

University of Zabol
Graduate School
Faculty of Veterinary
Department of Pathobiology

The Thesis Submitted for the Degree of masters (In the field of Veterinary)

Title:

Detection of Toxoplasma gondii DNA in sheep milk in sistan of Iran by PCR

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Abstract

Toxoplasmosis is one of the most dangerous protozoan diseases shared between humans and animals, which humans can be infected with in various ways. Eating unheated food of animal origin is one of the main causes of toxoplasmosis. Milk is one of the most consumed food all over the world and among all people of different ages in society, and considering the great importance of Toxoplasma gondii as a possible agent transmitted through milk, the aim of this study is to investigate the molecular prevalence of toxoplasmosis in the sample. Sheep milk was collected from Sistan region.

In the present study, 60 raw sheep milk samples were collected from different regions of Zabul city and were evaluated in the laboratory for the presence of Toxoplasma gondii and the presence of genes was checked by PCR method. The results of this study showed that one sample (1.67%) was infected with Toxoplasma gondii. Contamination of raw milk and traditional dairy products with Toxoplasma gondii can be independent of infected animals or as a result of non-observance of hygiene principles during the process of milking, transportation, storage and cross-contamination. Therefore, proper sanitization of milk before consumption is suggested.

Key words: Toxoplasma gondii, sistan, PCR