

**THE INCIDENCE AND INTERACTION OF HELMINTHIC
PARASITES IN GEKKONIDS OF MTS. PALAY-PALAY
MATAAS NA GULOD NATIONAL PARK,
LUZON ISLAND, PHILIPPINES**



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ABSTRACT

Vertebrates such as lizards are affected by helminthic parasites which are a burden on its population. This study determined the incidence and interaction of helminthic parasites in Gekkonid lizards in Mts. Palaypalay Mataas na Gulod National Park located in Maragondon Ternate Cavite and in Nasugbu Batangas, Philippines.

The Gekkonids were collected at night time through microhabitat sampling. A total number of seven lizards were collected from four different species. One individual from *Gecko gecko Linnaeus*, and *Cosymbotus platyurus*, and two individuals from *Hemidactylus frenatus* and *Gekko monarchus*. The average length of *Gekko monarchus* is 19 cm, *Hemidactylus frenatus* is 13cm, *Cosymbotus platyurus* is 8.25 cm and *Gekko gecko Linnaeus* is 17 cm. The average weight of *Gekko monarchus* is 14.4g, *Hemidactylus frenatus* is 8.9 g, *Cosymbotus platyurus* is 4.15 g, and *Gekko gecko Linnaeus* is 3.5g. The gekkonids were preserved in 70% ethyl alcohol and dissected through its ventral side. The gastrointestinal tract was mounted on slides using acid-fast staining. Each prepared slide was viewed to observe the presence of helminthic parasites. The parasites present in the organs of the lizards were from Phyla *Acanthocephala* (thorny-headed worms), *Platyhelminthes* (flatworms), class *Cestoda* and *Aschelminthes* or *Nemathelminthes* (roundworm), which has the highest prevalence rate among all the parasites present. The parasites were found in the small intestines, large intestines and stomach of the lizard.

The number and variation of parasites has no significant relationship with the host's length but has a correlation with the host's weight. The prevalence of helminthic parasites is highly correlated with diet category in gekkonids.

TABLE OF CONTENTS

Title Page	1
Approval Sheet	2
Abstract	3
Acknowledgement	4
Table of Contents	5
CHAPTER 1 INTRODUCTION	
1.1 Background of the Study	7
1.2 Theoretical Framework	8
1.3 Statement of the Problem	9
1.4 Scope and Limitations	10
1.5 Significance of the study	10
1.6 Definition of Terms	11
CHAPTER 2 LITERATURE REVIEW	
2.1 Conceptual Literature	13
2.2 Related Studies	17
CHAPTER 3 METHODOLOGY	
3.1 Research Design	22
3.2 Research Setting	22
3.3 Research Procedure	22
3.4 Data Gathering and Statistical Analysis	24
CHAPTER 4 RESULTS AND DISCUSSION	
4.1 Results	25
4.2 Discussion	31
CHAPTER 5 SUMMARY, CONCLUSION AND RECOMMENDATION	
5.1 Summary	35
5.2 Conclusion	35
5.3 Recommendation	36

Cited References	37
Appendices	
A. Map of the Study Site	41
B. Standard Procedure	42
C. Raw Data	49
D. Statistical Analysis	52
E. Photo Documentation	54
F. Curriculum Vitae	59

