ABSTRACT OF THE THESIS
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The thesis deals with the studies on the protozoan parasites of the blood streams of fresh water fishes from Maharashtra. The study covers an analysis of the prevalence, morphology and taxonomy of trypanosomes and trypanoplasma.

The present study is stretched over a period of about two years. The findings are on the average of monthly sampling. The thesis is presented in three parts:

PART : I

This part gives an analysis of the pattern of prevalence of protozoan parasite in fishes, based on an examination of about 1411 fishes. The study is spread over a period of about two years.

The twenty five species of hosts examined belonging to four orders, nine families and seventeens genera. An over all prevalence of about 10. 77% is recorded.

The analysis covers the following aspects -
1. Over all prevalence.
2. Comparative prevalence in different host groups.
3. Intensity of infections.
4. Locality-wise analysis of the protozoan parasites.
5. Prevalence of individual species.
6. Seasonal variations in the prevalence.
PART II

This part gives an account of the trypanosomes found during the study. The trypanosomes have been recorded from eleven species of hosts, of which only trypanosomes were present in five families (i.e. Ophiocephalidae, Cyprinidae, Bagridae, Siluridae, and Mastacembalidae).

Mixed infections of both Trypanosomes and Trypanoplasma were found in three species of hosts from two families i.e. Cyprinidae and Bagridae. Out of which one species are new and ten are redescribed.

1. *Trypanosoma masoodae* n.sp. from *Channa punctatus*
2. *Trypanosoma misrai* from *Channa gachua*
3. *Trypanosoma punctati* from *Channa gachua*
4. *Trypanosoma purnanensis* from *Mystus seenghala*
5. *Trypanosoma joshii* from *Mystus cavacius*
6. *Trypanosoma rayi* from *Puntius sarana*
7. *Trypanosoma marathwadaensis* from *Puntius hexasticthus*
8. *Trypanosoma puntii* from *Puntius kolus*
9. *Trypanosoma mandali* from *Nemacheilus mor*
10. *Trypanosoma murtii* from *Mastacembalus armatus*
11. *Trypanosoma mastacembali* from *Mastacemballus armatus*. 
PART : III

This part deals with account of the trypanoplasma found during the study. Trypanoplasmas were found as single infections in three species of hosts, two belonging to the Cyprinidae family and one to Siluridae. They were found in mixed infections along with trypanosomes in three species of hosts, one belonging to the Cyprinidae and two to Bagridae. Altogether eight species of the genus *Trypanoplasma* were recorded. Out of which two species are new and six are redescribed.

1. *Trypanoplasma susheelae* n.sp. from *Wallago attu*
2. *Trypanoplasma vijayae* n.sp. from *Mysrtus cavacius*
3. *Trypanoplasma cavacii* from *Mystus cavacius*
4. *Trypanoplasma seenghali* from *Mystus seenghali*
5. *Trypanoplasma vidyai* from *Mystus seenghala*
6. *Trypanoplasma solapurensis* from *Puntius jerdoni*
7. *Trypanoplasma lomi* from *Puntius hexastichus*
8. *Trypanoplasma qadrii* from *Labeo calbasu*

Comments are given in the light of the earlier work in this area.