





Safe-Guard<sup>®</sup> protects your herd and your bottom line by killing internal parasites right where they live – in the gut.



### IN THIS BUSINESS, YOU NEED MORE THAN ONE WAY TO SOLVE A PROBLEM.

Safe-Guard (fenbendazole) gives you more options to fit your specific operation, including paste and oral suspension for chute-side as well as convenient non-handling formulations including liquid supplement, blocks, pellets and cubes. After all, gathering cattle can cost up to \$5/head in labor and cause unneeded stress on your cattle and help. Strategically deworming with a Safe-Guard non-handling formulation can deliver positive results to your bottom line.

# HANDLING & NON-HANDLING

IT PAYS TO HAVE A CHOICE OF FORMULATIONS

PASTE       - Ap         Special       - Special         SUSPENSION       - Lor         PELLETS       - Alf         Free-choice       - Alf         LIQUID FEED       - Free         504 grams per ton       - Free         Feed Manufacturer       - Paulon         CRUMBLES       - Paulon	DESCRIPTION ow-dose volume paste pple-cinnamon flavor for improved palatability pecially designed metal hook for onvenient dosing ow-dose volume suspension offers stressless ewormer application asy-to-use applicator gun for accurate dose <b>CATTLE NON-HANDL</b> Ifalfa-based pellet for improved palatability	SIZE  290-g paste cartridge 92-g paste syringe  Gallons 1-liter bottles	DOSE         • Each 290-g paste cartridge deworms 29 head of 440-lb cattle         • Each 92-g paste syringe deworms eight head of 500-lb cattle         • Each gallon deworms 330 head of 500-lb cattle         • Each liter bottle deworms 86 head of 500-lb cattle	APPLICATION RATE <ul> <li>Single dose <ul> <li>application</li> </ul> </li> <li>Single dose</li> </ul>	
PASTE       - Ap         Special       - Special         SUSPENSION       - Lor         PELLETS       - Alf         Free-choice       - Alf         LIQUID FEED       - Free         504 grams per ton       - Free         Feed Manufacturer       - Paulon         CRUMBLES       - Paulon	pple-cinnamon flavor for improved palatability pecially designed metal hook for onvenient dosing ow-dose volume suspension offers stressless ewormer application asy-to-use applicator gun for accurate dose CATTLE NON-HANDL	<ul> <li>92-g paste syringe</li> <li>Gallons</li> <li>1-liter bottles</li> </ul>	<ul> <li>29 head of 440-lb cattle</li> <li>Each 92-g paste syringe deworms eight head of 500-lb cattle</li> <li>Each gallon deworms 330 head of 500-lb cattle</li> <li>Each liter bottle deworms 86 head</li> </ul>	application <ul> <li>Single dose</li> </ul>	
ORAL SUSPENSION     . de . Ea       PELLETS     . Alf       PELLETS     . Alf       Free-choice LIQUID FEED     . Free       504 grams per ton     . Free       Feed Manufacturer CRUMBLES     . Pa       Feed Manufacturer     . Pa       to     . Eacd Manufacturer	ewormer application asy-to-use applicator gun for accurate dose CATTLE NON-HANDL	• 1-liter bottles	of 500-lb cattle • Each liter bottle deworms 86 head		
PELLETS     • Fo       Free-choice     • Free       LIQUID FEED     • Free       504 grams per ton     • Pa       Feed Manufacturer     • Pa       CRUMBLES     • to				application	
PELLETS     • Fo       Free-choice     • Free       LIQUID FEED     • Free       504 grams per ton     • Pa       Feed Manufacturer     • Pa       CRUMBLES     • to	Ifalfa-based pellet for improved palatability	ING FORMULATION	NS – SAFE-GUARD		
LIQUID FEED 504 grams per ton Feed Manufacturer CRUMBLES	or top-dress feeding	Animal Health Distributor: • 1 lb, 5 lb, 10 lb bags	• ½ lb per 500 lbs body weight	• Feed for one day	
CRUMBLES to	ree-choice liquid supplement	• Does not apply	• 9 lb per 1,000 lbs body weight	• Feed free- choice over a 3-6 day period	
Food Manufacturer	alatable crumbles for use when adding o meal rations	Read and follow label	Read and follow label directions	• Feed for 1 day	
CUBES • Hig	ligh-quality range cubes for pasture top-dress	directions from manufacturer	from manufacturer		
Feed Manufacturer Free-choice MINERAL	ormulations vary by company	Read and follow label     directions from manufacturer	<ul> <li>Read and follow label directions from manufacturer</li> </ul>	<ul> <li>Feed over a 3-6 day period</li> </ul>	
EN-PRO-AL® So BLOCKS	oft-poured molasses block	• 25-lb block	• 1 ½ lb per 500 lb body weight	• Feed over a	
SWEETLIX® 20% Co	old-pressed protein block	• 25-lb block		3-day period	
FREE-CHOICE • Or	0% salt )nly dewormer available in a free-choice nineral form	Animal Health Distributor: • 25-lb plastic pail (20% salt)	• 8 oz. per 500 lb body weight (20% salt)	• Feed over a 3-6 day period	
1.96% • Tw SCOOP DEWORMER	wo convenient formulations:	Animal Health Distributor: • 25-lb plastic pail	• 1 oz. per 240 lb body weight	• Feed for 1 day	

EN-PRO-AL<sup>®</sup> and SWEETLIX<sup>®</sup> are registered trademarks of PM Ag Products.

Dung beetles are an important component of manure breakdown and pasture management. Safe-Guard *(fenbendazole)* is proven to have no measurable negative impact on dung beetles (*Veterinary Parasitology* 62 (1996) pp. 253-266).

### DEWORMING IS ALSO CRUCIAL FOR GETTING THE MOST FROM YOUR VACCINES:

"We firmly believe that moderate to high levels of parasites in an individual inhibit the immune system from functioning properly."

- Dr. Lou Gasbarre, USDA, Beltsville, MD

### PANACUR<sup>®</sup> (fenbendazole) DEWORMER for BEEF and DAIRY CATTLE

1 Gallon (3785 mL) Suspension 10% (100 mg/mL)

#### 🕨 RESIDUE WARNINGS: 🗲

- Cattle must not be slaughtered for human consumption within 8 days following treatment.
- Do not use at 10 mg/kg in dairy cattle. Dose rate of 10 mg/kg is for beef cattle only. Dose rate of 10 mg/kg in dairy cattle could result in violative residues in milk.
- A withdrawal period has not been established for this product in pre-ruminating calves. Do not use in calves to be processed for veal.

#### CAUTION:

Federal law restricts this drug to use by or on the order of a licensed veterinarian.

Keep this and all medication out of the reach of children.

### DOSAGE:

**Beef and Dairy Cattle**—5 mg/kg (2.3 mg/lb) for the removal and control of:

- Lungworm: Dictyocaulus viviparus
- Stomach worm (adults): Ostertagia ostertagi (brown stomach worm).
- Stomach worm (adults & 4th stage larvae): Haemonchus contortus/placei (barberpole worm), Trichostrongylus axei (small stomach worm).
- Intestinal worm (adults & 4th stage larvae): Bunostomum phle botomum (hookworm), Nematodirus helvetianus (threadnecked intestinal worm), Cooperia punctata and C. oncophora (small intestinal worm), Trichostrongylus colubriformis (bankrupt worm), Oesophagostomum radiatum (nodular worm).

Beef Cattle Only—10 mg/kg (4.6 mg/lb) for the removal and control of:

- Stomach worm (4th stage inhibited larvae):
- Ostertagia ostertagi (Type II Ostertagiasis)
- Tapeworm: Moniezia benedeni

🔶 Do not use in dairy cattle at 10 mg/kg. 🗲

#### DIRECTIONS:

Determine the proper dose according to estimated body weight. Administer orally. In beef and dairy cattle, the recommended dose of 5 mg/kg is achieved when 2.3 mL of the drug is given for each 100 lbs. of body weight. In beef cattle only, the recommended dosage of 10 mg/kg for treatment of *Ostertagiasis* Type II (inhibited 4th stage larvae) or tapeworm is achieved when 4.6 mL of the drug is given for each 100 lbs of body weight.

### EXAMPLES:

Dose (5 mg/kg)	Dose (10 mg/kg)	Cattle Weight
2.3 mL	4.6 mL	100 lbs
4.6 mL	9.2 mL	200 lbs
6.9 mL	13.8 mL	300 lbs
9.2 mL	18.4 mL	400 lbs
11.5 mL	23.0 mL	500 lbs
23.0 mL	46.0 mL	1,000 lbs
34.5 mL	69.0 mL	1,500 lbs

Under conditions of continued exposure to parasites, retreatment may be needed after 4–6 weeks. There are no known contraindications to the use of the drug in cattle. For dairy cattle there is no milk withdrawal period at 5 mg/kg.

Manufactured by: DPT Laboratories, San Antonio, TX 78215 Distributed by: Intervet Inc., Millsboro, DE 19966

Store at or below 25°C (77°F). Protect from freezing. Shake well before use. NADA # 128-620, Approved by FDA 697815-B





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

#### Safe-Guard EN-PRO-AL Molasses Block:

RESIDUE WARNING: Cattle must not be slaughtered within 11 days following last treatment.

A withdrawal period has not been established for this product in pre-ruminating calves.

Do not use in calves to be processed for veal.

Safe-Guard Protein Block: RESIDUE WARNING: Cattle must not be slaughtered within 16 days following last treatment.

A withdrawal period has not been established for this product in pre-ruminating calves. Do not use in calves to be

2 Giralda Farms • Madison, NJ 07940 • merck-animal-health-usa.com • 800-521-5767

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processed for veal

Inc. All rights reserved. 03/15 - 53655 BV-SG-1110724R3

Safe-Guard mineral, feed through products and liquid feed:

RESIDUE WARNING: Cattle must not be slaughtered within 13 days following last treatment. For dairy cattle, the milk discard time is zero hours. A withdrawal period has not been established for this product in pre-ruminating calves. Do not use in calves to be processed for veal.

### Safe-Guard drench and paste:

RESIDUE WARNING: Cattle must not be slaughtered within 8 days following last treatment. For dairy cattle, the milk discard time is zero hours. A withdrawal period has not been established for this product in pre-ruminating calves. Do not use in calves to be processed for veal.







# IT PAYS TO COMPARE

DEWORMING COMPARISON CHART

Not all dewormers are created equal. There are different worms, different stages and different levels of efficacy. To get the most out of your investment and your cattle, you need Safe-Guard (fenbendazole), the one product proven successful against the internal parasites that have the most potential to steal performance and profit. L'TABLES

	rasites that have	une mos	e potentia	1 10 5104		anoc ana	-					
WORMS		PANACIA SUSPICIA MARCIA	PECTON ECLARD	DECTON, DUPOW,	The form	EDRING COR OWING	NOME IN COLIN	IVONECTABLE	LALEN OUPON	SMANTHON STAND	RUM TEL	LEVANCE LEVANCE
BROWN STOMACH	ADULT	*	*	*	*	*	*	*	*	*	*	*
(O. ostertagi)	INHIBITED L4	★4	*	*	*	*	*	*	*	<b>23%-83.5%</b> †	NO	NO
	TYPE II OSTERTAGIOSIS	★4	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BARBERPOLE	ADULT	*	*	*	*	*	*	*	*	*	*	*
(Haemonchus spp.)	L4	*	*	*	*	*	*	*	*	NO	NO	NO
SMALL STOMACH	ADULT	*	*	*	*	*	*	*	*	*	*	*
(T. axei)	L4	*	NO	*	*	*	*	*	*	NO	NO	NO
<b>BANKRUPT</b> (T. colubriformis)	ADULT	*	*	*	*	*	*	*	*	NO	*	*
(1. contonionita)	L4	*	*	*	*	*	*	*	NO	NO	NO	NO
SMALL INTESTINE	ADULT	*	*	*	*	*	*	*	*	*	*	*
oopena panetata, c. oncopnora)	L4	*	*	*	*	*	*	*	*	*	NO	NO
THREADNECKED (Nematodirus helvetianus)	ADULT	*	NO	NO	*	*	84%	NO	*	NO	*	*
(Nematounus nelvenunus)	L4	*	NO	NO	*	*	NO	NO	*	NO	NO	NO
HOOKWORM (B. phlebotomum)	ADULT	★4	*	*	*	*	*	NO	*	*	NO	*
(B. phiebolomum)	L4	*	NO	NO	NO	*	*	NO	NO	NO	NO	NO
NODULAR (O. radiatum)	ADULT	*	*	*	*	*	*	*	*	*	*	*
	L4	*	*	*	*	*	*	*	*	NO	NO	NO
LUNGWORM (D. viviparus)	ADULT	*	*	*	*	*	*	*	*	*	NO	*
(D. viviparus)	L4	NO	*	*	*	*	*	*	*	*	NO	NO
<b>TAPEWORM</b> (M. benedeni)	ADULT	★⁴	NO	NO	NO	NO	NO	NO	*	*	NO	NO

<sup>1</sup> Also approved for external parasite control <sup>2</sup> Also approved for horn fly control <sup>3</sup> Do not administer to female cattle during first 45 days of pregnancy or for 45 days following removal of bulls

Safe-Guard is a registered trademark of Merck Animal Health. Cydectin is a registered trademark of Fort Dodge Animal Health Dectomax and Valbazen are registered trademarks of Pfizer Inc. Rumatel is a registered trademark of Phibro Animal Health. lvomec and Eprinex are registered trademarks of Merial Ltd.

evasole is a registered trademark of Merck Animal Health. Synanthic is a registered trademark of Fort Dodge Animal Health. Totalon is a registered trademark of Merck Animal Health. Tramisol is a registered trademark of Merck Animal Health

### CONTROL THE RIGHT WORMS, AT THE RIGHT TIME

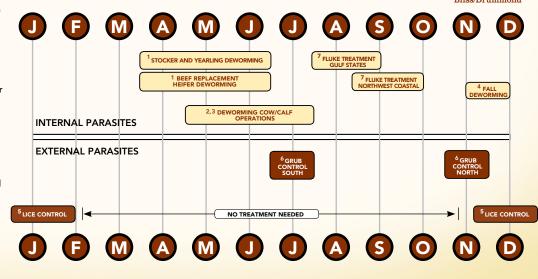
† FOI Summary of Pivotal Studies

When you need to deworm, Safe-Guard delivers the best control against the internal parasites that can cause the most economic damage. Bliss/Drummond

(1) Stocker, yearling and replacement heifers dewormed at turnout, four and eight weeks after onset of grazing (0-4-8).

<sup>4</sup>At 10 mg/kg dosage, Panacur label only. Do not use at the rate of 10 mg/kg in dairy cattle. Dose rate of 10 mg/kg in dairy cattle could result in violative residues in milk.

- ② Cow/calf deworming six weeks after onset of grazing.
- (3) If cattle were not dewormed in the fall, adult cows should be dewormed at pasture turnout and again six weeks after onset of grazing.
- 4 All cattle retained over winter should be dewormed.
- Ouring lice season, two treatments two to three weeks apart may be necessary.
- Grub treatment three to four months after the end of heel fly season, varies south to north. Requires systemic, annual control only.
- O Cattle grazed along the Gulf Coast and Northwest coast should be treated for adult and immature liver flukes.
- (Horn fly control as needed to keep populations below 200 flies per animal.)



# FENBENDAZOLE COMPARISON STUDY

WHICH PROVIDES GREATER RETURN ON INVESTMENT FOR REDUCING WORM EGG LOADS AND IMPROVING PERFORMANCE AND CARCASS MERIT IN FEEDLOT CATTLE: Safe-Guard<sup>®</sup> (fenbendazole) oral drench plus Ivomec<sup>®</sup> (ivermectin) pour-on? — OR — Ivomec pour-on alone?

To find out, a study was conducted on 1,106 crossbred yearling heifers. Eight pens were treated with Safe-Guard plus Ivomec pour-on, and eight pens were treated only with Ivomec pour-on.

### THE RESULTS:

Heifers receiving the combination of Safe-Guard and Ivomec pour-on had 73% fewer worm eggs per sample 98 days after treatment, and 68% fewer worm eggs at harvest (135 days). As a result, the Safe-Guard plus Ivomec pour-on heifers:

- Gained 0.12 lbs/head/day more weight
- Consumed 0.43 lbs/head/day more feed
- Were 17 lbs/head heavier at harvest than the heifers treated with Ivomec pour-on alone
- Had 12 lbs/head more carcass weight

Additional benefits exhibited by the Safe-Guard plus Ivomec pour-on group included more carcasses grading USDA Prime and Choice, and fewer repulls. All told, heifers treated with Safe-Guard plus Ivomec pour-on generated greater net returns, improving profits by \$20.08 per head over heifers treated with Ivomec pour-on alone.

Tria	l Summary*	
TREATMENT	SAFE-GUARD	IVOMEC P-O
Number of Pens	8	8
Number of Head	551	555
In Weight (lbs/head)	743	742
Final Live Weight (lbs/head)	1,200	1,183
ADG (lbs/head)	3.38	3.26
Dry Matter Intake	17.88	17.45
Feed/Gain (lbs/head)	5.29	5.35
Hot Carcass Weight (lbs/head)	744	732
Choice + Prime (%)	47.9	42.6
Morbidity (%)	19.7	24.3
Repulls (%)	47.1	58.8
Mortality (%)	1.26	2.14
PROFIT/HEAD SOLD (\$) *Heifers, 135 days on feed.	\$69.25	\$49.17

The broad-spectrum combination of Safe-Guard plus Ivomec pour-on increases:

- Feed intake
- Daily gains
- General health
- Carcass weight
- Quality
- Profitability

For more information on parasite control and Safe-Guard, visit merck-animal-health-usa.com or contact your Merck Animal Health representative.

"What's happening in the U.S., unfortunately, is resistance to ivermectin products."

- Dr. Lou Gasbarre, USDA, Beltsville, MD

## STRATEGIC DEWORMING PROGRAMS

### YOU CAN STRATEGICALLY DEWORM YOUR CATTLE OR WORMS CAN STRATEGICALLY DEVALUE YOUR CATTLE

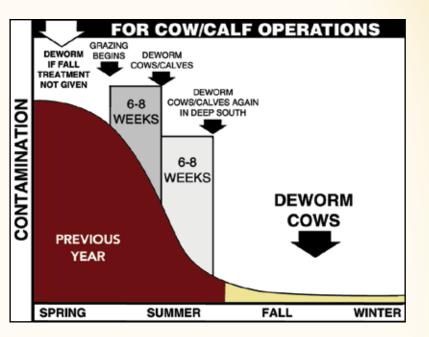
### A. COW/CALF OPERATIONS

### FALL - FIRST STRATEGIC TREATMENT

• Deworm when cattle are moved off pasture at the end of the grazing season or after the first of November in areas where cattle remain on pasture year-round.

#### SPRING – SECOND STRATEGIC TREATMENT

- Deworm at turnout or grass green-up if fall treatment was not given, and deworm the adult cow and her suckling calf six to eight weeks later.
- Deworm the adult cow and her suckling calf six to eight weeks after spring grazing begins, provided a fall treatment was given.



#### NOTE:

In extreme southern parts of the United States, including parts of California, Hawaii and the Gulf Coastal areas into southern Florida, a second spring/early summer deworming (given six weeks after the first spring deworming) may be economically warranted depending on grazing conditions.

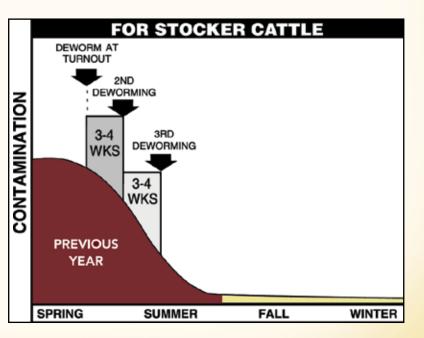
### **B. STOCKER CATTLE**

### FIRST STRATEGIC TREATMENT

Deworm cattle at the beginning of extended grass growth (or at turnout), followed by a second treatment three or four weeks later and a third treatment three to four weeks after the second deworming.

#### NOTE:

Winter small grain pastures that have not had cattle on them for about six months and have been tilled six inches deep and reseeded can be considered parasite-free; therefore, a deworming treatment at turnout will, in most cases, provide control for the winter grazing season. A second treatment three to four weeks after turnout is recommended if there is a possibility of pasture contamination at turnout.



### **C. FEEDLOT OPERATIONS**

Determining whether cattle arriving at the feedlot have been exposed to parasites can be accomplished easily using a sensitive fecal worm egg flotation method such as the Modified Wisconsin Sugar Flotation Method which standardizes the results and provides consistent accurate results. Fecal egg counts may not correlate accurately to the actual intestinal parasite load. Cattle with positive fecal egg counts should be dewormed with Safe-Guard.

IN A RECENT STUDY,\* THE DIFFERENCE OF 1,000 ADULT PARASITES IN THE ABOMASUM AT PROCESSING RESULTED IN A 34-POUND DIFFERENCE ON CARCASS-ADJUSTED WEIGHT AND A 20-POUND DIFFERENCE IN LIVE WEIGHT.

TOTAL PARASITE DIFFERENTIAL = 1,248; ADULT PARASITE DIFFERENTIAL = 909

\*The Bovine Practitioner, Vol. 34, NO.2, pp.104-114



### INTERNAL PARASITES CAN COST PRODUCERS FROM \$20 TO \$200 A HEAD

In 22 trials in 10 states, Safe-Guard gave producers an average increased calf-weaning weight of 28.9 lbs per head and improved conception rate by an average of 10 percent.

In 17 trials throughout nine states,				
Safe-Guard dewormed cattle showed				
an average increased weight gain				
of 36.6 lbs. per head.				

In five studies in four major cattlefeeding states involving 94 pens of cattle, Safe-Guard dewormed cattle outperformed control in nine out of ten categories (ADG and F/G examples shown below).

Cow/Calf Production					
	CALF WEANING WEIGHT <sup>1</sup> NCREASE (LBS)	COW PREGNANCY (P) or CALVING (C) RATES <sup>1</sup>			
Florida	+ 17	+ 10% C			
Florida	+ 43	+ 10% P			
Georgia	+ 16	+ 22% C			
Hawaii	+ 46	NM			
Minnesota	+ 39	+ 11% P			
Minnesota	+ 27	+ 12% P			
Missouri	+ 49	NM			
Missouri	+ 25	NM			
Montana	+ 19	ND			
Montana	+ 21	ND			
Montana	+ 32	NM			
Montana	+ 18	NM			
Montana	+ 10	NM			
Montana	+ 27	NM			
Montana	+ 13	NM			
Nevada	+ 39	ND			
North Dakot		ND			
Oklahoma	+ 37	NM			
Texas	+ 33	NM			
Texas	+ 25	NM			
Texas	+ 45	NM			
Texas	+ 24	NM			

<sup>1</sup>Compared to production in untreated herds. NM = Not Measured ND = No Difference

Stocker Cattle Production					
	TRIAL LENGTH (DAYS)	WEIGHT GAIN (LBS)			
California	109	+ 24 <sup>1</sup>			
California	100	+ 24 <sup>2</sup>			
Louisiana	155	+ 27 <sup>2</sup>			
Missouri	132	+ 67			
Montana	149	+ 28			
Oklahoma	118	+ 48			
Oregon	112	+ 25			
Oregon	81	+ 45			
Texas	217	+ 19			
Texas	158	+ 30			
Virginia	100	+ 64			
Virginia	111	+ 64			
Virginia	120	+ 20 <sup>2</sup>			
Virginia	138	+ 90 <sup>2</sup>			
Wyoming	112	+ 14			
Wyoming	112	+ 15			
Wyoming	117	+ 18			

<sup>1</sup> Compared to untreated controls unless otherwise specified <sup>2</sup> Controls in trials were dewormed once at the start of grazing

Feedlot Production					
SAFE-GUARD + OP INSECTICIDE CONTROL					
А	Average Daily Gain				
Colorado	4.59	3.90			
Colorado	3.22	2.95			
Texas	3.19	3.10			
Arizona	3.46	3.20			
Kansas	3.08	3.12			
Feed/Gain					
Colorado	5.09	5.56			
Colorado	5.82	6.14			
Texas	7.06	7.16			
Arizona	6.79	7.22			
Kansas	6.52	6.64			

Effects of fenbendazole & ivermectin on Performance of Feedlot Cattle, Myers & Grant, Agri-Practice, Vol. 9, Number 5, Set.-Oct, 1988

## STUDIES PROVE IT PAYS TO DEWORM

### WITH SAFE-GUARD\*

### IN A TRIAL OF '734 STEERS GRAZED IN SOUTHEASTERN OKLAHOMA AND FED IN COLORADO, STRATEGIC DEWORMING WITH SAFE-GUARD WAS PROVEN TO OFFER CLEAR PERFORMANCE AND ECONOMIC BENEFIT.

Despite a cool, wet spring and overall grazing performance that was not very impressive, steers strategically dewormed with Safe-Guard gained 48 pounds more and were worth \$33.75 more than control steers during the 118-day pasture phase.

### SAFE-GUARD IN THE FEEDLOT IMPROVES PERFORMANCE, REGARDLESS OF PASTURE DEWORMING TREATMENT.

- Feedlot use of Safe-Guard increased daily gain 18.4 percent and feed/gain 10.3 percent, compared to steers that had not received pasture deworming.
- Feedlot use of Safe-Guard increased daily gain 5.7 percent and feed/gain 2.3 percent, compared to steers that had been strategically dewormed on pasture.
- Deworming non-pasture-treated steers upon feedlot entry increased total grazing-finishing gain by 68 lbs.
- Strategic deworming in the pasture, followed by deworming upon feedlot entry, increased total gain 102 lbs vs. control steers.

### **ECONOMIC SUMMARY\*\***

There is clear performance and economic benefit to strategically deworming steers with Safe-Guard on pasture, and to deworming yearling steers with Safe-Guard when entering the feedlot from summer pasture.

- Had steers been sold at the end of the grazing phase, strategic deworming with Safe-Guard would have resulted in a net benefit of \$33.75 per head.
- In the grazing-finishing system analysis feedlot deworming of previously non-dewormed steers produced a net benefit of \$20.41 per head on a live basis or \$30.61 per head on a carcass-adjusted basis.

### DEWORMING IS ALSO CRUCIAL FOR GETTING THE MOST FROM YOUR VACCINES:

"The most dominant and economically significant types of internal parasites in cattle in the U.S. are nemotodes – the brown stomach worm Ostertagia and intestinal worms Cooperia and ."

- Dr. Lou Gasbarre, USDA, Beltsville, MD

#### Table 1

STRATEGIC DEWORMING WITH SAFE-GUARD INCREASES THE GRAZING PERFORMANCE.					
ITEM	CONTROL	DEWORMED			
NO STEERS	371	363			
INITIAL wt, lbs	627	632			
FINAL wt, lbs	737	790			
GAIN, lbs/hd lbs	110	158			
DAILY GAIN, lbs	.93	1.34			

STRATEGIC DEWORMING WITH SAFE-GUARD INCREASES PROFITABILITY DURING GRAZING.					
ITEM	CONTROL	DEWORMED			
ON PASTURE wt., lbs <sup>a</sup>	627	632			
OFF PASTURE wt., lbs <sup>a</sup>	737	790			
PASTURE COSTS \$/hd b	598.22	604.22			
PROFIT (loss), \$/hd <sup>c</sup>	(45.47)	(11.72)			
NET BENEFIT, \$/hd		33.75			

<sup>a</sup> Data from Table 1

b Assumes 630-lb steers purchased at \$80/cwt., 10% interest, \$60/head pasture rent, \$10/head processing and veterinary fee, \$10/head mineral, \$6/head for strategic deworming \$6/head for strategic deworming \$75/cmt

<ul> <li>Yearling feeders priced at \$75/cw</li> </ul>	π.
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SAFE-GUARD IMPACT ON FEEDLOT PERFORMANCE (121 DAYS ON FEED)						
PASTURE TREATMENT	CON	TROL	DEWC	ORMED		
FEEDLOT TREATMENT	CONTROL DEWORMED		CONTROL	DEWORMED		
Daily gain, lbs <sup>a</sup>	3.85	4.56	4.22	4.46		
DDMI, lbs <sup>b</sup>	21.75	23.24	23.24	23.91		
Feed/gain	5.75	5.16	5.55	5.42		
No. deads	4	0	1	0		
CARCASS ADJUSTE						
Final wt, lbs	1,197	1,277	1,293	1,327		
Daily gain, lbs	3.90	4.59	4.27	4.56		
Feed/gain	5.56	5.09	5.43	5.27		

<sup>a</sup> Live performance with deads in

**b** Daily dry-matter intake

<sup>c</sup> Final weights were calculated as hot carcass weights divided by the average dressing percentage (60.41%) for all treatments

\* Pasture Deworming and (or) Subsequent Feedlot Deworming with Fenbendazole (Safe-Guard<sup>®</sup>) I. Effects on Grazing Performance, Feedlot Performance, and Carcass Traits of Yearling Steers, Smith, Rogers, Huse, Wray, Brandt, Hutcheson, Nichols, Taylor and Rains. \*\*Bovine Practitioner, Vol. 34, No. 2