



اَوْنِيُوْرَسِيْتِي تِي كُوْلُوْمِي مَارَا
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**SCREENING OF ANTICOAGULANT ACTIVITY FROM AQUEOUS EXTRACT OF
Parkia speciosa PERICARP**

By

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DECLARATION

I hereby declare that this thesis is my original work and has not been submitted previously or currently for any other degree at UiTM or any other institution.

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ABSTRACT

Parkia speciosa or commonly known as 'petai' by locals is one of the famous plants that is abundantly found in Malaysia. The seeds are usually eaten raw (as ulam) or cooked (Lim, 2012). However, peels or pericarp is usually the waste part of the *Parkia speciosa* seed. The waste product has not generally been given attention with a view to be used or recycled. Hence, the current study was initiated to identify the anticoagulant activity of the aqueous extract of the *Parkia speciosa* pericarp. Therefore, the proposed study started with the collection of 1 kg of fresh *Parkia speciosa* pericarp, cutting them into smaller pieces and drying them under the sun. The dried pericarp were then extracted by using the decoction method with distilled water as solvent. Activated partial thromboplastin time (aPTT), prothrombin time (PT) and thrombin time (TT) tests were performed on normal control plasma spiked with the different concentrations of the extract in duplicates. Finally, the clotting time were recorded and analysed using one-way ANOVA followed by post-hoc Dunnet's test. aPTT and TT results obtained showed significant results ($p < 0.05$) at the highest concentration of extract which is was 100%. Contrary to aPTT and TT, no significant effect was observed for PT. Hence, the aqueous extract of *Parkia speciosa* pericarp was considered to possess anticoagulant effect which interfere with the extrinsic and common pathways.

Key words: Anticoagulant, *Parkia speciosa*, haemostasis, intrinsic pathway, extrinsic pathway, Malaysia

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TABLE OF CONTENTS

CONTENTS	Pages
TITLE PAGE	i
DECLARATION	ii
INTELLECTUAL PROPERTIES	iii
APPROVAL	vi
ABSTRACT	vii
ACKNOWLEDGEMENTS	viii
TABLE OF CONTENTS	ix
LIST OF TABLES	xii
LIST OF FIGURES	xiii
LIST OF ABBREVIATION	xv
CHAPTER	
1. INTRODUCTION	
1.1. Background of Study	1
1.2. Problem Statement	2
1.3. Objective Of Study	2
1.3.1. General Objective	2
1.3.2. Specific Objective	2
1.4. Significance of the Study	3
1.5. Research Hypothesis	3
2. LITERATURE REVIEW	
2.1. Medicinal herbal plant	4
2.2. <i>Parkia speciosa</i>	6
2.2.1 Distribution	6
2.2.2 Nutritional value	7
2.2.3. Phytochemical (chemical compounds)	9
2.3 Haemostatic disorder : Coagulation associated diseases	12
2.4 Anticoagulant therapy	13
2.4.1 Anticoagulant drugs	13
2.4.1.1 Warfarin	13