SYNOPSIS

“THE BIO-CHEMICAL VARIABILITY OF CESTODE PARASITES FROM DOMESTIC FOWL FROM AHMEDNAGAR DISTRICT.”

The animals belonging to the vertebrate group are very important components in an ecosystem and many of them provide protein rich food to different animal including humans. But vertebrate tend to be infested by a considerable range of parasites which occurs in large number. The helminthic group of parasites, especially cestode parasites the number of vertebrate host. The helminth parasites affect on the growth rate, reproduction and general metabolism and cause ill effect on the host health.

The Parasitology is a multidisciplinary branch and has got tremendous scope. There are different parasitic groups which are associated with the different host causing multi fold effect on them. The parasite control programmer are looked after a great prime importance all over the words, through also there are many cases of different diseases appearing and showing their ill effect on living systems. The host domestic fowls are playing very important role in the rural economy. Many parasites are found to occur in them.

Host parasite relationship is complex phenomenon. To understand the various components of this phenomenon, the study of chemical components of this phenomenon, the study of chemical components of

Advances in immunology and biochemistry have proceeded with bewildering rapidity and the techniques developed in these fields have increasingly been used in the study of parasites, and host parasite relationship (Smyth, 1969).

Parasites inhabit both homeotherms and poikilotherms host. The seasonal variations of the parasite generally depend on the homeotherms are remote possibility as these animals regular their body functions, unlike homeotherms, the poikilotherms adjust body function with the environment, which may eventually lead to the seasonal variation of the biochemical constituent of host. The variation in the host may result in the seasonal variation in the biochemical constituents of the parasites, observation made by Dunagan (1963) emphasized on some variation in Neochinorhynchus species of turtle however plecercoids of Schistoccephalus solidus inhabiting the cold-blooded host do not exhibit any seasonal variation (Hopkins, 1950).

Evidences of regional individuality in the biochemical composition of the cestode parasites are well established (Gold fisher, 1945; Von Brand and Mercado, 1961; Daugherty and Taylor, 1956; Read, 1956; Mayberry and Tibbittis, 1972; Madhahva Reddy, 1981; and Patwari)
The body covering of parasites is permeable to physiological substances present in lumen of intestine, hence the biochemical composition of the parasite is subjected to variation and these variations are influenced by the variation of the host.

Hence keeping this view in mind the value of host and loss caused due cestode parasite to host and economic loss to human the author has carried out the present study.

The thesis comprises of four parts as follows–

Part – I  Taxonomic studies.
Part – II  Biochemical estimation of cestode parasites.
Part – III  Seasonal variation.
Part – IV  References.

Part – I

This part deals with the Morphology of cestode parasites from Gallus gallus domesticus of the order: Davaineidea and Family: Davaineidae

The genera and the species are reported the present studies that are as follows:

1. Raillietina (R.) quadristesticulata, Moghe, 1925 (Redescribed).
5. Cotugnia shrirampurensis, sp.Nov.
7. Cotugnia goindi, sp.Nov.

Part – II

The following genera were observed for the seasonal variation from Oct, 2007 to Sept 2010 for the period of three years.

1. Raillietina (R.) quadristesticulata, Moghe, 1925 (Redescribed).
5. Cotugnia shrirampurensis, sp.Nov.
7. Cotugnia goindi, sp.Nov.
Part – III

This part deals with the biochemical estimation of protein, lipid, glycogen, pyruvic acid, lactic acid, lactate dehydrogenase, succinate dehydrogenase and cholesterol of the following tapeworm.


Part – IV

References