Detection of *Mycobacterium Paratuberculosis* using polymerase chain reaction (PCR) in cow raw milk samples in shahre-kord

Shrafati-chaleshtori, R (MSc)

Food Health Department, Islamic Azad University, research & science Branch, Tehran, Iran

Shakerian, A (PhD)

Assistant Professor of Food Health, Islamic Azad University, Shahrekord, Iran

Momtaz, H (PhD)

Assistant Professor of Microbiology, Islamic Azad University Shahrekord, Iran

Sharafati-chaleshtori, F (MSc)

Lecturer, Microbiology Deptment, Shahrekord University of Medical Sciences, Shahrekord, Iran

Corresponding Author:

Sharafati-chaleshtori F

E.mail: sharafati33@yahoo.com

Abstract

Background and objectives: Paratuberculosis or John's disease is a chronic infectious disease of ruminants caused by *Mycobacterium avium subsp. paratuberculosis* (MAP). It results in major economic losses to dairy farm of all over the world and it is the agent causing crohn's disease. The aim of this study was to detect the MAP using PCR in raw-milk samples of cows in shahre-kord.

Material and Methods: In this cross–sectional study, 100 raw milk samples of cows were collected from both industrial and semi -industrial farms in shahre-kord. The DNA of all Samples was isolated by MAP, using PCR method.

Results: The results Show that only three (3%) Samples were positive for *Mycobacterium avium subsp. paratuberculosis*.

Conclusion: Based on our results, Milk -PCR was useful for detection of MAP in milk samples.

Key words: Mycobacterium paratuberculosis, milk, polymerase chain reaction.