

臺灣高病原性家禽流行性感冒及其適應性研究

疫學研究組

陳麗璇 助理研究員

摘要

臺灣家禽流行性感冒(禽流感)之存在由來已久，該具封套之病毒為正黏液病毒科，遺傳物質為 8 段分開的負股 RNA。目前最早文獻可回溯至 1972 年 H6N1 亞型之檢出。另目前仍持續存於臺灣禽場的病毒群，除了前述之 H6N1 亞型病毒，尚有 2003 年起開始存在之類墨西哥 H5N2 亞型病毒、2015 年入侵之 2.3.4.4c 分支 H5Nx 亞型高病原性禽流感病毒以及 2021 年新入侵之 H5N2 亞型高病原性禽流感病毒。臺灣 2015 年以前之高病原性禽流感，多由低病原性類墨西哥 H5N2 亞型病毒株偶爾演化變異而來。2015 年以後，入侵之 2.3.4.4c 分支 H5Nx 亞型高病原性禽流感病毒為家禽場造成損失之主因。近年之高病原性禽流感病毒於雞隻之病原性試驗結果顯示，持續於臺灣家禽場循環，可在雞隻感染方面獲得適應性。

The situation of high pathogenicity avian influenza viruses in Taiwan and the investigation of adaptation study

Li-Hsuan Chen

Abstract

Avian influenza (AI) of Taiwan has existed for a long time. The enveloped virus belongs to the family Orthomyxoviridae and composes 8 segments of negative-stranded RNA. The earliest literature of Taiwan can be traced back to the detection of H6N1 subtype in 1972. In addition to the aforementioned H6N1 subtype viruses, there are still viruses of the Mexican H5N2 subtype that have existed since 2003, and the clade 2.3.4.4c H5Nx subtype high pathogenicity avian influenza virus that invaded in 2015 and newly introduced H5N2 subtype high pathogenicity avian influenza virus in 2021. Before 2015, the high pathogenicity avian influenza in Taiwan was mostly derived from the occasional mutation of the low pathogenicity Mexican-like H5N2 subtype virus strain. After 2015, the invasive clade 2.3.4.4c H5Nx subtype high pathogenicity avian influenza virus was the main cause of losses in poultry farms. In recent years, the results of pathogenicity experiments of high pathogenicity avian influenza viruses in chickens have shown that clade 2.3.4.4c H5Nx subtype viruses keep circulating in poultry farms in Taiwan, acquiring better adaptation in chickens.