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Fresh water fish culture is a profitable undertaking, with low investment, quick results and high profit value. The average production of meat through fish culture is highest of all forms of animal culture, not only in India but also in foreign countries.

The cat fish, *Heteropneustes fossilis* (Bloch) is well known for its nutritive, invigorative and therapeutic qualities (Azmi, 1990). In some parts of India, it is preferred over major carps and is often in great demand, fetching much higher price in market.

The country has extensive weed choked water areas with low dissolved oxygen suitable for culture of air breathing fishes like *Clarias batracus, H. fossilis, Anabas testudineus, Channa marulius, C. striatus* and *C. punctatus*. An All India co-ordinated research project of ICAR was started which resulted into the yield of 7 tons / ha / 6 month of *H. fossilis* with supplementary food, (USDA / ICAR, International symposium on aquaculture research needs for the year 2000 held in Bombay in 1988.)

The success of the implementation of various fishery development programmes depend to some extent on the intensification of the fish parasitological research, as to the improvement of fish yield commonly be achieved from healthy fish stock. It is needless to emphasize that an all out planning is essential for obtaining healthy fish stock.

The information of epizootiology commission for the study of fish diseases (1968) recommended:

1. Systematic examination of diseases,

2. Investigation on diseases circumstances,
3. Post mortem examination of fish,
4. Analysis of water, and
5. Applications of modern diagnostic means for the investigation.

Diseases of the fish, caused by cestode parasites world over include: Triaenophorosis, Cyathocephalosis, Bothriocephalosis, Diphyllobothriasis, Ligulosis, Diagrammosis, Khawiosis and Caryophylosis.

Diseases of cultured fish poses a management problem for pisciculturist as long as fishes are held in confinement. Plumb (1979) reported that roughly 10% of the cultured cat fish are lost in U.S.A. due to infectious diseases.

Some of the behavioural signs exhibited by diseased cat fishes as reported by Plumb, (1979).

1. Slowing down or complete cessation of feeding
2. Erratic swimming behaviour and loss of equilibrium,
3. Schooling just below the surface,
4. Swimming lethargically and
5. Scrabbing against the bottom or some other object in the pond.

Some of the physical signs of diseased cat fish are:

1. Excess mucus production giving a fish steel grey or bluish appearance,
2. Abnormal body coloration (either light or dark),
3. Erosion of fins and skin,
4. Swollen or eroded gills,
5. Pale colour of the gills,
6. Swollen abdomen filled with cloudy, bloody or clear fluid and,
7. Exophthalmia or bulging eye.

Caryophyllaids are known to cause Khawiosis and Caryophylosis affecting their host in several ways (Bauer et al., 1981), :-

1. Mechanical obstruction of the intestinal tract leading to intestinal blockage.

2. Irritation and inflammation at the place of their attachment resulting into ulcers and intestinal perforation.

3. Growth retardation and emaciation and,

4. The gills and skin appear anaemic.

The clinical symptoms of khawiosis includes general weakness, reduced activity, loss of weight and anaemic conditions of skin and gills (Shcherban, 1965). However, the clinical symptom of caryophyllosis includes anaemia and pronounced emaciation (Plehn, 1924 and Shcherban, 1965).

Fish pathology has been a neglected field in Asia and far eastern nations (Gopalkrishnan, 1960, 68). Although a culture of different fishes in this region has gained progress many folds as compared to the past which has created conditions favourable for the fish diseases to occur more frequently and in epidemic proportions.

Some work on the fish paracestodes and their pathogenic significance has been worked out for Proteocephalus, Vermasia, Senga, Gangesia,
and Diphylobothrium in the fishes like Wallago attu, Bagarius bagarius, Channa marulius, Eutropiichthyes vacha etc. But, practically no attempt has been made to study the systematics and morphology of caryophyllideans in general and Meerut region in particular. In view of this, the investigator intends to pursue this work on the morphology, population dynamics, biochemistry and physiopathology of these monozotic cestode parasites of fishes of Meerut region.