

## Short Communication

# Evaluation of microbial pollution of Caspian Sea at the Gorgan Gulf

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### Abstract

**Background & Objective:** Gorgan Gulf, with unique environmental value, has been located at the eastern south region of the Caspian Sea. It has not only valuable fish species such as strugen, Caspian roach, carp and vobla fish which supply a great part of daily protein need of our country and the world, but also its beaches are used for swimming. Therefore Lack of observation for environmental regulations result in entrance of microbial pollutants into Gorgan Gulf and creates dangers both for human health and for marine environment. So the evaluation microbial pollution for these beaches and comparing them with standards is an essential need. This study was done to evaluate microbial pollution for Caspian Sea at Gorgan Gulf.

**Materials & Methods:** 40 sea water samples were collected during spring and autumn of 2004 at Gorgan Gulf for evaluation of sea water in Gorgan Gulf microbial pollution and also the mean total number of bacteria, coliforms, fecal coli forms and fecal streptococci was determined by standard method.

**Results:** The results indicated that the mean total number of bacteria, coli forms, fecal coli forms and fecal streptococcus were 5001/1cc, 1555/100cc, 817/100cc and 59/100cc respectively.

**Conclusion:** Mean results compared with related standard (both for swimming beach and piscicultres) and we found that Gorgan Gulf beaches have been polluted for swimming applications, but it is not the case for piscicultures.

**Keywords:** Microbial pollution, Caspian Sea, Gorgan Gulf

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