



**UNIVERSITY OF NAIROBI**  
**COLLEGE OF PHYSICAL AND BIOLOGICAL SCIENCES**  
**DEPARTMENT OF CHEMISTRY**

**PHYTOCHEMICAL INVESTIGATION OF THE STEM BARK AND THE  
LEAVES OF *TECLEA SIMPLICIFOLIA* FOR ANALGESIC ACTIVITY**


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**A THESIS SUBMITTED FOR EXAMINATION IN PARTIAL FULFILMENT  
OF THE REQUIREMENTS FOR AWARD OF THE DEGREE OF  
MASTERS OF SCIENCE IN CHEMISTRY OF THE UNIVERSITY OF  
NAIROBI**

**2015**

### DECLARATION

I declare that this thesis is my original work and has never been presented elsewhere for examination, award of a degree or publication. In areas where other people's work has been used, it has been properly acknowledged and referenced in accordance with the University of Nairobi requirements.

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## **DEDICATION**

This thesis is dedicated to:

My parents Mr and Mrs. Charles Mugane,

My husband, Moses Karani and my daughter, Valerie Ikol.

## ACKNOWLEDGEMENTS

I acknowledge the support and continued guidance accorded to me by my supervisors; Prof Abiy Yenesew and Dr. Solomon Derese, making this work achievable. I'm grateful for their tireless efforts, professional advice and encouragement.

I would also wish to extend my gratitude to Dr. Albert Ndakala and Dr. John Onyatta who kept me up-to-date with the departmental, school and Board of postgraduate Studies requirements. Furthermore, I appreciate the support I received from Dr. Matthias Hydenreich of Institute of Chemistry, University of Potsdam, Germany for high resolution NMR analyses. In addition, I acknowledge the support received from Mr. Solomon Cheboi of National Museums of Kenya in the analysis of the analgesic data, and the entire Phytochemistry staff, National Museums of Kenya for their support.

The support received from the technical and academic staff of the Department of Chemistry, University of Nairobi is highly appreciated. I further extend my appreciation for the assistance received from my fellow MSc. and PhD students in the Department especially Mr Yoseph Atilaw, Dr. Negera Abdissa, Ms Martha Induli, Ms Caroline Chepkirui and Mr Tsegaye Deyou. I am also thankful for the endless love and financial support given to me by my parents and my husband, Moses Karani throughout the course of the studies. Finally, I give thanks to the Almighty God for his provisions and care throughout my academic journey.

## LIST OF ABBREVIATIONS AND SYMBOLS

COSY	Correlation Spectroscopy
HMBC	Heteronuclear Multiple Bond Correlation
HMQC	Heteronuclear Multiple Quantum Correlation
MHz	Mega Hertz
HZ	Hertz
J	Coupling constant
<i>s</i>	Singlet
<i>d</i>	Doublet
<i>t</i>	Triplet
TLC	Thin Layer Chromatography
PTLC	Preparative Thin Layer Chromatography
NMR	Nuclear Magnetic Resonance
NOESY	Nuclear Overhauser and Exchange Spectroscopy
NOE	Nuclear Overhauser effect

## TABLE OF CONTENTS

DECLARATION .....	ii
DEDICATION .....	iii
ACKNOWLEDGEMENTS .....	iv
LIST OF ABBREVIATIONS AND SYMBOLS .....	v
LIST OF TABLES .....	viii
LIST OF FIGURES .....	viii
LIST OF SCHEMES .....	ix
ABSTRACT .....	x
CHAPTER ONE .....	1
1.0 INTRODUCTION .....	1
1.1 GENERAL .....	1
1.2 PROBLEM STATEMENT .....	3
1.3 JUSTIFICATION .....	4
1.4 OBJECTIVES .....	5
1.4.1 General objective .....	5
1.4.2 Specific objectives .....	5
CHAPTER TWO .....	6
2.0 LITERATURE REVIEW .....	6
2.1 PAIN .....	6
2.1.1 Pain management .....	7
2.2 THE RUTACEAE FAMILY .....	7
2.3 THE GENUS <i>TECLEA</i> .....	9
2.3.1 Botanical information on <i>Teclea simplicifolia</i> .....	9
2.4 ETHNOBOTANICAL USES OF <i>TECLEA</i> SPECIES .....	10
2.5 BIOLOGICAL ACTIVITIES OF <i>TECLEA</i> SPECIES .....	10
2.6 PHYTOCHEMISTRY OF <i>TECLEA</i> SPECIES .....	11
2.6.1 Alkaloids .....	11
2.6.2 Terpenoids .....	20
CHAPTER THREE .....	21