

## Molecular Detection of *Salmonella* Serovar Isolated from Eggs

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**Abstract**

**Background and Objective:** Salmonellosis is the most common type of food poisoning in developed and developing countries that is caused by *Salmonella* serotype. Hence, we aimed to identify the *Salmonella* serovars in eggs obtained from Kohgiluyeh and Boyerahmad province and to evaluate antibiotic resistance of the isolated strains.

**Material and Methods:** In this study, 210 eggs were collected from Kohgiluyeh and Boyerahmad Province. The bacteria were isolated and identified using biochemical tests. After extraction of genomic DNA, *Salmonella* gender, *Salmonella enteritidis* and *Salmonella typhimurium* were investigated by *invA*, *fliC* and *sefA* primers, respectively, using Multiplex PCR method.

**Results:** of 210, 14 (6.66%) were contaminated with *Salmonella*. Of these, 12 (5.71%) were *Salmonella typhimurium* and 2 (0.95%) were related to *Salmonella* spp. None of the samples were contaminated with *Salmonella enteritidis*. The highest resistance was related to penicillin (100%) and neomycin (78.57%).

**Conclusion:** *Salmonella typhimurium* is the predominant serovar causing contamination in the eggs of this Province. Given the wide spread of antibiotic resistance in different serotypes of *Salmonella*, we recommend avoiding of indiscriminate use of antibiotics in livestock and poultry.

**Keywords:** *Salmonella*, Drug Resistance, Antibiotic, Multiplex PCR, Kohgiluyeh and Boyerahmad