

Summary of the Ph.D thesis No., **26466 parasitology**, Faculty of Veterinary Medicine, Urmia University.

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Title: Investigating on *Otodectes cynotis* infestation in domestic carnivores of Urmia city.

Abstract:

Otodectes cynotis is ear mange for domestic and wild cats and dogs with worldwide distribution. This mange is increasingly diagnosed in cats and is responsible for at least half of cases of otitis externa in cats. It is estimated that up to 58% of otitis externa cases in cats are caused by *O. cynotis*. These mites are obligate parasites belonging to the Psoroptidae family that live mainly on the lining surfaces of the ear canal, resulting in otitis externa. Ear mites feed mainly on squamous epithelial cells and auditory secretions, but sometimes on the lining. They pierce the ear and feed on tissue fluids. Ear mange infection is very contagious, especially in cats between 3 and 6 months of age. Clinical signs of infection include pruritus, mild to severe dermatitis, ear scratching, and head shaking. This parasite can potentially be transmitted to humans, so it has a high epidemiological value. In this study, we selected 100 pets from among the pets referred to the veterinary hospital of Urmia University Faculty of Veterinary Medicine and examined their ears. Age, sex, breed, sampling season and keeping method (domestic, stray or shelter) etc. were recorded in pre-prepared forms. Then, using a sterile swab, the secretions and contents of the animals' ears were sampled and the samples were placed in a microtube. A few drops of detergent were added to the sample inside the microtube and with the help of a shaker and a centrifuge, the contents inside the microtube were completely homogenized, and the sample was placed on a slide and observed under a light microscope with a magnification of 10 and 40, and after confirming the contamination, the morphological characteristics of the steps different complete life cycle of *Othodectes mange*, including egg, baby, young and adult, was recorded. Finally, we found that the frequency of this parasite in pets of Urmia city is 3%. It can be concluded that this parasite exists among pets in many areas.

Key words: *Otodectes*, Infestation, cat, dog, Urmia