COMPARATIVE STUDY OF PEROXIDE VALUE, IODINE VALUE OF GROUNDNUTS, SOYA BEANS AND COCONUT OILS.

NAME OF PRESENTER: NGATIA WARUGURU JOYCE

INDEX NO: 401001/793

PRESENTED TO: KENYA NATIONAL EXAMINATION COUNCIL

DATE OF PRESENTATION: OCTOBER 2000
# CONTENT

<table>
<thead>
<tr>
<th>CONTENT</th>
<th>PAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTENT</td>
<td>i</td>
</tr>
<tr>
<td>ACKNOWLEDGMENT</td>
<td>ii</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>iii</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>iv</td>
</tr>
</tbody>
</table>

## CHAPTER ONE

1.1.0. INTRODUCTION 1

1.1.1. LITERATURE REVIEW 3

1.1.2. PHYSICAL AND CHEMICAL PROPERTIES 5

1.1.3. CLASSIFICATION OF OILS 9

1.1.4. OBJECTIVES 12

1.1.5. METHODOLOGY 13

1.1.6. EXTRACTION OF OIL USING SOXHLET APPARATUS 14

1.1.7. REVIEW OF METHODS OF ANALYSIS 15

## CHAPTER TWO

2.1.0 APPARATUS 20

2.1.1 REAGENTS 21

2.1.2. PREPARATION OF REAGENTS 22
2.1.3. SAMPLING OF SEEDS 24
2.1.4. DETERMINATION OF QUANTITY OIL (PERCENTAGE) 25
2.1.5. DETERMINATION OF PEROXIDE VALUE 27
2.1.6. DETERMINATION OF IODINE VALUE 28

CHAPTER THREE

3.1.0. QUANTITY OF OIL PERCENTAGE 30
3.1.1. IODINE VALUE OF OIL 31
3.1.2. PEROXIDE VALUE OF OIL 32
3.1.3. DISCUSSION 33
3.1.4. RECOMMENDATION 34
3.1.5. REFERENCES 35
ABSTRACT

A comparative study was carried out on coconut, groundnut and Soya bean oils which was extracted from the name seed to determine quality and quantity. It was found that there was no significant difference on the quality of the 3 types of oils.

The amount of oil obtained from Soya beans was 75%, Groundnut 51.97% and Coconut 72.83%. Soya Beans has the highest percentage of oil followed by coconut and groundnuts.