	Manage of the state of the stat	ABLE OF CONTENTS		
			Page	
ACKNOWLED	GEMENTS		iii	
ABSTRACT IN ENGLISH			v	
ABSTRACT IN THAI			viii	
TABLE OF CO			xi	
LIST OF TABLES			xiii	
LIST OF FIGU	RES		xiv	
CHAPTER 1 II	NTRODUCT	TION	1	
CHAPTER 2 L	ITERATUR	E REVIEW	3	
CHAPTER 3 M	IATERIALS	S AND METHODS	15	
Part 1 F	Evaluation of	male sterility in chili and	15	
i	mprovement	of parental lines		
E	Experiment 1	Evaluation of male sterility in chili by	17	
	, 11	fertility scoring method		
H	Experiment 2	Molecular markers of male sterility genes of chili	18	
E E	Experiment 3	Improvement of parental lines	19	
Part 2 (Combining al	bility study in chili maintainers (B-line)	19	
CHAPTER 4 R	RESULTS		24	
Part 1 F	Evaluation of	male sterility in chili and	24 S T V	
improvement of parental lines				
rie	Experiment 1	Evaluation of male sterility in chili by	24	
		fertility scoring method		

TABLE OF CONTENTS (Continued)

	Page
Part 1 Evaluation of male sterility in chili and	
improvement of parental lines (continue)	
Experiment 2 Molecular markers of male sterility genes of chili	27
Experiment 3 Improvement of parental lines	28
Part 2 Combining ability study in chili maintainers (B-line)	29
CHAPTER 5 DISCUSSION AND CONCLUSION	73
REFERENCES	76
APPENDICES	92
CURRICULUM VITAE	111

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม Copyright[©] by Chiang Mai University All rights reserved

LIST OF TABLES

17 17 25
25
29
34
46
50
53
59
70
71
72

xiv

LIST OF FIGURES

Figure		Page
1	Improvement of chili parental lines by backcross method	20
2	Fertile pollen with red stained and sterile pollen with white color	26
3	DNA amplification by PCR technique	27
4	DNA amplification by OPF01 primer	28
5	F ₁ hybrids of chilies	36
6	Male parental varieties of chilies	39
7	Female parental varieties of chilies	39
8	Commercial varieties of chilies	39
9	Fruits of F ₁ hybrids, male parents, female parents and commercial	40
	varieties of chilies	

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่ Copyright[©] by Chiang Mai University All rights reserved