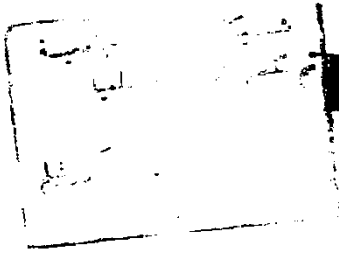


**STUDIES ON THE BIOLOGICAL AND
BIOCHEMICAL ACTIVITIES OF CERTAIN
STREPTOMYCES STRAINS ISOLATED
FROM EGYPTIAN SOIL**



THESIS
By



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M.Sc.

MICROBIOLOGY

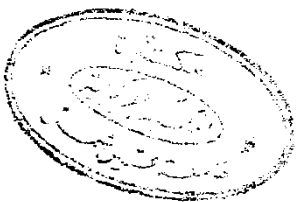
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PREFACE

Species of the genus *Streptomyces* were the subject of intensive research in the world. Volunteers of new antibiotics have been carrying out screening programs for the isolation of producers of new antibiotics, among thousands of isolates, obtained from natural habitats. These efforts led to the description of many new *streptomyces* species and many of new antimicrobial substances. The majority of these substances are antibacterial antibiotics where antifungal antibiotics are less common.

The fact that antibiotics are very heterogeneous in chemistry, origin and structure makes studies of their biogenesis very difficult. With the development of streptomyces taxonomy species of *streptomyces* had been differentiated into 6 colour sections.

The present thesis deals with 43 isolates belonging to the "Gray" series. The study covers the biological, physiological and antimicrobial potentialities of the isolates.

Special interest has been paid to one single isolate that proved to be a strong producer of an antibacterial, an-

tiyeast and antifungal antibiotic. The extraction, purification, characterization and identification of this antibiotic were done.

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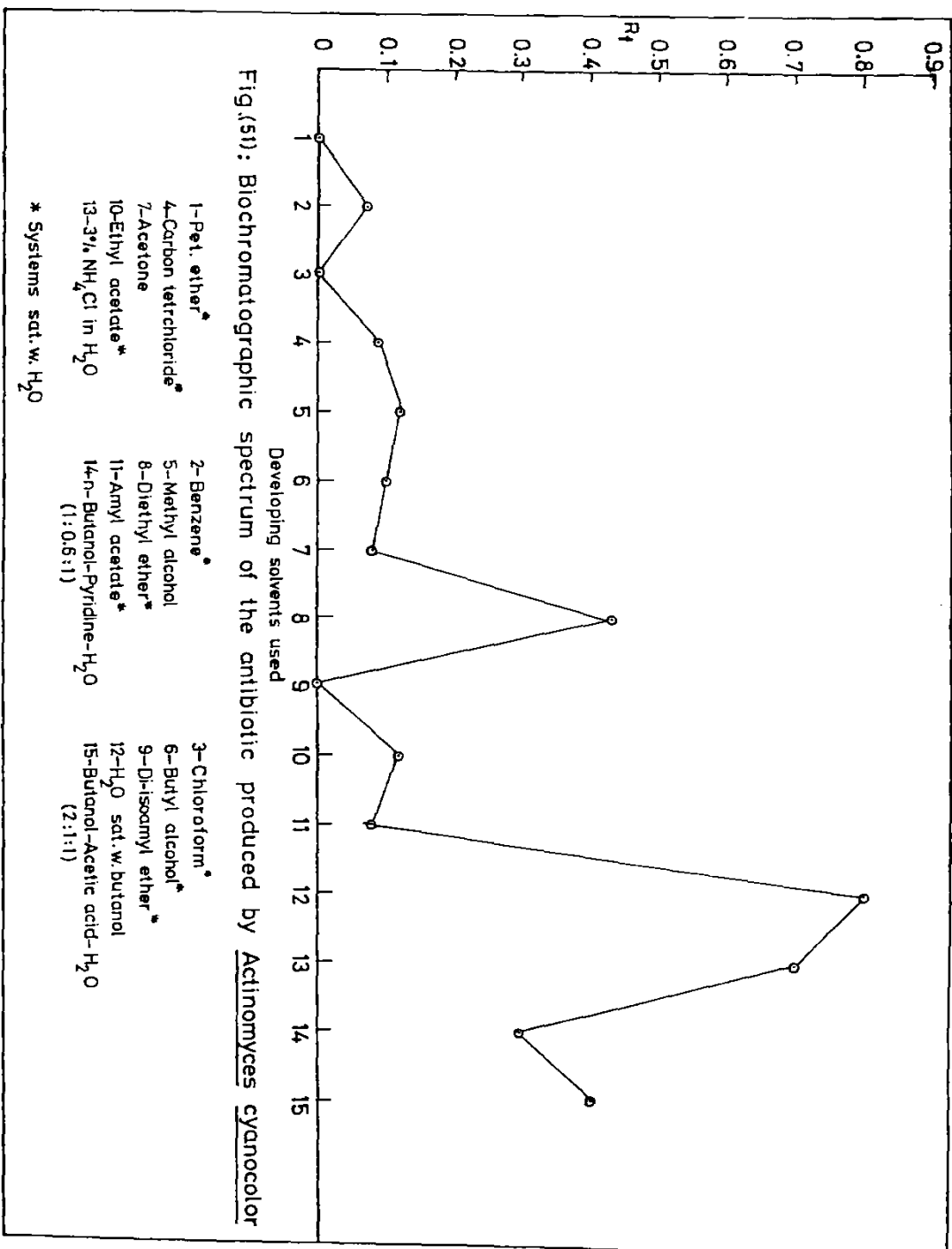
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DEDICATION

To All My Family

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PART "I"

INTRODUCTION