INTRODUCTION

Parasitism is the form of association between two organisms in which the parasite lives inside or on other associate host; parasitology is an ever growing discipline or rather in dynamic state. There is ever increasing need to explore newer methods and attitudinal changes to tackle emerging diseases and their consequent losses to the farming community. There is an urgent need to evolve consensus in this matter by the experts in the field of parasitology and allied disciplines. Parasitism is a natural way of life among the large number of organisms and parasitic diseases are the major public health problem, which results into morbidity and mortality in tropical countries, particularly in the socio-economically underdeveloped societies of the world.

Taxonomy of cestode parasites of birds has been at its realm during nineteenth and twentieth centuries. Parasitologists have their preference of studying helminth parasites groupwise, such as trematodes, cestodes and nematodes. But recent studies are some what different and particularly for an ecologist to give community, diversity of parasites burden of particular host, it’s infra population has to be studied. Such studies will give a comprehensive idea about the infra population of a particular host as well as its host parasite relationship.

The parasites live in an abnormal environment so it must adopt to the internal environment of its host through morphological and physiological modification includes movement is restricted compare to free organism, motile structure are their poor or reduced. In many parasites, the alimentary canal (Digestive system) is lost or reduced because they do not need an elaborate gut to digest food materials. Most of helminths are endoparasites, they live in the environment which does not allow visibility hence they lack vision organs such as eyes for detection of light. The adaptation also occurs in adhesive organs e.g. suckers, hooks, tentacles, spines and allies for the attachment purpose. The reproductive system and capacity of parasites are also modified to suit their needs.
Birds are the important components of the ecosystem. They are very important from the ecological and economical point of view. Man uses many birds as delicious and nutritious food. Similarly birds also produce some important products like meat, eggs and beautiful feathers. The infections of cestode parasites are found in birds. There are no estimates of population suffering from cestode infection but infections are very common in people who are eating poorly cooked or uncooked meat, unhygienic habitats and poor sanitation. Infection leads to anemia. Parasitic diseases are the major public health problem of tropical countries including India. They infect man and also invade domestic birds and wildlife. Although the morbidity and mortality due to such infection is not alarming they adversely affect the general health, physical and mental health, growth of children and productivity of an adult.

Morphologically the cestode parasites are elongated, dorsoventrally flattened, divided into number of proglottids, multicellular, bilaterally symmetrical endoparasites. They have no digestive system because they live in intestine of host, they absorb digested food material from the surrounding area. Reproductive system is very highly developed in each mature segment.

World-wide, about 3000 million cases of helminthiasis exist at present either as single or mixed infections. However, since helminth infections are usually asymptomatic and not dramatic in morbidity, they are not always regarded as serious diseases.

Birds carry heavy infection of varied types of cestode parasites. Consumption of edible birds by human beings, as one of the nutritious food, by not cooking properly causes dangerous diseases.

The environmental factors including climate, season and rainfall play an important role in the development of gastrointestinal helminth parasites. As every species of parasites passes its own particular problem, it is essential to be quite sure of identity of the species while dealing with. Therefore an accurate classification is fundamental for the completion of this study. Similarly keeping in mind, the food value and economic importance of birds, the author has
undertaken the work on Biosystematic and biochemical parameters of avian cestode parasite. The present investigation was started in July 2006. The present work could be the basis for further extensive investigations for the development of better anthelmintics to save these economically important birds.