



University of Zabol  
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**The Thesis Submitted for the Degree of Doctor of professionals  
(In the field of Veterinary)**

**A cross-sectional study of *bovine leukosis virus* in  
cow, sheep and goat population of Sistan and  
Baluchistan province by PCR**

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## Abstract

*Bovine leukemia virus* is RNA virus from the family of retroviridae and the deltavirus genus, which involves and settles in B lymphocytes and can cause leukemia or blood cancer in cattles. The aim of this study was to investigate the genes of bovine leukemia virus in cattles, sheeps and goats of Sistan and Baluchistan province of Iran by using of PCR method. In this study, 15 cows, 20 sheeps and 16 goats were randomly selected from 4 cities include of Zabul, Zahedan, Khash and Chabahar. blood samples were taken and the epidemiological informations was obtained with the help of a questionnaire, which included variables such as age, gender, number of births and type of nurturing were considered as independent variables and their effect on the level of contamination was evaluated using Pearson's Chi-Square test. The DNA of the samples was extracted and identified by PCR technique. In this study, out of a total of 15 cattle, 2 cows were positive and the virus was not isolated in any of the sheeps and goats. This study showed the presence of the virus in the cattle population of Sistan and Baluchistan which requires appropriate programs and acts to control and prevent of this infection.

Keywords: *Bovine leukemia virus*, Sistan and Baluchistan, cattle, sheep, goat, env, PCR