

CONTENTS

CHAPTER NUMBER	TITLE	PAGE NUMBER
1	INTRODUCTION	
A	Importance of Natural Products from Herbal Plants	1 – 18
B	Preliminary Investigation of Anacardiaceae Family and their Biological Activities	19 – 25
C	Chemical Constituents and their Pharmacological activities of <i>Semecarpus anacardium</i> L.f – A Review.	26 – 61
11	Isolation and Structural Determination of New Triacylglycerides from <i>Semecarpus anacardium</i> L.f (Bhallataka) Plant parts.	62 - 158
111	This chapter mainly consists of two parts: Biodiesel conversion and Epoxidation	
A	Recent Advances in the Synthesis of Biodiesel from Bhallataka Oil-2(Tulja triacylglyceride)	159 – 177
B	This Chapter deals with the Synthesis of Epoxy Bhallataka Oil-5 (Shiva triacylglyceride) and it's Evaluation for Lubricant Properties	178 – 208
1V	Molecular modeling of fatty acids and Multi metal analysis.	
A	Fatty Acids Isolated from Flowers, Leaves, Stem bark, Root bark and Nuts of <i>Semecarpus anacardium</i> L. f. (Anacardiaceae) their Molecular Modeling and Comparative Studies.	209 – 240
B	Multimetal analysis of Plant Extracts and Ash content of Root bark, Stem bark, Leaves, Flowers and Nuts of <i>Semecarpus anacardium</i> L.f and their Biological activities.	241 – 261
V	Isolation of Bhavanol and Biflavonoids	
A	Novel Applications of “Bhavanol” isolated from Roots and Nuts of Bhallataka for Chemical Industries	262 – 291

B Biflavonoids isolated from *Semecarpus anacardium* L.f Nuts, Rots, their Docking studies and their Biological Innovations. 292 – 319

Summary 320 – 339

Publications 340 – 403

Number of Tables (Chapter I to V).....75

Number of Figures(Chapter I to V).....219