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A novel real-time PCR approach for detection of infectious hypodermal and haematopoietic necrosis virus (IHHNV) in the freshwater crayfish *Procambarus clarkii*

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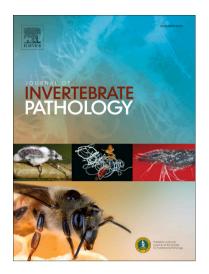
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.A novel real-time PCR approach for detection of infectious hypodermal and haematopoietic necrosis virus (IHHNV) in the freshwater crayfish *Procambarus clarkii*

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Abstract: Infectious hypodermal and haematopoietic necrosis virus (IHHNV) infects many crustacean hosts, including cultured penaeid shrimp. In the present study, we aimed to develop a novel sensitive SYBR Green-based real-time PCR method to specifically amplify DNA fragments of IHHNV. Our newly developed real-time PCR method with a 195-bp amplicon specifically detected IHHNV and showed no cross reaction with white spot syndrome virus (WSSV), hepatopancreatic parvovirus (HPV), Enterocytozoon hepatopenaei (EHP), infectious myonecrosis virus (IMNV) and yellow-head virus (YHV). This method could detect as low as one single copy of IHHNV plasmid DNA, more sensitive than other SYBR Green-based real-time PCR methods and less expensive and more convenient than the TaqMan probe-based real-time PCR. Moreover, our data using the newly designed method showed that

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