

Abstract

Coccidiosis is an important disease in the poultry industry which is caused by protozoa of Apicomplexa and *Eimeria* species which have direct life cycles and are characterized by enteritis. It is transferred between hosts by excretion of oocytes and can be detected by examining the form of oocytes in birds, measuring the sporulation period and histopathological observations. The aim of this study was to first "determine the abundance and diversity of *Eimeria* species in native birds in different regions of Sistan, and Secondly " evaluating the Histopathological changes of native chickens infected in the study. Methodology: A total of 2792 samples selected through random cluster sampling from areas of Zabol, Helmand, Adimi and Zehak were tested by the outbreak and severity of coccidia *Eimeria* oocytes based on the number of oocytes per gram of feces and the index (OPG) was determined. By using a solution of potassium bichromate 2,0 percent the diversity of *Eimeria* species was identified for each area. Results of the study showed that within the area of study, five species of *Eimeria* that were studied including *Eimeria acervulina* with 30,23 percent, *Eimeria maxima* with 20,70 percent, *Eimeria brunetti* with 19 percent, *Eimeria necatrix* with 10/23 percent and *Eimeria tenella* with 4,76 percent were observed and thus it can be concluded that the *Eimeria maxima* with 30,23 percent and *Eimeria tenella* with 4,76 percent respectively are possessing the highest and lowest rates of infection in domestic poultry compared to other species of *Eimeria*. Also *Eimeria maxima* and *E. Brunetti* with 20,70 and 19 percent respectively were in the second and third positions.

Keywords: coccidiosis, *Eimeria*, native poultry, Sistan



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**A study of coccidiosis prevalence in the Sistan's native chicken and compare
histopathological changes**

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