

**STUDY OF CHEMICAL COMPONENT FROM LICHEN  
(*PARMOTREMA PRAESOREDIOSUM*)**

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## TABLE OF CONTENT

	<b>Page</b>
<b>ACKNOWLEDGEMENTS</b>	iii
<b>TABLE OF CONTENTS</b>	iv
<b>LIST OF TABLES</b>	vi
<b>LIST OF FIGURES</b>	vii
<b>LIST OF ABBREVIATIONS</b>	viii
<b>ABSTRACT</b>	ix
<b>ABSTRAK</b>	x
<b>CHAPTER 1 INTRODUCTION</b>	
1.1. Background of Study	1
1.2. Problem Statement	4
1.3. Significance Study	5
1.4. Objective of the Study	6
<b>CHAPTER 2 LITERATURE REVIEW</b>	
2.1. Lichens	7
2.2. Lichens <i>Parmotrema</i> Genus	9
2.3. Classes of Lichen	10
2.4. Uses of Some <i>Parmotrema</i> Species	13
2.5. Phytochemical Study of <i>Parmotrema</i> Species	17
<b>CHAPTER 3 METHODOLOGY</b>	
3.1. Materials	25
3.1.1. Raw Materials	25
3.1.2. Chemicals	25
3.1.3. Apparatus	26
3.2. Methodology	27
3.2.1. Preparation of Sample	27
3.2.2. Extraction Chemical Component from <i>Parmotrema</i> Species.	28
3.2.3. Quantitative and Qualitative Analysis	28
3.2.3.1. Thin Layer Chromatography (TLC)	29
3.2.3.2. Column Chromatography (CC)	31
3.2.4. Spectroscopies analysis	33
3.2.4.1. Ultraviolet Spectroscopy (UV)	33
3.2.4.2. Fourier Transform Infrared Spectroscopy Analysis (FTIR).	33
3.2.4.3. Gas Chromatography-Mass Spectroscopy (GC-MS)	34

<b>CHAPTER 4 RESULT AND DISCUSSION</b>	35
4.1. Extraction of Sample	37
4.2. Thin Layer Chromatography (TLC)	45
4.3. Column Chromatography	46
4.4. Thin Layer Chromatography (TLC)	
4.5. Spectroscopy Analysis	49
4.5.1. UV-Vis Spectroscopy Analysis	50
4.5.2. Fourier Transform Infrared Spectrometers FTIR	51
4.5.3. Gas Chromatography-Mass Spectrometry GC-MS	
	54
<b>CHAPTER 5 CONCLUSION AND RECOMMENDATION</b>	56
5.1. Conclusion	
5.2. Recommendation	
	57
<b>CITED REFERENCE</b>	61
<b>APPENDICES</b>	64
<i><b>CURRICULUM VITAE</b></i>	

## ABSTRACT

### STUDY OF CHEMICAL COMPONENT FROM LICHEN ( *PARMOTREMA PRAESOREDIOSUM* )

This study represents the first identification of chemical component on *Parmotrema praesorediosum* from Malaysia collected in the area of UiTM Kuala Pilah, Negeri Sembilan. This species belongs to the family Parmeliaceae. Since, the healing potential of the component found in some lichen species as medical purpose has not been completely explored, therefore, numeral of method have been conducted in order to identify the presence of component found in lichen especially on *Parmotrema praesorediosum* species. This species was successively extracted in acetone and methanol where high percentage crude yield of methanol extract give 6.82 % compared to acetone extract which give 6.68 %. TLC technique that developed in solvent (hexane:diethyl ether:formic acid), (toluene:acetic acid) and (hexane:ethyl acetate) shows (hexane:ethyl acetate) was selected to use for the next separation due to it clear spot resolution in TLC test. The acetone extracts were subjected to column chromatography, eluted with increasing polarity of mixture solvent from (hexane:ethyl acetate) to (ethyl acetate : methanol) and collected in 70 vials. Only one vials (vials 56) is selected for further analysis based on the less spot appear in TLC plate that observed under UV lamp. Based on the spectroscopy analysis using UV spectroscopy which give maximum wavelength of  $\lambda = 215$  nm, FTIR with several absorption, GC-MS with m/z 503 molecular weight and comparison from literature data, it is shown that the isolated compound from *Parmotrema Praesorediosum* was probably morphine 3- methyl ether.