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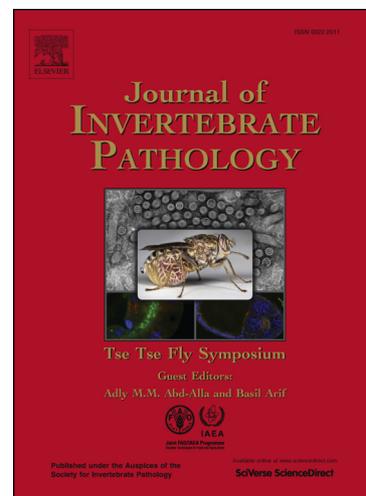
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**Reverse transcription loop-mediated isothermal amplification for
rapid and quantitative assay of covert mortality nodavirus in
shrimp**

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Abstract

A disease known as covert mortality disease has become an increasing problem in the shrimp farming industry in recent years in China and several countries of Southeast Asia, leading to serious losses in production. *Litopenaeus vannamei* (also known as Pacific white shrimp) is affected by this disease that leads to a range of clinical symptoms including hepatopancreas atrophy and necrosis, soft shell, slow growth, and abdominal muscle whitening and necrosis in the acute stage of disease. A new nodavirus, termed covert mortality nodavirus (CMNV), has been shown to be the etiological agent. In this study, we report a sensitive and specific real-time reverse transcription loop-mediated isothermal amplification (RT-LAMP) assay for the rapid

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