MILK PRODUCTION RESPONSE OF DAIRY CATTLE SUPPLEMENTED WITH AMAFERM®

Alex Bach

Cows fed AMAFERM showed a 2.5 kg/d increase in milk yield and improved fat-corrected milk.

SUMMARY

DOSE OF AMAFERM USED
3, 30 and 60 g per head, per day

Dairy cows supplemented with 3 g/h/d AMAFERM produced more milk and fat-corrected milk ($P < 0.05$) than the Control cows. Although milk component concentration was not affected, the combination of numerically higher milk fat concentration and significantly greater milk yield resulted in significantly improved fat-corrected milk yield with AMAFERM.

VALUE

Compared with the Control, AMAFERM effectively improved milk persistency in dairy cows and showed lower milk drop as DIM increased.

PROTOCOL

Type of Animals/Experimental Units

- Lactating dairy cows

Number of Animals/Experimental Units

- 40 total, 10 in each treatment

Trial Design

- Randomized complete block design

PROTOCOL (CONTINUED)

Treatments

- Control or 3, 30 and 60 g/h/d AMAFERM fed for 102 days (data from the first 90 days were used)

Diet Information (General)

- 24.4% corn grain, 17.7% rye grass silage, 14.5% wheat silage, 11.1% soybean meal, 10.6% alfalfa silage, 7.7% citrus pulp, 4.8% corn gluten feed, 4% lupine meal, 2% barley grain, etc.

Data Collection

- Daily milk yield, monthly milk composition, rectal temperature
- Feces, blood and milk samples from AMAFERM-fed cows were collected for later determination
- Health status was checked weekly

DISCUSSION OF RESULTS

- AMAFERM supplementation significantly ($P < 0.05$) increased milk production compared with the Control (26.03, 28.52, 26.96 and 27.21 kg/d for Control, 3 g/h/d AMAFERM, 30 g/h/d AMAFERM and 60 g/h/d AMAFERM, respectively). The highest response was achieved with the 3 g/h/d level
- Average rectal temperature was not significantly affected by treatments (38.7, 38.7 38.6 and 38.7 for Control, 3 g/h/d AMAFERM, 30 g/h/d AMAFERM and 60 g/h/d AMAFERM, respectively)
- Cows fed 30 or 60 g/h/d AMAFERM had higher milk production than the Control, but had lower ($P < 0.05$) milk production than cows on 3 g/h/d
- DIM for cows fed 3 g/h/d and 30 g/h/d AMAFERM was significantly lower (237 and 239, respectively) than the Control or the cows fed 60 g/h/d AMAFERM (250 and 249, respectively. This might explain why 60 g/h/d AMAFERM resulted in less milk production than 3 g/h/d, but the reason cows fed 30 g/h/d produced less milk than cows fed 3 g/h/d was unknown
- Compared with the Control, cows supplemented with AMAFERM seemed to show a lower milk drop as DIM increased (better milk persistency)

DISCUSSION OF RESULTS (CONTINUED)

- Milk fat concentration (3.46, 3.70, 3.56, 3.76% for the Control, 3 g/h/d AMAFERM, 30 g/h/d AMAFERM and 60 g/h/d AMAFERM, respectively) was not significantly affected by treatments, nor was milk protein concentration (3.53, 3.44, 3.38, 3.50% for the Control, 3 g/h/d AMAFERM, 30 g/h/d AMAFERM and 60 g/h/d AMAFERM, respectively)
- Fat-corrected milk was significantly increased ($P < 0.05$) with AMAFERM compared to the Control (24.32, 26.64, 25.34 and 26.19 kg/d for the Control, 3 g/h/d AMAFERM, 30 g/h/d AMAFERM and 60 g/h/d AMAFERM, respectively.) The greatest response was observed with 3 g/h/d AMAFERM

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

BIOZYME® INCORPORATED