



OF PARASITOSIS
IN MEAT AND DAIRY CATTLE



NO WITHDRAWAL PERIOD FOR MILK



Parasitosis

Internal and external parasitic diseases are two of the main limiting factors today in the health of livestock.

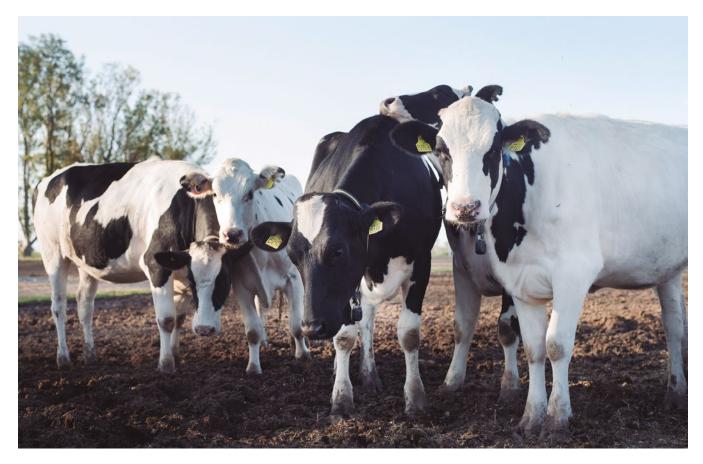
When choosing a solution to control and treat them, the challenge is to find a product that is practical and effective, and that -at the same time- does not leave residues in milk and meat.

EPRINOVER POUR-ON is an Eprinomectin-based antiparasitic, a macrocyclic lactone -derived from avermectins- that does not require a withdrawal period for milk and therefore it can be used in lactating cows.



Mechanism of action

Eprinomectin selectively binds to glutamate-mediated chloride channels present in nerve and muscle cells of invertebrates. This causes an increase in cell membrane permeability, leading to paralysis and death.



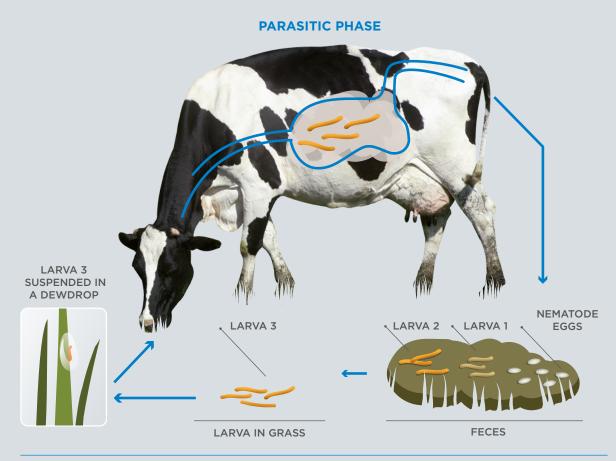
Nematodes

Gastrointestinal nematodes cause a high economic impact due to production losses, growth retardation and reduced weight gain.

GENUS	LOCATION	PATHOGENIC EFFECT
Haemonchus placei (Large worm)	Abomasum	They suck blood, both in the larval and adult stages. Hemorrhagic punctation. Anemia.
Ostertagia ostertagi (Brown worm)	Abomasum	Adult and immature worms damage the abomasal mucosa, which affects digestive function. Nodular umbilical lesions.
Trichostrongylus axei (Small worm)	Abomasum	Localized areas of necrosis (crateriform lesions).
Trichostrongylus colubriformis (Hair worm)	Small intestine	High loads of these worms cause congestion and catarrhal enteritis, which erodes the epithelial surface.
Cooperia oncophora, punctata, pectinata (Striated necked worm)	Small intestine	Adult worms interfere with digestive activity. Generally, they complicate the clinical profile initiated by ostertagia in the rennet.
Nematodirus helvetianus (Thread necked worm)	Small intestine	A high load of these worms can interfere with intestinal absorption.
Oesophagostomum radiatum (Nodular worm)	Cecum and colon	Immature forms of these worms produce nodules in the intestinal wall, which usually turn into abscesses [of the "grano de tripa" (in Spanish) type].

Source: Steffan, P.; Fiel, C. y Costa, J.; 1993

Typical parasitic cycle of nematodes



FREE-LIVING PHASE

Propagation of nematodes

Humidity and temperature are essential for larva survival, development and transport. Therefore, most free-living larva survive overwintering conditions, while the season of high temperatures and water deficit limit their propagation.

Impact

A LOAD OF MORE
THAN 200 PARASITES,
WHICH DOES NOT
CAUSE OBVIOUS
SYMPTOMS, IN A
CATTLE SPECIMEN

REDUCES 20% OF ITS

APPETITE

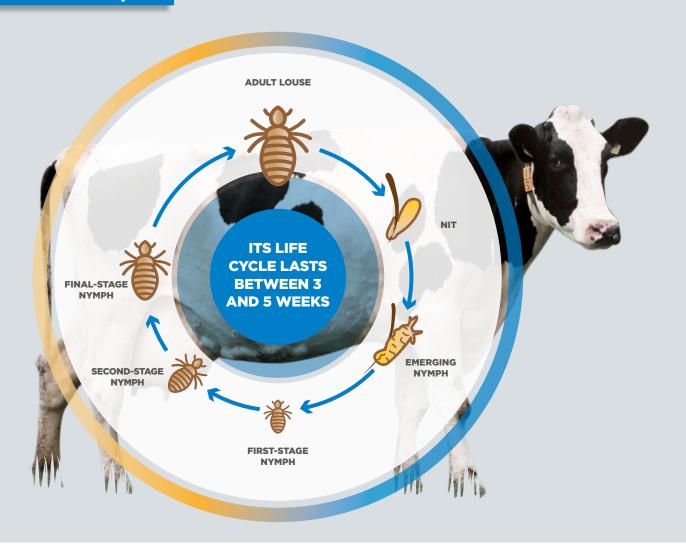
MILK PRODUCTION

MEAT PRODUCTION

SIGNS OF ESTRUS



Louse's life cycle



Lice

Some factors predispose the presence of this parasitosis, such as, for example, poorly fed young and adult animals, and a dense coat.

Lice spend their whole life on the same host. Transmission between hosts is by contact. Infestations develop mainly in the cold season and end in early spring.

As a consequence of the intense irritation caused by the bite of these arthropods, the animals rub against posts or wire fences, resort to self-wicking and spend less time feeding themselves. Skin (thickened, folded and scaly) lesions and alopecic areas appear.

CLINICAL EFFICACY TEST OF 0.5% EPRINOMECTIN POUR-ON IN CATTLE NATURALLY INFECTED WITH TRICHOSTRONGYLUS SPP NEMATODES.

CESAR FIEL - PEDRO STEFFAN

PERIOD: August to September 2018.

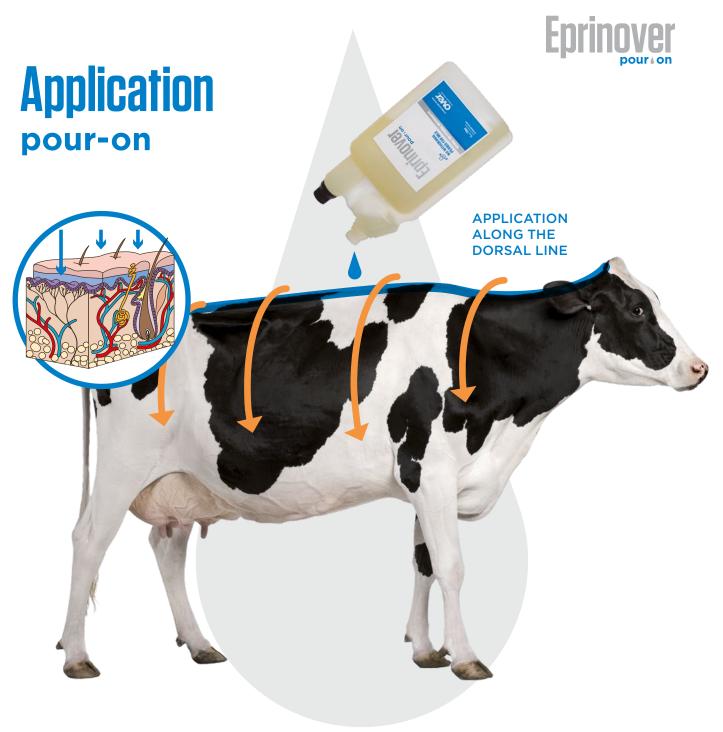
PLACE: Livestock farm in the province of Buenos Aires (central-west) with a history of gastrointestinal parasitosis in their cattle.

MATERIALS AND PROCEDURE: 25 Aberdeen Angus steers, whose average weight was 222.1 k.l.w., were selected. They underwent a fecal egg count, which showed a value higher than 100 EPG. On day 0, two groups were formed: group 1 (n=10) was the untreated control group, while group 2 (n=15) was treated via dorsal effusion with Eprinover pour-on formulation at a dose of 500 mcg/k.l.w. (1 ml/10 k.l.w.). On day +14, fecal samples were collected again and average EPG counts of 164 and 13.3 were obtained for groups 1 and 2, respectively.

Results

EPRINOVER pour-on, at a dose of 500 mcg/k.l.w. (1 ml/10 k.l.w.) showed a measurable efficacy in terms of nematode egg excretion (FECRT) of 91.3%. A stool culture done on day +14 revealed 100% efficacy on *Haemonchus spp* and over 90% efficacy on *Ostertagia spp*, *Cooperia spp*, *Oesophagostomum spp* and *Trichostrongylus spp*.





Effective and safe control of parasitosis in meat and dairy cattle.

EPRINOVER is a broad-spectrum endectocide with proven efficacy. It does not require a withdrawal period for milk, therefore it can be used in meat and dairy cattle, including lactating cows.







FORMULATION: each 100 m	nl contain:
Eprinomectin	0.5 g
Formulation agents	q.s.

INDICATIONS FOR USE:

Indicated for the treatment and control of external and internal parasitosis in cattle. Gastrointestinal nematodes (including inhibited stages of Ostertagia ostertagi), pulmonary nematodes (Dictyocaulus viviparus), and sucking & chewing lice.

FORM OF APPLICATION:

Pour-on.

DOSAGE:

1 ml per 10 k.l.w., equivalent to 0.5 mg of eprinomectin per k.l.w., is recommended.

PRESENTATIONS:

100 ml and 1 liter self-dosing jerry can. 2 and 5 liter jerry can.







