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شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

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التوثيق الالكتروني والميكروفيلم

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التوثيق الإلكتروني والميكروفيلم

قسم

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TRIALS FOR ISOLATION, ANTIGENIC AND GENOMIC CHARACTERIZATION OF ROTAVIRUS FROM FIELD OUTBREAK IN BUFFALOES

A thesis presented
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(Virology)

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ABSTRACT

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Title: "Trials for isolation, antigenic and genomic characterization of Rota virus from field outbreak in buffaloes".

Abstract

Bovine Rotavirus (BRV) was detected in fecal samples collected from different groups of diarrheic buffaloes in Ismailia governorate using both latex agglutination test and ELISA. The results revealed that 44.8% of the samples were positive by Latex agglutination whereas ELISA based on the use of monoclonal antibodies were able to detect BRV in 48.2%. All groups of diarrheic animals were found to be infected by Rotavirus in a percentage ranged from 22.2-100%. In a trial for isolation of BRV from infected animals 25 samples were prepared and inoculated in MA104 cell line. Twenty out of the 25 inoculated samples were revealed in cell culture after three successive passages. BRV was detected in inoculated cell culture among the three cell culture passages using monoclonal antibody based ELISA. Three isolates (Ismailia: 3/98, 42/98 and 57/98) were selected and antigenically characterized using serotype specific monoclonal antibody. Genomic characterization of the VP7 gene of the isolates was carried out using RT-PCR genotyping assay in the presence of cocktail of sertype specific primers to the most predominant BRV serotypes (G6 and G10) among field strains. The results of antigenic and genomic characterization demonstrated that the three BRV isolated strains were of G6 specificity. This is the first study on the isolation, serotypic and genotypic characterization of BRV field strains in Egypt.

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بسم الله الرحمن الرحيم

وقالوا

سبحانك لاعلم لنا إلا

ما علمتنا إنك أنت

العليم الحكيم

صدق الله العظيم

البقرة ٣٢

DEDICATION

TO THE SPIRIT OF MY MOTHER

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