



# Flatfish Pathogens in Marine Aquaculture and Their Importance in Medicine



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Received date: October 2, 2015

Accepted date: October 5, 2015

Published date: October 6, 2015

**Citation:** Wiwanitkit, V., et al. Flatfish Pathogens in Marine Aquaculture and Their Importance in Medicine. (2015) J Marine Biol Aquacult 1(2): 30.

## Introduction

An important concern in aquaculture is the pathogen causing infections. For the flatfish aquaculture, the two important pathogens are *Tenacibaculum maritimum* and *Edwardsiella tarda*<sup>[1]</sup>. The pathogens can be the problem to the fishes. In addition, the problem to human being should also be discussed. Focusing on the two pathogens, there are some reports on human infected cases, especially those caused by *Edwardsiella tarda*. *Edwardsiella tarda* can cause the gastrointestinal infection in human beings. For *Edwardsiella tarda*, it is also reported as a cause of human infected hepatic cyst<sup>[2,3]</sup>. It is also reported as a pathogen causing infection in a case with relapse of ulcerative colitis<sup>[4]</sup>. Kadam concluded that "A bacterium associated with fresh water ecosystems, can cause life-threatening illnesses in susceptible hosts<sup>[5]</sup>." Gauthier noted that "some epidemiological and/or molecular linkages have been made between other bacteria infecting both fishes and humans, but more work is needed to elucidate routes of transmission and the identity of these pathogens in their respective hosts at the genomic level<sup>[6]</sup>." Based on the existed evidence, disease from flatfish to human beings during aquaculture as a new emerging zoonosis must be a new interdisciplinary issue for future research<sup>[7]</sup>.

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