سامية محمد مصطفى

شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

سامية محمد مصطفى

شبكة المعلومات الجامعية

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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سامية محمد مصطفى

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

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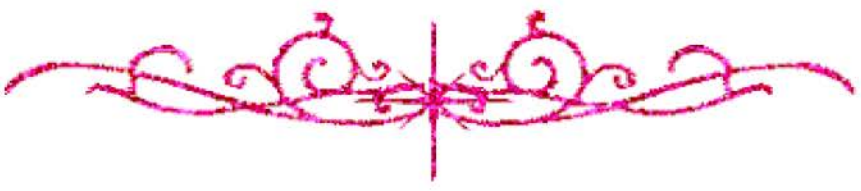

سامية محمد مصطفى

شبكة المعلومات الجامعية

بالرسالة صفحات لم ترد بالأصل

SUEZ CANAL UNIVERSITY
FACULTY OF VETERINARY MEDECINE
DEPT. OF VETERINARY MEDICINE

STUDIES ON BLOOD PARASITES OF CATTLE IN SUEZ CANAL AREA

Thesis Presented by

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For M. V. Sc. Degree in
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Under supervision of

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CONTENTS

INTRODUCTION

Introduction

Suez canal district is considered as one of the most important regions in Egypt as it considered a new area hopeful for land reclamation and animal production.The most restrictive factors of animal production and the biggest hinderness for successful breeding are the blood parasites and their vectors. Piroplasmosis is a group of highly fatal and economically important diseases of livestock. These diseases are caused by protozoan parasites belonging to family babesidae and theileridae **(Levin, 1961)**.

The major economic impact of the disease is felt in relation to the morbidity and mortality among domestic ruminants . The greatest losses occur when fully susceptible animals are introduced into enzootic areas **(Losos,1986).**

Bovine babesiosis is of greatest economic importance because of direct losses and restriction of movement by quarantine laws. Many animals die or undergo along period of convalescence entailing loss of meat and milk production . Incidental costs of immunization and treatment add to economic losses created by the disease **(Radostits et al, 1994)**.

Theileria parasites affect a wide range of mammals. Indigenous animals may stand to the effects of these disease, however their productivity may be reduced A large number of cattle in Egypt are infected with a subclinical babesiosis which is considered as an immunosuppresive factor affecting the animals **(Gattas,1990).**

The mortalities due to theileriosis may reach 100% in exotic animals introduced to the local stocks.In addition to direct losses attributed to theileriosis enormous costs are incurred in attempting to control the disease .This is done mainly by the use of acaricides to eradicate ticks. Such operations involve the constriction of dips or spray races,the use of expensive chemicals and the treatment of live stock as often as twice a week through out the year **(Soulsby et al,1987).**

Mediterranean theileriosis in cattle can not be eliminated by medicaments and in most cases it results in high mortailites of imported cattle **(Hegazy, 1992).**

For all the above mentioned reasons this work was suggested, planned and aimed to:

1-Provide a data about the incidence and distribution of these blood parasites and to study the effect of season,breed and age on the infection rate of these blood parasites in Suez Canal district.

2-To detect the clinical symptoms associated with each of these blood parasites in both cows and buffaloes.

3-To study the effect of each blood parasites on the haematological picture.

4-To study the effect of some drugs (Imizol and Butalex)on the babesia and theileria parasites.

5-To study the postmortem and histopathological changes in the animal that died from acute babesiosis.

6-Induction of acute piroplasmosis using splenectomy in a calf to provide an antigen for serological studies.

LITERATURE

Literature

Incidence of Babesiosis:

The epizootiological investigation of babesiosis involves the determination of the disease distribution and frequency among animal groups such as herds of ruminants. The evaluation of the epizootiology of babesiosis in a herd is more complex process; requiring consideration of the host, the babesia spp, and the vector **(Losos 1986)**. **Barnett (1974a)** defined the epizootiological factors which have to be considered when planning control measures against protozoal tick - borne diseases to be (1) the presence of ticks and diseases which cause damage and loss (2) The presence of ticks in an area where the disease is enzootic and controlled and (3) the absence of both ticks and diseases in a region where they could become established. The author reviewed the economic aspects of tick-born disease control in the U.K and of protozoal tick - borne diseases of live stock in the rest of the world.

In Australia the New South wales, is considered a quarantine area with very little tick fever incidence while in Queensland, where ticks are relatively uncontrolled, the incidence of tick fever is endemic in most properties within the tick zone .The incidence of clinical and subclinical infections in New South Wales between 1964 and 1970 was ascertained by means of serological studies, examination of blood films and transmission tests **Curnow (1973).** In a short review of the epizootiology of *B.bigemina* and *B.bovis* in Australia, **Callow (1979)** described the difference between the species with respect to the transmission, incidence, and severity of the infections. The incidence of clinical babsiosis in cattle in Queensland between 1947 and 1963 was examined; 90 % of the cases were found to be due to *B.bigemina* **(Johnston 1967).** It was found that