



Demodectic mange mites

Demodex spp.

Description: very small (1/250 to 1/60 inch long), slender, whitish, almost maggot-like mites with four pairs of bud-like legs on the anterior one-third of the body.

Domestic animals affected: cattle, swine, horses, goats, dogs, and cats—each by a different species in the *Demodex* genus.

Damage caused: In large mammals, damage is mostly cosmetic causing pea-sized to hen-egg-sized intradermal nodules filled with cheesy sebum (skin oil) and mites. Sometimes there is patchy hair loss; nodules may rupture and become secondarily infected by bacteria; hides from infested animals have holes or weak spots. In dogs, infestation is often often debilitating, sometimes fatal. It is usually accompanied by *Staphylococcus* infection and a strong, sour odor. *Demodex* mites of dogs may invade internal organs.

Development: gradual metamorphosis: egg, 6-legged larva, protonymph, deutonymph, adult.

Generational time: [probably 2 or 3 weeks].

Oviposition site: initially in a hair follicle or pore in the skin; in established infestations, anywhere within the dermal nodule formed by interaction between the host and the mites.

Larval and nymphal habitat, feeding: same as for the adults.

Adult habitat, feeding: entirely within the intradermal nodule, utilizing serum, sebum, and possibly white blood cells of the host.

Method of dispersal or infestation: dispersal is by host-to-host contact, especially from dam to newborn offspring or when nodules have ruptured; additional dispersal may be via fomites and definitely includes host animal mobility and transportation.

Seasonality: Infestation is year-round. As to initial establishment in new hosts, the detrimental effect of cold temperature on mites during transfer between hosts in the winter time may be offset by increased crowding of animals seeking mutual warmth.

For additional information contact:
Ludek Zurek Ph.D.
Medical and Veterinary Entomology
Department of Entomology
Kansas State University
Manhattan KS 66506
(785) 532-4731
lzurek@ksu.edu

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

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