

STUDIES ON THE LARVAL TREMATODES OF  
WEST BENGAL PART II  
ON A NEW ECHINOSTOME CERCARIA

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(With 1 Text-figure)

An intensive investigation of larval trematodes carried out in West Bengal resulted in a discovery of a new Furcocercous cercaria the description of which was included in Part I of this series. Present paper deals with the description of a new echinostome cercaria.

Out of 15 *Gyraulus convexiusculus* collected from Manohar Das tank, Dharmatalla, Calcutta, two snails were found to discharge small echinostome cercariae. They are whitish in appearance and move like one part to another in the container. They move in the water directing clouds from the anterior-part upwards and the powerful muscular tail downwards. On the flat surface of the slide they can crawl rapidly with oral and ventral suckers. Under laboratory condition majority of the the help of cercariae died within 8 to 10 hours time after they emerged from the infected snails.

*Cercaria dharmatallansis* n. sp.

(Text-fig. 1 A & B).

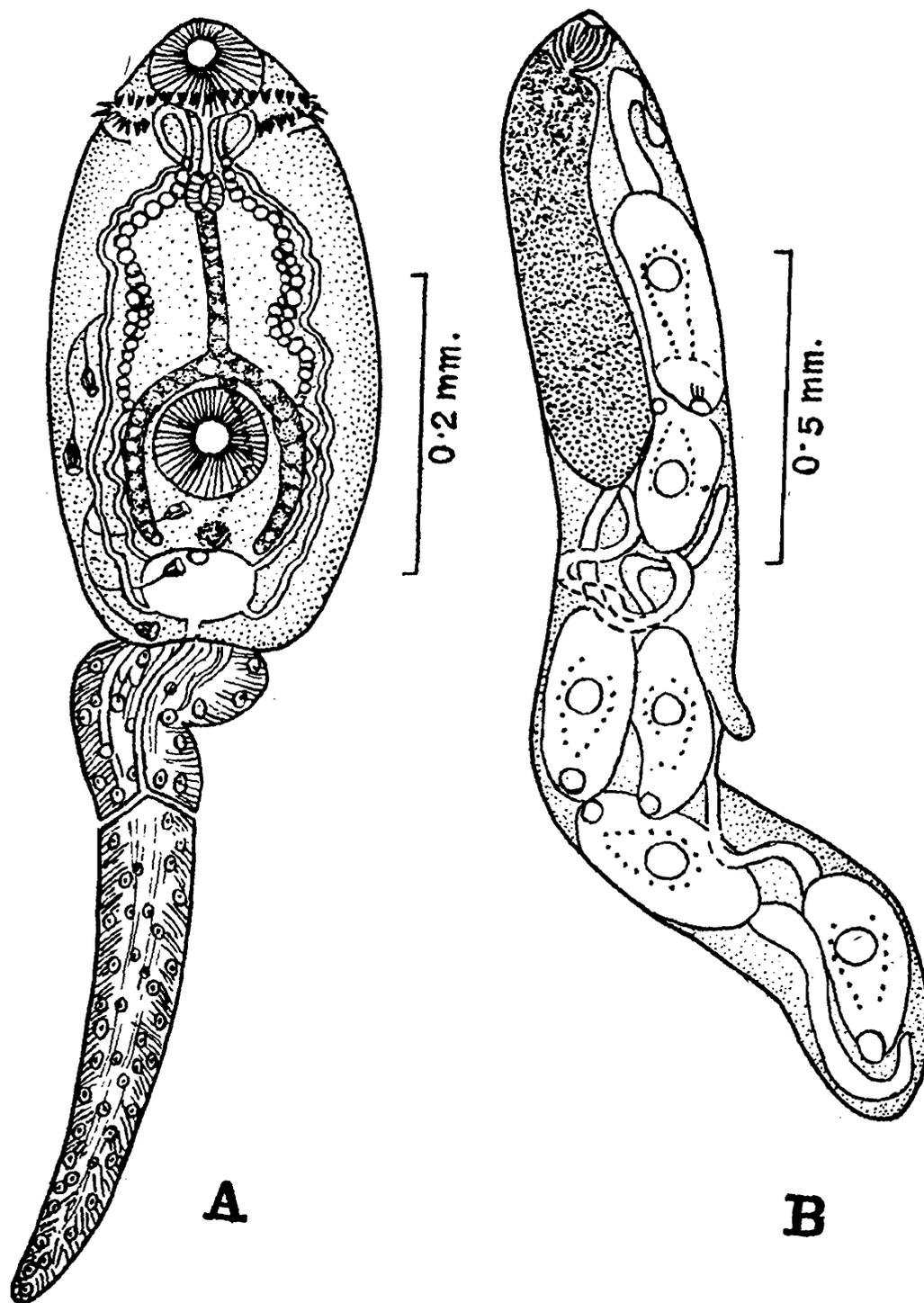
Flat body of the cercaria measures 0.270-0.432\* in length and 0.117-0.198 in breadth. Tail measures 0.360-0.459 in length and 0.045-0.063 in breadth. Oral sucker measures 0.062-0.077 in length and 0.058-0.079 in breadth. The well developed pharynx measures 0.029-0.036 in length and 0.022-0.037 in breadth.

Body is provided anteriorly with a collar which carries 32 collar spines. The body and tail are smooth and without any spines. Mouth is located terminally and the prepharynx is narrow and long. Long and narrow oesophagus bifurcates just above ventral sucker into two almost

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\* All measurements are in mm.

straight caeca. Caeca extends far behind ventral sucker and terminate at anterior or middle level of excretory bladder. Oesophagus and caeca are provided with uninucleate cells. The rounded muscular ventral sucker situated in mid-region and at post-equatorial part of body. Cystogenous cells are compactly arranged in the body. Powerful muscular tail is slightly longer than body and gradually tapers towards posterior end.



Text-fig. 1.— A. *Cercaria dharmatalansis* n. sp. B. Redia of *Cercaria dharmatalansis* n. sp.

Transversely elongated, thin walled excretory bladder is oval in shape and situated a little in front of posterior end of body. From its antero-lateral parts two narrow ducts arise and runs forward in a zig-zag course. These ducts run on either side of ventral sucker and widen out in front of it and again they narrow down near the pharynx. Descending excretory canals form loops near prepharynx. Portions of ascending canals, between ventral sucker and pharynx contain refractile excretory granules of various sizes. Descending canal of each side gives out two flame cells at mid region of oesophagus and three flame cells at posterior part of body. Excretory bladder gives out a median duct into the tail and this duct soon after entering the tail divides into two lateral ducts which open on two lateral sides of tail.

Redia is an elongated body, measures 1.446—1.962 in length and 0.065—0.072 in breadth. It is provided with a pair of locomotor appendages but without a collar. Well developed pharynx is located anteriorly and measures 0.063 — 0.081 in length and 0.054 — 0.072 in breadth. Gut broad, elongated sac and content is yellowish in colour. It measures 0.052—0.450 in length and 0.063 — 0.171 in breadth. The birth pore is located anteriorly and at posterior level of pharynx. Each redia contains 6 to 10 cercariae and germ balls.

Host : *Gyraulus convexiusculus*

Locality : Manohar Das Tank, Dharmatalla, Calcutta.

*Discussion*: Present cercaria comes close to *Cercariae indicae* XII. Swell, 1922, *Cercariae nairi* Peter, 1955 and *Cercariae echinostome* sp. Odening, 1970 but it differs from *C. indicae* XII in number of collar spines, number of flame cells and arrangement of spines and flame cells. It differs from *C. nairi* in number of collar spines and their arrangement and absence of caudal processes. It differs from *C. echinostome* sp. in number of collar spines and their arrangement, number of flame cells and absence of fin fold in the tail.

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