De La Salle University - Dasmariñas
BIOLOGICAL SCIENCES DEPARTMENT

PREVALENCE OF *Leptospira* IN DOMESTICATED DOGS IN CAVITE

A Special Problem Presented to the

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ABSTRACT

Leptospirosis is a zoonotic disease endemic in the Philippines. Rats act as maintenance hosts and contribute to disease transmission. Reports of human infection increases each year, suggesting the possibility that domesticated dogs could also be reservoir hosts in the Philippine setting. A prevalence study was conducted using 152 urine samples obtained from either pure breed or mixed breed dogs found in Bacoor, Dasmariñas, and General Trias. Extracted DNA was assayed for pathogenic leptospires by PCR amplification of *lip*L32 gene. Results showed the total prevalence was 2.63%, with 3.77% in pure breeds and 0% in mixed breeds. Using statistical analyses, it was found that there is no significant difference ($p > 0.05$) between pure and mixed breeds dogs in relation to risk of infection, and that a significant association ($p=0.0001$) between domesticated dogs and pathogenic leptospires exists. This would indicate that leptospiral infection is non-selective among breeds and that domesticated dogs may serve as sources of human leptospiral infection.

TABLE OF CONTENTS

Title Page		1
Approval Sheet		2
Acknowledgments		3
Abstract		4
Table of Contents		5
CHAPTER 1	INTRODUCTION	
1.1	Background of the Study	7
1.2	Conceptual Framework	11
1.3	Statement of the Problem	12
1.4	Scope and Limitations	12
1.5	Significance of the Study	13
1.6	Definition of Terms	13
CHAPTER 2	LITERATURE REVIEW	
2.1	Conceptual Literature	15
2.2	Related Studies	21
CHAPTER 3	METHODOLOGY	
3.1	Research Design	28
3.2	Research Setting	28
3.3	Research Procedure	28

3.4 Data Gathering and Statistical Analysis 32

CHAPTER 4 RESULTS AND DISCUSSION

4.1 Results 33

4.2 Discussion 35

CHAPTER 5 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion 41

5.2 Recommendations 42

Cited References 43

Appendices

A. Map of Study Site 58

B. Standard Procedure 59

C. Photo Documentation 65

D. Gantt Chart 69

E. Budgetary Requirements 70

F. Curriculum Vitae 71