



**Cairo University**  
**Faculty of Veterinary Medicine**



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

A thesis presented

By

**Walaa Mohammed Abd Elazeem Mohammed**  
**(B.V.Sc., Beni Suef University, 2010)**  
**(M.V.Sc., Cairo University, 2015)**

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**Doctor of Philosophy in Veterinary Medical Science**  
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**Under The Supervision of**

**Prof. Dr. Kamelia Mahmoud Osman**  
**Professor of Department of Microbiology**  
**Faculty of Veterinary Medicine**  
**Cairo University**

**Dr. Ahmed Oraby Hassan**  
**Lecturer of Microbiology**  
**Faculty of Veterinary Medicine**  
**Cairo University**

**Prof. Dr. Zeinab Roshdy Mohammed**  
**Chief Researcher**  
**Mycoplasma Department**  
**Animal Health Research Institute**

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Cairo University  
Faculty of Veterinary medicine  
Department of Microbiology

**Name** : Walaa Mohammed Abd EL-Azeem Mohammed

**Specification** : Microbiology (Bacteriology, Immunology, Mycology).

**Thesis title** : Studies on virulence and antimicrobial resistance of *Mycoplasma* species recovered from Camel.

**Supervisors:**

**Prof. Dr. Kamelia Mahmoud Osman**

Professor of Department of Microbiology  
Faculty of Veterinary Medicine, Cairo University.

**Dr. Ahmed Oraby Hassan**

Lecturer of Department of Microbiology  
Faculty of Veterinary Medicine, Cairo University.

**Prof. Dr. Zeinab Roshdy Mohammed**

Chief Researcher of Department of *Mycoplasma*  
Health Research Institute, (Doki).

### 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 H<sub>2</sub>S 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.

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