



Pinkeye Control

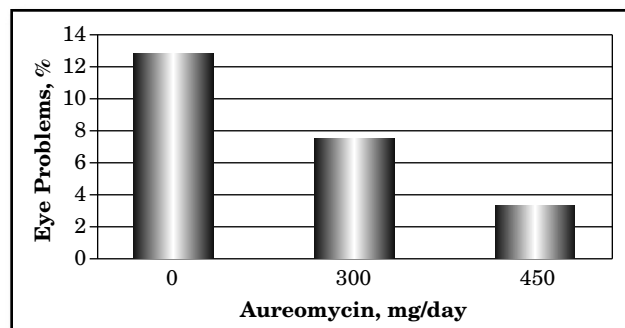
Pinkeye, the common name for Bovine Keratoconjunctivitis, is a contagious bacterial infection first detected as tearing and squinting of the eye, followed by redness and inflammation of the eyelid and eyeball. Eventual ulceration of the cornea is quite painful and may result in permanent blindness if the eye protrudes and ruptures. Data indicate discounts of at least \$2 per hundred-weight at sale time to be common among affected calves. Aside from being of less value, additional economic losses result from reduced growth rate, decreased milk production, and the cost of treatment including labor. Costs of lost performance and treatment are estimated to approach \$150 million annually in the U.S. One recent advertisement in a popular beef magazine quipped, "A spot in the eye means a hole in your pocket."

Calves and yearlings are more prone to pinkeye than older cattle as some degree of immunity is achieved from previous exposure to the disease. Contributing factors include high numbers of flies, excessive exposure to ultraviolet radiation from sunlight, environmental irritants (tall grass, chaff, dust, pollen, overhead hay racks), concurrent infections (IBR, mycoplasma), exposure to carrier animals, close confinement, and breeds or strains of cattle with increased susceptibility such as non-pigmented eyes.

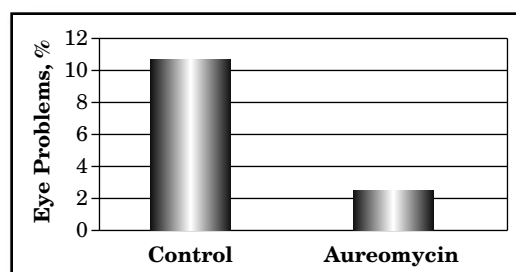
Fortunately, spontaneous recovery from pinkeye is common, but left untreated, considerable discomfort and accompanying weight loss is inevitable. Studies indicate that affected calves can weigh 30 to 45 lb less at weaning. Although no FDA claim exists, research suggests the use of Aureomycin (chlortetracycline) in the mineral and/or creep feed to be an approach to prevention.

In a 1994 test at Kansas State University, 244 mixed-breed steers averaging 562 lb were random-

ly allotted in April to eight burned bluestem pastures (30 or 31 steers per pasture) and fed 0, 150, 300, or 450 mg Aureomycin per head daily via a commercial mineral. **Over the 92-day duration, incidence of eye maladies was reduced from 12.9% in the nonmedicated steers to 7.7% in those fed 300 mg Aureomycin and 3.5% in those fed 450 mg.** The incidence of foot problems followed a similar pattern.



These Kansas data are supportive of a similar 5-year trial conducted with calves at the University of Kentucky (1984). There, Aureomycin was fed at a level to provide protection against anaplasmosis (350 mg/head/day).



Pinkeye is the second-most prevalent condition affecting unweaned calves over three weeks of age, according to a 1997 report by USDA's National Animal Health Monitoring System (NAHMS). The same report named pinkeye to be of significant incidence in breeding-age females, affecting 1.3% of the U.S. beef cowherd. Vaccination against

(continued)

Moraxella bovis can reduce the incidence dramatically, but achieving a high level of immunity requires proper management and good nutrition. Zinc, copper, and manganese, in that order, and vitamins A and E are important in maintaining tissue integrity in and around the eye.

Adequate free-choice mineral intake becomes crucial then in terms of supplying this good

nutrition and an appropriate level of Aureomycin. During periods of greatest pinkeye challenge, range conditions can change in a matter of days. Monitor mineral intake closely and immediately take action to correct it if necessary. Free-choice mineral intake by nursing calves is highly variable and may not be the best way to deliver medication. If the calves are being creep fed, mixing Aureomycin into the creep ration is a more reliable method of delivery.