

104 年度台泰農業合作「臺泰重要豬隻病毒疾病診斷試劑及實驗室診斷技術發展合作」與「口蹄疫國家/參考實驗室診斷技術與經驗交流」

出國報告

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摘要

藉由臺泰第四次農業合作會議，促成此次與泰國獸醫研究單位的國際交流，主要針對「臺泰重要豬隻病毒疾病診斷試劑及實驗室診斷技術發展合作」與「口蹄疫國家/參考實驗室診斷技術與經驗交流」等兩項議題進行國際交流，分別參訪了農業合作部畜產發展處、國家動物衛生研究所、獸醫生物藥品局、口蹄疫參考實驗室、動物衛生研究所獸醫生物藥品檢定組與泰國朱拉隆功大學獸醫學院新浮現與再浮現動物傳染病中心，並於國家動物衛生研究所進行本所所開發的豬瘟與豬生殖與呼吸綜合症診斷試劑的測試，於豬瘟單株抗體與核酸檢測均具有良好的呈現，對未來要成立參考實驗室是一大診斷利器，至於 PRRSV 的診斷試劑，對於高病原性的 PRRSV 與美洲型 PRRSV 具有良好的敏感性與特異性，但對於歐洲型 PRRSV 的敏感性不足，需加以改良，將借重泰國的診斷技術重新建置歐洲型 PRRSV 的診斷方法，另外，於參訪過程中也針對豬瘟、豬生殖與呼吸綜合症、口蹄疫等重大疾病的診斷與防疫進行經驗分享與交流，藉由此國際交流可瞭解泰國在於動物疾病診斷與防治之做法，泰方具有良好的診斷方法與防治措施，可做為我國重要疾病診斷與防疫之借鏡。

Report on the Development of Diagnostic Test Kits and Laboratory Diagnostic Techniques for Important Swine Viral Diseases and Exchange of Diagnostic Techniques and Experiences in a FMD National/Reference Laboratory during a Visit to Thailand

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Abstract

As part of a bilateral collaborative project between Taiwan and Thailand under the Taiwan-Thailand Agricultural Cooperation Agreements, Drs. Tsai, Deng and Huang from our institute visited several governmental veterinary agencies in Thailand, including the Department of Livestock Development, the National Institute of Animal Health, the Bureau of Veterinary Biologics, the OIE SEA FMD Reference Laboratory, the Veterinary Biologic Assay Division, the Center of Emerging and Re-emerging Infectious Diseases in Animals at Chulalongkorn University, while attending the 4th Taiwan - Thailand Agricultural Symposium held from the 17th August 2015 to 21st of August 2015. The main objective of the visit was to discuss the diagnostic techniques of transboundary diseases and exchange experiences in the prevention and monitoring of the diseases. The diagnostic kits and monoclonal antibody of classical swine fever virus (CSFV) and porcine reproductive and respiratory syndrome virus (PRRSV) were tested in the field samples collected in Thailand. The results of CSFV monoclonal antibody and diagnostic kits showed high sensitivity and specificity, demonstrating their reliability and commercial values to the National Institute of Animal Husbandry (NIAH) of Taiwan when establishing an OIE reference laboratory on CSFV. The high sensitivity and specificity were also found in the results of PRRSV diagnostic kits against the North American (NA) genotype and highly pathogenic (HP)-PRRSV. However, the results of PRRSV diagnostic kits against the European (EU) genotype were poor, highlighting the need to further optimize the existing diagnostic techniques. In addition, the experiences for disease control and diagnosis of foot-and-mouth disease (FMD), CSFV, and PRRSV were also discussed during this visit. These experience exchanges can help us understand the diagnostic methods and controls against animal diseases in Thailand. In this light, we can learn from Thailand's skillful diagnostic methods and control measures.

