This Final Year Project Report entitled “Comparison Of Different Drying Methods And Proximate Analysis Of The Fruit Peel” was submitted by Siti Najihah binti Kamaruddin, in partial fulfillment of the requirements for the Degree of Bachelor of Science (Hons.) Biology, in the Faculty Of Applied Sciences, and was approved by

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# TABLE OF CONTENT

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>TABLE OF CONTENT</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>viii</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>ix</td>
</tr>
<tr>
<td>ABSTRAK</td>
<td>x</td>
</tr>
</tbody>
</table>

## CHAPTER 1: INTRODUCTION
1.1 Background of Study 1
1.2 Problem Statement 3
1.3 Significance of the Study 4
1.4 Objectives of the Study 4

## CHAPTER 2: LITERATURE REVIEW
2.1 Food Drying Method 5
2.2 Dried Product 6
2.3 Candying Method 8
2.4 Candied Product 9
2.5 Nutritional Composition 10
   2.5.1 Carbohydrate 10
   2.5.2 Protein 10
   2.5.3 Fat 11
   2.5.4 Fiber 11
   2.5.5 Mineral 12

## CHAPTER 3: METHODOLOGY
3.1 Materials 13
   3.1.1 Raw materials 13
   3.1.2 Chemicals 13
   3.1.3 Apparatus 13
3.2 Methods 14
   3.2.1 Sample preparation 14
   3.2.2 Proximate Analysis 18
      3.2.2.1 Calculate-by-difference method 18
ABSTRACT

COMPARISON OF DIFFERENT DRYING METHODS AND

PROXIMATE ANALYSIS OF FRUIT PEEL

Process of dehydration can be used as a long-term preservation of product efficiently. The aim of this study is about to compare different drying methods of fruit peel and to determine proximate analysis of the fruit peel. Drying methods conducted are sun drying, oven drying and candied drying. Proximate analysis is conducted based on parameter carbohydrate, protein, fat, crude fiber, moisture and ash to determine the nutrient content of raw melons and dried melons. The result obtained from the experiment indicates that oven dry samples have advantages in term of proximate value and longer shelf life of the sample compare to other drying methods and raw sample. The highest value of moisture is raw rock melon which is 93.27%, highest value for ash is oven-dried watermelon which is 11.64%, highest value for crude fiber is oven-dried honeydew which is 90.23%, highest value of crude fat content is candied-dried honeydew which is 2.67%, highest value of crude protein is oven-dried honeydew which is 48.27% and lastly highest value of carbohydrate is candied-dried watermelon which is 62.83%. Low moisture content indicates the oven-dried peel sample can be stored for a longer time compare to other dried and raw peel sample. Other significant proximate value such as highest value ash content indicates highest mineral content in the sample and highest value of crude fiber in which indicates ability to lower risk of chronic disease such as obesity can be obtained by oven-dried peel for watermelon, honeydew and rock melon peel sample.