白蝦病原監控與分析

生物研究組

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摘要

為提升國內白蝦養殖場生物安全,本所於109年至111年間與水試 所、漁業署及學校學者組成專家團隊下鄉服務白蝦生產業者,協助現 場疾病檢診及調查臺灣白蝦繁養殖場疾病現況,以釐清我國白蝦繁養 殖場生物安全風險來源。針對種苗業者,期間共協助5家國內種苗業 者監測其生產蝦苗是否帶有病原,並依檢驗結果給予輔導,協助2家 進口苗商監測其進口蝦苗是否帶有病原。針對一般白蝦養殖場,每年 約協助70家養殖場檢測其放養蝦苗是否攜帶病原,並於養殖期間協助 病例檢驗。例行檢驗項目以白點病、急性肝胰臟壞死症、對蝦肝胰腺 微孢子蟲病及黃頭病毒基因1型為主,另送檢病例則視症狀及病史增 加檢驗其他懷疑病原,並協助進行環境監測。綜整三年輔導結果,由 繁殖業者送樣及養殖場蝦苗監測結果可見對蝦肝胰腺微孢子蟲病是 最常見的病原。於送檢病例中,白點病毒及蝦類急性肝胰腺壞死綜合 症是主要造成大量死亡的病原;除病原性疾病,大雨後養殖池未能妥 善管理也是養殖白蝦大量死亡的原因。

Analysis of surveillance data for Major Pathogens in

White Shrimp

I-Wen Chen

Abstract

From 2020 to 2022, a technical service team consisting of the Animal Health Research Institute, Fisheries Research Institute, Fisheries Agency, and scholars was set up to improve the white shrimp industry's biosecurity. During the period, we regularly detected pathogens in shrimp fry from 5 domestic breeders and 2 importers and provided solutions according to the results. Every year, we help about 70 white shrimp farms detect pathogens in shrimp fry before breeding and provide disease diagnosis services. The detection focused on white spot disease virus (WSDV), acute hepatopancreatic necrosis disease (AHPND), *Enetrocytozoon hepatopanei* (EHP), and yellow head virus genotype 1 (YHV1); other suspected pathogens were tested according to the clinical signs and history of the submitted cases. Furthermore, environmental samples were collected and tested for suspected pathogens. The most common pathogen in shrimp fry was EHP. Among the submitted cases, WSDV and AHPND showed mass mortality. Besides pathogens, poor management after heavy rainfall was also the most common cause of mass mortality.