

Abstract

Salmonella bacteria are members of the enterobacteriaceae family, gram negative, aerobic and anaerobic, with a basil shape as large as 0.7-1.5× 2-5 microns and without spores and grow normally on normal culture media. Most *Salmonella* serotypes are potential pathogens for humans and many animals and birds. This bacterium is usually entered orally into the gastrointestinal tract and it is excreted through human stool or livestock and contaminates water and food and the environment. In addition to food poisoning associated with acute diarrhea and vomiting, *salmonella* sometimes causes meningitis and septicemia in children.

In this study, 150 poultry meat samples were collected from Zahedan township and then, using conventional biochemical methods, the bacteria were identified. The confirmed bacteria were biochemically introduced into the PCR reaction. Four *Salmonella* bacteria were confirmed by molecular method using *invA* gene. According to the results, the PCR reaction can be used as a precision method with high specificity to detect *Salmonella* bacteria in raw products.

Keywords: Zahedan, *Salmonella*, Poultry meat, Polymerase Chain Reaction, *invA*



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**The Thesis Submitted for the Degree of Master of Science
(In the field of Veterinary Bacteriology)**

Title:

**Evaluation of chicken meat contamination with
Salmonella spp. in Zahedan , Iran via PCR**

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Winter 2019