



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكرو فيلم

بسم الله الرحمن الرحيم



MONA MAGHRABY



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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قسم

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Faculty of Veterinary Medicine



Studies on virulence and antimicrobial resistance of *Mycoplasma* species recovered from Camel

A thesis presented

By

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(B.V.Sc., Beni Suef University, 2010)
(M.V.Sc., Cairo University, 2015)

For the degree of

**Doctor of Philosophy in Veterinary Medical Science
(Microbiology)**

Under The Supervision of

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Approval sheet

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Abstract

This study was carried out on 460 samples obtained from apparently healthy and diseased Camels. 26.3 % of samples were positive to the primary isolation of *Mollicutes*. Recovery rate of *Mycoplasma* was 13.2% from diseased slaughtered Camels. Biochemical and molecular identification (PCR) of *Mycoplasma* isolates showed that 21.31 % were *M. bovis* and 78.68 % were *M. arginine*. On performing phenotypic characterization of isolates, it was found that *M. bovis* isolates showed high resistance to ciprofloxacin and erythromycin in percentage of 100% & 76.9% respectively, while *M. arginini* showed high resistance to ciprofloxacin, erythromycin, doxycycline and lincomycin in percentage 83.3%, 79.2%, 64.6% and 58.3% respectively. 20% of *M. bovis* and 19% of *M. arginini* isolates showed catalase activity. 100% *M. bovis* and *M. arginini* isolates have haemolytic activity and H₂S producers. *M. bovis* and *M. arginini* isolates were found to have poor adhesion and biofilm formation abilities. The *par C*, *gyr A*, *vsp A*, *uvr C* and *gap A* genes were not detected in *M. arginini*. While *par C* and *vsp A* were detected in 15% of *M. bovis* isolates.

Key words: *Mycoplasma*, *M. bovis*, *M. arginini*, PCR, Phenotypic characterization.

Dedication

This thesis is dedicated

To my father soul

*To my mother for her endless Love,
Support & Encouragement*

To my sisters & brother

To My Husband who inspired me all the time

To my soul my son and daughter

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