

## Study of prevalence Coccidian parasites in the soil of public places in Isfahan region in 1394-95

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### Abstract

**Introduction:** soil contamination with parasites as a serious risk for parasitic infections in humans and animals. Many studies carried out on frequency of parasites in soil samples in several parts of the world. However, there is a few epidemiological data about the prevalence of parasites in soil samples from various regions of Iran. Because of the importance of soil as an important source for transmission of parasites to humans and animals, this study was carried out to determine the prevalence of various forms of parasite such as oocysts.

**Materials and Methods:** A total of 150 soil samples were collected from public places of Isfahan city. Isolation of parasites from the soil, was performed by saturated solution of sodium nitrate. Then, the samples were observed under microscope and Positive isolates to sporulation and better recognize, poured in 3% potassium dichromate. All the isolates were studied for further investigations with acid-fast specific staining.

**Results:** Of the 150 isolates, 30 were positive and the others had no infection with coccidian parasites The results were as follows: 4 samples with *Toxoplasma gondii* oocysts. *Isospora sp.* oocysts 12 samples. 6 samples contained oocysts *Eimeria sp.* and 10 samples of *Cryptosporidium sp.*

**Conclusion:** Soil is considered as an important potential source in transmission of parasitic infections. According to our study, percent of parasites in the soil is decreased. Environmental hygiene is required for prevention of soil pollution and control of soil-borne parasitic infections especially.

**Key words:** Prevalence, Soil, coccidian, Isfahan, *Toxoplasma* oocyst, Isfahan