

CONTENTS

List of tables	Page No.
List of Figures	
List of Plates	
List of Maps	
CHAPTER 1: GENERAL INTRODUCTION	1-6
1.1. GENERAL CHARACTERS OF ORDER NEUROPTERA	2
1.2. GENERAL CHARACTERS OF FAMILY MYRMELEONTIDAE	3
1.2.1. Behaviour of larval Myrmeleontids	4
1.2.2. Natural enemies/Predators of antlion larvae	4
1.2.3. Habitat	4
1.2.4. Parasites of antlion	5
1.3. SIGNIFICANCE OF THE PRESENT STUDY	5
1.4. OBJECTIVES OF THE PROPOSED WORK	6
CHAPTER 2: ECOLOGY OF MYRMELEONTID LARVAE	7-68
2.1 . INTRODUCTION	7-11
2.2 . REVIEW OF LITERATURE	12-16
2.2.1. Myrmeleontids of World	12
2.2.2. Myrmeleontids of India	14
2.2.3. Abiotic factors	15
2.2.4. Soil preference	15
2.3. RESEARCH METHODOLOGY	17-38
2.3.1. Study area- Kerala	17
2.3.2. Meteorological data of Kerala	17
2.3.3. Sampling	18
2.3.4. Collection Techniques (Both adult and larvae)	19
2.3.5. Killing and Preservation	19
2.3.6. Rearing of Antlion larvae	19
2.3.7. Depository	20

2.3.8. Identification of collected specimens	20
2.3.9. Habitat	23
2.3.10. Morphometric Analysis-Larvae	23
2.3.11. Morphometric Analysis-Cocoon	24
2.3.12. Morphometric Analysis- Adult	25
2.3.13. Physical Parameters	25
2.3.14. Soil Texture Analysis	25
2.3.15. Soil Chemical Analysis	27
2.3.16. Seasonal Adaptability & Habitat choice	36
2.3.17. List of abbreviations Used	37
2.3. RESULTS	39-64
2.4.1. Collection- Sampling site	39
2.4.2. Identification	41
2.4.3. Habitat of Antlion larvae	49
2.4.4. Morphometric Analysis-Larvae	52
2.4.5. Morphometric Analysis-Cocoon	56
2.4.6. Morphometric Analysis- Adult	56
2.4.7. Physical Parameters	56
2.4.8. Soil Texture Analysis	58
2.4.9. Soil Chemical Analysis	60
2.4.10. Seasonal Adaptability & Habitat Choice	60
2.4. DISCUSSION	63-68
CHAPTER- 3: LARVAL BEHAVIOUR PATTERNS	69-97
3.1 . INTRODUCTION	69-71
3.2 . REVIEW OF LITERATURE	72-75
3.2.1. Pit building behaviour	72
3.2.2. Predatory behaviour	73
3.2.3. Intraspecific and Interspecific interactions	75
3.3 . RESEARCH METHODOLOGY	76-82
3.3.1. Pit Building Behaviour	77
3.3.2. Predatory/Feeding Behaviour	79

3.3.3. Types of Interactions-Intraspecific relationships	80
3.3.4. Interspecific relationships	81
3.3.5. Ethogram	82
3.4. RESULTS	83-92
3.4.1. Pit Building Behaviour	83
3.4.2. Predatory/Feeding Behaviour	86
3.4.3. Intra-specific relationship-Cannibalism	89
3.4.4. Inter -specific relationships-Prey and Predation	90
3.4.5. Ethogram	91
3.5 DISCUSSION	93-96
SUMMARY	97-98
APPENDIX	
REFERENCES	