The right dewormer for today’s cattle production

Internal parasite resistance – a growing problem

- For more than 20 years, the U.S. cattle industry has depended on a handful of easy-to-use, pour-on endectocide products – Ivomec® (ivermectin), Eprinex® (eprinomectin), Dectomax® (doramectin) and Cydectin® (moxidectin) – to control internal parasites.
- Pour-on dewormers can be inconsistently absorbed into the bloodstream, often taking four days to reach peak levels in the GI tract.\(^1\)
- This leads to reduced levels of active ingredient being delivered to the parasitic infection in the stomach and intestinal tract.
- Because these products are in the same drug class and have a similar mode of action, resistant parasites have been able to flourish and multiply.
- Overuse of low-priced generic pour-ons is compounding the problem.

Worms cost you money

- Sub-clinical disease caused by parasite infection that goes undetected costs $190 per animal, according to a recent study from Iowa State.\(^2\)
- Infected cattle lose their appetite and eat less. Their diseased gastrointestinal tract can’t function properly and with a suppressed immune system, they are unable to fight off infections that cause respiratory disease.\(^3\)
- Research shows parasitized cattle can’t effectively respond to vaccination programs.\(^3\)
  - Takes a minimum of two to three weeks from removal of parasites for cattle immune systems to effectively respond to a Modified Live Vaccine.

Safe-Guard – the straight-to-the-gut solution

- Safe-Guard dewormer, powered by fenbendazole, works differently than endectocide pour-on dewormers.
- It goes straight to the gut, delivering a dose right where the worms live and breed. It works fast to kill worms and stop egg shedding and pasture recontamination.

Think strategically

- Reduce recontamination by deworming based on the worm life cycle throughout the season.
- This lowers the worm burden in the animals and on pastures.
- A treatment before spring turnout and another four to six weeks later dramatically reduces pasture reinfection, improving cattle health and performance throughout the grazing season.
- Safe-Guard dewormer offers chuteside and nonhandling options to assist with strategic deworming.

Act decisively

- Safe-Guard is the only dewormer available in formulations that can be used both chuteside – drench or pastes – and on pasture – blocks, minerals and feed products – for effective season-long control.
- No added expense and hassle of bringing cattle back in that have already been turned out.
- These options make Safe-Guard dewormer ideal for cow/calf and stocker operators.
Improving pasture performance

- Trial information – 734 cross-bred yearling steers weighing an average of 629 lbs at turnout grazed on Eastern Oklahoma native grass pastures for an average of 118 days.
- Steers strategically dewormed during grazing gained an average of 48 lbs more than those steers not dewormed.
- The net dollar benefit per head for strategic deworming would be $50.40 per head if the cattle were sold at the end of the grazing phase.

Safe-Guard Pasture Trial, Oklahoma

Dewormed with Safe-Guard at turnout, 28 and 56 days on grass.

<table>
<thead>
<tr>
<th></th>
<th>Non-dewormed</th>
<th>Safe-Guard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of steers</td>
<td>371</td>
<td>363</td>
</tr>
<tr>
<td>Initial weight – lbs</td>
<td>627</td>
<td>632</td>
</tr>
<tr>
<td>Final weight – lbs</td>
<td>737</td>
<td>790</td>
</tr>
<tr>
<td>Gain – lbs/head</td>
<td>110</td>
<td>158</td>
</tr>
<tr>
<td>Daily gain - lbs</td>
<td>.93</td>
<td>1.34</td>
</tr>
<tr>
<td>Net benefit - $/head</td>
<td></td>
<td>50.40</td>
</tr>
</tbody>
</table>

Delivering new value in the feedlot

- In feedlots, internal parasites have been shown to reduce feed intake, decrease weight gain, decrease feed efficiency, and reduce the animal’s ability to ward off disease because of impaired immune function.
- In three out of four large-scale feedlot trials, with 10,381 animals, Safe-Guard oral drench in combination with an Ivomec pour-on or injectable shows a clear advantage in dry matter intake, feedlot gain, improved health and pounds of beef produced.
- Investing between $1.50 to $1.80 per head in Safe-Guard oral drench, has, on average, created $17.18 of additional value resulting in an ROI of 10:1.

Safe-Guard + Endectocide versus Endectocide Alone – Four Trials

<table>
<thead>
<tr>
<th>Trial Description</th>
<th>Combination Treatment</th>
<th>Economic Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safe-Guard + Ivomec Injectable vs. Cydectin Injectable</td>
<td>Safe-Guard + Ivomec Injectable</td>
<td>$19.62(7)</td>
</tr>
<tr>
<td>Safe-Guard + Ivomec PO vs. Dectomax Injectable</td>
<td>Safe-Guard + Ivomec PO</td>
<td>$9.01(6)</td>
</tr>
<tr>
<td>Safe-Guard + Ivomec Injectable or Safe-Guard</td>
<td>Safe-Guard + Ivomec Injectable(8)</td>
<td>$4.20(6)</td>
</tr>
<tr>
<td>Safe-Guard + Ivomec PO vs. Ivomec PO</td>
<td>Safe-Guard + Ivomec PO</td>
<td>$22.19(6)</td>
</tr>
</tbody>
</table>

5. Pasture deworming and/or subsequent feedlot deworming with fenbendazole (Safe-Guard®) I. Effects of grazing performance, feedlot performance, and carcass traits of yearling steers, R. Smith, et al., 1997.
7. Average Value/hd reflects:
   - Purchase price using an 800 lb steer at $101/cwt and a $.04/lb slide according to actual weight
   - Carcass price of $146/cwt
   - Live price of $92/cwt, Fall 2007 $230/ton dry matter ration cost x feed consumed
   - Safe-Guard oral drench, Ivomec, Cydectin (by treatment), viral vaccines and implants
   - Yardage at $.25/hd/day
   - Incremental profit margin prior to the cost of Safe-Guard
8. Safe-Guard combination treatment group statistically equivalent to other treatments on all health and performance parameters.

Consult your local veterinarian for assistance in the diagnosis, treatment and control of parasitism.

Intervet/Schering-Plough Animal Health
35500 W. 91st Street
DeSoto, KS 66018
www.intervetusa.com
800.441.8272

Safe-Guard is a registered trademark of Intervet Inc. or an affiliate
©2009 Intervet Inc. All rights reserved Ivermectin and Eprinex are registered trademarks of Merial, LLC.
Dectomax is a registered trademark of Pfizer Inc., and Cydectin is a registered trademark of Wyeth Holdings Corp.
BV-SG-088497K