Transversotrema Chackai sp. Nov, adult of Cercaria Chackai, from Fishes (Digenea: Transversotrematidae) by A. Mohandas

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ABSTRACT

Transversotrema chackai sp. nov. adult of Cercaria chackai, is described. They are found as adults beneath the scales of three species of fishes, Macropodus cupanus (CUV & VAL), M. cupanus var. Dayi (DAY) and Barbus puntius (HAM & BUCH). This species is compared with other known adults of the genus Transversotrema and the creation of a new species is justified.

INTRODUCTION

The genus Transversotrema WITENBERG, 1944 is remarkable in many respects: laterally expanded body, lack of an oral sucker, characteristic life cycle pattern as well as discontinuous distribution. The type species, T. haasi WITENBERG, was reported from fishes collected from the Red Sea, but the precise location of the parasite in this host was not reported. The second species described under this genus was T. patialense (SOPARKAR, 1924) YAMAGUTI, 1958. The biology of this species was worked out by CRUSZ et al. (1964), RAO & GANAPATHY (1967) and Murthy & Rao (1968). CRUSZ et al. preferred to call it "mature metacercaria" recovered from beneath the scales of the fresh water fishes, Ophiocephalus punctatus Bloch, Macropodus cupanus (CUV & VAL) and Tilapia mossambica (PETERS). It is interesting to note that the cercaria of this species occurs in widely distributed areas of the world, the Congo, Ceylon and India. Other adult species described under this genus were T. laruei VELASQUEZ, (VELASQUEZ,1958, 1961) recovered from Lates calcarifer Bloch and Mollienesia latipinna Le Sueur, and T. licinum MANTER (MANTER,
1970) from *Scorpius* sp. and *Microcanthus strigatus* (Cuv & Val). The former species was described from brackish water fishes and the latter from marine fishes. *T. coliensis* (Olivier, 1947) Yamaguti, 1958 and *Cercaria soparkari* Pandey (Pandey, 1971) were known only as cercariae and considered to be congeneric with *T. patialensis*.

**Materials & methods**

Fishes collected from Chackai canal, Trivandrum, were examined for the parasites. The recovered flukes were fixed in 10% formalin and stored in 70% alcohol. The description was based on 25 specimens, unstained and stained with Borax Carmine and Alum Carmine. Measurements are in millimicrons and the drawing was made to scale with a Camera-Lucida.

**Description of the species**

The species described below is the adult of *Cercaria chackai* Nada-kal et al. (Nada-kal et al. 1969) and has been named as *Transversotrema chackai* sp.nov. They occur as sexually matured ones. As eggs, though rare, were present in the uterus, I prefer to consider the flukes as normal adults rather than “progenetic metacercariae” or “metacercariae”  

*Transversotrema chackai* sp.nov. (Fig. 1).*

**Hosts**  
- *Macropodus cupanus* (Cuv & Val)
- *Macropodus cupanus* var. *Dayi* (Day)
- *Barbus punctius* (Ham. & Buch.)

**Location**  
Beneath the scales

**Locality**  
Chackai canal, Trivandrum, Kerala

**Number**  
15 from *M. cupanus*, 2 from *M. cupanus* var. *Dayi* and 8 from *B. punctius*. Three specimens, each with one egg.

The body is thin, flat and leaf-like, broader than long with slightly concave anterior ends. Scale-like spines are present throughout the body, arranged in alternating rows. Eye spots spherical in outline and situated close to the pharynx on either side and having a diameter of 15—30. The body measures 400—460 x 625—950. Oral sucker lacking. Mouth situated 55—85 away from the anterior margin, opens directly into the pharynx, having a diameter of 55—70. Pharynx almost circular in outline. Oesophagus short and intes-

*Paratype specimens have been deposited at the Zoological Survey of India Museum, Calcutta, India, under number W 7185/1 to W 7187/1.*

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