Abstract
Brucellosis is one of the most important zoonosis. Brucellosis is an endemic in some parts of word such as Iran. Beside causing abortion and financial problems for livestock, public healing could be vitality important to be noticed. This study was conducted to investigate the epidemiologic aspects of brucellosis among sheep and goats in Sistan area, with PCR assay. In this research, 150 Blood samples were collected from jugular vein. There were 92 and 58 blood samples were from sheep and goats respectively. risk factors such as age; sex, having history of abortion and pregnancy status has been recorded in questionnaire. Sampling took place 2017 in winter (between January and March). After serum separation in laboratory condition, samples were kept in -20 degrees of centigrade in order to use for the following assays. Every samples was used in PCR assays to identify species of *brucella melitensis* and genus *brucella*. 17 samples (11%) of total 150 samples were identified to be infected by Brucella which of all infected samples examined with *B.melitensis* primer were shown to be positive (11%). due to the importance of Brucellosis among humans and cattel (zoonosis), it is recommended to following related instructions in healthcare and also vaccinating almost all of sheep in the fold.

**Keywords:** *Brucella, Brucella Melitensis, PCR*
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