

## CONTENTS

|  |           |
|--|-----------|
| Acknowledgement  | i – iii   |
| List of Abbreviations  | iv – v    |
| Introduction   | 01 – 22   |
| Materials and Methods  | 23 – 36   |
| <b>Chapters</b>  |           |
| 1 Influence of COX-2 induced PGE <sub>2</sub> on the initiation and progression of tail regeneration in Northern House Gecko, <i>Hemidactylus flaviviridis</i> | 37 – 58   |
| 2 Antioxidant status during various stages of tail regeneration in <i>Hemidactylus flaviviridis</i> subjected to specific COX-2 inhibitor                      | 59 – 81   |
| 3 Role of COX-2 induced PGE <sub>2</sub> in epimorphosis: Regulation of stage specific expression of proteins  | 82 – 110  |
| 4 Evidence for the involvement of prostaglandin E <sub>2</sub> in different cellular activities during epimorphic regeneration                                 | 111 – 130 |
| General Considerations   | 131 – 141 |
| Bibliography   | 142 – 165 |