

SHORT CONTRIBUTIONS

PARASITIC HABIT OF THE RABBIT MITE, *CHEYLETIELLA* *PARASITIVORAX* (MEGNIN)*

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For many years there has been a controversy over the feeding habit of *Cheyletiella parasitivorax* (Megnin), the cosmopolitan ectoparasite of the European rabbit, *Oryctolagus cuniculus* (L.), which has also been recorded on cat, dog, and man. Some authors, such as Cooper (1946), maintain that it does not parasitize the rabbit itself but is predatory upon other soft-bodied mites such as *Psorogates*, *Notoedres*, and *Listrophorus* spp. which live on the same host; while others, such as Barr (1955), affirm that it is directly parasitic upon the host and is capable of inducing pathological changes.

The incrimination of this mite as a vector of infectious myxomatosis among wild rabbits in Australia (Mykytowycz, unpublished data), suggests that it is a true parasite of the rabbit, and this is confirmed by the following observations.

Under the dissecting microscope it was repeatedly observed that when *C. parasitivorax* was transferred from a carcass to a living rabbit it attached itself to the skin at an angle of about 30°, and gradually became engorged with a colourless fluid. Once attached it was difficult to remove with a dissecting needle.

C. parasitivorax and another common ectoparasite of the rabbit, *Listrophorus gibbus* Pagenstecher, were often kept together in vials at room temperature, but on no occasion was predation observed. Under such conditions *C. parasitivorax* usually died 2–3 days before *L. gibbus*. On a living rabbit these mites occupy different ecological niches, *L. gibbus* living on the hairs around the neck and on the ventral surface of the tail, whilst *C. parasitivorax* is found on the skin—usually on the abdomen and back. *C. parasitivorax* has repeatedly been found on young kittens free from *L. gibbus* and other species of soft-bodied mite.

Although the observations recorded here leave little doubt that *C. parasitivorax* is a true parasite of the rabbit, feeding on the skin of its host, among the hundreds of rabbits that have been handled and examined during the past 8 years not one exhibited gross dermal lesions that could be attributed to this species.

References

- BARR, A. R. (1955).—A case of "mange" of the domestic rabbit due to *Cheyletiella parasitivorax* (Megnin). *J. Parasit.* **41**: 323.
- COOPER, K. W. (1946).—The occurrence of the mite *Cheyletiella parasitivorax* (Megnin) in North America with notes on its synonymy and "parasitic" habit. *J. Parasit.* **32**: 480–2.

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