**牛流行熱新外來病毒株流行病學探討**

疫學研究組

丁履紉 副研究員

**摘要**

牛流行熱（bovine ephemeral fever，BEF）為節肢動物媒介疾病，病原為桿狀病毒科的牛流行熱病毒。臺灣自1967年開始傳出疫情。分析2013-2014年臺灣牛流行熱病毒株G醣蛋白基因親緣性，發現2013-2014年毒株與臺灣2012年以前病毒株之基因群核苷酸序列相似性較低為96.2-97.2%（97.8–98.6% 酸基酸相似性），卻與中國毒株較接近，相似性達99.0-99.4%（99.4–100.0% 酸基酸相似性）。可證實2013-2014年牛流行熱病毒株係新入侵病毒，並非臺灣牛流行熱病毒株演化產生。且新入侵毒株儼然為強勢毒株，已取代本土株成為2014年盛行毒株。

Invasion of exotic bovine ephemeral fever virus into Taiwan

Lu-Jen Ting

**Abstract**

Bovine ephemeral fever virus is a member of the family *Rhabdoviridae* and bovine ephemeral fever has frequently affected cattle population in Taiwan since 1967. During the outbreaks in 2013 and 2014, exotic bovine ephemeral fever viruses were detected and nucleotide sequencing. Sequence comparison showed that the exotic viruses shared 99.0–99.4% nucleotide identities (99.4–100.0% amino acid identities) with Chinese viruses and, on the contrary, 96.2–97.2% nucleotide identities (97.8–98.6% amino acid identities) with indigenous Taiwanese viruses. Additionally, our phylogenetic analysis also supported that the newly invaded bovine ephemeral fever viruses were closely related to the Chinese strains. These exotic 2013–2014 viruses have become prevalent and displaced indigenous virus strains since their appearance.