

COMPARISON OF AMAFERM[®] AND MONENSIN USING A STARTER RATION IN WEANLING CALVES

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Stressed calves commingled from different locations showed some trends for increased intake and feed efficiency when fed AMAFERM.

SUMMARY

DOSE OF AMAFERM USED

1.9g or 2.8g per head,
per day (see treatment note)

In Trial 3, there was a numerically higher intake for the AMAFERM treatment versus the 3 treatments with AMAFERM and Monensin, or the control. In Trial 3, feed efficiency was improved slightly over the control with the addition of AMAFERM. The addition of Monensin and AMAFERM improved efficiency over AMAFERM alone. Stress and the number of sick cattle were minimal and cattle went on feed rapidly, which may have minimized the positive effects of AMAFERM normally seen on stressed cattle.

VALUE

Calves fed AMAFERM at either 1.9g/d or 2.8g/d had higher feed intake compared with calves that were fed AMAFERM and Monensin together. AMAFERM treatments supported higher average daily gain compared to the control.

PROTOCOL

Type of Animals/Experimental Units

- Trial 1 and 3: English crossbred of weanling steer calves
- Trial 2: Brahma crosses of weanling steer calves

Number of Animals/Experimental Units

- Trial 1: 77 head • Trial 2: 79 head • Trial 3: 79 head

PROTOCOL (CONTINUED)

Trial Design

- Randomized (Trials 1 and 2), Blocked by Origin (Trial 3)

Treatments

- **Trial 1 and 2 (28 day trials)**

1. Control
2. AMAFERM 1.9g/d + Monensin 33mg/kg
3. AMAFERM 2.8g/d + Monensin 33mg/kg
4. AMAFERM 1.9g/d
5. AMAFERM 2.8g/d

- **Trial 3 (56 day trial)**

1. Control
2. AMAFERM 1.9g/d + Monensin 33mg/kg
3. AMAFERM 1.9g/d + Monensin 33mg/kg
4. Monensin 33mg/kg
5. AMAFERM 1.9g/d

Note: What the author refers to as 6g/hd/d of AMAFERM actually provides approximately 1.9 grams per head, per day of AMAFERM, and the 9g/hd/d provides 2.8 grams per head, per day of actual AMAFERM (W. C. Behrens, Final Report).

Diet Information

- Roughage mix, almond hulls, barley, beet pulp, molasses and cottonseed crumbles

Data Collection

- Health issues, gain and intake

DISCUSSION OF RESULTS

- Three groups of cattle were used in Trials 1 and 2. The number of sick cattle and stress-related problems were not higher in the first two groups (Cal Poly herd, local ranch) but were higher in the third trial of sale-barn calves
- AMAFERM-fed calves showed increased feed intake at both levels, compared with a slight decrease with Monensin + AMAFERM treatments (Table 1)
- In Trial 3, the 56-day data shows no advantage with the combination of AMAFERM and Monensin

DISCUSSION OF RESULTS (CONTINUED)

- The AMAFERM-fed calves supported the highest daily gain among all treatments, but were only superior to the control for feed efficiency (Table 2)
- All cattle receiving AMAFERM stayed on feed during periods of sickness, despite recording above normal temperatures

<i>Table 1</i> Average daily gain, feed intake and feed efficiencies in Trials 1 and 2 combined.*	Item	Control	1.9g AMAFERM 33mg/kg Monensin	2.8g AMAFERM 33mg/kg Monensin	1.9g AMAFERM	2.8g AMAFERM
	ADG kg/d	1.51	1.58	1.55	1.53	1.49
Feed intake, kg/d	8.03	7.61	7.19	8.07	7.89	
Feed Efficiency (intake:gain)	5.39	4.81	4.65	5.28	5.29	

*Trials 1 and 2 were not significantly different ($P>0.05$), so data was combined.

<i>Table 2</i> Average daily gain, feed intake and feed efficiency in Trial 3.*	Item	Control	1.9g AMAFERM 33mg/kg Monensin	1.9g AMAFERM 33mg/kg Monensin	33mg/kg Monensin	1.9g AMAFERM
	ADG kg/d	1.02	1.00	1.05	1.07	1.09
Feed intake, kg/d	8.71	8.07	8.31	8.51	8.86	
Feed Efficiency (intake:gain)	8.54	8.07	7.91	7.95	8.13	

*Treatments 2 and 3 are the same and were the optimal treatment from Trials 1 and 2.

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