Prevalence and Molecular Characterization of Vibrio parahaemolyticus in Estuarine Fish from Dhaka City Markets

Authors : Fahmida Khalique Nitu

Abstract : Little is known on the biosafety level of Vibrio parahaemolyticus in estuarine fish in Bangladesh. The purpose of this study was to investigate the prevalence and concentration of V. parahaemolyticus in estuarine fishes using the Polymerase Chain Reaction(PCR) method . The study was conducted on 37 fishes of different species from different types of estuarine fish commonly sold at city markets. Sampling was done on the intestinal tract and gills of each fish. The prevalence of V. parahaemolyticus was found to be 29.72% with higher percentages detected in samples from the gills (89.28%) followed by the intestinal tract (10.71%). The density of Vibrio spp. in the gill of estuarine fishes with an average was 4.4×103 CFU/g and in the intestine samples was 1.5×103 CFU/g. The outcome of the biosafety assessment V. parahaemolyticus in estuarine fish indicates another potential source of food safety issues to consumers.

Keywords : biosafety, estuarine, prevalence, Vibrios

Conference Title : ICBE 2016 : International Conference on Biodiversity and Ecosystems

Conference Location : Istanbul, Türkiye

Conference Dates : April 19-20, 2016

1