In recent years the demand for fish as human food has increased greatly. But the aim of enhanced rate of production has largely been impeded by the intensified parasitic invasion especially by protozoans. Among the protozoan parasites, representatives of Myxozoa have assumed immense importance in the recent past in view of great loss to fish populations. Investigations on the morphology, taxonomy, seasonal distribution and some other aspects of myxosporean organisms found in edible fishes of West Bengal were undertaken and the present thesis is the result of all these observations.

The entire work was carried out in the Protozoology Laboratory, Department of Zoology, University of Kalyani, Kalyani 741 235, West Bengal, India during April, 1997 to August, 2001. For convenience in describing the results the thesis has been subdivided into three broad parts: PART I, PART II and PART III. In PART I morphology, systematics and seasonal distribution of eleven new and three previously described species of myxozoans from freshwater and estuarine edible fishes of West Bengal have been presented. Results of SEM studies of five myxobolid species have also been included in this Part. All the new species described in PART I of the thesis have been designated as Genus sp. I sp. n., Genus sp. II sp. n., and so on, in accordance with the principles as laid down in the following Articles of the International Code of Zoological Nomenclature, 1999:

Article 7. Application. The provisions of this Chapter apply to the publication not only of a new scientific name, but also to that of any nomenclatural act or information likely to affect nomenclature.

Article 8. What constitutes published work. A work is to be regarded as published for the purposes of zoological nomenclature if it complies with the requirements of this Article and is not excluded by the provisions of Article 9.

8.1 Criteria to be met. A work must satisfy the following criteria:

8.1.1. it must be issued for the purpose of providing a public and permanent scientific record,

8.1.2. it must be obtainable, when first issued, free of charge or by purchase, and

8.1.3. it must have been produced in an edition containing simultaneously obtainable copies by a method that assures numerous identical and durable copies.

8.2. Publication may be disclaimed. A work that contains a statement to the effect that it is not issued for public and permanent scientific record, or for purposes of zoological nomenclature, is not published within the meaning of the Code.

8.3. Names and acts may be disclaimed. If a work contains a statement to the effect that all or any of the names or nomenclatural acts in it are disclaimed
for nomenclatural purposes, the disclaimed name or acts are not available. Such a work may be a published work (i.e. taxonomic information in it may have the same nomenclatural status as the taxonomic information in a published but suppressed work: see Article 8.7.1).

8.4. **Works produced before 1986.** To be published, a work produced before 1986 must have been produced on paper, by a printing method then conventional (such as letterpress, offset printing) or by hectographing or mimeographing.

8.5. **Works produced after 1985 and before 2000.** A work produced between 1985 and 2000 by a method other than conventional printing may be accepted as published within the meaning of the Code if

8.5.1. it meets the other requirements of this Article and is not excluded by the provisions of Article 9, and

8.5.2. contains a statement by the author that any new name or nomenclatural act within it is intended for public and permanent scientific record, and

8.5.3. contains a statement in words in the work itself that it is produced in an edition containing simultaneously obtainable copies.

8.6. **Works produced after 1999 by a method that does not employ printing on paper.** For a work produced after 1999 by a method other than printing on paper to be accepted as published within the meaning of the Code, it must contain a statement that copies (in the form in which it is published) have been deposited in at least 5 major publicly accessible libraries which are identified by name in the work itself.

8.7. **Status of suppressed works.** A work that has been suppressed for nomenclatural purposes by the Commission by use of the plenary power [Article 81] and that satisfies the provisions of this Article remains published within the meaning of the Code, unless the Commission has ruled that it is to be treated as not having been published;

8.7.1. such a work remains available as a source of published descriptions and illustrations but not as a work in which a name or nomenclatural act (such as the fixation of a name-bearing type, or the determination of precedence under Article 24.2) can be made available.

**Recommendation 8A. Wide dissemination.** Authors have a responsibility to ensure that new scientific names, nomenclatural acts, and information likely to affect nomenclature are made widely known. This responsibility is most easily discharged by publication in appropriate scientific journals or well-known monographic series and by ensuring that new names proposed by them are entered into the *Zoological Record*. This is most easily achieved by sending a copy of the work to the *Zoological Record*, published by BIOSIS, U.K.
Recommendation 8B. Desirability of works on paper. Authors and publishers are strongly urged to ensure that a new scientific name or nomenclatural act is first published in a work printed on paper.

Recommendation 8C. Public accessibility of published works. Copies of published works which contain a new scientific name or nomenclatural act should be permanently conserved in libraries whose works are publicly accessible (but for the deposition of works produced after 1999 by a method other than printing on paper see Article 8.6).

Recommendation 8D. Responsibilities of authors, editors and publishers. Authors, editors and publishers have a responsibility to ensure that works containing new names, nomenclatural acts, or information likely to affect nomenclature are self-evidently published within the meaning of the Code. Editors and publishers should ensure that works contain the date of publication, and information about where they may be obtained.

Recommendation 8E. Inclusion of disclaimers. Editors and publishers should avoid including new names and the information that might appear to make the names available, or new nomenclatural acts, in works that are not issued for public and permanent scientific record (such as pre-symposium abstracts, or notices of papers to be delivered at a meeting). They should ensure that such documents contain a disclaimer (see Article 8.2), so that new names published for the first time therein do not enter zoological nomenclature unintentionally and pre-empt intended publication in another work.

Article 9. What does not constitute published work. Notwithstanding the provision of Article 8, none of the following constitutes published work within the meaning of the Code:

9.1. after 1930 handwriting reproduced in facsimile by any process;
9.2. photographs as such;
9.3. proof sheets;
9.4. microfilms;
9.5. acoustic records as such made by any method;
9.6. labels of specimens;
9.7. copies obtained on demand of an unpublished work [Article 8], even if previously deposited in a library or other archive;
9.8. text or illustrations distributed by means of electronic signals (e.g. by means of the World Wide Web); or
9.9. abstracts of articles, papers, posters, texts of lectures, and similar material when issued primarily to participants at meetings, symposia, colloquia or congresses.
Recommendation 9A. Authors to avoid unintentional publication in abstracts. Authors submitting abstracts of conference papers primarily for issue to participants, should ensure that names and acts affecting zoological nomenclature in such works are not liable to unintended publication. They should ensure that volumes of abstracts contain appropriate disclaimers [Article 8.2].

PART II deals with the comparative study on prevalence of myxosporeans in pure and hybrid carps in Hooghly-Chinsurah Municipality area.

Comprehensive discussions on some aspects of the biology of these myxozoans have been made followed by the chapter References.

In course of the present work, four papers have been published. Reprints of these papers are appended at the end of the thesis as PART III.