

Some aspects of mange in man and domestic animals

by

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Mange is an itching disease of the skin produced by various species of mites living either in the superficial layers of the skin or at the base of external crusts.

The mites that produce mange are permanent parasites. They are specific for this habitat and are not able to live in other conditions.

Another itching disease of the skin that must not be confused with mange is dermatitis. Dermatitis is essentially a temporary eruption accompanied by severe itch and sometimes general symptoms. This disease may be produced by various groups of mites belonging to several sub-orders. The most frequent are the acarid or glycyphagid mites, also called detriticolous mites because they live normally in decaying organic material. The dermatitis generally occurs in workers who are handling infected products. The mechanism of the production of this dermatitis is not well known. Some authors believe that the mites are the primary causes of the itch by their saliva or excretions. For others hypersensitivity plays the main part in its production.

True mange is produced by various groups of mites. Among them the group of the Sarcoptiformes is the most important owing to the number of species that are involved and the severity of the lesions that may be produced. In birds the families Epidermoptidae and Knemidokoptidae are the most harmful. The first contains several species parasitic on domestic or cage birds. Among them the most pathogenic are *Microlichus avus* living in the feather follicles and producing loss of feathers and *Epidermoptes bilobatus* producing a generalized but more superficial mange. The Knemidokoptidae are more pathogenic than the Epidermoptidae. They burrow more deeply in the epidermis and produce a stronger corneous reaction on the part of the host. Some attack the feathered parts of the body in pigeons and chickens (*Neocnemidocoptes laevis*) and produce loss of feathers, while other species invade the non-feathered parts of the legs and the head. This disease is commonly named scaly-legs or scaly-face. Scaly-face is common in budgerigars and parrots (= *Knemidokoptes pilae*) while scaly-legs is more often encountered in some passeriform cage birds (*Knemidokoptes jamaicensis*) and chicken (*Knemidokoptes mutans*).

In mammals the true mange is produced by two different families: Psoroptidae and Sarcoptidae. On the base of a morphological study of the genus *Sarcoptes* the author concludes that only one species (*Sarcoptes scabiei*) can be retained in that genus. Owing to the high degree of individual variability of that species he expresses the opinion that the so called "varieties" (actually subspecies) described so far are not more than "forms" without any taxonomic value.