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臺灣首例非洲豬瘟診斷

新興傳染病組

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摘要

非洲豬瘟為高度致死性之重要豬隻傳染病且於全球跨境傳播，2025 年 10 月，臺中市一處豬場於短期內發生大量豬隻死亡案件，累積死亡率達 37.5%以上。臨床表現包括呼吸困難、猝死及鼻腔出血，病理解剖可見皮膚、腎臟及多處淋巴組織明顯出血及脾腫大，疑似病例樣本經送交農業部獸醫研究所檢驗後，依據世界動物衛生組織（WOAH）《陸生動物疾病診斷與疫苗手冊》建議之非洲豬瘟診斷方法，進行分子生物學及病理學檢測，結果顯示，受檢組織之 real-time PCR、傳統 PCR 檢測皆呈陽性，並成功分離病毒，於血球吸附試驗（HAD test）呈現典型陽性反應，且完成基因定序比對分析。為輔助臨床與分子證據，亦進行組織病理學檢查，觀察到脾臟、淋巴結及腎臟等處有出血性或壞死性病變，利用免疫組織化學染色於選定組織中證實非洲豬瘟病毒抗原存在。然而，病理學及免疫標記檢測僅作為輔助佐證，非 WOAH 官方必需之確診方法。綜合前述病毒核酸檢出、病毒分離及其他實驗室診斷方法，本病例符合 WOAH 之非洲豬瘟確診標準，確認為臺灣首例非洲豬瘟確診案例。

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Diagnosis of the first confirmed case of African swine fever in Taiwan

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Abstract

African swine fever (ASF) is a highly lethal infectious disease of pigs and transboundary transmitted globally. In October 2025, a commercial pig farm in Taichung, Taiwan, experienced a sudden outbreak with extensive pig mortality within a short period of time, resulting in a cumulative mortality rate exceeding 37.5%. Affected animals exhibited clinical signs including respiratory distress, sudden death, and nasal hemorrhage. Gross pathological examinations revealed prominent hemorrhagic lesions in the skin, kidneys, and various lymphoid tissues, as well as splenomegaly. The samples from suspected cases were submitted to the Veterinary Research Institute, Ministry of Agriculture, for laboratory analysis. Diagnostic testing was conducted in accordance with the African swine fever diagnostic methods recommended in the World Organisation for Animal Health (WOAH) Terrestrial Manual. Molecular analyses confirmed that multiple tissue samples tested positive for the African swine fever virus (ASFV) using both real-time PCR and conventional PCR methods. Virus isolation was successfully achieved, and typical positive reactions were observed in the hemadsorption (HAD) test, followed by genetic sequencing and comparative analysis. To support the clinical and molecular findings, histopathological examinations were conducted, revealing hemorrhagic and/or necrotizing lesions in the spleen, lymph nodes, and kidneys. Immunohistochemical staining further indicated the presence of ASFV antigens in selected tissues. However, the pathological and immunolabeling findings were considered supportive evidence and do not constitute mandatory confirmatory methods according to WOAH standards. The integration of viral genome detection, virus isolation, and other diagnostic techniques confirmed that this case met the WOAH criteria for African swine fever confirmation, marking it as the first confirmed case of ASF in Taiwan.