報告

豬瘟研究組

黄有良助理研究員、鄧明中研究員兼組長

摘要

自 2018 年 8 月中國爆發非洲豬瘟疫情後,此疾病已擴散至東北 亞與東南亞,並成為此區域最為重要的豬隻疾病,而即時疾病確診 工作實乃防治非洲豬瘟的重要基石。家畜衛生試驗所(簡稱畜衛所) 依世界動物衛生組織陸生動物及疫苗手冊建立非洲豬瘟病毒核酸檢 測技術與病毒分離技術,並成功自邊境檢疫肉製品及離島海漂豬隻 檢體檢出非洲豬瘟病毒核酸,唯欠缺含有活病毒的樣本測試病毒分 離技術,為填補此缺口,畜衛所於 108 年 10 月 23 日與越南國家獸 醫研究所簽訂非洲豬瘟合作備忘錄,並於 108 年 12 月 24 至 30 日間 赴該實驗室進行測試,試驗期間成功利用越方所提供之試驗樣品分 離出非洲豬瘟病毒,確認畜衛所建立的非洲豬瘟病毒分離技術可成 功分離出病毒,確認我國非洲豬瘟病毒診斷技術可因應臨床檢體演 驗所需。

The African Swine Fever diagnosis and monitoring program

at the National Institute of Veterinary Research, Vietnam

Yu-Liang Huang, Ming-Chung Deng

Abstract

Since the August 2018 outbreak of African Swine Fever (ASF) in China, the disease has spread to South Asia and North Asia and became the most important disease affecting swine in the region. An important cornerstone for ASF disease prevention and control is based on rapid diagnostic test results. Therefore, ASF diagnostic methods were developed at the Animal Health Research Institute (AHRI) according to the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals, and was implemented for the successful detection of ASFV nucleic acids from illegal meat production operations and floating pig carcasses. However, ASFV was not detected in these ASFV-positive samples due to insufficient viral nucleic acid extraction. In order to improve ASFV detection methods, researchers from AHRI examined the methods used at the National Institute of Veterinary Research (NIVR) in Hanoi, Vietnam from December 24-30, 2019, under the memorandum of understanding for the cooperation in ASF diagnosis and monitoring between AHRI and NIVR. The methods developed at AHRI for ASFV nucleic acid isolation and molecular detection were found to successfully detect ASFV in ASFV-positive field samples. Thus, this ASFV diagnostic method can meet the needs for clinical examination and monitoring in swine populations.