

Management Tips for Internal Parasite Control in Sheep and Goats

Frank Craddock, Rick Machen, and Tom Craig

The primary control strategy for internal parasites in sheep and goats has been the use of anthelmintics. One result of the apparent overuse of anthelmintics has been the development of resistant strains of gastrointestinal nematodes. The following management tips can be used by producers to help control internal parasites and prevent resistance from occurring.

1. Treat during mid-winter (December, January, February) before parturition to destroy hypobiotic (dormant stage) larvae in the host. Use anthelmintics (ivermectin, fenbendazole, albendazole, and oxfendazole) that are effective against hypobiotic larvae. This will greatly reduce pasture contamination in the spring.
2. Use fecal egg counts to determine if treatment is needed. After treatment, 7 to 10 days, use fecal egg counts to determine if drug was effective. There should be a 95 percent reduction in fecal egg count in order to consider the drug effective. Treat animals when warranted. Treat every animal.



3. Always rotate to uncontaminated or clean pastures if possible. The use of cultivated land is recommended to break life cycle of parasite. The longer native pasture can be rested the better.
4. Do not underdose. Sort animals according to size and determine dose according to weight of heaviest animal in the group, not an average body weight. Regularly

check that dosing equipment is functioning properly to insure proper dosage. A slight overdose on smaller animals is generally not harmful due to the large margin of safety of most wormers.

5. Wait a minimum of 48 hours after treatment before turning animals onto an uncontaminated pasture.
6. Rotate dewormers on an annual basis or when a resistance develops.
7. Regardless of time of year, routinely treat new animals that are introduced into the flock.
8. When using dewormers, always follow labeled directions. Regardless of product choice, oral dosing is the recommended route of administration. Anthelmintics approved for use in sheep and/or goats are limited to ivermectin, levamisole and thiabendazole. Extra-label use of other dewormers can be utilized if prescribed by a veterinarian.
9. If possible, select livestock that show resistance to parasitism.

**Table 1. Anthelmintics available to U.S. sheep and goat producers.
Many are not approved for use in small ruminants.**

Class of Compound Active Ingredient	Trade Name	Efficacy against			
		<i>Haemonchus contortus</i>	Other gastrointestinal nematodes	Tapeworms	Flukes
Avermectin					
ivermectin*	Ivomec [®]	+++	+++	--	--
Benzimidazoles					
albendazole	Valbazen [®]	+++	++++	++++	++++
fenbendazole	Safe-Guard [®] , Panacur [®]	++	++++	++++	+
mebendazole	Telmin [®]	++	++++	++	--
oxfendazole	Synanthic [®] , Benzelmin [®]	++	++++	++++	+
oxibendazole	Anthelcide [®]	++	++++	--	--
thiabendazole*	TBZ [®]	+	++++	--	--
Imidothiazole					
levamisole*	Tramisol [®] , Levasol [®]	+++	++++	--	--

*These products are approved for use in sheep and/or goats.

Authors

**Frank Craddock, Professor and Extension Sheep and Goat Specialist, San Angelo;
Rick Machen, Assistant Professor and Extension Livestock Specialist, Uvalde;
Tom Craig, Professor, Department of Veterinary Pathobiology, College Station;
The Texas A&M University System.**

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