Detection of Vibrio parahaemolyticus in cockle (Anadara granosa) by PCR

Abstract

This study aimed to determine the occurrence of Vibrio parahaemolyticus in cockles (Anadara granosa) at a harvesting area and to detect the presence of virulent strains carrying the thermostable direct hemolysin (tdh) and TDH-related hemolysin genes (trh) using PCR. Of 100 samples, 62 were positive for the presence of V. parahaemolyticus with an MPN (most probable number) value greater than 3.0 (>1100 MPN per g). The PCR analysis revealed 2 samples to be positive for the tdh gene and 11 to be positive for the trh gene. Hence, these results demonstrate the presence of pathogenic V. parahaemolyticus in cockles harvested in the study area and reveal the potential risk of illness associated with their consumption.