51ST ANNUAL CONFERENCE

PROCEEDINGS

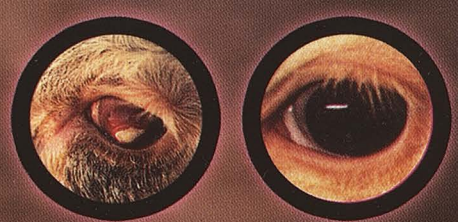
American Association of Bovine Practitioners

Phoenix, Arizona
September 13-15, 2018

Moraxella bovoculi Bacterin

World's First Commercially Available Moraxella bovoculi Pinkeye Preventative!

- **8 Different M. bovoculi Isolates**
- **Cost Effective for All Cattle Herds**
- **Proven Safety Record**
- **More Convenient than Autogenous Programs**



Addison Biological Laboratory, Inc. announces the approval of the world's first commercial Moraxella bovoculi vaccine for the prevention of pinkeye in cattle. This USDA conditionally licensed product is the first of this kind. Previously the only method of prevention against *Moraxella bovoculi* was autogenous services. This vaccine signifies a breakthrough in convenience for the large number of veterinarians and herd owners battling the challenging problem of pinkeye caused by *Moraxella bovoculi*. This product license is conditional; efficacy and potency have not been fully demonstrated.

From the LEADERS in pinkeye prevention!

ADDISON BIOLOGICAL LABORATORY

Addison Biological Laboratory, Inc.
www.addisonlabs.com
info@addisonlabs.com
800-331-2530

PROCEEDINGS

of the

FIFTY-FIRST ANNUAL CONFERENCE

AMERICAN ASSOCIATION OF BOVINE PRACTITIONERS

September 13-15, 2018

Phoenix, Arizona

Editor
Robert A. Smith, DVM
3404 Live Oak Lane
Stillwater, OK 74075
Tel: (405) 372-8666
Fax: (405) 743-8422

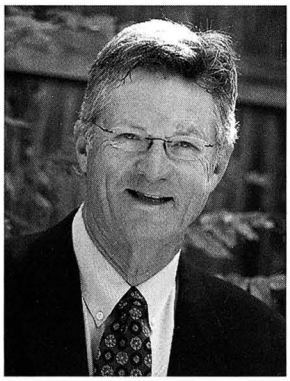
Advertising Representative
J. T. O'Brien & Assoc.
12118 Nieman Road
Overland Park, KS 66213
Tel: (913) 579-4084

Executive Vice President
K. Fred Gingrich II, DVM
1130 East Main St., Suite 302
Ashland, OH 44805
Tel: (419) 496-0685
Fax: (419) 496-0697

Publisher
VM Publishing Company
205 W. 7th Ave., Suite 201
Stillwater, OK 74074
Tel/Fax: (405) 533-1883

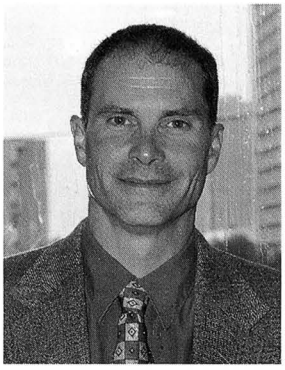
Photo courtesy of Dr. Bob Smith, Stillwater, Oklahoma.

2017 - 2018
AABP OFFICERS



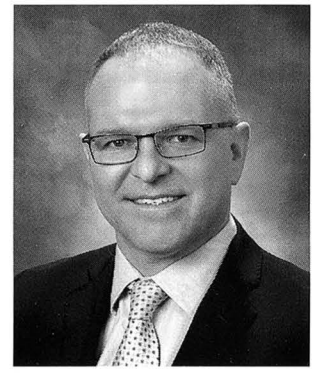
President-Elect
GLENN M. ROGERS
DVM
Aledo, Texas

Vice-President
CALVIN BOOKER
DVM
Okotoks, AB, Canada



Past President
MARK J. THOMAS
DVM
Lowville, New York

President
MIKE D. APLEY
DVM
Manhattan, Kansas

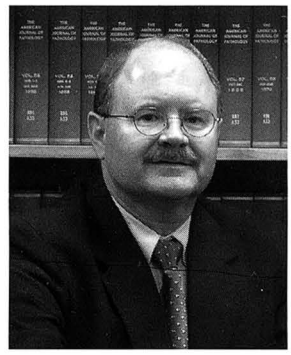


Executive Vice-President
K. FRED GINGRICH II
DVM
Ashland, Ohio

Directors

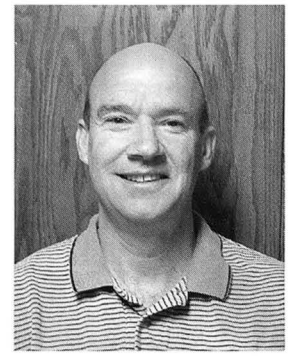
District 1
CARIE TELGEN
DVM
Greenwich, New York

District 2
THOMAS B. MASSIE, JR.
DVM
Washington, Virginia



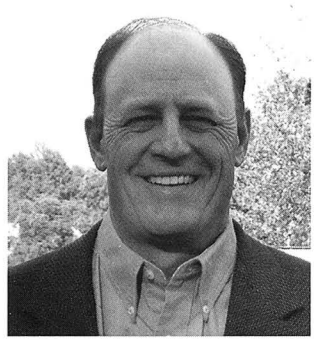
District 3
LEE JONES
DVM
Tifton, Georgia

District 4
MARK E. HARDESTY
DVM
Maria Stein, Ohio



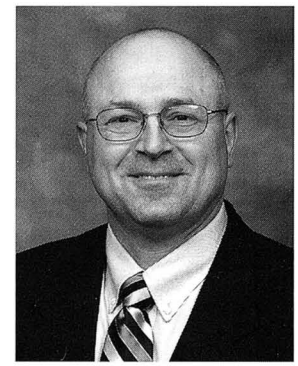
District 5
HUNTER LANG
DVM
Prairie du Sac, Wisconsin

District 6
VICKIE L. COOPER
DVM
Ames, Iowa



District 7
CARL MEYER, JR.
DVM
Oskaloosa, Kansas

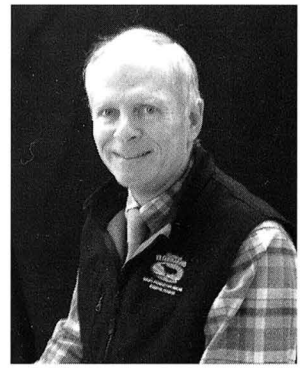
District 8
JOE M. HILLHOUSE
DVM
Panhandle, Texas



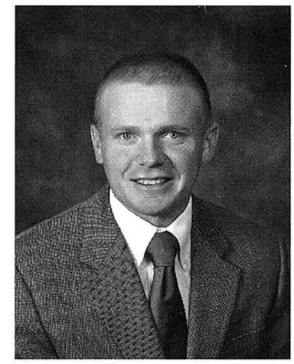
District 9
JEFF D. ONDRAK
DVM
Fairbury, Nebraska

District 10
GERARD J. KOENIG
DVM
Tulare, California

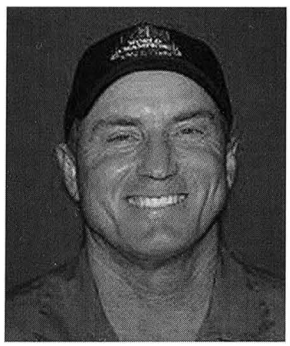
District 11
DALE A. MOORE
DVM
Moscow, Idaho



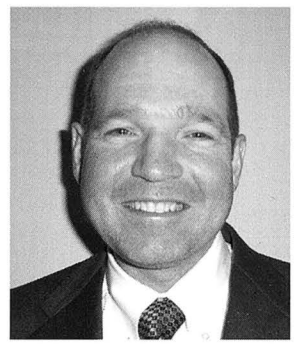
District 12
WAYNE S. SHEWFELT
DVM
Tavistock, Ontario, Canada



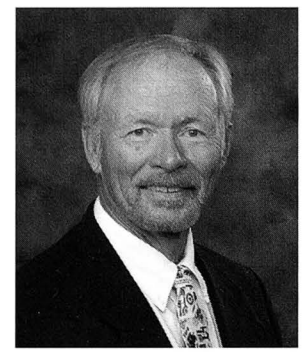
District 13
ERIC BEHLKE
DVM
Okotoks, Alberta, Canada



Treasurer
BRYAN D. HALTEMAN
DVM
Turlock, California



Exhibits Chairman
CHARLIE HATCHER
DVM
College Grove, Tennessee



Editor
ROBERT A. SMITH
DVM
Stillwater, Oklahoma

Parliamentarian.....Christine B. Navarre, DVM, Baton Rouge, Louisiana
AVMA Delegate.....Brian J. Gerloff, DVM, Marengo, Illinois

Injectable Baytril® 100 (enrofloxacin)

100 mg/mL Antimicrobial Injectable Solution
For Subcutaneous use In Beef Cattle, Non-Lactating Dairy Cattle
For Intramuscular Or Subcutaneous Use In Swine
Not For Use In Female Dairy Cattle 20 Months Of Age Or Older
Or In Calves To Be Processed For Veal

BRIEF SUMMARY:
Before using Baytril® 100, please consult the product insert, a summary of which follows:

CAUTION:
Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian.

Federal (U.S.A.) law prohibits the extra-label use of this drug in food-producing animals.

To assure responsible antimicrobial drug use, enrofloxacin should only be used as a second-line drug for colibacillosis in swine following consideration of other therapeutic options.

INDICATIONS:
Cattle - Single-Dose Therapy: Baytril® 100 is indicated for the treatment of bovine respiratory disease (BRD) associated with *Mannheimia haemolytica, Pasteurella multocida, Histophilus somni* and *Mycoplasma bovis* in beef and non-lactating dairy cattle; and for the control of BRD in beef and non-lactating dairy cattle at high risk of developing BRD associated with *M. haemolytica, P. multocida, H. somni* and *M. bovis.*

Cattle - Multiple-Day Therapy: Baytril® 100 is indicated for the treatment of bovine respiratory disease (BRD) associated with *Mannheimia haemolytica, Pasteurella multocida* and *Histophilus somni* in beef and non-lactating dairy cattle.

Swine: Baytril® 100 is indicated for the treatment and control of swine respiratory disease (SRD) associated with *Actinobacillus pleuropneumoniae, Pasteurella multocida, Haemophilus parasuis, Streptococcus suis, Bordetella bronchiseptica* and *Mycoplasma hyopneumoniae.* Baytril® 100 is indicated for the control of colibacillosis in groups or pens of weaned pigs where colibacillosis associated with *Escherichia coli* has been diagnosed.

Use within 30 days of first puncture and puncture a maximum of 30 times with a needle or 4 times with a dosage delivery device. Any product remaining beyond these parameters should be discarded.

RESIDUE WARNINGS:
Cattle: Animals intended for human consumption must not be slaughtered within 28 days from the last treatment. This product is not approved for female dairy cattle 20 months of age or older, including dry dairy cows. Use in these cattle may cause drug residues in milk and/or in calves born to these cows. A withdrawal period has not been established for this product in pre-ruminating calves. Do not use in calves to be processed for veal.

Swine: Animals intended for human consumption must not be slaughtered within 5 days of receiving a single-injection dose.

HUMAN WARNINGS:
For use in animals only. Keep out of the reach of children. Avoid contact with eyes. In case of contact, immediately flush eyes with copious amounts of water for 15 minutes. In case of dermal contact, wash skin with soap and water. Consult a physician if irritation persists following ocular or dermal exposures. Individuals with a history of hypersensitivity to quinolones should avoid this product. In humans, there is a risk of user photosensitization within a few hours after excessive exposure to quinolones. If excessive accidental exposure occurs, avoid direct sunlight. For customer service or to obtain product information, including a Safety Data Sheet, call 1-800-633-3796. For medical emergencies or to report adverse reactions, call 1-800-422-9874.

PRECAUTIONS:
The effects of enrofloxacin on cattle or swine reproductive performance, pregnancy and lactation have not been adequately determined.

The long-term effects on articular joint cartilage have not been determined in pigs above market weight.

Subcutaneous injection in cattle and swine, or intramuscular injection in swine, can cause a transient local tissue reaction that may result in trim loss of edible tissue at slaughter.

Baytril® 100 contains different excipients than other Baytril® products. The safety and efficacy of this formulation in species other than cattle and swine have not been determined.

Quinolone-class drugs should be used with caution in animals with known or suspected Central Nervous System (CNS) disorders. In such animals, quinolones have, in rare instances, been associated with CNS stimulation which may lead to convulsive seizures. Quinolone-class drugs have been shown to produce erosions of cartilage of weight-bearing joints and other signs of arthropathy in immature animals of various species. See Animal Safety section for additional information.

ADVERSE REACTIONS:
No adverse reactions were observed during clinical trials.

ANIMAL SAFETY:
In feeder calves, clinical signs including depression, incoordination, muscle fasciculation and inappetance have been observed at higher than approved label dosages. In swine subcutaneous safety studies, incidental lameness of short duration and musculoskeletal stiffness have been observed at higher than approved label dosages.

In swine intramuscular safety studies, transient decreases in feed and water consumption were observed after each treatment. Mild, transient, post-treatment injection site swellings were observed in pigs receiving the 37.5 mg/kg BW dose. Injection site inflammation was found on post-mortem examination in all enrofloxacin-treated groups.

V-04/2016

Baytril® 100
Bayer, the Bayer Cross and Baytril are registered trademarks of Bayer.
NADA 141-068, Approved by FDA
Bayer HealthCare LLC, Animal Health Division
Shawnee Mission, Kansas 66201 U.S.A.
GHG100518

Bayer

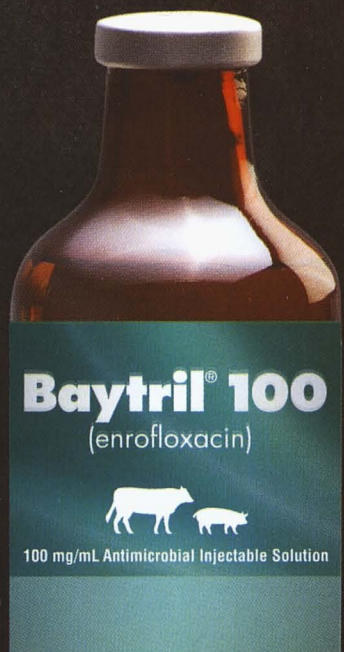
HOW LONG DOES IT LAST?

THAT'S THE WRONG QUESTION.

The question to ask is how fast does the treatment kill BRD-causing bacteria.

Single-dose Baytril® 100 (enrofloxacin) Injectable delivers effective, therapeutic levels of drug in the lung tissues in 1-2 hours*[1] and kills 97% of BRD-causing bacteria in 1-2 hours.*[2,3] The sooner bacteria are killed, the faster a calf will feel better and get back to work eating and gaining weight. You know the drill. You turn to the one you trust.

*The clinical significance of *in vitro* data has not been demonstrated.
Federal law restricts this drug to use by or on the order of a licensed veterinarian.
Extra-label use of this product in food-producing animals is prohibited.



[1]Davis JL, Foster DM, Papich MG. (2007). Pharmacokinetics and tissue distribution of enrofloxacin and its active metabolite ciprofloxacin in calves. *J Vet Pharmacol Ther*. 30(6):564-571.
[2]Blondeau JM, Borsos S, Blondeau LD, et al. (2005). The killing of clinical isolates of *Mannheimia haemolytica* (MH) by enrofloxacin (ENR) using minimum inhibitory and mutant prevention drug concentrations and over a range of bacterial inocula. In: ASM Conference on Pasteurellaceae; 23-26 October 2005; Kohala Coast, Big Island, Hawaii: American Society of Microbiology; Abstract B12.
[3]Blondeau JM, Borsos SD, Hesje CH, et al. Comparative killing of bovine isolates of *Mannheimia haemolytica* by enrofloxacin, florfenicol, tilmicosin and tulathromycin using the measured minimum inhibitory concentration (MIC) and mutant prevention concentration (MPC) drug values. In: International Meeting of Emerging Diseases and Surveillance (IMED); Vienna, Austria: International Society for Infectious Diseases. February 23-25, 2007. Figures 8-10.

Table of Contents

Advertisers' Index

French translations by Mr. Guy Beauchamp. Revisions by Dr. Emile Bouchard.

Notice to Readers

Articles published in the Proceedings of the American Association of Bovine Practitioners are not peer-reviewed or refereed. All statements, opinions and conclusions contained in articles in the Proceedings are those of the author(s), and are not necessarily those of the American Association of Bovine Practitioners (AABP) unless specifically approved by the AABP Board of Directors.