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## ISOLATION AND IDENTIFICATION OF *MYCOBACTERIUM* FROM CAPTURED CATS BELONGING TO TUBERCULOSIS INFECTED FARMS

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**Background & Aim:** Bovine tuberculosis is one of the most important zoonotic diseases in Bovidae. Humans and animals that transit to the farm can transfer *Mycobacterium* to the cattle. Hence, the aim of this study is to evaluate the possible role of cats in transferring the *Mycobacterium* infection in dairy farms.

**Methods:** From a dairy cattle farm with more than 20% infection of *Mycobacterium*, seven cats were captured and their gastric juice cultured in the LJ and LG medium. The acid-fast staining of the isolates prepared to identify *Mycobacterium* and PCRs were carried out afterwards.

**Results:** Five out of seven cultures were positive in direct smear by acid fast staining and in PCR-16SrRNA, which indicates that the above-mentioned isolates belong to the *Mycobacterium* genus. Also, positive PCR-IS6110 confirmed that the isolate species are identified as *Mycobacterium tuberculosis* complex. Currently, we are conducting sequencing for the exact identification of these isolates.

**Conclusion:** Animals such as mice and cats that live in the farm can harbour *Mycobacterium*. In this study, it has been proven that cats certainly transfer *Mycobacterium* to the cattle farms.

### Biography

Khashaiar Mansouri is currently studying Doctor of veterinary medicine at the Islamic azad university Garmsar branch. His Research focus is on zoonotic diseases particularly *Mycobacterium* in cat and mice, as well as *Bukholderia mallei* in Guinea pig. Recently, he has given poster presentation in the 19th international and Iranian congress of microbiology.

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