CONTENTS

PREFACE

CHAPTER I

Section I: PHYTOCHEMICAL STUDIES ON MACARANGA PELTATA Muell.
1.1.1 Introduction
1.1.2 Work so far reported on Macaranga species
1.1.3 Present work
1.1.4 Materials and methods
1.1.5 Extraction, fractionation and isolation of compounds from the petroleum ether extract of the bark of M. peltata Muell.
1.1.6 Rearrangement of 3-acetylaleuritolic acid in acid medium
1.1.7 Results and discussion

Section II: SINGLE CRYSTAL X-RAY ANALYSIS OF 3-ACETYL ALEURITOLIC ACID ISOLATED FROM MACARANGA PELTATA
1.2.1 Introduction
1.2.2 Methods of crystal structure analysis
1.2.3 Methods of crystal structure refinement
1.2.4 Experimental aspects of X-ray analysis
1.2.5 Present work
1.2.6 Results and discussion

CHAPTER II: INVESTIGATION ON MACARANGA PELTATA SEED OIL
2.1 Introduction
2.2 Chemistry of fats
2.3 Theories of distribution of fatty acids
2.4 The fatty acids of nature
2.5 Physical properties of fatty acids
2.6 Chemical properties
2.7 Shorthand notation for nomenclature of fatty acids
2.8 Minor compounds accompanying lipids
2.9 Present work
2.10 Materials and methods
2.11 Experimental