

ENDOGENOUS VIRAL ELEMENTS (EVE) OF *Decapod penstylhamaparvovirus 1* (INFECTIOUS HYPODERMAL AND HEMATOPOIETIC NECROSIS VIRUS, IHHNV) – IMPLICATIONS FOR SHRIMP DIAGNOSIS

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(IHHNV), now renamed *Decapod penstylhamaparvovirus 1*. IHHNV is a ssDNA virus in the family Parvoviridae, one of the smallest penaeid shrimp viruses encoding three ORFs and AF218266.2, 3909 bp). This virus was found integrated in the *P. monodon* genome collected from Australia, Thailand, Africa (Tang et al. 2003; Tang & Lightner. 2006). In some African isolates, IHHNV (DQ228358) was found inserted into *RTE-2_PMo* non-LTR retrotransposon in Replibase (www.girinst.org), and these DQ228358-like insertions are absent in other *P. monodon* isolates. We suspect IHHNV have also endogenized *P. vannamei* and some IHHNV-EVEs remain in some *P. vannamei* genomes IHHNV

be confirmed once a new, continuous, fully assembled reference genome for SPF *P. vannamei* from the USA is available (expected size: 2.87 Gb). A new reference genome for *P. vannamei* is urgently needed to help improve accuracy in diagnosis of IHHNV/*Decapod penstylhamaparvovirus 1* (OIE PCR, multiplex PCR, IQ 2000 LAMP).