The thesis gives a detailed account of five new species of fresh water copepod fish parasites, life history and host-parasite relationship. For the first time in India life history of a fresh water copepod was successfully done in the laboratory conditions. To eradicate the parasitic attack on cultural ponds different treatment methods were tried and suggested a suitable one for further use in this field.

In the life history of *Lernaea osphronemi* sp. nov. there are nine larval stages but no intermediate host for the parasite to complete the life cycle. The life span of the parasite is established as 20-25 days. The experiments conducted with *Tilapia mosambica* as a biological control proved to be successful. The parasitic attack on fresh water fishes can be controlled both by chemical and biological treatment as per the investigation carried out.