ISOLATION AND IDENTIFICATION OF NEWCASTLE DISEASE VIRUSES FROM DUCK SOLD IN SEPAJANG MARKET SIDORJO, EAST JAVA

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ABSTRACT

This research aims to detect Newcastle disease virus on ducks at Sepanjang traditional market in Sidoarjo. The ducks are one of the birds that spread and transmit Newcastle disease viruses. The ducks are infected by Newcastle disease viruses rarely showing clinical symptoms, so the ducks can spread potentially the disease to other birds. Cloacal swab samples of ducks were taken one a week for 5 weeks. The samples used were 100 pooled samples which 3 cloacal swab sample of individual ducks were pooled being 1 pooled sample. Swab samples were inoculated in Specific Antibody Negative (SAN) 8-10 days embryoned chicken eggs, then they were incubated at 37°C for 4-5 days. On the fifth day, the allantoic fluids from embryoned chicken were harvested and tested using HA test. HA test was positive when agglutination of erythrocytes was shown. The positive result of HA test was continued for HI test. HI test was positive when inhibition of hemagglutination was shown, that was signed by sedimented erythrocytes on the bottom of the microplate wells. The results of this study showed that of the 100 pooled samples from 300 ducks, there are 3 pooled samples which ND viruses could be detected.

Key words: Newcastle Disease, Duck, HA test, HI test.