

JOINT EVENT

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**Epidemiology of duck as reservoir of avian influenza virus in Bangladesh****Md. Zakir Hassan**<sup>1,2</sup><sup>1</sup>National Reference Laboratory for Avian Influenza (OIE Reference Laboratory), Bangladesh<sup>2</sup>Livestock Research Institute, Savar, Dhaka, Bangladesh

This research was conducted to detect the prevalence and incidence of avian influenza virus (AIV) in duck at hoar area of Kishorganj in Bangladesh in 2013. A total of 736 serum and 150 cloacal samples were collected from asymptomatic semi scavenging duck above four months of age. The serum sample was tested for AIV specific antibody through cELISA and cloacal sample was tested to detect the incidence of AIV through RT-PCR in CDIL, Dhaka. Total of 684 is positive (prevalence) (+ve) of Avian Influenza type A antibody. The prevalence rate was 92.93%. The tested result shown that prevalence rate was at 4-6 months of age as 93.96% and 7-9 month of age as 92.92 % and in 10-12 month of age as 91.91%. A total number of 15 pooling samples from 75 cloacal samples was conducted for detection of AIV that shed in environment. After calculating the result through RT-PCR, it was shown that two pooling samples was positive (incidence) (13.33%) for AIV. Epidemiology of this hoar duck can be shown that they can transmit the AIV in the surrounding poultry population and clinical outbreaks may occur. To sum-up the result of ELISA and PCR, it was illustrated that duck act as a natural reservoir of AIV in Bangladesh.

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