

Less Common Fur Mites in rabbits

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Rabbits can be infested with fur mites (cheyletiellosis). Visual examination is not always sufficient to confirm the presence of mites. One can use the tape method, skin scraping (shallow if fur mites are suspected, deep if burrowing mites are suspected), or the vacuum aspiration method on a filter paper. Samples from scraping or aspiration should be spread on a microscope glass, dissolved in KOH, and examined under a microscope. The chance is great that one will discover at least one mite, a larva or eggs. Hair can also be sampled, dissolved in KOH, and examined under the microscope for the presence of eggs. If no mite is found in the first sample, one should check other places on the body. If the presence of burrowing mites is suspected, but not found after a deep skin scraping, it is best to do a biopsy on the area suspected of mite infestation.

Fur mites (live on the surface of the skin) can fall off and contaminate the environment. While treating for mites, careful cleaning of the cage and environment is recommended.

If any mite problem is not solved, consider the presence of dogs and cats (both can be asymptomatic carriers) or of parasites that survived the treatment.

Less Common Fur Mites: *Trombicula autumnalis* and *Dermanyssus gallinae*

Both parasites specifically infest other species but can be hosted by rabbits. *Trombicula autumnalis*, or harvest mite, in the same genus as the "chigger," is found in rabbits that have free access to a yard. The female mite lays eggs in the soil. The hatching larvae, barely visible with the naked eye, move into the grass and wait till a suitable host is found. Only larvae will attack a rabbit, cat, dog, or human; further developing stadia proceed in the soil. The parasite will suck body fluids up to 3 times its body size, after which it will fall down on the soil to complete its life cycle.

Dermanyssus gallinae, also called red mite, may accidentally be hosted by rabbits living in the presence of birds.



Symptoms and clinical signs

The larvae are commonly found on the head of rabbits (ears, inner and outer corners of the eyes, chin), the neck and shoulder regions, under the front legs and between the toes, and in the perianal region.

Both lead to intense pruritis and the formation of macules and pustules. Scratching will lead to self-mutilation, wounds, and secondary bacterial infection.



livingthings.narod.ru/Clit/Ani/Art/Ara/Aca/aca003.jpg
fiocruz.br/ccs/novidades/imagens/11aca_ser3.jpg

Left: *Trombicula autumnalis*
Right: *Dermanyssus gallinae*

Treatment

Treatment of *Trombicula autumnalis* is difficult and sometimes it is sufficient to remove the affected animal from the source of infestation. While fipronil, permethrins, and organophosphates are used on other animals to treat these mites, all can cause serious adverse effects in rabbits and should be avoided. The manufacturer of fipronil (Frontline® - Merial) strongly advises against using it on rabbits. Serious adverse effects (depression, anorexia, seizures, death) have been observed in rabbits, especially young or small rabbits.

Dermanyssus gallinae is best treated with carbamates, but care should be taken. This type of insecticide can trigger toxic reactions in rabbits. It is best to use a powdered product, to avoid absorption through the skin.

Treatment of the environment is important (boric acid such as Fleabusters®; Vet-Kem Acclaim Plus® - Sanofi; Staykil® - Novartis; Indorex® - Virbac; acaricide spray). When treating a carpet, vacuum first in order to further penetration of the spray or powder. Shampooing and steam



cleaning are not ideal; their residual humidity can increase the mite problem. During treatment of the environment, rabbits should be kept in another part of the home to avoid the danger of contact with the products.

Further Information

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