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قسم

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بالرسالة صفحات

لم ترد بالأصل

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STUDIES ON THE EFFICACY OF COMBINED IMMUNOSTIMULANT-ANTIBIOTIC THERAPY AGAINST EXPERIMENTAL *MYCOPLASMA GALLISEPTICUM* INFECTION IN CHICKENS

Thesis Presented by

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For M.V.Sc.
(Pharmacology)

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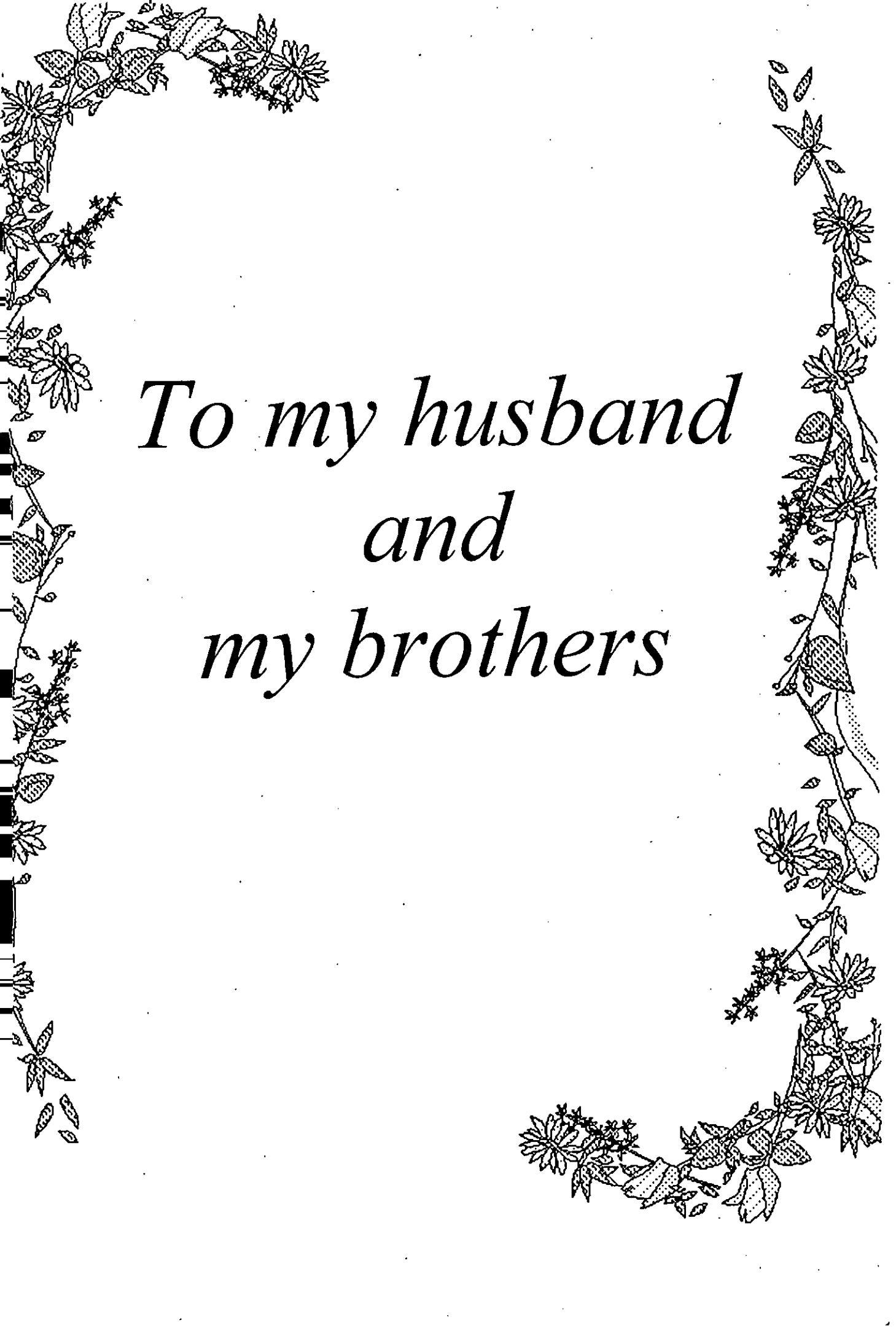
1994



To my husband
and
my brothers

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بسم الله الرحمن الرحيم

" قرار لجنة الحكم والمناقشة "

قررت لجنة الحكم والمناقشة قبول الرسالة المقدمة من السيده ط . ب / سامية المجدى سلامه أحمد وترشيح سيادتها للحصول على درجة الماجستير فى العلوم الطبية البيطرية (أدوية بيطرية) من كلية الطب البيطرى - جامعة القاهرة

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INTRODUCTION

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Mycoplasma gallisepticum remains to be a major aetiological factor in the pathogenesis of respiratory disease of chickens. Economic losses from Mycoplasma gallisepticum infection in broilers arises from mortality, reduced weight gain and food conversion and poor carcass quality which often lead to condemnation **(Yoder, 1978)**. Chemotherapy of mycoplasmosis presents a special problem. Mycoplasmal cell does not have a cell wall which renders them non susceptible to the action of Penicillins **(Razin and Tully, 1983)**, moreover, many of the mycoplasmal organisms are localized intracellularly **(Razin and Tully, 1983)** which makes them non sensitive to chemotherapeutic agents which do not readily penetrate intracellularly. Josamycin would be particularly suited for use in mycoplasmosis because the antibiotic is known to become concentrated intracellularly in phagocytic cells to reach concentration 10-20 times higher than those in intercellular fluids **(Wildfeuer et al., 1986)**, a property that would possibly augment the expected lethal effect of josamycin against intracellular mycoplasma. Also, josamycin reaches high concentration in lung tissue **(Kuriaki et al., 1969 and Wildfeuer and Lemme, 1985)** which favour its used in pulmonary infections. Unfortunately, little is known about the efficacy of josamycin in the treatments of pulmonary

diseases of animals and poultry. In this present work, the efficiency of josamycin and combined lincomycin-spectinomycin therapy in the treatment of experimental mycoplasma infection in chickens were evaluated. Because many antibiotics are known to suppress the immune system of the treated host, therefore, the effect of a non-specific immunostimulant (Corynebacterium ultralysate) on the success of chemotherapy was also evaluated. Criteria used in this study to evaluate efficiency of chemotherapy were:

1. Pathologically: morbidity, mortality and assessment of the severity of pathological lesions.
2. Microbiologically: cultural examination of remaining organisms in organs after chemotherapy.
3. Immunologically: leucocytic count, slide agglutination and haemagglutination inhibition tests.

REVIEW OF LITERATURE