

# Aureomycin®

*Benefits for Grazing Cattle*



*Aureomycin® Type A Medicated Article aids in the control of bacterial infections, improving health and resulting in improved performance and thriftier cattle coming off pasture or out of backgrounding programs.*

## Aureomycin for Improved Health

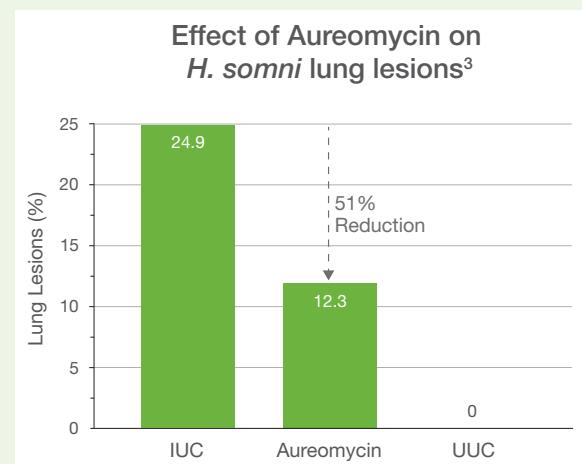
Aureomycin helps keep cattle healthy, resulting in increased growth rates and improved profitability. Feeding trials<sup>1,2</sup> have demonstrated steers fed Aureomycin, compared to nonmedicated control, experienced:

- Lower incidence of respiratory disease
- Fewer respiratory disease treatments
- 3 – 5% improvement in daily gain

A study at Iowa State University<sup>3</sup> was conducted to determine the efficacy of Aureomycin in reducing lung lesions in calves challenged with *Histophilus somni*, a bacteria causing respiratory diseases. Calves were in three groups shown below:

- Infected, unmedicated control (IUC)
- Aureomycin (350 mg/hd/day)
- Uninfected, unmedicated control (UUC)

Calves fed Aureomycin experienced 51% fewer lung lesions than infected calves.



## Improve Heifer Reproductive Efficiency With Aureomycin

Aureomycin was fed in a trace mineralized salt<sup>4</sup> to determine the effect on pregnancy rate and time to conception. Heifers were treated before and/or during the breeding period to evaluate body condition score and body weight.

- Heifers receiving Aureomycin before breeding were 7% more likely to become pregnant than those not treated before breeding.
- Heifers fed Aureomycin before and during breeding demonstrated the highest pregnancy rate compared to all other groups ( $P < 0.03$ ).



## Improved Heifer Reproduction, Growth With Aureomycin<sup>a</sup>

Item	Treatment					SE
	No Aureomycin	Aureomycin before breeding	Aureomycin during breeding	Aureomycin before and during breeding		
Animals, n	189	191	190	190		
Pregnancy % improvement <sup>b</sup>	—	+4	-10	+10	—	
Time to conception, days <sup>c</sup>	60.4 <sup>e</sup>	60.1	69.4 <sup>f</sup>	59.8	2.3	
Gain/day, lb <sup>d</sup>	0.64 <sup>e</sup>	0.73	0.71	0.88 <sup>f</sup>	0.02	

<sup>a</sup> Aureomycin was provided in a trace mineral at a rate of 4480 grams/ton and fed either 30 days before or the first 35 days during a breeding season; targeted dose was 300 mg/head/day.

<sup>b</sup> Determined by rectal palpation at 45 days after the end of the breeding season.

<sup>c</sup> Estimated time to conception within the breeding season (February 11 to May 15) determined by rectal palpation.

<sup>d</sup> Determined between the initial and final examination days of the study (January 13 to June 30).

<sup>e,f</sup> Row values with different superscripts differ significantly from the no Aureomycin controls ( $P < 0.05$ ).

## Effects of Aureomycin on Cow-calf Health

A four-year grazing trial<sup>5</sup> was conducted to determine the effects of Aureomycin for control of anaplasmosis in cow-calf pairs on conception rate and calf weaning weight. 583 cows and 340 calves were treated during the four-year period with a breeding unit average of 500 mg Aureomycin.

Pairs fed Aureomycin demonstrated:

- 6% improvement in average daily gain
- 3% improved conception rate
- Earlier calving dates (almost 2 full weeks)



4-year Summary	Control	Aureomycin
Average weight gain (lb)	257	272
Average daily gain (lb)	1.48	1.57
205-day adjusted calf weight (lb)	426	450
Conception rate (%) <sup>*</sup>	73.9	76.6

\* Conception rates were low in general due to poor conception among younger cows, heat stress, and high endophyte pastures (fescue toxicity).

Research<sup>6</sup> conducted during May – October grazing determined the effect of Aureomycin for anaplasmosis control or Rumensin® on cow herd performance. Aureomycin was fed in a mineral supplement containing 5,600 g/ton to provide a dose of 0.5 mg/lb body weight.

Herd Health Results			
	Control	Aureomycin	Rumensin
No. of cow-calf pairs	124	182	184
Cow BCS change (%)	0.2	0.2	0.2
Pregnancy rate improvement (%)	—	+1.8	-0.3
Calf weight gain (lb)	343	362	362
Percentage of Cattle Treated for Illness			
Foot rot (% treated)	21	6.6	19.4
Respiratory disease (% treated)	0.0	0.0	0.5
All illnesses* (% treated)	21.8	6.6	20.4

Cows fed Aureomycin demonstrated:

- 1.8% improved pregnancy rate
- 19 lb additional calf weight gain

\* Incidence of bovine respiratory disease, foot rot and general health concerns for cattle were measured throughout the study.

## Feeding Aureomycin Doesn't Cost, It Pays

Implementing an Aureomycin program for grazing cattle is an investment. To make the most of your investment:

- Ensure cattle consume enough mix to obtain results. Keep mineral fresh, dry and in front of your cattle for best results.
- In addition to Aureomycin, a high level of nutrition is important to help maintain the immune system's ability to control common grass cattle infections.
- Follow the Aureomycin label instructions as outlined below:

Animal	Drug	Use Level	Indications for Use
Beef cattle	Aureomycin	350 mg/head/day	Control of bacterial pneumonia associated with shipping fever complex caused by <i>Pasteurella</i> spp.
Beef cattle (under 700 lb)	Aureomycin	350 mg/head/day	Control of active anaplasmosis infection caused by <i>Anaplasma marginale</i> .
Beef cattle (Over 700 lb)	Aureomycin	0.5 mg/lb of body weight/day	Control of active anaplasmosis infection caused by <i>Anaplasma marginale</i> .
Beef cattle and nonlactating dairy cattle	Aureomycin	0.5 – 2.0 mg/lb of body weight/day	Control of active anaplasmosis infection caused by <i>Anaplasma marginale</i> in free choice cattle feeds such as feed blocks or salt/mineral mixes.

### Aureomycin Delivers Multiple Advantages

Aureomycin addresses a wide range of respiratory, rickettsia, enteric and reproductive diseases observed in grazing cattle. Unique label claims, zero-day withdrawal and years of experience in manufacturing and sales/technical support combine to make Aureomycin the tetracycline of choice compared to competitive chlortetracycline and oxytetracycline.



Do not use Aureomycin in calves to be processed for veal.

**Caution:** Federal law restricts medicated feed containing this veterinary feed directive (VFD) drug (Aureomycin) to use by or on the order of a licensed veterinarian.

# Aureomycin®

**The only tetracycline approved for use in free choice mineral,  
Aureomycin keeps grazing cattle healthy and growing.**

<sup>1</sup> Study Report No. 28. ANH-4014. July 1984.

<sup>2</sup> Study Report No. 91. ANH-4032. March 1987.

<sup>3</sup> Andrews J. Veterinary Medical Research Institute, College of Veterinary Medicine, Iowa State University, Ames, Iowa; Lucas TE, D.V.M., MS, Cyanamid, 1991.

<sup>4</sup> Rae DO, et al. 2002. Effect of chlortetracycline in a trace mineral salt mix on fertility traits in beef cattle females in Florida. J. Anim. Sci. 80:880-885.

<sup>5</sup> Study Report No. 324. ANH-4039, 1992.

<sup>6</sup> Breiner RM, Llewellyn DA, Martson TT. 2005 Effect of adding Aureomycin for anaplasmosis control or Rumensin to mineral supplements on summer beef cowherd performance. *Beef Cattle Research*, Kansas State University Report of Progress. 943:50-53.