Detection and genetic profiling of infectious hypodermal and haematopoietic necrosis virus (IHHNV) infections in wild berried freshwater prawn, *Macrobrachium rosenbergii* collected for hatchery production

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**Abstract**

Infectious hypodermal and haematopoietic necrosis virus (IHHNV) has been detected widely in penaeid culture facilities in Asia and the Americas. IHHNV infection on sub-adult and postlarvae of the giant freshwater prawn, *Macrobrachium rosenbergii* which had caused up to 80% mortalities was first reported in Southeast Taiwan in 2006. In Malaysia, although, there has been no report on IHHNV infections in *M. rosenbergii*, preliminary work suggests that there is an urgent need to setup a screening protocol for IHHNV for both wild and cultured populations. In this study, polymerase chain reaction based screening was carried out on 30 randomly sampled berried wild *M. rosenbergii* before and after spawning. All samples did not showed any sign of IHHNV infection. However, the results showed that 20% of the samples were IHHNV positive. Sequence analysis of the amplified band using NCBI-BLAST showed that the putative IHHNV sequence had 98% nucleotide sequence (388 bp) identity with the IHHNV isolate AC-05-005 non-structural protein 1 gene and seven other IHHNV strains in the data bank further affirming the suggestion on the presence of IHHNV in wild freshwater prawn populations in Malaysia.