

Detection of total and pathogenic *Vibrio parahaemolyticus* by Polymerase chain reaction using toxR, tdh and trh genes

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Abstract

The levels of total and pathogenic *Vibrio parahaemolyticus* were estimated in 105 samples (each 35 of fresh water fish, sea fish and mutton) using cultural and polymerase chain reaction (PCR) methods by amplification of toxR gene for total *V. parahaemolyticus*, tdh and trh genes for pathogenic *V. parahaemolyticus*. Out of 105 samples, 30 (28.6%), 39 (37.1%) samples gave positive results for total *V. parahaemolyticus* by cultural and PCR methods respectively. Out of 39 samples positive for PCR 6 (5.7%), 28 (26.6%) and 3 (8.6%) were positive for tdh, trh and both tdh and trh respectively.

Key Words: *Vibrio parahaemolyticus*, PCR, Gene, Laboratory Technique, Pathogenic Organism.