



De-worming adult horses

A de-worming program should be established beforehand with your treating veterinarian, according to the stud and not individually. It can vary according to practices on the farm.

By Marie DELERUE - | 01.03.2017 |

Technical level 🖉 🖉 🖉



Grazing horses

What are the main equine parasites ?

Here is a list of the main <u>equine digestive parasites</u>, with their location, the horses affected, the clinical signs, and the infestation frequency



Small strongyles, or cyathostomins



Roundworm, <u>small strongyles</u> or cyathostomins are the horse's main parasite.

Small strongyle larvae in droppings

- Where are they found ? In the wall of the small intestine
- Which horses are affected ? Horses out to grass
- What are the clinical signs ? Diarrhoea, weight loss (highly pathogenic especially in young horses)
- What is the infestation frequency ? Very high

Ascarids



Adult ascarids © Laboratoire de parasitologie équine de Dozulé - Anses

Ascarids are roundworm.

- Where are they found ? In the small intestine
- Which horses are affected ? Young horses
- What are the clinical signs ? Weight loss, stunted growth, colic (highly pathogenic in young horses)
- What is the infestation frequency ? Very high



Tapeworm



Adult tapeworm in droppings

Tapeworm are flat worms.

- Where are they found ? In the large intestine
- Which horses are affected ? Horses out at grass
- What are the clinical signs ? Colic
- What is the infestation frequency ? Very high

Large strongyles

Large strongyles (bloodworm) are a round worm.

- Where are they found ? In the blood vessels
- Which horses are affected ? Horses out at grass
- What are the clinical signs ? Colic, sudden death (highly pathogenic)
- What is the infestation frequency ? Low

Bots (Gasterophilus)

Bots are insects, their larvae infest horses.

- Where are they found ? In the horse's stomach
- Which horses are affected ? Horses out at grass
- What are the clinical signs ? General decrease in good form (low pathogenic impact)
- What is the infestation frequency ? Very high

Pinworms (Oxyuris equi)

Pinworms are a round worm.

- Where are they found ? In the large intestine
- Which horses are affected ? Stabled horses
- What are the clinical signs ? Itchiness around the anus (Low pathogenic impact)
- What is the infestation frequency ? Average



Pathogenic impact and infestation frequency of the main equine parasites						
Intestinal worm	Pathogenic impact	Frequency of infestations				
Small strongyles	+++	+++				
Ascarids	+++	+++				
Tapeworm	++	+++				
Large strongyles	+++	+				
Pinworm (Oxyuris equi)	+	++				
Bots (Gasterophilus)	+	+++				

Key : + low ; ++ average ; +++ high

What de-wormers are available ?

To control nematoda (roundworm=> all worms except tapeworm), 3 families of anti-parasitic molecules are available on the market for equines.

- Macrocyclic lactones : ivermectin, and moxidectin;
- Pyrantel;
- Benzimidazoles : fenbendazole and mébendazole.

To control tapeworm, 2 molecules are available :

- Pyrantel;
- Praziquantel.



A single dewormer will not kill all parasites : each molecule has a specific activity spectrum.

Molecule	Larval stage of small strongyles	Adult stage small strongyles	Large strongyles	Ascarids	Pinworm (oxyuris equi)	Tapeworm	Bots
Ivermectin	+/- partly active	+	+	+/- resistances noted	+	-	+
Moxidectin	+	+	+	+/- resistances noted	+	-	+
Pyrantel	-	+/-low resistance in some areas	+	+	+	- Double dose	-
Fenbendazole	+/-using a 7.5mg dose/kg for 5 consecutive days	+/-low resistance in some areas	+	+	+	-	-
Mebendazole	-	+/-low resistance in some areas	+	+	+	-	-
Praziquantel	-	-	-	-	-	+	-

<u>Key</u> : + active molecule ; +/-active but some resistances have been noted ; - inactive

Setting up a protocol for FEC (Faecal egg counts) and de-worming



A protocol for FEC and de-worming is set up with your treating veterinary surgeon. For example, in the case of a sanitary assessment of the stud, the veterinarian can establish a parasitic audit and establish a individual protocol based on the parasitic pressure on the property, this depends on :

- Breeding practices;
- Accommodation of horses (field or stabled);
- The burden;
- The **frequency with which the horses are moved** in and out of the property.

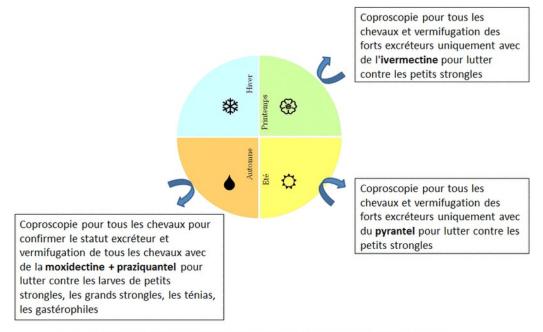
There are two categories of horse :

- **Young horses** (1-3 years of age), need de-worming systematically 3 to 4 times ayear, due to low immunity;
- **Horse aged 3 or more**, for which a well-reasonned de-worming schedule is highly recommended. Ideally, a FEC should be carried out before de-worming. Only administer a de-wormer to high shedders (horses shedding more than 200 Epg in their droppings).

Each season also gives rise to the question of which molecule to use according to the targeted parasites, but also according to prior knowledge of worm resistance to the de-wormers used on the stud.

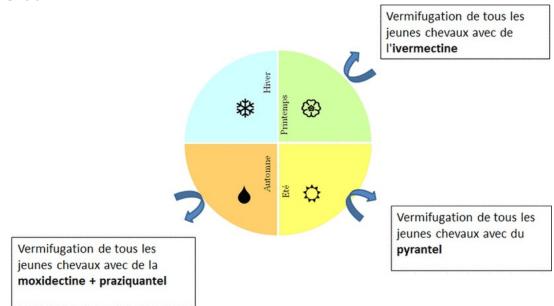
Period	Spring (May)	Summer (August)	End of Autumn (November)
Targeted parasites	 Small strongyles (adults) Large strongyles 	 Small sttrongyles (adults) +/- Pinworm (stabled horses) 	 small strongyles (adults and larval stages) tapeworm large strongyles bots

For Horses aged over 3 traduction à faire bas du schéma les chevaux



==> Les chevaux "forts excréteurs" sont vermifugés 3 à 4 fois par an. Au contraire, les "faibles excréteurs" sont vermifugés 1 à 2 fois par an.





For young horses (1-3 years of age) à traduire bas du tableau les chevaux

==> Les chevaux de moins de 3 ans sont vermifugés 3 à 4 fois par an.

Specific cases

Brood mares

Brood mares should be de-wormed on the same basis as other adult horses. A spring de-wormer restricts an early infestation for the foal.

Donkeys



Donkeys are sensitive to the same parasites as horses, but are also more sensitive to :

© F. Marduel



Donkeys are sensitive to the same parasites as horses, but are also more sensitive to :

- Lungworm (*Dictyocaulus arnfieldi*) : This can provoke respiratory problems, and it can be treated with the same de-wormer as for strongyles.
- Fluke (*Fasciola hepatica*) : (there are rare cases, and this parasite provokes weight loss) : Fluke can be treated with **triclabendazole** and **closantel**.

Donkeys are often healthy carriers (showing no clinical symptoms) but they act as a reservoir for horses :

- They can be de-wormed following the same protocol as horses
- A preventative treatment against <u>fluke</u> can be considered if there are symptoms in the horses living with donkeys.

Remember

► The main equine parasites are small strongyles and tapeworm

Young horses, 1-3 years of age are systematically de-wormed 3-4 times a year.

Horses over the age of 3 are de-wormed following a well reasoned schedule, after a FEC (Fecal egg count)

A de-worming protocol should be established with the treating veterinarian, and depends on the practices in place on the farm/ stud.

About our writers

• Marie DELERUE Docteur vétérinaire, ingénieur de développement IFCE

