**CASE STUDY AND HISTOPATHOLOGICAL CHANGES OF INFECTIOUS BRONCHITIS IN SEVERAL FARMS IN INDONESIA**

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**ABSTRACT**

Infectious Bronchitis Virus (IBV) infection in poultry farms in Indonesia has been reported by farmers for many years. Many of these reports were only based on farmers’ observation, such as lowering production and irregular shaped eggs. This research aimed to confirm IB cases in several sites in Indonesia and to study the virus’s pathological features in several internal organs from confirmed field cases. Samples collected were tracheal and cloacal swabs from suspected farms along with internal organs for pathological examination. Internal organs sampled consist of trachea, lung, oviduct, ovary, and kidney. Swab samples were extracted for RNA and tested by Reverse Transcriptase Polymerase Chain Reaction (RT PCR) on gene S1 of IBV. Out of 58 samples taken, 9 were positive of IB by RT PCR. Histopathological examination with hematoxylin eosin revealed tracheitis, pneumonia, salpingitis, and nephritis with deposits of uric acid found in the lumen of collecting ducts. Gross pathological and histopathological features of IB found in field cases are often obscured by coexisting infection of other viruses, such as Avian Influenza and Newcastle Disease.

Keywords: Coronavirus, RT PCR, pathology