2015 年臺灣蝙蝠麗沙病毒及狂犬病抗體監控

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麗沙病毒屬(*Lyssavirus*)至少可區分成 14 種麗沙病毒，其中狂犬病病毒屬第一基因型，麗沙病毒感染人類及溫血動物，其引起之臨床症狀及致死率與狂犬病相似。蝙蝠已被證實可作為麗沙病毒之保毒宿主，本所自 2008 年起執行蝙蝠麗沙病毒監測計畫，本年已收集 85 例蝙蝠腦組織(品種包含:家蝠、東亞家蝠、棕蝠、台灣管鼻蝠、台灣葉鼻蝠、高頭蝠、摺翅蝠)，其麗沙病毒抗原檢測結果均呈陰性。另收集口腔拭子及糞便共 12 例，其麗沙病毒核酸檢測結果均呈陰性。2015 年與美國疾病管制局合作檢測麗沙病毒抗體，將 2008、2011~2014 年收集之蝙蝠血清送至美國進行檢測，以 CVS-11 進行 micro RFFIT 檢測血清中和抗體，完成 94 例檢測，狂犬病抗體結果均呈陰性。返國後於本所實驗室建立 micro RFFIT 檢測技術，進行歷年~2015 年蝙蝠血清之檢測，其中完成 165 例檢測，狂犬病抗體結果均呈陰性。另 9 例因血清毒性導致細胞生長不良或死亡等原因，而無法進行判讀者，則將進行後續複測。

Lyssavirus and rabies virus antibody monitoring of Taiwanese bats

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The genus *Lyssavirus* can be divided into 14 species, and rabies virus belongs to genotype 1. Lyssavirus can infect a variety of mammals, causing rabies and rabies-like clinical symptoms. Bats have been shown to be reservoirs of lyssavirus. The Animal Health Research Institute (AHRI) has conducted a bat lyssavirus survey project since 2008. A total of 85 bat brain samples from 6 species, including *Pipistrellus abramus, Murina puta, Hipposideros armiger terasensis, Scotophilus kuhlii, Miniopterus schreibersii*, were collected in the past year. The direct fluorescent antibody test (dFA) was applied to check the presence of lyssavirus antigens, and all samples were negative. Twelve samples of oral swabs and feces were collected and found to be negative via RT-PCR detection for lyssavirus. Furthermore, the bat sera collected between 2008 and 2014 were transported to the Centers for Disease Control and Prevention (CDC),USA for rabies antibody detection in 2015 under a collaboration agreement between the United States and Taiwan. A total of 94 bat sera were negative of rabies antibodies via micro rapid fluorescent focus inhibition test (RFFIT) with the challenge virus standard (CVS)-11 strain. After several training courses, the micro RFFIT technique was then established at the AHRI to test the remaining bat sera in our laboratory. Among them, 165 samples were negative for rabies antibodies via micro RFFIT, while 9 samples are still awaiting retest due previous to poor cell growth or cell death induced by sera toxicity.