

CONTENTS

COVER PAGE	i
RATIFICATION PAGE	ii
STATEMENT PAGE	iii
DEDICATION	iv
PREFACE	v
CONTENTS	vi
LIST OF FIGURES	vii
LIST OF TABLES	viii
LIST OF APPENDICES	ix
ABSTRACT	x
INTISARI	xi
CHAPTER I INTRODUCTION	1
I.1 Background	1
I.2 Aims	3
I.3 Research Benefits	4
CHAPTER II LITERATURE REVIEW AND HYPOTHEIS FORMULATION	5
II.1 Literature Reviews	5
II.1.1 Veratraldehyde	5
II.1.2 Chalcones derivatives	6
II.1.3 Flavone derivatives	9
II.1.4 Antimalarial activity assay	12
II.2 Hypothesis Formulations and Research Plans	14
II.2.1 Hypothesis formulation I	14
II.2.2 Hypothesis formulation II	15
II.2.3 Hypothesis formulation III	15
II.2.4 Research planning	16
CHAPTER III RESEARCH METHODS	17
III.1 Materials	17
III.2 Equipments	17
III.3 Procedures	17
III.3.1 Synthesis of 2'-hydroxy-3,4-dimethoxychalcone	17
III.3.2 Synthesis of 3',4'-dimethoxyflavone	18
III.3.3 Antimalarial Activity Assays	18
CHAPTER IV RESULTS AND DISCUSSIONS	20
IV.1 Synthesis of 2'-hydroxy-3,4-dimethoxychalcone	20
IV.2 Synthesis of 3',4'-dimethoxyflavone	25
IV.3 Heme Polymerization Inhibitory Assay Results	32
CHAPTER V CONCLUSIONS	36
V.1 Conclusions	36
V.2 Suggestions	36
REFERENCES	37
APPENDICES	41