

## PREFACE

A critical survey of literature on the salivary glands of mammals revealed that there is marked diversity in morphology, biochemistry and histochemistry of these glands among different species. These glands at least rodent sub-mandibular glands especially of mouse, contains large variety of polypeptides with interesting biological properties. These polypeptides are located in one cell type within this gland the granular duct. Salivary glands are not fully developed at birth but in adult these are formed from transitional cellular elements whose definitive differentiation takes place post-nately. There is sexual dimorphism in these glands; it is more apparent in rodent salivary glands, which provides readily accessible sensitive target organ common to both the sexes. Because of the above facts salivary glands of rodents have attracted considerable attention in recent past, even then no information is available on the salivary gland of squirrel.

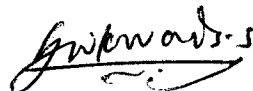
The present investigation of the salivary glands of squirrel is undertaken with a view to understanding structure and sexual dimorphism of these glands. Three striped squirrel ( Funambulus palmarum L. ) is selected for this study. The thesis is divided into six chapters. The first chapter gives a detailed and critical account of salivary gland structure, secretion and its control and sexual dimorphism and outlines

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contd.

the plan of proposed work with reason. The second chapter describes material and methods, third, fourth and fifth chapters describe the observations along with interpretations on submandibular, sublingual and parotid glands respectively. The sixth and last chapter deals with summary and concluding remarks.

I assume responsibilities for the opinions expressed in the present thesis and also for omissions and errors, if any, in the body of the thesis. I feel and hope that readers will find this thesis interesting, informative and stimulative.



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