Astigmata
(Mites, Scabies, Mange)

Psoroptic Scap Mites (*Psoroptes* spp.)

- *Psoroptes ovis*
- *Psoroptes cuniculi*

- *P. ovis* causes scabs and other epidermal body lesions, whereas *P. cuniculi* does not not cause body lesions but instead tends to move to the ears where it induces aural lesions.

- *Psoroptes* genus cause psoroptic mange, a highly contagious form of mange that can spread rapidly by direct transfer of mites between animals or indirectly by materials.

- *Psoroptes* infestations tend to more prevalent during the winter months.
- *Psoroptes* mites cause more severe problems than any of the other psoroptic genera, commonly resulting in economic loss in cattle, sheep, and goat.
- The mouthparts of *Psoroptes* species are adapted for feeding on the surface of the skin rather than piercing the epidermis.

Chorioptic Scab Mites (*Chorioptes* spp.)

- Psoroptic mite in the genus *Chorioptes* cause chorioptic mange in domestic ungulates
- They feed on sloughed epidermal tissues, sometimes causing irritation and crusty, pruritic lesions that warrant treatment.

- *C. bovis* occurs primarily on the legs and feet of its hosts.
- The life cycle of *C. bovis* is completed in about three weeks.
- Body lesions in severe cases are characterized by dermal crusting, erythema, and hair loss.

Otodectic Ear Mite (*Otodectes cynotis*)

- This mite is known as the ear mite or ear canker mite of cats and dogs
- It occurs worldwide and parasites other carnivores.
- *Otodectes cynotis* is closely related to *Psoroptes* species, which it resembles in size and general appearance.

- *Otodectes cynotis* typically occurs deep in the external ear canal
- *Otodectes cynotis* does not burrow into the skin.
- This mite lead to highly variable responses ranging from asymptomatic or mild cases to severe otitis and convulsive seizures.
- Diagnosis of *O. cynotis* is confirmed by otoscopic examination and by recovering the mite from aural scrapings.

Knemidokoptidae

- Kenemidokoptid mites superficially resemble sarcoptids, from which they differ by having short legs without pretarsi or long setae and lacking dorsal triangular setae.
- The invade the feather follicles and skin of wild and domestic birds worldwide, causing **knemidokoptic mange** in some species.
- Their life cycle is similar to *S. scabiei*.
- All stages of these mites occur on the host, and transmission is by direct contact with infested birds.

Scaly-leg Mite (*Knemidokoptes mutans*)

- This mite is a pest of poultry, especially chickens, and occurs worldwide.
- It burrows beneath the epidermal scales of legs and feet, causing irritation, inflammation, hyperkeratization, formation of vesicles, and encrustations.
- In chronic cases, *Knemidokoptes* infestations can lead to lameness, deformed legs and feet, and occasionally the loss of digits.

Scaly-face Mite (*Knemidokoptes pilae*)

- This cosmopolitan mite infests captive parakeets.
- Lesions usually appear initially in the cere and the corners of the beak where the mites invade the feather follicles and folds of skin.
- Lesions of the legs and feet, especially in the early stages, can closely resemble those of *K. mutans*.

Cheyletidae

- Parasitic cheyletid mites occur mainly on domestic cats, dogs, and rabbits.
- They are nonburrowing mites that live in the pelage of their hosts and feed on lymph and other tissue fluids.
- C. *blakei*-Cats
- C. *yasguri*-Dogs
- C. *parasitivorax*-Rabbit