

Bracon sp., was found in comparatively large numbers on the host. About 80% parasitization by *Bracon* sp., was noticed in a sample collected from Mercara (Karnataka). Earlier, Rao *et al.*² have reported two natural enemies, *Dimericrus kiesenwetteri* (Meyr.) (Torymidae) and *Syntomopus* sp. (Pteromalidae) against this tephritid fly in India and they have also reported that this gall-maker had not effectively controlled this weed in the studied areas. This record of two new parasites, *Bracon* sp. and *Earytoma* sp., substantiates the earlier observation and accounts for the failure of this tephritid fly as a biological control agent against *E. adenophorum* in the areas covered by the present study.

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1. Mani, M. S., *Plant Galls of India*, Macmillan India, 1973, pp. 354.
2. Rao, V. P., Ghani, M. A., Sankaran, T. and Mathur, K. C., *Tech. Communication, Commonw. Inst. Biol. Cont.*, Trinidad, West Indies, 1971, No. 6, p. 64.

**HENNEGUYA THERMALIS N. SP.
PARASITIC IN THE BRAIN TISSUE OF
THE LOACH, LEPIDOCEPHALICHTHYS
THERMALIS (HAMILTON)**

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MYXOSPORIDANS, parasitizing the fresh, brackish and salt water fishes, have cosmopolitan distribution and are known to infect almost all organs of the fish. The best known pathogenic myxosporidians of freshwater fish belong to the family Myxobolidae which includes the genus *Henneguya* among others. In 1944, Davis¹ divided the species described under this genus into three genera, viz., *Henneguya*, *Myxobilatus* and *Unicauda*. In India, *Henneguya ophiocephali* was first described by Chakravarty² from *Ophiocephalus punctatus*. Later, six more species were reported³⁻⁸. In the present report another new species of *Henneguya* parasitizing the brain tissue of *Lepidocephalichthys thermalis* is described.

In the course of investigation on the parasites of freshwater fishes of Karnataka, a sample of fish caught in the tank near Honnenahalli, Chitradurga

District was analysed. Examination of the smears of eyes, gills, muscle, heart, kidney, gonad and brain tissue of *L. thermalis*, stained with methylene blue (1%) and Lugol's iodine, revealed the presence of myxosporidan spores belonging to the genus *Henneguya* in the brain tissue. The spore characters were recorded and camera lucida drawings were made. Since formalin preserved specimens were used, polar filament extrusion was not attempted.

The syntypes have been deposited in the parasitological collections of the Fish Pathology Unit, College of Fisheries, Mangalore, India.

Spore : Pyriform in front view, anterior side round broad, while the posterior end more pointed bearing two bifurcated caudal appendages; spore wall moderately thick and smooth, without articulations. Sutural ridge very distinct, but the sutural line not clear. Polar capsules unequal, the larger pyriform, the smaller ovoidal; the anterior ends of the capsules converge and open to a side from the long axis; polar capsule nucleus small, situated at the posterior end of the capsule. Sporoplasm more or less triangular occupying the extracapsular space; iodophilous vacuole circular and small; a small, round, sporoplasm nucleus above the iodophilous vacuole.

Dimensions of spores (μm): length 12.0-13.2, width 6.0-8.0.

Polar capsules larger : length 4.0-5.0, width 2.0-3.0 smaller: length 3.0-4.0, width 1.5-2.0, thickness, 5.0.

Caudal appendages: length 11.0-13.0.

The species described in this report is placed into the genus *Henneguya* based on the morphological characters described by Davis¹. The characters which relate the present species to the known species of *Henneguya*, taking into consideration other than those described from Indian fishes, have been checked. Of the species described so far, the present one resembles *H. ophiocephali*², *H. qadrii*⁶ and *H. singhi*⁷ in having unequal polar capsules, but differs from them in spore shape and size as well as in the size of the polar capsules. In the spore shape this species is comparable with *H. otolithi*³, *H. latesi*⁴ and *H. nigris*⁹ and in spore size with *H. zahoori*⁵, *H. zschokkei*¹⁰ and *H. salmonis*¹¹, but, the presence of unequal polar capsules and variation in the size of the capsule and of appendages make it distinctly different from them.

The characters such as the shape and size of spore and the polar capsules, as well as the size of caudal appendages are the important taxonomic characters in establishing a new species of myxosporidan. Since the present species varies in the main taxonomic characters from the others described so far, it is regarded to be new and named as *Henneguya thermalis* after the host species.