Keeping in mind, the economical value and importance to the human survival through fishes, the author has undertaken this work. The major collection was done from East coast of India, from the places like, Machilipattanam, Kakinada, Waltair, and Madras during the month of November, 1983 to June, 1985.

The thesis comprises of three parts, such as (i) Taxonomy, (ii) Histopathology and Neurosecretion and (iii) Biochemistry. The whole work has been carried about the cestode parasites of the orders (i) Tetraphyllidea (ii) Lecanicephalidea and (iii) Trypanorhynchida. They belong to the families Phyllobothriidae, Lecanicephalidae, Tetragonocephalidae, Oncobothridae, Gymnorhynchidae and Tentacularidae.

The species of the genera included in this work are Phyllobothrium, Echeneibothrium, Pithophorus, Kowsalyabothrium, Acanthobothrium, Hexacanalis, Tetragonocephalum, Ratnagiribothrium, Bybelinia, Gymnorhynchus and Tetrarhynchus. The different aspects of two species of Phyllobothrium, two species of Kowsalyabothrium, one species of Pithophorus, one species of Acanthobothrium, two species of Hexacanalis, two species of Tetragonocephalum.
one species of Ratnagiribothrium, one species of Nybelinia, one species of Gymnorhynchus and one species of Tetrarhynchus.

PART I

TAXONOMY

This part deals with the taxonomy of the following species of the genera, as mentioned below:

1. Phyllobothrium - sp. redescribed
2. Phyllobothrium - sp. redescription
3. Echeneibothrium govinda n.sp.
4. Echeneibothrium alii n.sp.
5. Pithophorus zugei n.sp.
6. Kowsalyabothrium machilipattanamensis gen.et.sp.nov.
7. Kowsalyabothrium trygoni sp.nov.
8. Acanthobothrium - sp. redescription
9. Hexacanalis singhi n.sp.
10. Hexacanalis kakinadaensis n.sp.
11. Ratnagiribothrium thapari n.sp.
12. Tetragonoccephalum shindei n.sp.
13. Tetragonoccephalum namae n.sp.
14. Nybelinia - sp. redescription
15. Gymnorhynchus - sp. redescription
16. Tetrarhynchus - sp. redescription
Keys to the genera Pithophorus, Kowsalyabothrium, Hexacanalis, Tetragonocephalum and Ratnagiribothrium are also provided.

A detail list of literature is included

PART : II
HISTOPATHOLOGY AND NEUROSECRETION

This part deals with the histopathology and neurosecretion of the following species of the genera mentioned therein -

(A) Histopathology
   (1) Acanthobothrium sp.
   (2) Uncibilocularis sp.

(B) Neurosecretion
   (1) Phyllobothrium sp.
   (2) Balanobothrium veravalensis
       Jadhav and Shinde (1978).

PART : III
BIOCHEMISTRY

This part deals with the biochemical observations of the following species of the genera mentioned below:
(A) Glycogen estimations

(1) *Echeneibothrium alii* n.sp.
(2) *Hexacanalis hafeezullahae* n.sp.
(3) *Hexacanalis kakinadaensis* n.sp.
(4) *Tetragonocephalus shindei* n.sp.

(B) Protein estimations

(1) *Echeneibothrium alii* n.sp.
(2) *Hexacanalis hafeezullahae* n.sp.
(3) *Tetragonocephalus shindei* n.sp.

(C) Amino acid estimations

(1) *Tetragonocephalus shindei* n.sp.
(2) *Echeneibothrium alii* n.sp.
(3) *Hexacanalis hafeezullahae* n.sp.