

重要水產動物病原檢測結果

生物研究組

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摘要

109 年重要的水產動物病原為十足目虹彩病毒，本病毒為 2014 年新浮現的蝦類病毒，主要可感染白蝦、澳洲螯蝦及泰國蝦等，目前已在中國 11 個省份造成嚴重損失。我們利用 2 種定量聚合酶鏈反應及 1 種巢內聚合酶鏈反應方法針對來自 14 個縣市(包括新北、桃園、新竹、苗栗、彰化、雲林、嘉義、台南、高雄、屏東、台東、花蓮、宜蘭、金門)的 160 場蝦類養殖場、24 場種苗場、42 場大閘蟹場及 33 批進口蝦苗進行調查。在 160 場國內蝦類養殖場發現 22 場陽性場(包括 17 場澳洲螯蝦、4 場白蝦及 1 場草蝦)。其結果暗示無臨床症狀不顯性感染的澳洲螯蝦應該是扮演病毒保毒場所。

Investigation of important aquatic pathogens

Chien Tu

Abstract

Since 2014, a newly emergent shrimp virus, decapod iridescent virus 1 (DIV1), has infected most cultured shrimps, especially for *Litopenaeus vannamei*, *Cherax quadricarinatus* and *Macrobrachium rosenbergii*. Recently, DIV1 caused severe die-off in shrimp farms in 11 provinces in China. We have achieved an investigation on shrimp samples of 160 shrimp farms, 24 shrimp hatcheries, 42 Chinese mitten crab farms from 14 counties/cities (New Taipei, Taoyuan, Hsinchu, Miaoli, Changhua, Yunli, Chiayi, Tainan, Kaohsiung, Pingtung, Taitung, Hualien, Ilan, and Kimen) and 33 batches of imported shrimp larvae using two quantitative polymerase chain reactions (qPCR) and a nested PCR (nPCR) methods. Out of 160 shrimp (white leg shrimp, giant river prawn, red claw crayfish, and black tiger shrimp) investigated farms, there were 22 farms tested positive for DIV1, including 17 farms of red claw crayfish, 4 farms of white leg shrimp, and 1 farm of black tiger shrimp farm. The results showed that the inapparent red claw crayfish with no clinical signs should play a role in a reservoir of DIV1.