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**EXTRACTION AND EVALUATION OF OILS FROM INDIGENOUS
AND GRAFTED MACADAMIA NUTS FOUND IN MATHIOYA
DIVISION, MURANG'A DISTRICT :**

TRADE PROJECT

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TABLE OF CONTENTS

Declaration	i
Dedication.....	ii
Acknowledgements	iii
Table of contents	iv
Abstract	viii

1.0 CHAPTER ONE

1.1 Introduction.....	1
1.2. Literature Review	5
1.2. 1 Fats and Oils.....	5
1.2.2 Structure of fats/oils	6
1.2.3 Hydrolysis of fats/ oils	7
1.2.4 Extraction of Fats and oils	7
1.2.5 Evaluation of fats and oils.....	8
1.3 Methodology	10
1.3.1 Oil Extraction	10
1.3.2.2 Solvent Extraction	10
1.3.1.2 Choice of solvent	11
1.3.1.2.1 Other methods of extraction.....	12
1.3.2 The Parameters analyzed.....	12
1.3.2.1 Chemical parameters.....	12
1.3.2.1.1 Saponification value.....	12
1.3.2.1.2 Acid value.....	13

1.3.2.1.3 Iodine value	14
1.3.2.1.4 Peroxide value	15
1.3.3 Metal analysis	16
1.3.3.1 Lead	16
1.3.3.2 Iron	16
1.3.3.3 Calcium	17
1.3.3.4 Zinc	17
1.3.4 Physical parameters	18
1.3.4.1 Specific gravity	18
1.3.4.2 Water content	18
1.3.5 Atomic absorption spectroscopy	19
1.3.5.1 A block diagram of A.A.S.	21
1.3.6 Karl fisher apparatus	22
2.0 CHAPTER TWO	
2.1 Sampling and experimental	23
2.1.1 Sampling	23
2.1.1.1 Sampling area	23
2.1.1.2 Sample collection	23
2.1.1.3 Sample storage	23
2.1.1.4 Sample coding	24
2.1.1.5 Sample preparation	24
2.1.1.5.1 Dehusking	24
2.1.1.5.2 Drying	24

2.1.1.5.3 Kernel recovery	24
2.1.1.5.4 Size reduction	24
2.1.1.6 Oil extraction – solvent extraction.....	25
2.2 Experiments	26
2.2.1 Saponification value determination.....	26
2.2.2 Iodine value determination	27
2.2.3 Acid value determination	28
2.2.4 Peroxide value determination	29
2.2.5 Metal analysis	30
2.2.5.1 List of equipment and apparatus.....	30
2.2.5.2 Preparation of solutions for metal analysis.....	31
2.2.5.2.1 Lead	31
2.2.5.2.2 Iron	32
2.2.5.2.3 Calcium	32
2.2.5.2.4 Zinc	32
2.2.5.3 Sample preparation for metal analysis.....	32
2.2.5.3.1 Sample for calcium analysis.....	33
2.2.5.4 Instrument parameters and working conditions	34
3.0 CHAPTER THREE	
3.1 Results	35
3.1.1 Chemical apparatus.....	35
3.1.1.1 % crude oil	35
3.1.1.2 Saponification value.....	35

3.1.13 Iodine value	36
3.1.1.4 Acid value	36
3.1.1.5 Peroxide value	37
3.1.2 Physical analysis	37
3.1.2.1 Water content	37
3.1.2.2 Specific gravity	37
3.1.3 Metal analysis	38
3.1.3.1 Concentration of calcium	38
3.1.3.2 Concentration of Lead	38
3.1.3.3 Concentration of Iron	38
3.1.3.4 Concentration of Zinc	39
3.1.3.1.1 Calibration curve for Lead	40
3.1.3.1.2 Calibration curve for calcium	41
3.1.3.1.2 Calibration curve for iron	42
3.1.3.1.2 Calibration curve for zinc	43
4.0 CHAPTER FOUR	
4.1 Discussion of results	44
4.2 Conclusion and recommendations	45
Appendices	48
References	51

ABSTRACT

An extraction and analysis was carried out to compare oils obtained from indigenous and grafted macadamia nuts from trees found in Mathioya division, Murang'a district.

In this project the word indigenous was taken as the original plant. This means that the chemical composition of the plant is not changed by ways of grafting for example.

Grafting means the act of fixing a part of a shoot from one plant with desirable characteristics to another. In macadamia, grafting is done to the indigenous plant when the plant is six months old. This changes the productivity and multiplication of a plant.

The study started right from the garden where the trees were grown. Some trees were found along the fence and others in the midst of other plants where they were well cared for. The trees together with other trees. The nuts were randomly picked in pairs of grafted and indigenous nuts from two stations within the division. Various problems were encountered since the farmers did not understand why one insisted on growth and maturity of the nuts. There was also inavailability of both types from one station.

The grafted nuts were found to be of high oil content compared to the indigenous nuts. Their saponification value was also high.

They were also found to contain reasonable zinc. The metal lead which cause lead poisoning was not found. Macadamia oil was therefore found fit for human consumption.