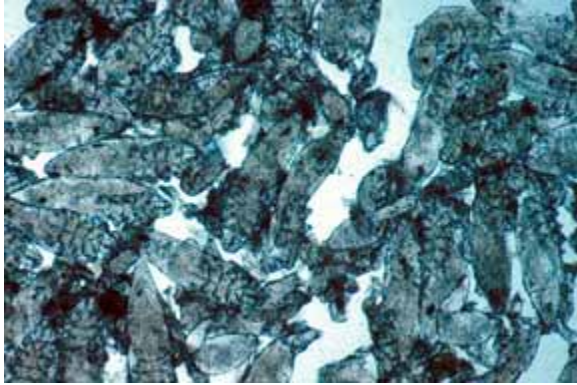


Mange

Mary Smith, DVM, Cornell University

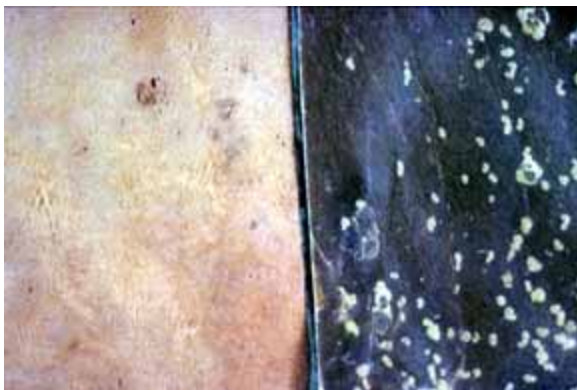
Demodectic Mange



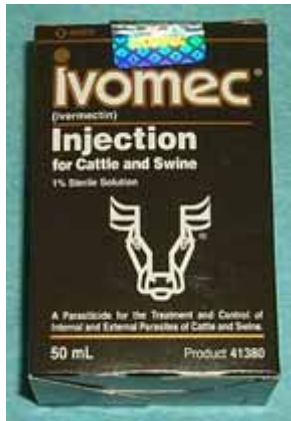
Etiology - This mass of cigar-shaped *Demodex caprae* mites was expressed from a distended hair follicle of a goat.



Clinical signs - Demodectic mange is common in goats. Young kids are infected (adults become immune) but nodules in the skin rarely become visible before 18 months of age. The size of the nodules may then increase for a year or two, as mites accumulate within hair follicles. The neck and shoulder of 2-3 year old animals are good areas to palpate when looking for demodectic mange. Animals with healthy immune systems and good nutrition eventually seem to clear the infection, or at least the obvious skin nodules disappear.



Demodex lesions in hair follicles cause substantial damage to the skin and thus decrease the value of the hide processed from the affected goat. This picture from the Colour Atlas of Diseases and Disorders of the Sheep and Goat shows hide damage attributable to *Demodex*.



Treatment - Individual distended hair follicles can be emptied by squeezing, inserting a needle, or lancing. Systemic parasiticides such as injectable ivermectin probably will help to clear the lesions on an individual pet or show animal, but even if the mites are killed the nodules won't disappear overnight. Check that the animal has adequate nutrition (energy, protein, selenium, vitamin E, copper) to support a good immune response and eventually clear the parasite. Artificial rearing of kids seems to decrease the prevalence of demodectic mange.

Chorioptic Mange

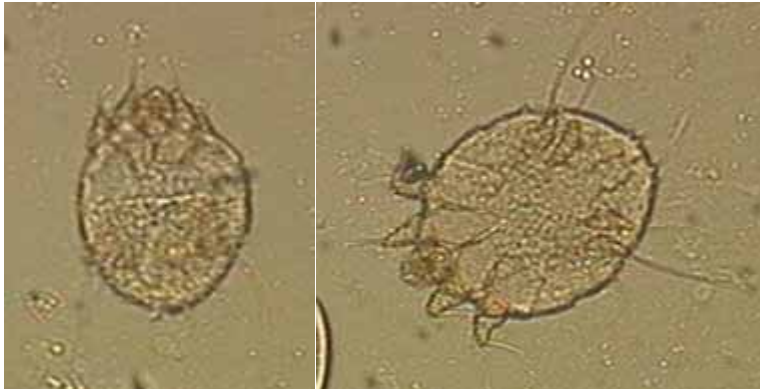


The chorioptic mite has relatively long legs and lives on the surface of the skin. It can be identified by its short pedicels on the pretarsi. It is a fast moving critter, so it may walk off your slide if you don't add a little insecticide or work fast. The mite can also survive for weeks in bedding or in cracks and crevices in the barn, complicating control efforts.



Crusty, scaly lesions on the pasterns are very typical of chorioptic mange in goats. Eprinex topically is labelled for treating chorioptic mange in cattle, and can be tried on goats. Lime sulfur baths are another option. The mite is a surface dweller and not readily killed with systemic ivermectin. As it is common for only one animal in the herd to show lesions, it seems logical that there may be an allergic component to the disease. An individual with severe lesions may require corticosteroids and antibiotics (for secondary staphylococcal infection) in addition to medication directed against the mites.

Sarcoptic Mange



This is a sarcoptic mite. Identification is based on the presence of long unsegmented pedicels on the pretarsi and location of the anus at the posterior edge of the body. Sarcoptic mites burrow into the skin and are difficult to find in skin scrapings, so a negative scraping does not rule out the disease.



This goat from the U.K. has sarcoptic mange. Pruritic, crusty, alopecic lesions are most severe on the head and neck but also involve the rest of the body. The pasterns are less apt to be severely involved than with chorioptic mange. Many, many lime sulfur baths will be needed to control the infection, so try Eprinex (eprinomectin) pour-on instead and repeat in approximately 2 weeks; this product has no milk withdrawal in dairy cattle but is not labeled for goats, so any residue in the milk is illegal.

Psoroptic Ear Mites



Psoroptes cuniculi ear mites are commonly found in the ears of goats. The mites cause goats to shake their heads and scratch at their ears, only rarely generalizing onto the skin of the body. Goats hate having you mess around in their ears, and the ear canal is too deep to easily see the mites. Don't expect to see the black exudate you look for in cats with ear mites. Look for a bare patch on the back edge of the ear. Remove the bell that is annoying the owner. Cat ear mite medicine or systemic avermectins can be used to control the mite.



Sheep scab, caused by *Psoroptes ovis*, is not present in the United States. The parasite has been controlled in other countries by compulsory dipping (often in organophosphate solutions) and more recently by two injections of an avermectin such as ivermectin.