

Deworming and dewormers



Refugia
Deworming
Monitoring
Pasture
Resistance
Resilience

Adapt the choice of dewormer to the situation on the farm

The choice of dewormer must depend on the following:

- The parasite species present;
- The treatment history and therapeutic efficacy;
- The age and purpose of animals to be treated (vs withdrawal period);
- The physiological status of animals to be treated (gestation, lactation, etc.);
- The time of year

To assess the therapeutic efficacy, it is recommended that a fecal egg count reduction test be performed regularly. For more details, see the sheet on resistance.



Eric Labonté, MAPAQ

WARNING



In Quebec, all dewormers sold must be prescribed by a veterinarian and used according to the prescribed instructions.

Systematic treatment of the entire herd is no longer appropriate. If deworming is required, targeted selective treatment must be used. See the sheet on the choice of animals to treat.



Route of Administration

Based on current knowledge, the oral route is preferred.

Pour-on products are not well absorbed by sheep and should therefore be avoided.

Dose calculation (See Table 1).

- For approved products, the instructions on the label must be followed. **WARNING!** If your veterinarian prescribes extra-label use, he or she may refer to doses recommended in other countries to determine the dose. However, veterinarians must be careful in establishing the withdrawal period because the maximum residue limits vary significantly from country to country. As such, veterinarians may refer to the CgFARAD or any other expert on the subject.
- Ideally, to avoid under-dosing issues, each animal should be weighed individually. Since this is often impossible, the weight of the largest animal in the group can also be used to establish the dose to administer. If animal size varies significantly (watch out for over-dosing and the toxicity of certain dewormers), the group must be divided into sub-groups, and the dose for each sub-group must be determined based on the largest animal in that sub-group.
- The drench gun must always be calibrated prior to use and cleaned after each use.

Administration Technique

- Ensure that animals are properly restrained (to avoid injury or loss of dewormer).
- Place a hand under the animal's head so that it remains horizontal.
- Gently insert the nozzle into the side of the animal's mouth and slide it behind the base of the tongue.
- Press on the plunger and hold the head straight for several seconds.



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Gun calibration

1. Adjust the gun to the 10-ml mark. Fill the gun with water.
2. Pump 20 times into an accurate measuring cup. Divide the total volume by 20.
3. The result should be 10 ml +/- 5% (between 9.5 and 10.5 ml).



Deworming for sheep ¹

Rotation? As long as a dewormer remains effective within a herd, it is recommended to continue with the product.

Active ingredient	Commercial name ²	Category	Parasites targeted in sheep ³	Route of administration	Dosage	Withdrawal period ⁴	Approved in Canada?
Fenbendazole	Panacur, Safeguard	Benzimidazoles	<u>In France</u> : <i>H. contortus</i> , other strongyles, flat worms	Oral	Consult your veterinarian	Consult your veterinarian	Cattle
Albendazole	Valbazen	Benzimidazoles	<u>In the U.S.:</u> <i>H. contortus</i> , other strongyles	Oral	Consult your veterinarian	Consult your veterinarian	Cattle
Ivermectin	Ivomec Potion	Avermectins	<i>H. contortus</i> , other strongyles, oestridae	Oral	2,5 mL / 10 kg	14 days (meat)	Sheep
Ivermectin	Ivomec injection	Avermectins	<i>H. contortus</i> , other strongyles, oestridae	Sub-cutaneous	1 mL / 50 kg	35 days (meat)	Sheep
Noromectin	Noromectin potion	Avermectins	<i>H. contortus</i> , other strongyles, oestridae	Oral	2,5 mL / 10kg	14 days (meat)	Sheep
Closantel	Flukiver	Salicylanilides	<i>H. contortus</i>	Oral	1 mL / 5 kg	49 days (meat)	Sheep
Derquantel + Abamectin	Startect	Combinaison Spiroindole// Avermectins	<i>H. contortus</i> , other strongyles	Oral	1 mL / 5 kg	14 days (meat)	Sheep

1. Other dewormers may also be prescribed by a veterinarian when resistance has been documented.
2. Dewormers may have varying commercial names; always refer to the name of the active ingredient to avoid unwanted use of a molecule.
3. Refer to the label for a complete list of parasites treated.
4. None of these products are approved for use in ewes whose milk is intended for human consumption.

Dewormer combinations

Combining dewormers from different categories is a new approach to slowing the development of resistance to parasite treatments.

Warning: Farmers must never improvise a combination on the farm because there is a risk of physicochemical incompatibility between products. Any combination not validated by a specialist can have serious consequences on the health of the animals and lead to increased resistance.

Spectrum of activity of main categories of dewormers

	Benzimidazoles*	Avermectins	Moxidectin*	Levamisole*	Closantel	Derquantel + Abamectin
Larvae in hypobiosis ⁵	+	++	++	+/-	++	++
Residual effect ⁶	-	+/-	++	-	+/-	-
Flukes (Albendazole 10 mg/kg)	+/-	-	-	-	++	-

Adapted from the Handbook for the Control of Internal Parasites of Sheep and Goats 

5. The following species are those whose L4 larvae can go into hypobiosis: *Cooperia*, *Nematodirus*, *Oesophagostomum*, *Haemonchus*, *Ostertagia/Teladorsagia*, *Trichostrongylus*.

6. Sub-therapeutic levels can be reached quite quickly, which can contribute to the development of resistance. CAUTION!

* Product not approved for use in sheep in Canada

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The strategies described in this pamphlet also largely apply to goats