



Saturn Pour on

PREMIUM BROAD SPECTRUM DOUBLE ACTIVE CATTLE POUR ON

For the treatment & control of all gastrointestinal roundworms, lungworms and sucking lice in cattle

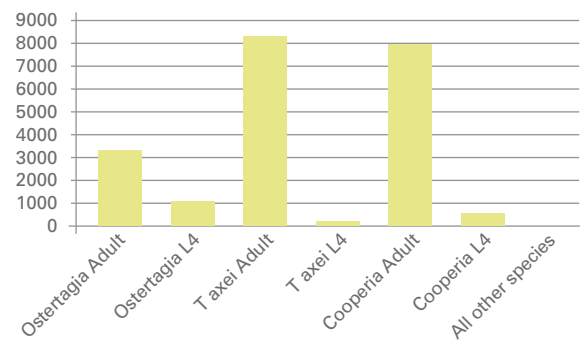
ACTIVE INGREDIENT 200g/L Levamisole & 10g/L Abamectin

DOSE RATE 1mL / 20kg

Double Active
Cattle Pour On

WHAT ARE THE MOST COMMON GASTROINTESTINAL WORMS THAT AFFECT CATTLE?

The study carried out by PharmVet Solutions identified significant numbers of the three major production limiting parasite species in cattle as: *Trichostrongylus axei* (adult), *Cooperia* (adult) and *Ostertagia* (adult). Refer to **GRAPH 1** below.



GRAPH 1 Mean Worm Count by species of GIT parasites of untreated cattle at slaughter.

TRIAL INTRODUCTION

To satisfy product registration requirements Bayer contracted PharmVet Solutions, an independent contractor to compare the efficacy of Saturn Pour on to Eclipse® Pour-On.

Both products are combinations of Abamectin 10g/L and Levamisole 200g/L and control a wide range of parasites including *Cooperia* species resistant to single active products.

TRIAL PROTOCOL

This trial was run according to normal industry standards on local Friesian calves commencing in April 2008. A full range of parasites were present with ample numbers of the three major production limiting species *Ostertagia*, *Trichostrongylus* and *Cooperia* to validate the results (Refer **GRAPH 1**). The trial was divided into three components:

FIRST

A Faecal Egg Count (FEC) where parasite eggs are monitored pre and post drench treatment to identify the impact of anthelmintic (drenches) on their ability to kill adult and larval populations and hence prevent any further egg output. If a drench is effective in this respect, no eggs should be seen in faeces less than 14 days post treatment.

SECOND

A Quantitative Larval culture where faeces of all animals in a treatment group are pooled (25g) and the eggs are allowed to hatch to larvae where individual species are identified. This is more accurate than FEC as a greater volume of faeces is tested.

THIRD

A group of animals are slaughtered 12 days post treatment and the gastrointestinal tract (GIT) is flushed and any parasites remaining are counted, identified and compared to untreated controls. This is the most accurate test (gold standard) of drench efficacy as some parasites can become dormant after drenching and not producing eggs. The slaughter study will pick up these parasites.



Saturn Pour on

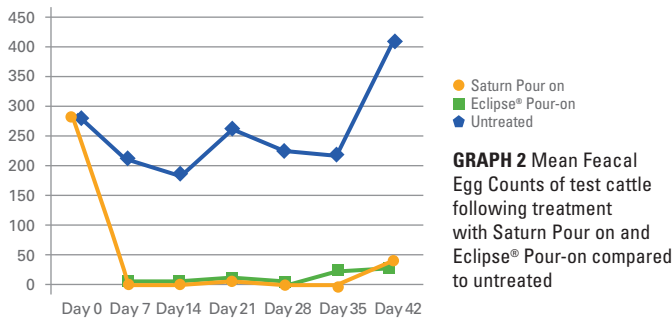
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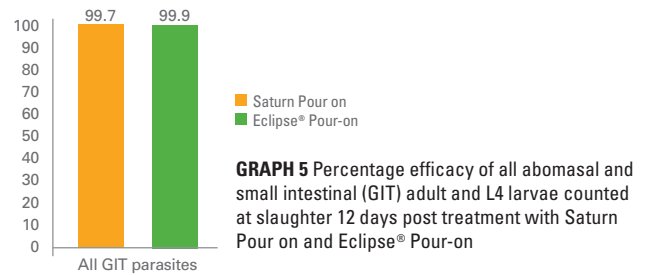
OVERALL EFFECTIVENESS

TRIAL RESULTS

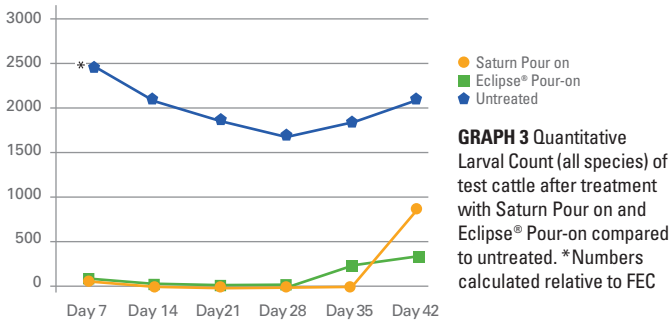
THE FIRST TRIAL that was based on Faecal Egg Counts, is shown in **GRAPH 2** below. Both Saturn Pour on and Eclipse® Pour-on were effective anthelmintic treatments.



THE OVERALL EFFECTIVENESS of Saturn Pour on and Eclipse® Pour-on against all abomasal and small intestinal tract worms is shown in **GRAPH 5** where they both show high efficacy.

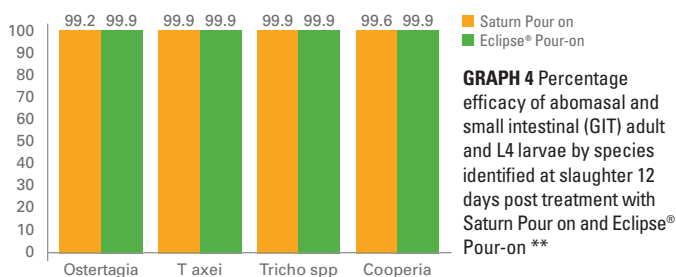


THE SECOND TRIAL that was based on Quantitative Larval Counts of all species, is shown in **GRAPH 3** below. Again both Saturn Pour on and Eclipse® Pour-on were effective anthelmintic treatments.



CONCLUSIONS

THE THIRD TRIAL based on slaughter studies, is shown in **GRAPH 4** below. Once again, Saturn Pour on and Eclipse® Pour-on were found to be highly effective anthelmintic treatments. An anthelmintic treatment (drench) is deemed effective at over 95%.



- Saturn Pour on reduced egg output to zero within 7 days
- Highly effective against all GIT parasites present in trial cattle (10 species)
- Especially effective against the three major cattle parasites identified as: *Trichostrongylus axei* (adult), *Cooperia* (adult), *Ostertagia* (adult)
- Reduced egg output for up to 5 weeks to all major parasite species
- Slaughter studies confirmed 99.2% efficacy against *Ostertagia* and 99.9% efficacy against all other parasites at 12 days post treatment where 95% is considered efficacious
- High efficacy against *Cooperia* in this trial would suggest similar efficacy against ML resistant strains of *Cooperia*
- Due to high efficacy across a wide species range, Saturn Pour on, being a combination product will delay or slow development of resistance of all other parasites to the ML family
- This trial showed Saturn Pour on has comparable efficacy to Eclipse® Pour-on in all respects and all parasites

** Haemonchus, Nematodirus, Strongyloides, Oesophagostomum, Chabertia, Trichuris numbers too low to be included