# CONTENTS

PRE FACE

CHAPTER I

PHYTOCHEMICAL STUDIES ON CISSUS GLUACA

1.1 Introduction 1
1.2 Medicinal properties and uses 1
1.3 Work so far reported on Cissus species 2
1.4 Present work 3
1.5 Materials and methods 3
1.6 Extraction, fractionation and isolation of compounds from the petroleum ether extract of C. gluaca 7
1.7 Extraction, fractionation and isolation of compounds from the acetone extract of C. gluaca 8
1.8 Results and discussion 9
1.8.1 Characterization of MG1 (Mixture of esters) 9
1.8.2 Characterization of MG2 and SM2 (Friedelin) 15
1.9 Conclusion 26

CHAPTER II

ANALYSIS OF THE ESSENTIAL OIL OF THE ROOTS AND LEAVES OF THE MEDICINAL PLANT KAEMPFERIA GALANGA L.

SECTION 1

GENERAL INTRODUCTION

2.1.1 Essential oil 29
2.1.2 Methods of production of essential oil 35
2.1.3 Chemical composition 37
2.1.4 Essential oils in practice 38
2.1.5 Antimicrobial properties 42
2.1.6 Analytical methods 44

SECTION 2

ANALYSIS OF THE ROOT ESSENTIAL OIL OF KAEMPFERIA GALANGA

2.2.1 Introduction 56
2.2.2 Medicinal properties and uses 57
2.2.3 Previous work 57
2.2.4 Present work 58
2.2.5 Materials and methods 58
2.2.6 Results and discussion 60