

## Isolation of *Vibrio parahaemolyticus* from Tissue of *Trochus erythreus* (Trochidae) in Genaveh Port, North Coast Persian Gulf, Iran

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**Background & Objectives:** The Trochidae is a large family with worldwide distribution and the range of diets of the trochids corresponds to the range in habitats. Hard substrate species graze on algae, algal spores, detritus or bacteria; some species live on and consume macroscopic algae. The species *umbonium vestiarius*, which are infaunal soft-bottom inhabitants, are unusual in the family as they filter particulate matter from the water and bind it in mucous for consumption. *Vibrio parahaemolyticus* is a ubiquitous marine bacterium and human pathogen. The purpose of this study of in *Vibrio Parahaemolyticus* Isolated from species *Trochus erythreus* (Trochidae) of Genaveh Port in the North Coast Persian Gulf, Iran.

**Methods:** It extends form The research area is located in the Genaveh Coastal of North Persian Gulf was selected as the study area. Random samples from *Trochus erythreus* (Trochidae) One hundred were collected from coast, during October to December 2010. On examination was sampling from *Trochus erythreus* different parts of intracellular tissues and transported to TSA agar and then the biochemical examination were recognized vibriaceae. On the basis of colony shape on Thiosulphate Citrate Bile Salt sucrose (TCBS) agar, catalase activities, motility and sensitivity to vibriostatic and growth in peptone water at different NaCl concentrations (0%, 3%, 6%, 8% and 10%). A more complete genus identification was obtained using the API 20E test.

**Results:** In order to evaluate the degree of microbial pollution of the investigated area, fecal coliforms and *Escherichia coli* densities were also determined. Some *Vibrio* species such *Vibrio parahaemolyticus* (Blue to green centered colonies) were present as well as in intracellular tissues *Trochus erythraeus* (Trochidae). The isolation of some potential pathogenic vibrio species shows the importance of *Vibrio* research to estimate water quality and to avoid transmission of infection to man and to other marine organism.

**Conclusion:** *Vibrio parahaemolyticus* is found mainly in foods of marine origin, and studies carried out in the USA found that 60 - 100 % of seafood samples were contaminated with the organism. Coliform, fecal coliform, Enterobacteriaceae and virus populations found in the raw sewages and sewage effluents coastal Genaveh of the Persian Gulf that finally, the effects on the environment that adversely affects the coast. The circulation of *Vibrio parahaemolyticus* was medium in the Genaveh coast.

**Keywords:** *Vibrio parahaemolyticus*; Tissue; Mollusca; Persian Gulf