



شبكة المعلومات الجامعية  
التوثيق الإلكتروني والميكروفيلم

# بسم الله الرحمن الرحيم



**MONA MAGHRABY**



شبكة المعلومات الجامعية  
التوثيق الإلكتروني والميكرو فيلم



# شبكة المعلومات الجامعية التوثيق الإلكتروني والميكرو فيلم



**MONA MAGHRABY**



شبكة المعلومات الجامعية  
التوثيق الإلكتروني والميكروفيلم

# جامعة عين شمس

## التوثيق الإلكتروني والميكروفيلم

### قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



### يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



**MONA MAGHRABY**



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



**Cairo University**

## **Investigation into the Use of SeM Protein as Immunogenic Material against Equine Strangles Disease**

A thesis presented by

**Shaimaa Mahmoud Elsayed Abdelmageed**

(B. V. Sc., Benha University, 2010; M.V.Sc, Cairo University, 2016)

**To**

Cairo University,  
Faculty of Veterinary Medicine,

For the Degree of PhD in Veterinary Medical Sciences  
(**Microbiology**)

Under Supervision of

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Professor of Microbiology  
Faculty of Veterinary Medicine  
Cairo University

**Dr. Soumaya El-Sayed Ahmed El-Sayed El-Shafii**

Chief Researcher of Bacteriology Department  
Animal Health Research Institute

**(2020)**





## Approval sheet

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Chief Researcher of Bacteriology Department

Animal Health Research Institute





بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

نَرْفَعُ دَرَجَاتٍ مِّنْ نَّشَأٍ  
وَفَوْقَ كُلِّ ذِي عِلْمٍ

عَلِيمٌ

سورة يوسف (٧٦)



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Thesis title : Investigation into the Use of SeM Protein as Immunogenic  
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### Abstract

SeM protein extracts were prepared from locally isolated *S. equi* subspecies *equi*. Modification by further centrifugation of both the supernatant and sediment of the SeM acid extract was made. The resulting supernatants of both centrifugations were analyzed electrophoretically using SDS-PAGE, including SeM acid extract sediment (SeM1), SeM acid extract supernatant (SeM2), supernatant from centrifuged SeM1 (SeM3), and supernatant from centrifuged SeM2 (SeM4). Electrophoresis of SeM1 revealed the appearance of a band at MW 70.9 kDa, While SeM2 revealed the presence of 7 bands at MW of 105, 87.8, 70.9, 61.1, 44, 37.9 and 18.4 kDa. Five bands were detected in SeM3 at MW 70.9, 58.9, 37.2, 29.8 and 18.3 kDa, and SeM 4 showed four bands at MW of 72.0, 58.6, 29.8 and 18.0 kDa. Antibody titer was detected in the sera of rabbits immunized by SeM3 and SeM4 using indirect ELIZA.



### Dedication

*My humble effort is wholeheartedly dedicated to*

*My beloved **mom** for her support, belief in my abilities and her hands in prayers for my success and great patience and goodwill throughout the fairly long period of study and work. She gave me strength when I thought of giving up.*

*My beloved **dad** for his motivation to take up this program of studies, financial support and his belief in my abilities throughout all my schooling.*

*My **sister** and **brother** who continually provide their moral, spiritual and emotional support.*

***Karma** (my niece) for being a source of happiness and light in my life.*

*They all kept me going on and this work would not have been possible without their input.*

