



Rumatel® Frequently Asked Questions

What is Rumatel?

Rumatel is a broad-spectrum feed-grade dewormer for dairy and beef cattle, as well as goats. Rumatel has been in the US feed market since the 1980's and has been used with excellent efficacy. Other dewormers have been predominately used in more recent years: however, lately increasing nematode resistance has become an issue with some of these more typically used dewormer compounds. This makes Rumatel an ideal product to re-introduce in this new environment of multiple-drug resistant strains of nematodes.

How does it work?

The active compound is morantel tartrate. This compound causes neuromuscular paralysis of the worm (nematode), leading to death of the parasite. Other dewormers kill nematodes through different mechanisms. The application of different killing mechanisms helps break the resistance cycle, as the worm generally is not resistant to all types of dewormers.

What worms does it kill?

Rumatel is effective against round worms that invade the abomasum, small intestine and large intestine. These worms are considered to be the most economically devastating internal parasites of cattle and goats. Rumatel does not kill tapeworms and lungworms.

Why the worm?

Parasites decrease productivity more than any other disease agent. Losses are estimated between \$2 – 8 billion per year. Worms reduce feed intake and feed utilization, cause losses in milk production and reproduction, cause damage and bleeding in the intestines and suppress the immune system. They are most detrimental to younger animals and animals close to parturition (birthing process).

How do animals become infected?

Animals graze pastures infected with nematode larvae. The larvae mature inside the animals' digestive systems to become adult worms. These worms attach to the intestinal lining, damaging the tissue and reducing nutrient absorption. Adult worms also lay eggs inside animals' intestinal tracts, which pass out of the animal in feces. The eggs mature into larvae, re-contaminating a pasture with the parasite.

Parasite	Efficacy
<i>Haemonchus</i> (Barberpole worm) ¹	> 99
<i>Ostertagia</i> (Brown Stomach worm) ¹	91
<i>Cooperia spp.</i> (Small Intestinal worm) ²	> 99
<i>Trichostrongylus</i> (Bankrupt worm) ¹	97
<i>Nematodirus</i> (Threadneck worm) ²	100
<i>O. radiatum</i> (Nodular worm) ³	> 99

¹Abomasum, ²Small intestine, ³Large intestine

How is a worm infection diagnosed?

Veterinarians either do a post-mortem on an animal that dies as a result of the parasite load or a fecal egg count on animals in herds that appear to be nematode challenged. Animals in herds may appear lethargic, anemic, unthrifty, have a rough hair coat or diarrhea. In many cases, the worm challenge will be sub-clinical, with no outward signs of disease with animals experiencing milk production losses, reproductive problems, poor feed intake and increased disease susceptibility. A fecal egg count is an analysis done by looking at a small sample of feces in a solution under a microscope in which total eggs shed per gram of feces is counted. This is an estimate of the parasite population in the animal and is reported as EPG (eggs/gram feces).

What are issues with dewormers?

In 2005, the American Association of Veterinary Parasitologists reviewed 15 papers at their annual meeting to discuss the increasing resistance of GI parasites to commonly used dewormers. Resistance in ruminants had been reported for both the avermectin and benzimidazole families of dewormers. Animals experiencing issues with drug resistant worms continue to be parasitized and may experience the performance and health challenges of animals that have never been dewormed. The increase in resistance has been associated with heavier use of dewormers, repeated use of the same dewormers and using lower than recommended dosing rates.

What is the feeding rate of Rumatel 4.4?

Rumatel 4.4 is fed at a rate 0.1 lb/100 lb of body weight in both cattle and goats. Consult the following table for dose rates and body weight information:

Animal Weight, lb	Dose Rate, lb/h/d
200	0.2
400	0.4
600	0.6
800	0.8
1,000	1.0
1,200	1.2
1,500	1.5

What are the main benefits of Rumatel?

- Savings in labor and time over drench and pour-on products
- No need to pen animals
- Easy application - top-dress or mix in a ration
- May help break resistance cycle
- Safe
- Effective
- Convenient

What can be done concerning the resistance issue?

- Improve pasture management
- Know resistance status of worms on farms (cattle and goats)
- Adjust parasite management plan based on regular monitoring
- Quarantine new arrivals - withhold feed 24 hours and deworm
- Administer proper dose of dewormer
- Use a dewormer that has no reported parasite resistance on farm