SYNOPSIS OF THE THESIS

The thesis presents the results of the studies on the coccidian parasites of the genus *Eimeria* occurring in some mammals in the Marathwada region of Maharashtra State.

The investigation showed extensive prevalence of coccidia in sheep, goats and rabbits in this area. Cattle and bubalines showed relatively very low prevalence of coccidial infections. The three hosts where *Eimeria* was common were subjected to a detailed study. The results are presented in three parts.

**PART I**

This part covers a study of the prevalence of *Eimeria* in goats and sheep in Aurangabad district. The study covers an analysis of 575 faecal samples from goats and 517 faecal samples from sheep, over a period of one year. Detailed data as well as critical comments are presented on the over all prevalence of *Eimeria*, the species composition, prevalence of the individual species and the pattern of pure and mixed infections. These different aspects are covered individually in the case of both hosts and also a detailed comparison is made of the aspects in both the hosts.
PART II

This part gives an account of the morphology and morphometrics of the oocysts of eleven species of *Eimeria* from sheep and goats. Of these seven are common to both hosts, three are restricted to goats and one restricted to sheep. In the case of the species occurring in both hosts comparison is made of the morphology of cysts, from both hosts. The species described are:

(A) **Common to goats and sheep**:

4. *E. granulosa* Christensen, 1928.
5. *E. intricata* Spiegl, 1925.

(B) **Occurring in goats only**


(C) **Occurring in sheep only**

Critical comments are given in the light of earlier work.

PART : III

This part presents a study of the morphology and morphometrics of the oocysts of the Eimerian species occurring in rabbits. The **new** following seven species are described are as -

4. *E. magna* Perard, 1925
5. *E. media* Kessel, 1929

Comments are given in the light of the earlier work in this area. A detailed account is given of a new species of *Eimeria trimurthyi* n.sp. from rabbits.

Brief historical reviews are given of the oocidia of sheep, goats and rabbits.