Introduction

Mollusca are the second largest phylum of the animal kingdom, forming a major part of the world fauna. The Gastropoda is the only class of mollusks which have successfully invaded land. They are one of the most diverse groups of animals, both in shape and habit. Among gastropods, land snails (subclass: Pulmonata) are one of the most numerous with almost 35000 described species of the world. The Phylum Mollusca is probably the third most important animal group after the arthropods and vertebrates (South, 1992). Snails and slugs belong to the class Gastropoda. Snails and slugs are mollusks, a group of invertebrate animals with soft unsegmented bodies. Slugs are often described as snails without a shell, while snail bodies are enclosed in calcareous shells (Barker, 2001; Ramzy, 2009). Crops contaminated by snail slime lose their marketability and hence their export potential in many countries (Baker and Hawke, 1990; Ittah and Zisman, 1992). Land snails cause also a heavy damage to seed of oil plants and leaves of ornamental plants as well as citrus, peach, palm and vegetable, i.e. cabbage, carrot and bean. (El-Deeb et al., 1999; Ismail et al., 2003; Lokma, 2007; Shahawy et al., 2008). The unique mechanical properties of snail pedal mucus enable the animal’s locomotion while also causing the mucus to function as an adhesive to the substrate. The mucus trail performs a number of other functions, including the provision of mechanisms for re-tracing a path and for finding a mate of the same species by following a trail (Al-Sanabani, 2008). It is clearly known that successful control methods of terrestrial mollusca depend greatly on the broad base of knowledge of biological and ecological aspects of Mollusc particularly in integrated approaches (El-Deeb et al., 2003a; Gabr et al., 2006; Shoieb, 2008). Infection rate found increased with the rise in heat. In the month of January infection in all the snail species was very lowest amount but in February and March it increases comparatively. Ultimately in the month of April and May it shows the maximum rate of infection (Laxman S. Chandore, 2011).

The study of parasites and their relationship to the host requires a multidimensional approach in order to understand the nature of parasitism and the pathological effects on the hosts. Such studies include phylogenetic relationships, morphological and ecological aspects,
physiology and biochemistry of the parasites, host parasite relationship and serological and immunological studies. In recent years, attention has been paid to the study of morphology, physiology, biochemistry, ecology of the parasites and the work on serological and immunological studies have been accelerated. In the present work host parasite relationship is studied and full attention is paid to study the effects of larval stages of trematodes on the first intermediate host i.e. gastropods. The flatworms have been included in the class Trematoda of phylum Platyhelminthes, the other classes being the Turbellaria and the Cestoda.

The trematodes are a remarkable group of organisms, study of them brings one in contact with the biology of number of other groups especially mollusks, arthropods and vertebrates which acts as intermediate or definite host. Furthermore, investigation of their physiology involves the use of biophysical, biochemical or immunological techniques as well as routine cytological and histochemical techniques now widely used in biological laboratories. The study of relationship between a trematode parasite, its intermediate host and final host brings about the ecological and histopathological studies of molluscs as well as vertebrate hosts.

The study of molluscs harbouring the cercariae of various trematodes involves in the study of environment in which the molluscs live. Freshwater harbors a wide variety of animals depending upon its physico-chemical nature. There is a definite relation between the chemical composition, presence of molluscs and infection of cercariae.