



## Poultry red mite (*Dermanyssus gallinae* deg.)

A mature red mite is darkly-red coloured, about 1 mm in size and has eight legs. A female can lay 2-7 eggs a day. She hides the eggs in all possible cracks and openings. Depending on the temperature the larvae will hatch after 1-2 days. If conditions are unfavourable, the eggs can survive for months. The larvae will not hatch before the temperature suits them. Thus, the mites can also hibernate without problems. Before they become fully-grown, the larvae undergo several stages of development in which they assume different kind of shapes. The red mites become not older than six months and can survive without food for months.

### Way of living

The mites live very close to birds. They stay in the aviary and hide in cracks during the day. They are light-sensitive and do not emerge before darkness. Then, they attack their hosts. With a special suction device they suck blood from the sleeping birds. Young birds in brood cages and nesting boxes often are also affected.



### Symptoms

It is important to discover an infestation of red mites as soon as possible. Please control the aviary regularly and check the cracks and other small openings carefully. An excellent point of control is at the end of the perch on the underside. With regular checks it is possible to discover an infestation at the earliest possible moment. However, the birds themselves also indicate whether something is out of order. They start scratching themselves, lose weight and become lethargic. During breeding time, red mites are also found in the nests. There, they attack newly hatched birds that die even before they can develop their plumage. If you detect such symptoms, the infestation is serious and you should intervene immediately.

### Control

Attach a small PVC tube underneath the perch in order to discover the incipient infestation in time. Into the tube, put a tightly rolled piece of corrugated cardboard. The red mites use this little corridor as a hiding-place during daytime. Control every week whether red mites can be found on the piece of cardboard. As soon as you discover the first red mites, immediately apply Dutchy's®.



### Tropical fowl mite (*Ornithonyssus bursa*).

The tropical fowl mite is – like the poultry red mite - an ectoparasite that only attacks on the outside of hosts. Originally from tropical regions, the tropical fowl mite may have been introduced to our climate through import goods. Especially for breeders of canaries the tropical fowl mite causes big problems during breeding time. The fowl mites appear especially in spring and early summer. Afterwards, the fowl mite population abates rapidly; at the end of summer, they are not found anymore. That means that they primarily target bird hatchlings and that they are not capable of surviving on mature birds. The mites attack the bird hatchlings in great numbers and suck blood. This weakens the bird hatchlings so much that they die after some days.



Only few bird hatchlings survive such an infestation. The fowl mites can also pass illnesses; in the end, the animal enthusiast himself can be affected. During bird care, the fowl mites can crawl onto our body and prick us. In doing so, they insert a small amount of saliva in our skin which causes small reddish itchy spots. If someone is sensitive to skin problems, ailments like strongly irritant skin rash can develop.

### General attributes

A fully-grown fowl mite is about 0,5 mm of size, has eight legs and is lightly-beige coloured or nearly transparent with distinctive markings on the body. The female fowl mite lays the eggs on cloths and residual material close to the bird nests. Depending on the temperature, the larvae will hatch after one or two days. Is the temperature too low, the eggs can survive for months. The larvae will not hatch before conditions are favourable and before sufficient 'food' is available - for example bird hatchlings. Before the larvae become full-grown, they undergo different phases of development.

### Way of living

The fowl mites live close to young birds and consequently stay mostly near the nests of the birds. Contrarily to red mites, fowl mites are not light-sensitive but also diurnal. In full daylight, they crawl over feeding sites and over the edges of nests. The fowl mites move very fast. During bird care they can also crawl onto our body in no time. The fowl mites attack primarily young birds in order to suck blood but they also crawl over the plumage of mature birds. If the adult bird is in the nest and the fowl mites crawl through its plumage, it gets so restless that it leaves the nest over and over again; at last it abandons its young ones.

### Symptoms

It is important to discover an infestation as soon as possible. Please check the nest every third day for an infestation and intervene immediately when you discover the first fowl mite. If the fowl mites are already in and around the nest in considerable numbers, it is already too late. Then, the fowl mites are hard to extinguish and many bird hatchlings will die.

### Pest control

The combat of the red and the fowl mites is not easy. Some chemical agents exist but most of them are ineffective. The problem is that the eggs and the mites can survive without food for months. In addition, the mites are often resistant to formerly effective substances of chemical products. Thus, part of the mite population may survive every kind of insecticide. If you really want to solve the problem, use **Dutchy's®**. **Dutchy's®** are predatory mites that feed on other species of mites. Depending on the circumstances, the predatory mites can survive quite long in aviaries and thus exterminate possibly harmful parasites like fowl mites.



The predatory mites search for their prey and do not let them escape any more. If an infestation is ascertained, it is important to apply **Dutchy's®** as soon as possible in order to prevent an increase of the parasites.

The table below shows the applicable amount of **Dutchy's®** as appropriate.

The material can be put in a specifically designed container for dispersion, the **Mite Booster®**. These containers can be hung up in the bird cage. The advantage is that birds can not disturb the material. Thus, the material does not exsiccate. Moreover, those predatory mites can also develop that still exist in form of eggs in the litter.

### Prevention is better than cure.

If no harmful fowl mites are present it can nevertheless make sense to deploy a small amount of predatory mites. In doing so before breeding time you can save yourself a lot of trouble. At that point of time, you can prevent the fowl mites from establishing a population by applying the lowest dosage of **Dutchy's®** and thus anticipating an infestation. During breeding time it may be sensible to even reiterate such a treatment every six weeks.

### Chemical products.

If a chemical agent was applied before the deployment of **Dutchy's®** it is possible that the predatory mites themselves will be affected. In some cases they may even die prematurely.

Thus, to be on the safe side, wait at least 5-6 weeks after a treatment with chemical products before deploying predatory mites.

Animal stay	Dosage*	Repeat
<b>Aviary birds</b>		
Breeding cage 40x40 cm	1 container per 8 cages	every 5-6 weeks
Breeding cage 80x80 cm	1 container per 4 cages	every 5-6 weeks
Breeding cage 120x60 cm	1 container per 2 cages	every 5-6 weeks
Black mites	As above plus 1 tablespoon per nest	every 3 weeks
Nesting blocks	1 container per m <sup>2</sup> nesting block®	every 5-6 weeks
<b>Chicken and other fowl</b>		
Night shelter	1 container per m <sup>2</sup>	every 5-6 weeks
Nest box	1 container per m <sup>2</sup>	every 5-6 weeks