

**ISOLATION AND IDENTIFICATION NEWCASTLE DISEASE VIRUS
ON BROILER CHICKEN SHOWING SYMPTOMS OF
NEWCASTLE DISEASE IN THE SURABAYA
TRADITIONAL MARKETS**

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ABSTRACT

The aim of this research to confirm the presence of *Newcastle Disease* virus on broiler chicken in the traditional market environment via virus isolation and identification. This research is using 30 post-mortem colon samples of broiler chickens collected from traditional markets in Surabaya. Suspected materials inoculated into allantoic sac in specific antigen negative of 10 days embryonating chicken's egg. It had been conducted in Virology and Immunology Laboratory, Department of Microbiology, Faculty of Veterinary Medicine, University of Airlangga since May 2017 until June 2017. Methods that used are hemagglutination (HA) test and hemagglutination inhibition (HI) test. The growth of the virus determined by the ability to agglutinate chicken red blood cells or hemagglutination test. Positive hemagglutination performed by hemagglutination inhibition (HI) test using specific antibody against ND virus. The results showed that from the 30 samples which isolated from colon of post-mortem poultry showing symptoms of Newcastle disease virus infection, a total of 1 sample from 30 samples (0,03%) is positive tested for Newcastle disease virus infection.

Key words: Newcastle disease virus, Broiler Chicken, HA/HI test, hemagglutinin