IDENTIFICATION OF NEWCASTLE DISEASE VIRUS ON BATS IN INDONESIA ISLAND

Bintang Indriana Pramasari

ABSTRACT

The purpose of this research was to know about existence of Newcastle Disease virus on Bats respiratory organs in Indonesia Island. The study was begin on April 2017 in Avian Influenza Research Centre (AIRC) Surabaya. Bats respiratory organs were collected from four archipelago area that consist of Bawean, West Sumatra, West Kalimantan, and Riau. This research used ninety-nine Bats which has been necropsy and cutting the respiratory organ and smoothing then. The supernatant of the sample organ and 0,2 ml streptomycin antibiotic inoculated in 99 chichken embryonated egg. The allantoic fluid was tested for haemaglutinin protein activity using microtechnique Haemaglutination Assay (HA). Data obtained from the result of isolation virus and HA/HI test in descriptive format with present total of positive and negative from result of identification. If the samples that showed titre at least $2^2$ HAU/25 µl were continued to Haemaglutination Inhibition (HI) using Newcastle Disease antisera. The result showed from all sampel tested, only resulted 13 sampel positive of HA. HI Assay was performed and the antisera negatively inhibit the agglutination, it showed that Newcastle Disease virus has not identified in Bats on Indonesia Island.

Keywords: Bats, Newcastle Disease, Chicken Embryonated Egg, HA Assay, HI Assay