

臺灣2011年豬生殖與呼吸綜合症之病理學研究

行政院農業委員會家畜衛生試驗所

疫學研究組

張仁杰、蔡國榮、涂央昌、許偉誠、莊為傑、李淑慧

摘要

2011 年動物疾病診斷中心豬隻檢驗病例結果分析，191 例檢診病例中，單獨檢出豬生殖與呼吸綜合症（PRRS）比例為 13%（24/191）、豬環狀病毒第二型（PCV2）比例為 11%（21/191），兩者皆檢出比例高達 49%（93/191），得知 PRRS 之檢出明顯較前兩年增加，為困擾養豬產業重要之疾病因子之一。本報告以北部地區某牧場於 2011 年 7 月至 10 月間發生 PRRS 疫情處理模式為例，應用健康監測技術平台，綜合臨床病理學、微生物學及分子生物學等檢驗結果，確診該場為 PRRS 爆發場，成功控制本病，發病母豬之病理學檢查可見非化膿性腦膜腦炎、心肌炎、間質性肺炎、間質性腎炎及子宮黏膜壞死等病變，保育豬病理學檢查可見間質性肺炎，立即建議該場使用 PRRS 疫苗免疫母豬群，3 至 4 週後母豬流產疫情趨緩，流行期間母豬流產盛行率約 10%（60/600），死亡率約 15%（9/60），此外，保育豬出現虛弱、消瘦、背毛粗剛及呼吸症狀，盛行率約 50%，經本所檢診服務後，疫情爆發後之育成率由 90%下降至 60%。本所提供之檢診與健康監測技術平台有效協助牧場早期預警及採取積極防治措施，同年 10 月該場育成率已恢復 90%以上。

The Pathological Findings of Porcine Reproductive and Respiratory Syndrome in Taiwan in 2011

Animal Health Research Institute, Council of Agriculture, Executive Yuan
Jen-Chieh Chang, Kwok-Rong Tsai, Yang-Chang Tu, Wei-Cheng Hsu,
Wei-Chieh Chuang, Shu-Hwae Lee

Abstract

The reports of pig disease diagnosis from Animal Disease Diagnostic Center at AHRI in 2011 revealed that the detection rates of PRRS-alone infection was 13% (24/191), PCV2-alone infection was 11% (21/191) and PCV2 and PRRSV dually infection was 49% (93/191). The cases of PRRS have been increased obviously in the last two years and PRRS was listed in the group of important pig diseases affected the benefit of porcine industry. This study gave a successful example for dealing with a PRRS outbreak in the pig farm in northern Taiwan during July to October, 2011. The technical platform of animal health surveillance was applied and clinical pathology, microbiology and molecular biology were performed to diagnose PRRS and control the outbreak. The pathological examination of the diseased sow showed nonsuppurative meningoencephalitis, myocarditis, interstitial pneumonia, interstitial nephritis and mucosal necrosis of the uterus. We also found interstitial pneumonia in diseased nursery pigs. The producer adopted our recommendation to vaccinate the sows with PRRS vaccine. After vaccination, the situation of sow abortion was getting better in the following 3-4 weeks. The prevalence of sow abortion was about 10% (60/600) and the mortality was 15% (9/60). In addition, the nursery pigs showed the clinical signs of weak, thinness, rough hair coat and respiratory syndrome. The prevalence of this epidemic in nursery pigs was about 50% and the survival rate decreased from 90% to 60% after the outbreak. Our institute offers the services of animal diagnosis and health surveillance platform and effectively assists pig farms in developing early warning system and taking active control strategies. The survival rate in October 2011 has returned to the average above 90%.