OPTIMIZATION OF KELI AFRIKA (*CLARIAS GARIEPINUS*) HYDROLYSATE BY ALCALASE (EFFECT OF TIME AND ENZYMES SUBSTRATE RATIO)

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	v
LIST OF FIGURES	vi
LIST OF ABBREVIATIONS	vii
ABSTRACT	viii
ABSTRAK	ix

CHAPTER 1 INTRODUCTION

5

1.1	Background	1
1.2	Significant of study	2
1.3	Objectives of study	2

CHAPTER 2 LITERATURE REVIEW

2.1	Catfish	3
2.2	Hydrolysis	5
	2.2.1 Acid hydrolysis	5
	2.2.2 Alkaline hydrolysis	6
	2.2.3 Enzymatic hydrolysis	7
2.3	Protein Hydrolysis	9
	2.3.1 Enzyme	10
	2.3.2 Factor affecting enzyme activity	11
	2.3.2.1 Enzyme, Substrate and Cofactor Concentration	12
	2.3.2.2 Effect of pH	12
	2.3.2.3 Effect of Temperature	13
	2.3.3 Alcalase	13
	2.3.4 Fish protein hydrolysate(FPH)	14
	2.3.5 Benefit of protein hydrolysate	15
2.4	Problems in protein hydrolysates	17
	2.4.1 Bitterness	17
e	2.4.2 Colour	20
	2.4.2.1 Colour formation in acid hydrolysis	21
	2.4.2.2 Colour formation in enzymes hydrolysis	21

ABSTRACT

OPTIMIZATION OF KELI AFRIKA (CLARIAS *GARIEPINUS*) HYDROLYSATE BY ALCALASE(EFFECT OF TIME AND ENZYMES SUBSTRATE RATIO)

The optimization of catfish hydrolysate by Alcalase was obtained from the experiment at optimum condition 137 minutes and 4% enzymes concentration with temperature 50° C and pH 7 as determined by randomized surface methodology (RSM). Whereby, the nitrogen recovered from catfish hydrolysis was optimum condition at 147 minutes and 4% enzymes concentration. The degree hydrolysis of hydrolysate was 4.11% for catfish flesh were treated with enzymes Alcalase. The total nitrogen content of enzymatic hydrolysate range from 0.85% to 2.86%.the characteristic of the hydrolysate was obtained from hydrolysis was brown in color with sticky characteristic. Increasing the time and enzymes concentration significantly (p<0.05) increased the degree of hydrolysis.