The lorisoids or lorisiform primates comprise on the one hand, the African galagos or bush babies and on the other, the slow paced potto, angwantibo, slow and slender lorises from Africa, India and South East Asia. Despite the recent resurgence of interest in the primates, our knowledge of the patterns of reproduction in the lorisoid members of the order remains fragmentary and in some cases virtually non-existent. This is to a large measure attributable to their unobtrusiveness in the wild, their nocturnal and arboreal habits, and not least the fact that many are notoriously ill-adapted to life in captivity and seldom breed. The lorises occupy an interesting position in mammalian phylogeny since it is universally agreed that this group shows both primate and insectivore affinities. Regardless of whether they are considered as the most primate-like insectivores or the most insectivore-like primates, the lorises remain as a living example of an ancestral form close to the primate stem. It is essential that this gap in our knowledge be filled as a link to the understanding of reproductive processes in higher primates and man.

The thesis consists of six chapters of which the first and the second present reviews on the
reproductive pattern of primates and the mammalian testis respectively. The fourth chapter is based on the study of the testis of the slender loris from the time of its differentiation to adulthood. Chapter V deals with the accessory reproductive organs of loris, its histology and biochemistry. The last chapter relates to the changes that are observed in the testis and accessory reproductive organs due to the experimentally induced cryptorchidism.

CHAPTER I

This chapter reviews the different reproductive patterns in primates with emphasis on prosimian primates. The primates exhibit a variety of reproductive patterns; some show continuous reproductive activity while a few exhibit regular periodicity. It is remarkable to note that, while the concerned organs have the same and a rather limited function to perform, reproductive mechanisms are as varied as the anatomical features of the organs involved.

CHAPTER II

This chapter reviews the literature published so far on the mammalian testis with emphasis on its morphology, development and kinetics of the seminiferous epithelial cycle.
CHAPTER III

This chapter deals with the collection and processing of the material and the methods employed throughout this study on the male reproductive organs of the slender loris.

CHAPTER IV

The objectives of chapter IV were to determine the stages of testicular development of loris randomly collected throughout the year. It also describes and summarises the testicular changes occurring during its differentiation and attainment of maturity. The chapter emphasis on the differentiation, growth and development of the foetal testis and the descent of the testis. This chapter also includes the spermatogenic cycle which has been divided into 12 stages and 14 steps, similar to the other non-human primates. The vascular supply of the loris testis has also been dealt with.

CHAPTER V

This chapter deals with the male accessory organs of the slender loris which are the seminal vesicles, the prostate and Cowper's glands. Their morphology, histology and secretory activity during
the different months of the year is correlated with the breeding activity of the loris.

**CHAPTER VI**

Chapter VI is on the effect of experimental cryptorchidism in the slender loris. This chapter lays emphasis on the changes in the testis, epididymis and the accessory reproductive glands caused by the altered condition of the testis from the scrotum to the abdomen. Changes of varying degrees are noticed in the testis and accessory reproductive glands in these cryptorchid animals.