THE ISOLATION OF FLAVONOID IN Garcinia parvifolia (Mig.)

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TABLE OF CONTENTS

				PAGE		
ACKNOWLEDGEMENT						
TABLE OF CONTENTS						
LIST OF TABLE						
LIST OF FIGURES						
LIST OF ABBREVIATIONS						
ABSTRACT						
ABS	ΓRAK			viii		
СНА	PTER 1	: INT	RODUCTION			
1.1	Backs	ground	of Study	1		
1.2	Proble	em Stat	tement	2 2 3		
1.3	Signif	Significance of Study				
1.4	Objec	Objectives of Study				
СНА	PTER 2		LITERATURE REVIEW			
2.1	Guttif		ETTERATORE REVIEW	4		
2.2	Garci			4		
2.3		Garcinia parvifolia (Miq.)				
	2.3.1		rigin of Garcinia parvifolia (Miq.)	5		
	2.3.2		mple collection	6		
	2.3.3		rt of <i>Garcinia parvifolia</i> (Miq.)	6		
	2.3.4	Be	enefits of Garcinia parvifolia (Miq.)	7		
2.4	Flavo	noids		7		
	2.4.1	Ty	pe of Flavonoid	8		
	2.4.2	Be	enefit to human	10		
			2.4.2.1 Immunity	10		
			2.4.2.2 Against chronic disease	11		
		2.4.3	Benefit to plants	11		
	2.5		etion and Analysis	20.000		
		2.5.2		12		
		2.5.3		12		
		2.5.4	0 1 7	13		
		2.5.5	Total Flavonoid Content (TFC)	14		

CHAP	TER 3	: METHODOLOGY			
3.1	Materials				
	3.1.1	Raw materials	15		
	3.1.2	Chemicals	15		
	3.1.3	Apparatus	16		
3.2	Metho	ods	16		
	3.2.1	Sample extraction	17		
	3.2.2	and the second of the second o	17		
	3.2.3	Column Chromatography	18		
	3.2.4	Total flavonoid content(TFC)	18		
3.3	Statist	ical Analysis	19		
 CHAPTER 4: RESULT AND DISCUSSION 4.1 Thin Layer Chromatography 4.2 Fractionation Column Chromatography 4.3 Total Flavonoid Content 					
CHAF	TER 5	: CONCLUSION AND RECOMMENDATIONS	36		
		ERENCES	38 42		
APPENDICES					
CUDI	CIII III	M VITAE	48		

ABSTRACT

THE ISOLATION OF FLAVONOID IN Garcinia parvifolia (Miq.)

The isolation of flavonoid and total flavonoid content of crude methanolic extract from pericarp of (takob-akob) Garcinia parvifolia (Mig.) from Sabah were investigated. The thin layer chromatography with n-hexane:ethyl acetate with 4:1 and 3:2 (v/v) ratio solvent system confirmed the presence of flavonoid. The confirmation was done by the detection of spots on TLC which were vellow, yellow-violet and violet colours using aluminium chloride as spray reagent and Rf values were between 0.14-0.55. Separation by column chromatography, five types of flavonoid were isolated and were suspected to be quercetin, glycoside, rutin, anthocyanin and kolaviron. Total flavonoid content in the sample was 0.27±0.00 mg/g determined using spectrophotometer equivalent to rutin. The total flavonoid content found was low compared to other parts of the plants such as flesh and seed. In conclusion, flavonoid was detected and isolated in the pericarp of Garcinia parvifolia (Mig.). Flavonoid has many medicinal values for example anticancer, antidiabetic, antioxidant and anti-inflammatory. Therefore, it is beneficial to consume Garcinia parvifolia (Miq.) in daily diet. It will serve as an affordable source of antioxidant.