

Abstract

Galerida Cristata Sistan can be a carrier of human and animal pathogens, one of the most important of these bacteria is *Escherichia coli*. This bacteria is a cause of many diseases in humans. The aim of this study was to determine the prevalence of *Escherichia coli* bacteria in *Galerida Cristata* Sistan and some genes of *stx1*, *stx2*, *eae* and *hly* as well as antimicrobial resistance pattern of isolates. A total of 50 swabs were taken from the *Galerida Cristata*. Separation of the bacteria by culture was performed on differential environments. Antibiotic susceptibility testing was carried out for isolates by disc diffusion method. The presence of genes *stx1*, *stx2*, *hly* and *eae* in the isolates was evaluated by multiplex PCR method.

The results showed that the isolates were resistant to co-amoxyclav antibiotics (100%) and sefetriaxone (100%) and they were sensitive to cefixime. The PCR Multiplex method showed that 33 isolates of *Escherichia coli* isolated in one isolate (0.5%) with the *eae* gene showed positive band. The *stx1*, *stx2*, and *hly* genes did not show a positive result.

Keywords: *Galerida Cristata*, *Escherichia coli*, Virulence Factors, Antibiotic Resistance



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Title:

**Survey and comparison of *stx1* ,*stx2* ,*hly* and *eae*
frequency in *E.coli* isolated from *crested lark* collected in
Sistan, South East of Iran**

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