

OCCURRENCE, CHARACTERISATION AND DETECTION OF POTENTIAL VIRULENCE DETERMINANTS OF EMERGING AQUATIC BACTERIAL PATHOGENS FROM THE PHILIPPINES AND THAILAND

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SUMMARY

Strains of Aeromonas spp., 'non-cholera vibrios' (NCVs) and Plesiomonas shigelloides isolated from aquatic environments, fish and human diarrhoeal cases in the Philippines and Thailand were characterised for potential virulence markers. Thus, the production of cytotoxin, cell-associated and cell-free haemolysin and their capacity to adhere to human intestinal (Henle 407) cells in vitro was investigated. In addition, the occurrence of tlh and tdh haemolysin genes and urease activity among V. parahaemolyticus strains was investigated. The results showed that strains recovered from clinical sources (human and fish) produced these virulence factors, whereas these are absent in environmental strains.

KEY WORDS: Aeromonas spp.; Vibrio spp.; P. shigelloides; Philippines; Thailand; virulence factors

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