Abstract:

Abortion in dairy herds and fattening sheep, is causing huge economic losses. Several infection and non-infection factors are involved in this phenomena. Toxoplasma gondii, an obligatory intracellular protozoan parasite, is one of the causative agents of ovine abortion, as reported in many countries. Different techniques are being used to detect this pathogen in ovine aborted fetuses. One of the most sensitive and specific diagnostic techniques is PCR. Therefore this study was conducted to investigate on the prevalence of Toxoplasma gondii infection in aborted Baluchi sheep fetuses in Sistan district using PCR method. During the autumn, a total of 79 aborted fetuses, were collected from different part of Sistsn district and sampling operations began from their brains. Information of each fetus as independent variable, including keeping ewes area, age of fetus, history of ewes abortion, fetal sex, maternal age and number of location were recorded in a questionnaire. Data analysis were carried out using SPSS statistical software version 23 and a significance level of P < 0.05 were considered for that. The results revealed that T. gondii DNA was detected in 16% brain samples of ovine aborted fetuses. The prevalence of toxoplasma gondii in male fetuses was higher than that of the female fetuses (P>0.05).

Key words: *Toxoplasma gondii*, Abortion, Sistan, PCR



University of Zabol
Graduate School
Faculty of Veterinary
Department of Food Hygiene

The Thesis Submitted for the Degree of M.Sc (in the field of Veterinary)

Title:

A study on the prevalence of *Toxoplasma gondii* infection in aborted Baluchi sheep fetuses in Sistan district using PCR method

Supervisors:

Dr.D.Saadati

Dr.A.Daryani

By:

Ghasem Sanjarani

Summer 2017