



PARASITES

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Parasitism is the most expensive disease in the sheep industry if one considers the cost of deworming and the decreased performance that is caused by parasites. Due to variation in climatic conditions, location and sheep density, no single recommendation can be made that will be effective across the country. However, there are a few things to keep in mind when developing an internal parasite control program.

Internal parasites can be considered in three broad groups: roundworms, tapeworms and flukes. Roundworms attach to the intestinal surface and suck blood or serum from the animal. The most serious of these parasites is *Haemonchus contortus*. These worms will drain enough blood that the sheep will become anemic, very unthrifty and may die from blood loss. Other parasites in this group are *Ostertagia*, *Nematodirus* and lungworms. *Haemonchus* is the most efficient at developing resistance to dewormers. Generally if the deworming program can control *Haemonchus* the other roundworm will be controlled as well. Young growing lambs are particularly susceptible to roundworms and should be dewormed when they are 3 to 4 months old.

Tapeworms do not do as much damage to sheep as roundworms. The greatest concern is that if large numbers of worms are present they can physically block the intestinal tract and cause death.

Flukes invade and migrate through the liver. Sheep are very sensitive to flukes and even one fluke can cause enough damage to kill a sheep. The life cycle of flukes requires a snail intermediate host. Therefore fluke problems are found in areas of standing water. One species of fluke, *Fasciola magna* can also infect deer and is a serious problem in northern Minnesota and Wisconsin.

In developing a deworming program always keep in mind the two populations of parasites: one population of adult worms in the animal and one population of immature larvae on the pasture. If you deworm sheep and turn them out in an infected pasture they will be reinfected with worms in 30 days. Plan your deworming to coincide with pasture rotation. Nearly all infective larvae are killed by freezing temperature so late fall is an excellent time to deworm your ewes as you can keep them clean all winter.

The best time for fall deworming is after the first killing frost. Deworming at this time will allow parasite free ewes until lambing. If a white wormer, such as Valbazen or Panacur is used in the summer, then Levasol (Tramisol) or Ivomec are excellent choices for fall deworming. Remember to refrain from using Valbazen on early pregnant ewes as it has been shown to cause fetal defects in the first trimester of pregnancy.

Anthelmintics (Dewormers)					
Drench	Dosage/100#	Cost/150#	Rdwms	Tapes	Flukes
Valbazen	3ml	.32	X	X	X
Ivomec	12ml	.92	X		
Levasole/Tramisol	1oz.	.75	X		
*Panacur	2.5cc	.45	X	X	
*Synantic (9.06%)	2.5cc	.52	X	X	
Injectable					
Ivomec	1ml	.99	X		
*Levasole	2ml	.36	X		
*Dectomax	1ml/100#	1.13	X		

* Extra-label drug use, not approved by the FDA.

Levasole and Tramisol contain the same drug and concentration of drug, they can be considered as equivalent. Valbazen is effective against flukes at 6mLI 100#. Valbazen should not be used in pregnant ewes as the active ingredient, Albenazole can cause developmental defects in the fetus.

Internal parasites can be cost-effectively controlled by the use of pasture rotation, freezing temperatures, strategic deworming and periodic fecal analysis by your veterinarian. Parasitic worms that infect sheep are species specific. They only affect ruminants and cannot be passed to humans or other monogastric animals.