

## C O N T E N T S

| CHAPTER                         |   | PAGE |
|---------------------------------|---|------|
|                                 | INTRODUCTION  | 1    |
| PART - I                        |   |      |
| PHYSIOLOGY OF TAIL REGENERATION |   |      |
| I                               | Tail regeneration in <u>Mabuya carinata</u> related with breeding seasons and thyroid activity.   | 18   |
| II                              | Local and systemic alterations in glycogen content and phosphorylase activity during tail regeneration in the Scincid lizard, <u>Mabuya carinata</u> .                                | 41   |
| III                             | Local and systemic alterations in lactate and succinate dehydrogenases during tail regeneration in the Scincid lizard, <u>Mabuya carinata</u> .                                       | 56   |
| IV                              | Quantitative and electrophoretic analysis of lactate dehydrogenase during tail regeneration in the Scincid lizard, <u>Mabuya carinata</u> .   | 69   |
| V                               | Local and systemic alterations in protein content and transaminases during tail regeneration in the Scincid lizard, <u>Mabuya carinata</u> .  | 90   |
| VI                              | Involvement of cAMP in tail regeneration in the Scincid lizard, <u>Mabuya carinata</u> as evaluated by the activity levels of cAMP phosphodiesterase : A systemic and local analysis. | 107  |
| VII                             | Cholinesterases during tail regeneration : A local and systemic analysis in the Scincid lizard, <u>Mabuya carinata</u> .  | 123  |

| CHAPTER                                   |   | PAGE |
|---|---|------|
| PART - II                                 |   |      |
| ENDOCRINE PHYSIOLOGY OF TAIL REGENERATION |   |      |
| VIII                                      | Thyroid and carbohydrate metabolism in relation to tail regeneration in the Scincid lizard, <u>Mabuya carinata</u> : A local and systemic analysis.   | 142  |
| IX  | Local and systemic alterations in succinate dehydrogenase activity in relation to altered thyroid functioning and tail regeneration in the Scincid lizard, <u>Mabuya carinata</u> .                         | 168  |
| X   | Thyroid and tail regeneration : Local and systemic alterations in protein content and activities of transaminases under differential functioning of thyroid in the Scincid lizard, <u>Mabuya carinata</u> . | 179  |
| XI  | Local and systemic phosphodiesterase activity in relation to tail regeneration in the Scincid lizard, <u>Mabuya carinata</u> under altered functional states of thyroid.                                    | 204  |
| XII                                       | Renal and hepatic ascorbic acid contents during tail regeneration in the Scincid lizard, <u>Mabuya carinata</u> under euthyroidic, hypothyroidic and T4 replaced conditions.                                | 217  |
|   | S U M M A R Y   | 228  |
|   | GENERAL CONSIDERATIONS  | 239  |
|   | B I B L I O G R A P H Y   | 248  |