

# “DIVERSITY OF CESTODE PARASITES OF MARINE FISHES FROM WEST COAST OF MAHARASHTRA”

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## ABSTRACT

Study was carried out to determine diversity and distribution pattern of cestodes of marine fishes viz. *Uncibilocularis osmanabadensis* sp.; *Calycobothrium maharashtrii* sp.; *Cephalobothrium shindei* sp.; *Tylocephalum damodharae* sp.; *Tetragonocephalum murudensis* sp. and *Nybelinia elongata* sp. from certain marine fishes from West Coast of Maharashtra. Diversity of Piscean tapeworms includes 06 species of Six genera. This survey provides baseline data for the future monitoring of these potentially important parasitic infections in this region.

**KEY WORDS-** Cestode Parasites, Diversity, Marine fishes, West Coast of Maharashtra.

## INTRODUCTION

The infection of cestode parasites are found plenty of in marine fishes, which reduces the food value of fishes and decrease in their production and result in mortality, so the study of cestode parasites is necessity today. The human beings consume the fishes as one of the nutritious food. If the fishes are not properly cooked, the cestode parasites cause dangerous diseases to human beings like anaemia and haemorrhages. Keeping in the view, the economical value and importance to human survival through fishes, hence the study was undertaken.

## MATERIAL AND METHODS

During survey of cestode parasites of marine fishes from different localities of West Coast of Maharashtra. Cestode parasites were recovered from the intestine of marine fish hosts. These worms were preserved in 4% formalin. stained with Harri's Haematoxylene, dehydrated in ascending grades of alcohol, cleared in xylene, mounted in Canada Balsm. Camera lucida drawings were prepared and photomicrographs were taken by trinocular computerized research microscope. All the measurements are recorded in millimeter.

## RESULTS

The occurrences of Cestode parasites of marine fishes in relation with its geographical area and host species from West Coast of Maharashtra are as follows.

Diversity of Cestode parasites of marine fishes includes 06 species of Six genera viz. *Uncibilocularis osmanabadensis* sp.; *Calycobothrium maharashtrii* sp.; *Cephalobothrium shindei* sp.; *Tylocephalum damodharae* sp.; *Tetragonocephalum murudensis* sp. and *Nybelinia elongata* sp. from West Coast of Maharashtra.

**Table- Distribution pattern and diversity of cestode parasites of marine fishes from different localities of West Coast of Maharashtra.**

S.N.	Name of Cestodes	Name of Host	Habitat of Parasite	Locality
1	<i>Uncibilocularis osmanabadensis</i> sp.	<i>Aetomylaeus nichoffii</i> , (Bloch and Schneider, 1801)	Spiral valve	Alibag, Dist. Raigad
2	<i>Calycobothrium maharashtrii</i> sp.	<i>Chiloscyllium plagiosum</i> (Anonymous, Bennett, 1830)	Intestine	Malvan, Dist. Sindhurg
3	<i>Cephalobothrium shindei</i> sp.	<i>Dasyatis uarnak</i> (Forsskal. 1775)	Intestine	Mirkarwada, Dist. Ratnagiri
4	<i>Tylocephalum damodharae</i> sp.	<i>Dasyatis walga</i> (Muller and Henle, 1841)	Intestine	Bhatye, Dist. Ratnagiri
5	<i>Tetragonocephalum murudensis</i> sp.	<i>Dasyatis bleekeri</i> (Blyth, 1860)	Spiral valve	Murud, Dist. Raigad
6	<i>Nybelinia elongata</i> sp.	<i>Carcharhinus dussumeri</i> (Muller and Henle, 1839)	Intestine	Shrivardhan, Dist. Raigad

### DISCUSSION

All these Six species are differs from each other in general topography of organs. In case of locality or distribution of tapeworms, the maximum numbers of parasites are collected from Raigad District as compare to Sindhurg and Ratnagiri. Kennedy C.R. (1971, 1976) explained the ecological factors i.e. distribution and environment of host, the diet and mode of feeding of host and parasites are influence the parasitic development. The water becomes warm which is suitable for the growing of Zooplankton, some aquatic invertebrates i.e. mollusks and crustacean, these aquatic animals as a food of freshwater fishes as well as the intermediate host of many parasites. Availability of food and feeding activity of the host also may be one of the reasons for occurrence of parasitic diversity. The infections are host specific because the morphological, physiological and ecological factors affect the host specificity. The morphological factors are those which like a parasite with its host at the site of attachment. The ecological factors are such as, distribution, and environment of the host, the diet and mode of feeding. These adaptations often provide important role for limiting a parasite to a particular host sp., particular season.

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