

**DETERMINATION OF CAROTENOID CONTENT IN  
RIPENS AND DRIED FRUITS OF *Garcinia atroviridis***

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## TABLE OF CONTENT

	PAGE
<b>ACKNOWLEDGMENT</b>	<b>iii</b>
<b>TABLE OF CONTENTS</b>	<b>iv</b>
<b>LIST OF TABLES</b>	<b>vi</b>
<b>LIST OF FIGURES</b>	<b>vii</b>
<b>LIST OF ABBREVIATIONS</b>	<b>viii</b>
<b>ABSTRACT</b>	<b>ix</b>
<b>ABSTRAK</b>	<b>x</b>
 <b>CHAPTER 1 : INTRODUCTION</b>	
1.1 Background Study	1
1.2 Problem Statement	3
1.3 Significance of Study	3
1.4 Objectives of the study	4
 <b>CHAPTER 2 : LITERATURE REVIEW</b>	
2.1 Application of <i>Garcinia atroviridis</i>	5
2.2 Carotenoids	6
2.3 Biological activities of <i>Garcinia atroviridis</i>	8
 <b>CHAPTER 3 : METHODOLOGY</b>	
3.1 Materials	
3.1.1 Raw materials	10
3.1.2 Chemicals	10
3.1.3 Apparatus	10
3.2 Method	
3.2.1 Carotenoid determination	11
3.2.2 Spectrophotometer reading and determination of carotenoids	13
3.2.3 Antioxidant activity test	14
3.2.4 Statistical analysis	15

<b>CHAPTER 4 : RESULT AND DISCUSSION</b>	
4.1 Carotenoid content	16
4.2 Factors influence availability or amount of carotenoids	17
4.3 DPPH <sup>+</sup> Radical Scavenging Activity	18
4.4 Determination of antioxidant activity	20
4.5 Preferable consumption for healthy benefits	20
 <b>CHAPTER 5 : CONCLUSION AND RECOMMENDATIONS</b>	 22
 <b>CITED REFFERENCES</b>	 24
<b>APPENDICES</b>	28
<b>CURRICULUM VITAE</b>	34

## ABSTRACT

### DETERMINATION OF CAROTENOID CONTENT IN RIPENS AND DRIED FRUITS OF *Garcinia atroviridis*

*Garcinia atroviridis*'s fresh fruit is one of the underutilized in Malaysia, which have bright yellow color. The yellow colour arise from the presence of a pigments called carotenoid, that brings a lot of advantages in human health. However, the fruits often consumed in the form of "asam keping" which is the sun dried *G.atroviridis*. The aims of this study is to analyze the amount of carotenoid in both ripens and dried condition, since the advantage of the fruits are mostly rely in the carotenoid which brings the antioxidant activity. Both of the sample was acquired from the same source and undergo the extraction of carotenoid before proceeding with DPPH + Radical scavenging acticity to determine the antioxidant activity. The fresh fruit of *G.atroviridis* is 9.17 µg/g of the dry mass of carotenoid content which is significantly higher compared to the dried conditions, with 6.57µg/g of total carotenoid content in dry masses. The dried *G.atroviridis* loses some of the carotenoid due to the various external factor such as heat, light and oxygen that have been encountered during the preparation process of "asam keping. There is also a correlation between the amount of carotenoid with the rate of antioxidant activity, where the ripens *G.atroviridis* also have higher antioxidant activity compared to the dried. Hence, the ripens *G.atroviridis* has more benefit for our health instead of the dried *G.atroviridis*.