

Withering Syndrome of the Small Abalone, *Haliotis diversicolor supertexta*, Is Caused by *Vibrio parahaemolyticus* and Associated with Thermal Induction

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The susceptibility of the small abalone *Haliotis diversicolor supertexta* to *Vibrio parahaemolyticus* 880915 strain and its extracellular products (ECP) at different temperatures was investigated. The strain was previously isolated from the haemolymph of the moribund small abalone with withering syndrome during an outbreak of mass mortality among the cultured animals in September 1999 in I-Lan, Taiwan. The bacterium and its ECP were lethal to the small abalone. Onset of the withering syndrome in the moribund or dead animals could be observed at 4–7 d post-bacterial challenge. The same bacterial strain could be isolated from the haemolymph of the moribund animals with or without the syndrome post-bacterial challenge. This syndrome could not be observed in the moribund or dead animals post-ECP challenge. The animals were more susceptible to the bacterium and ECP challenge at higher temperature (28 °C) indicating that the outbreak of the disease in warmer season is associated with thermal induction.