cow weight gain and significant body condition scores as compared to another mineral supplement.
- Weaning weight of calves from VitaFerm supplemented pairs weighed about 10 pounds more than their contemporaries, but this weight difference was not statistically different.

#### **BIOZYME INCORPORATED**

6010 Stockyards Expy | St. Joseph, MO 64504 USA Tel: 816-238-3326 | Fax: 816-238-7549 support@biozymeinc.com | www.biozymeinc.com

