#### Abstract

Beef contamination usually occurs in the killing process, one of the intestinal bacteria that cause it to spread in humans and animals everywhere, is an *E. coli* bacterium. One of the important serotypes of this bacterium is Ecoli O157:H7.

The aim of this study was to determine the rate of contamination of beef produced in Zahedan to *Escherichia coli* by MPN Methode and also isolated of *O157:H7*strain by PCR. During this study, from July 1396 to July 1397 Within six months, 360 beef samples from red meat packages of Zahedan city, from different parts of the carcasses The isolation of the heat-resistant *Escherichia coli* in the laboratory was carried out using the MPN method. Seventy isolates were finally isolated. The final test was performed using a specific primer for *rfb* to detect *Ecoli O157:H7* using a PCR reaction. Only one isolate from The opinion of this serotype was confirmed, which indicates the proper health status of the meat produced in Zahedan

Keywords: Escherichia coli, O157: H7, MPN, PCR Method, Zahedan



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## The Thesis Submitted for the Degree of Master of Science (In the field of VeterinaryBacteriology)

### Title:

# Investigating the rate of pouring of beef produced in Zahedan to *Escherichia Coli* using MPN and detection

### of *O157: H7* by PCR

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