

Molecular identification of infectious laryngotracheitis virus in backyard and broiler chickens in Iran

Seyed Hesamodin Emadi Chashmi^{1*}, Hamid Staji², Iradj Ashrafi Tamai³
and Sahar Ghaffari Khaligh⁴

¹ Department of Clinical Sciences, Faculty of Veterinary Medicine, Semnan University, Semnan, Iran

² Department of Pathobiology, Faculty of Veterinary Medicine, Semnan University, Semnan, Iran

³ Department of Microbiology, Faculty of Veterinary Medicine, University of Tehran, Tehran, Iran

⁴ Department of Pathobiology, Faculty of Veterinary Medicine, Semnan University, Semnan, Iran

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Abstract

Infectious laryngotracheitis (ILT) is a highly contagious, infectious respiratory disease that is caused by *Gallid Herpesvirus-1* (*GaHV-1*, namely ILTV) mainly affecting pullets and laying hens. The disease has not been reported in broilers and backyard chicken in Iran, previously. The present study aimed to identify ILTV strains in outbreaks with severe respiratory clinical signs that occurred in Semnan province (Iran) in broiler farms and backyard chicken farms during June 2019 and March 2020. For this purpose, specimens were investigated from twenty-eight broiler farms with severe respiratory symptoms and a mortality rate of 5.5-29% and 2 backyard flocks. The presence of ILTV was assessed by histopathology, conventional PCR targeting of ICP4 gene fragment, and sequencing analysis. Comparison of detected genotypes with strains from Iran and neighboring countries demonstrated the high homology of detected isolated with field strains from Turkey.

Keywords: Backyard chicken; Broiler; ICP4 gene sequencing; infectious laryngotracheitis

* **Corresponding Author:** Seyed Hesamodin Emadi Chashmi, Department of Clinical Sciences, Faculty of Veterinary Medicine, Semnan University, Semnan, Iran, E-mail: hesamemadi@semnan.ac.ir



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