



Cairo University

Cairo University
Faculty of Veterinary medicine
Department of Virology

Molecular Studies on Infectious Bronchitis Virus in Broiler Chickens in Damietta Governorate

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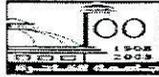
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ABSTRACT

One of the major problems of avian infectious bronchitis virus (IBV) is the frequent emergence of new variants. In the present study, 52 suspected farms from broiler chicken farms were collected during December 2012 to August 2014 from Damietta governorate districts these farms showed respiratory signs. There were 36/52 (65%) of suspected farms were positive for IBV with real time RT-PCR. Seven samples were selected from 36 IBV positive samples. The samples were inoculated in specific pathogen free (SPF) embryos for three blind successive passages and the hypervariable region of spike protein (SP1) was amplified and sequenced to study the genetic diversity between viruses. The phylogenetic analysis was carried out between the selected Seven isolates and other IBV from the Middle East. Seven isolates had identity percent between each other reach 100% ,close relationship with the Israeli variant (IS/1494) reached up to 89.3%. Also seven isolates had close relationship with D274 virus with identity 90.8% .

Keywords: Infectious Bronchitis Virus, RT-PCR, Sp1 gene.

Dedication

Dedicated to my

Father

Mather

wife

lovely sons (Khadiqa and Mohamed)

I hope that they will be happy, with my deep thanks for their support during the work,

Acknowledgment

In the name of Allah, the Most Gracious and the Most Merciful Alhamdulillah all praises to Allah for the strengths and His blessing in completing this thesis.

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