PREFACE

The zoology department of Willingdon college, Sangli, is recognised for M. Sc. and M. Phil. courses in zoology by Shivaji University, Kolhapur. It is engaged in exploration of various plant preparations and chemicals for their antifertility potentials. The Entomology section of department is actively working on taxonomy, studies on crop pests of this area and their control. Some research work on fishes of Krishna river is also in progress in this department. The behaviour of lysosomal enzymes and nonlysosomal enzyme during lytic process is extensively studied in various life processes. Presently the laboratory is conducting research work mainly in exploration of various plant preparations for their use as a male contraceptive agent, as these have minimal side effects.

The present dissertation is concerned with the effects produced by <u>Piper betle</u> petiole extract in male reproductive tract of wistar strain albino rats. The biochemical and histochemical investigation in testes and accessory sex organs is essential to throw more light on alterations during such aspermatogenesis. The present investigation was, therefore, undertaken to elucidate the effects of <u>Piper</u> extract and to augment the understanding of alterations in histlogy, acid phosphatase and alkaline phosphatase in the testes, caput and cauda epididymis, vas deference, seminal vesicle, prostate gland and Cowper's gland.