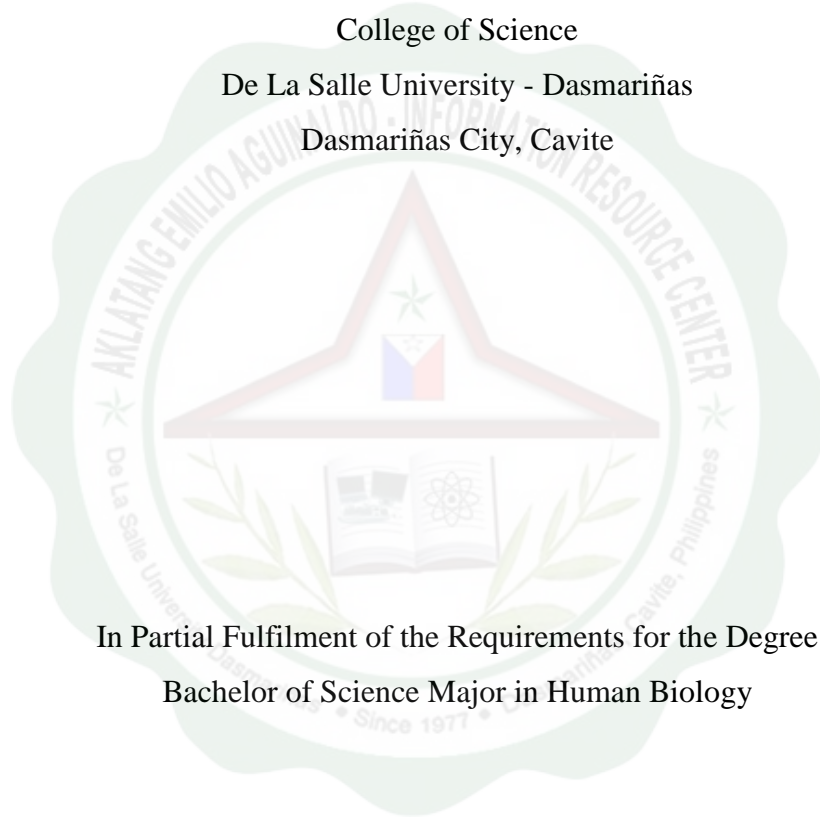




**PARASITE DETECTION ON VARIOUS LIZARDS FOUND IN A
PRIVATE LAND AREA AT CABANGAAN, SILANG, CAVITE**

A Thesis Presented to the
Faculty of the Biological Sciences Department
College of Science
De La Salle University - Dasmariñas
Dasmariñas City, Cavite



In Partial Fulfilment of the Requirements for the Degree
Bachelor of Science Major in Human Biology

EUNICE T. DERIQUITO
ANNA KRISTINA S. TOPACIO

March 2011



ABSTRACT

Parasites are organisms that live in a host and compete for the host's nutrients. Some studies on lizard parasites have shown that the rates of parasitism or some parameter of the parasite communities may vary between host species/populations living in closed habitats and those that live in open habitats. In our study, we collected 13 samples of different lizard species under 9 genera which were obtained through hand-grabbing in a private land area in Cabangaan, Silang, Cavite. The collected samples were preserved in 10 percent formalin and were viewed under the microscope for detection of ectoparasites. The parasite Crab Lice was found on the lizard species *Hemidactylus brookii*. Endoparasites such as Trichostrongyloid, Heterakid, Pinworm, and Nematode were found on species of *Sphenomorphus jagori*, *Sphenomorphus decipiens*, *Hemidactylus brookii*, *Brachymeles talinis*, and *Lamprolepis smaragdina*. The process of identifying the endoparasites was by Lactophenol staining. This was to enhance the image of the parasites being viewed for better identification. Amongst the 13 species, only five were positive for parasitic infection. According to the IUCN, the lizards collected were of least importance.



TABLE OF CONTENTS

Title Page	1
Approval Sheet	2
Acknowledgments	3
Abstract	4
Table of Contents	5
List of Table	7
List of Figures	8
CHAPTER 1 INTRODUCTION	
1.1 Background of the Study	10
1.2 Conceptual Framework	11
1.3 Statement of the Problem	12
1.4 Hypotheses	12
1.5 Scope and Limitations	13
1.6 Significance of the Study	13
1.7 Definition of Terms	14
CHAPTER 2 LITERATURE REVIEW	
2.1 Conceptual Literature	15
2.2 Related Studies	17
CHAPTER 3 METHODOLOGY	
3.1 Research Design	19

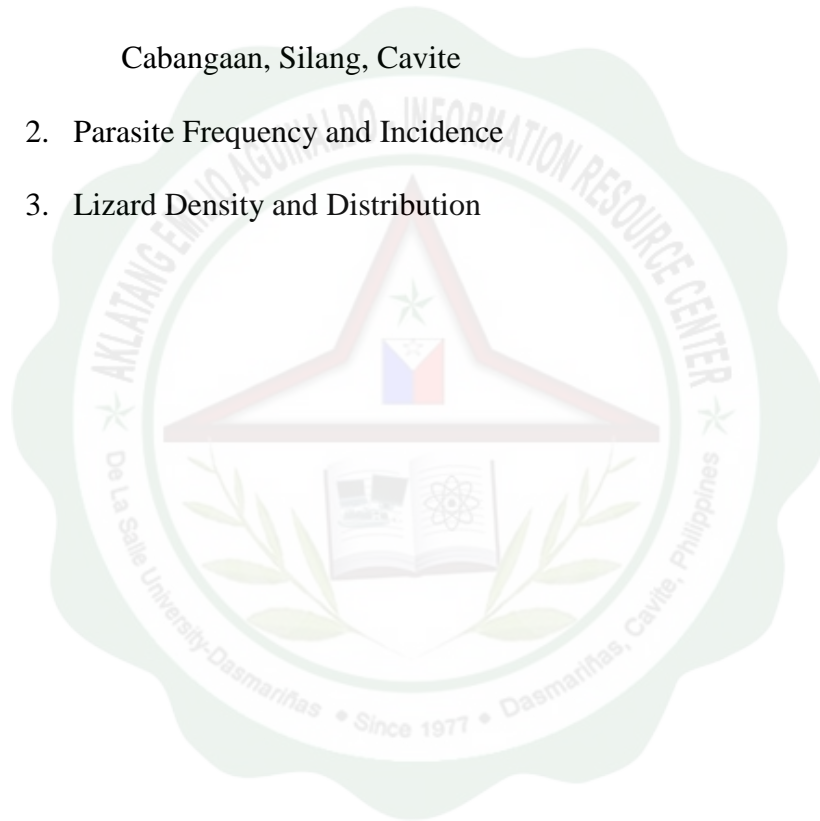


3.2 Research Setting	19
3.3 Research Procedure	20
3.4 Data Gathering and Statistical Analysis	21
CHAPTER 4 RESULTS AND DISCUSSION	
4.1 Results	23
4.2 Discussion	38
CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS	
5.1 Conclusions	40
5.2 Recommendations	41
Cited References	42
Appendices	
A. Map of Study Site	47
B. Standard Procedure	48
C. Raw Data	49
D. Photodocumentation	52
Curriculum Vitae	54



LIST OF TABLE

TABLE	PAGE
4.1 Number of Lizards Collected Per Species	23
1. Different Kinds of Lizards Found in Cabangaan, Silang, Cavite	49
2. Parasite Frequency and Incidence	50
3. Lizard Density and Distribution	51





LIST OF FIGURES

FIGURE	PAGE
4.1 <i>Sphenomorphus jagori</i>	25
4.2 <i>Sphenomorphus decipiens</i>	26
4.3 <i>Brachymeles talinis</i>	27
4.4 <i>Lamprolepis smaragdina</i>	28
4.5 <i>Hemidactylus brookii</i>	29
4.6 <i>Cyrtodactylus philippinicus</i>	30
4.7 <i>Bronchocela cristatella</i>	31
4.8 Lizard Distribution Classified under Three Species	32
4.9 Density of Parasites Detected	33
4.10 Crab Lice	34
4.11 Arthropod egg 40x	35
4.12 Strongyle male anterior / posterior	35
4.13 a.) Embryonated strongyle egg (40x)	36
b.) Encysted nematode (40x)	36
c.) Larva (40x)	36
d.) Strongyle egg (10x)	36
4.14 a.) Pinworm female (10 x)	36
b.) Pinworm male (10 x)	36
4.15 a.)strongyle egg (40x)	37



	b.) strongyle female anterior (10x)	37
	c.) strongyle female posterior (10x)	37
	d.) strongyle female whole (4x)	37
	e.) strongyle male whole (4x)	37
	f.) strongyle female vulva (10x)	37
4.16	a.) ascardid eggs in uterus (40x)	37
	b.) ascardid female (4x)	37
	c.) ascardid male (4x)	37
	d.) ascardid male and female (4x)	38
	e.) ascardid uterus with egg (40x)	38

