

TABLE OF CONTENTS

TITLE PAGE.....	i
APPROVAL PAGE.....	ii
AUTHENTICITY STATEMENT.....	iii
PREFACE.....	iv
TABLE OF CONTENTS.....	vi
INDEX OF FIGURE.....	viii
INDEX OF TABLE	ix
LIST OF APPENDIX	x
INDEX OF ABBREVIATIONS.....	xi
ABSTRACT.....	xii
CHAPTER I INTRODUCTION	
A. Background.....	1
B. Problem Formulation.....	3
C. Research Objective.....	3
D. Research Authenticity.....	3
E. Research Benefit.....	4
CHAPTER II	
A. LITERATURE REVIEW	
1. Epidemiology.....	5
2. <i>Aedes aegypti</i>	8
3. Chemical Vector Control.....	11
4. Insecticide Resistance.....	14
B. THEORETICAL BASIS.....	15
C. CONCEPTUAL FRAMEWORK.....	17
CHAPTER III RESEARCH METHODOLOGY	

A. Research Design.....	18
B. Research Subject and Location.....	18
C. Equipment.....	18
D. Material.....	18
E. Research Course.....	19
F. Research Variables.....	21
G. Result Analysis.....	21
CHAPTER IV RESULT AND DISCUSSION	
A. RESULT.....	22
B. DISCUSSION.....	24
CHAPTER V CONCLUSION AND SUGGESTION	
A. CONCLUSION.....	28
B. SUGGESTION.....	28
REFERENCES.....	30
APPENDIX	

INDEX OF FIGURE

Figure 1 - Incidence rate of dengue per 100.000 people in Indonesia.....	6
Figure 2 - Incidence rate of dengue per 100.000 people by Province in 2015.....	6
Figure 3 - Number of DHF case from 2012-2015.....	7
Figure 4 - Distribution of dengue case in each <i>Kecamatan</i> of Kediri, East Java on January 2015.....	7
Figure 5 - <i>Ae. aegypti</i> eggs.....	9
Figure 6 - Fourth instar <i>Ae. aegypti</i> larvae.....	9
Figure 7 - Clockwise from top left: Pupa stage, emerging adult, and adult stage of <i>Ae. aegypti</i>	10
Figure 8 - General chemical structure of Organophosphate.....	12
Figure 9 - From left to right: Fast blue B salt, alpha naphthyl acetate, and sodium dodecyl sulphate.....	18
Figure 10 - From left to right: Sample larvae, negative control larvae, positive control larvae.....	19
Figure 11 - Differences between <i>Ae. aegypti</i> and <i>Ae. albopictus</i>	11

INDEX OF TABLE

Table 1 - Average absorbance of each sample.....	19
Table 2 - Standard Deviation and average number calculated from four samples which have lowest absorbances.....	20
Table 3 - Number and percentage of samples classified into each absorbance status.....	21

LIST OF APPENDIX

Appendix 1 – Microplate appearance after the addition of coupling reagent into each well

Appendix 2 - Standard Deviation, average number, and cutoff points calculated from four samples; AI (0,137), EII (0,100), BIII (0,213), and AIV (0,214) which have lowest absorbances.

Appendix 3 - Pictures of the Experiment

Appendix 4 – Absorbance result obtained from Microplate Reader

Appendix 5 – Ethical Clearance

INDEX OF ABBREVIATIONS

<u>Abbreviation</u>	<u>Full Citation</u>
CDC	Centre of Disease Control and Prevention
MoH	Ministry of Health
<i>Ae.</i>	<i>Aedes</i>
ml	milliliter
mg	miligrams
WHO	World Health Organization
μ L	microliter
Depkes	Departemen Kesehatan