

TABLE OF CONTENTS

TITLE PAGE	i
APPROVAL PAGE	ii
RATIFICATION PAGE	iii
STATEMENT PAGE	iv
PREFACE	v
TRIBUTES	vii
ABSTRACT	viii
INTISARI	ix
TABLE OF CONTENTS	x
LIST OF FIGURES	xi
LIST OF TABLES	xii
LIST OF APPENDICES	xiii
INTRODUCTION	1
Background	1
Research Purposes	3
Research Benefits	3
LITERATURE REVIEW	4
Bali Cattle	4
Production System of Bali Cattle	5
Infestation of Ticks and Flies	7
Nusa Penida Island	10
THEORETICAL BASIS	11
Theoretical Basis	11
Empirical Statement	12
MATERIALS AND METHODS	13
Time and Location	13
Materials	13
Methods	13
RESULTS AND DISCUSSION	19
Farmers Characteristics in Nusa Penida	19
Farm Structure in Nusa Penida Island	21
Ectoparasite and Lesion	25
Environment Characteristics	35
CONCLUSION, LIMITATIONS AND RECOMMENDATION	38
Conclusion	38
Limitations	38
Recommendation	38
BILBIOGRAPHY	40
APPENDICES	45

LIST OF FIGURES

Figure	Page
1. View of female <i>Hippobosca equina</i> (Forest fly).....	16
2. Head and wing of <i>Hippobosca</i> sp	16
3. Tick bite dermatitis in cattle	17
4. <i>Hippobosca equina</i> found in Nusa Penida Island.....	32
5. Flies observed on cattle body in Nusa Penida Island.....	33
6. Skin lesions of Bali cattle in Nusa Penida Island.....	35

LIST OF TABLES

Table	Page
1. Tick and Fly scoring scale	15
2. Fly lesions scoring scale	15
3. Farmer characteristics in Nusa Penida Island (N = 51)	20
4. Farm structure in Nusa Penida Island (N=51)	22
5. Production system in Nusa Penida Island (N=51)	22
6. Fly scoring on Bali cattle at Nusa Penida Island (N=94)	27
7. Lesion scoring on Bali cattle at Nusa Penida Island (N=94)	29
8. Environment characteristics of Nusa Penida Island	36

LIST OF APPENDICES

Appendix	Page
1. Ectoparasite observation form	45
2. Analytical results	47
3. Semi-structured questionnaire	75