FEATHER MITES OF THE BUDGERIGAR (MELOPSITTACUS UNDULATUS)

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Poster Abstract

Although at present about 2000 different species of feather mites are described, only very little is known about their biology and effects on the host. The budgerigar hosts two species of feather mites, *Sideroferus lunula* and *Dubininia melopsittaci*. Both species have been collected in Australia from caged as well as free living budgerigars and also from budgerigars originated in many other parts of the world. These two species are also common on budgerigars kept in Germany. But in contrast with the scaley mite *Knemidocoptes pilae* and the chicken mite *Dermanyssus gallinae*, both well known ectoparasites of the budgerigar, nobody knows the feather mites of this bird. In the German literature there are no comments about these ectoparasites from the budgerigar. The feather mites of the budgerigar will be published by this poster with the help of illustrations and photos, so that determinations of these mites can be made easily and accurately.

*Sideroferus lunula* (Robin, 1877)

Already in 1877 ROBIN described this mite as *Pterolichus lunula*, other known synonyms are *Protolichus lunula* and *Magninia lunula*. Both sexes are strongly sclerotized and the males are the only mite stage living on parrots having bifurcated tarsi on the first pair of legs. In addition the males have two long paragenital apodemes extending from the genital region to the posterolateral margins of the body. This mite occurs on the exposed surface of wing and tail feathers and is estimated as non or less pathogenic.

*Dubininia melopsittaci* Atyeo and Gaud, 1987

Not until 1987 the second species of feather mites from the budgerigar has been described, primarily on back anterior to the upper tail coverts. According to literature information this mite occurs on the smaller feathers of the body and causes damage on these feathers. Because of the irritations by this mite the birds bite their plumage and destroy the feathers particularly of the tail and the wings. Investigations of the Institute of Parasiology have shown that from 24 budgerigars 12 birds were infested with *S. lunula*, 7 with *D. melopsittaci* and 6 with both species.

The knowledge about damage effects caused by feather mites are contradictory. The mites are commensals and normally do not create problems for the host birds. On the other hand a survey of feather diseases of 198 exhibition budgerigars in the United Kingdom in 1996 has shown that 18.2% of these feather diseases were caused from feather mites. Among 37 different causes of such feather diseases the feather mites were in position three.

Another aspect of damage effects caused by feather mites is that they are potentially an important source of allergens for the budgerigar keepers.

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