

Observations on Fungal Infection of *Channa Punctatus* (Bloch)

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ABSTRACT

The infected fish showed white Cottony patches and black yellow galls scattered on *Channa punctatus* (Bloch). *Saprolegnia diclina* (Humphrey) were observed on infected areas of the test fish. These infected fish died within 15-17 hr. of the infection test.

Introduction:

During the course of investigation on fungi associated with fish diseases some diseased specimens of cultivated fish bearing fungal infections were observed in the Amkhera water tank of Adhartal Jabalpur (M.P.) The infected fish showed white cottony patches and black and yellow galls scattered on their body. These infections usually resulted in the death of the host.

Material and Method:

The fungus causing infection was isolated from the host and raised on the sterile hemp seed halves in sterilized distilled water. Unifungal bacteria-free cultures of the fungus were prepared on the lines described by Raper, J.R. 1937, Tiffrey, W.N.J 1939, Johnson, T.W. 1956. The isolates were identified using the monographs of Coker, W.C. and Seymour, R.L., 1970. The fish species were identified using the key of Jhingran, V.G., and Sehgal, K.L. 1978.

Results and discussion:-

The Parasite was identified as *Saprolegnia diclina* (Humphrey) and the host as *Channa punctatus*

(Bloch). Pathogenicity tests were conducted with the isolates at room temperature ranging between 20-25°C on the lines of Scott and O'Warren, using individuals of *Chela labuca* (Ham.), *Anabas testudineus* (Bl.), *Colisa lalia* (ham.) and *Cyprinus carpio* var. *Communis* (L) as test fish. Injuries were inflicted by scrapping scales from different regions of the body. Hyphae of the parasite were observed on injured areas of the test fish within 15-17 hr of placing the fish in the infection troughs. These infected fish died within 18-33 hr of the infection test. (Table 1)

The specimens kept in the troughs, in which no inoculum was added, remained unaffected and survived. The identity of the parasitic fungus was verified by comparing with the cultures of the original inoculum.

The Number of fish tested and those in which Mycosis was evident and died was 3.

In the available literature there is no previous record of the occurrence of *Saprolegnia diclina* on *Channa punctatus*. The present work therefore, extends the host range of *Saprolegnia diclina* to *Channa punctatus*.

Table.1 Controlled laboratory studies demonstrating the infectious ability of *Saprolegnia diclina*

Name of fish	Mycosis Evident within hr	Death occurred in hr.
<i>Anabas testudineus</i>	11-13	18-21
<i>Chela labuca</i>	13-16	22-24
<i>Cyprinus carpio</i>	11-17	18-33
<i>Colisa lalia</i>	14-16	28-30

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