

THE CIRCULATION AND INTRAVENOUS PATHOGENICITY INDEX OF AVIAN INFLUENZA TYPE A, SUBTYPE H5N1 VIRUSES FROM LIVE CHICKEN IN LANG SON PROVINCE

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Summary

Composite cloacal and tracheal swap samples were collected from the chicken illegally imported from China to Lang Son (Vietnam) in 2014 and 2015 to examine the circulation of avian influenza A (H5N1) virus in poultry. The results were as follows: in 2014 17/264 samples was infected with type A avian influenza A (H5N1) virus in poultry (6.43%), of which, 10/264 samples were positive with subtype H5 (3.78%), and 9/264 samples were positive with subtype N1 (3.40%); in 2015, 21/533 samples were infected with type A virus (3.93%), of which 17/533 samples were positive with subtype H5 (3.18%), and 2/533 samples were positive with subtype N1 (0.37%). For the chicken sold at Lang Son local markets, 28/180 samples were positive with type A virus (15.55%); of which nine were positive with subtype H5 (5%), and five were positive with subtype N1 (2.77%). For the ducks sold at three border markets in Lang Son in 2015, 17/126 cloacal and tracheal swap samples were positive with type A virus (13.49%); of which six were positive with subtype H5 (4.76%) and five were positive with subtype N1 (3.96%). Intravenous Pathogenicity Index (IVPI) was performed on the lab chicken without virus antibody. The result was that all the chicken showed symptoms of the disease and died within 1 to 2 days after infected with H5N1 virus. IVPI of the virus was 0,87 and 1,17, which showed that the virus isolated in Lang Son, with the IVPI < 1.2, was one with low virulence (LPAI).

Keywords: *Avian influenza, type A, H5N1.*