



ALL YOU EVER WANTED TO KNOW ABOUT RED MITE!

The RED POULTRY MITE, *Dermanyssus gallinae*, is a very prolific external parasite of birds which can be very difficult to eradicate – partly because the mite can survive for up to eight months between feeds – so they are often in situ, just waiting for the arrival of a new flock!

Mites feed largely on blood of the birds, but also on feathers, skin or scales ; each blood feed lasts approximately 1-2 hours after which the mite leave the birds and return to hide in cracks and crevices in the poultry housing, where they lay their eggs, returning to the birds again the following night – hence, it is easy to miss their presence if examining a bird during daylight.

Heavy mite infestations in chickens lead to high levels of stress and result in anaemia, reduced egg production and, eventually if not treated, death, so the effects of red mite are of considerable economic importance when considering production costs. Additionally, mite can transmit diseases, such as the chicken pox virus, Newcastle Disease, fowl typhoid and salmonella as well as causing dermatitis and mange. When disturbed, they will also bite interfering humans and can cause a type of dermatitis.

At one time it was thought that mite only tended to live in wooden structures, but they are now found on both plastic and metal – anywhere that is as near to their next meal as possible. Nowadays, they are also becoming increasingly common in battery cages, where they cause severe health problems and economic loss.

The tiny mite vary in appearance, depending on when they last fed – a mite is only red when it has consumed blood recently and changes colour again through black to grey as the interval between feeds increases. When checking housing areas for mite, a tell-tale 'grey ash' around crevices is evidence of mite faeces, but the best time to examine a house is at night, when the mite can often be seen with the aid of a torch, both on and off the bird.

Red Mite, in common with lice and other arachnids (spider-type creatures with eight legs) have a waxy exoskeleton (hard outer covering), without which they rapidly dry out (desiccate) and die. One of the best methods of attacking Red Mite therefore is to use a strong degreasant compound which dissolves the exoskeleton and rapidly kills the mite by desiccation. This method has the advantage that it is impossible for the mite to build resistance, a growing problem with many pesticides, and means that the same treatment can be applied repeatedly to keep the infestation under control.



Smite Professional is a specially selected, super-strength degreasant, disinfectant cleaner, with excellent wetting properties, which has been proven highly effective at eliminating Red Mite in poultry housing. It is pleasant to use, for both the operator and the birds, is economical and contains no pesticides.



Smite Organic offers a range of products especially developed for the elimination of red mite, lice, flying and crawling insects. These products contain Diatomaceous earth, a naturally mined organic substance. Use in conjunction with Smite professional to form part of the Smite-a-Mite programme.

Symptoms of Red Mite Infestation.

- Pale, 'jaundiced' faces and wattles, through anaemia
- Depressed birds, lacking vitality
- Emaciation – or even weight gain!
- Decreased egg production
- Increase in feed intake coupled with decreased egg production
- Dark dots and speckles on normally plain eggs – they may be blood spots or on closer inspection you may see the speckles move!
- In extreme cases, feather loss and signs of dermatitis
- Whitish-grey 'ash' (mite faeces) around the edges of crevices and in trails along and under perches.
- Active red mite on housing which glow in the light of a torch at night. (Underneath the roofing felt is a favourite place for mite to hide!)
- Hens may avoid a nesting box which is particularly badly infected.
- Never assume that red mite are the problem if you can't find any physical signs of them at all – remember, most sick hens display some similar symptoms, whatever the cause!
- If in doubt – ask your vet.



Red Mite and eggs on eggshell.

Photo Courtesy of Dr. Ivan Pavlovic, PhD, MSc, DVM, ScAdv. Scientific Veterinary Institute of Serbia Dept. of Parasitology; 11000 Belgrade, V. Toze 14, Serbia and Montenegro

The Red Mite Life Cycle.

Mites feed on the bird under cover of darkness each night and return to their crevices during the day

- Eggs are laid in crevices in the housing. Eggs are pearly white and oval, approx 0.4mm x 0.25mm.
- After 2-3 days, in warm conditions (longer in cooler weather), the eggs hatch into 6-legged larvae.
- Within 24 hours, the larvae moult into 8-legged pronymphs, which start to feed on the roosting birds.
- Pronymphs then moult into deutonymphs, which continue to feed, before moulting again to become adult male or female red mite.
- In warm, favourable conditions, this whole life-cycle can be completed within seven to ten days, which means that
- Mite populations in poultry housing grow very rapidly during the summer months, but
- Gradual climate change and warmer winters means that rather than being a problem which is only encountered during the summer, mite are now continuing to reproduce, though at a slower rate, through the winter, so need increased vigilance to keep populations in check.
- Mite can survive for up to eight months without a feed and have been known to lie dormant for ten years!
- When hidden in cracks are very resistant to desiccation – so cleaning out and leaving a house empty will not prevent mite reappearing when birds are reintroduced!
- Mite can be carried by wild birds and prevailing winds, so can appear even when there has been no previous evidence of infestation.