Abstract

Avian colibacillosis is one of the most common infections and E. coli is one causes of this disease. O antigen is detected on the surface of all bacteria. O antigen is one of the most divergent components of cell wall. Based on this fact, O antigen is a stand for arrangement of O serotypes for many of gram negative bacteria. Each serotype of E. coli has an important role in clinical form of colibacillosis disease and its rate of incidence. In different regions of Iran, although total incidence of colibacillosis is very high, few studies have been conducted on this subject by multi PCR method. The aim of this study was to define the frequency rate of O serotypes isolated from poultries with Colibacillosis in Zabol City. This study was performed for determination of *E. coli* O serotypes frequency, isolated from broiler chickens of Zabol. 100 isolates of *E. coli* were identified by performing microbial cultures and common biochemical tests. The DNAs of isolated bacteria were extracted by boiling method and their serotypes were identified by triplex PCR method. In this study, 26% of total isolates were related to O_{157} serotype, and 22%, 9% and 6% were related to serotypes O_{16}, O_{12} and O_{75}, respectively. The present study revealed that the majority of E. coli isolates extracted from broiler chickens with colibacillosis in Zabol City were related to O_{157} serotype.

Key words: Escherichia coli, Colibacillosis, O-serotypin

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O serotyping of *Escherichia coli* isolates collected from broilers with colibacillosis in Zabol

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