



Study of a New Trematode Parasite found in the Fresh Water Fish *Barilius Barana* (Ham.) from River Ganga in District Kanpur.

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Abstract :- This new species has been found in the Intestine of fish *Barilius Barana* (Ham.) collected from River Ganga in district Kanpur. Out of these only two specimens were found infected with six trematode worms. The experiment was carried out from the laboratory from August to October.

Key words :- *Barilius Barana* (Ham.), Intestine, *Allocreadium Kanpurensis*.

Introduction : During the study of trematode parasite of fishes this *Barilius Barana* have been collected at the different sites of district Kanpur (U.P.) and the specimen examined as trematode parasites. About eighty fishes were collected and examined for the study of trematode infection. Only two specimens were found infected with six trematode worms. The described form has been referred to the Genus *Allocreadium Looss*, 1902.

Eight species have been described under the Genus *A. Looss* (1902) from India. In which some are *A. Kosia* Pande (1938), *A. dollfusi* Rai (1962), *A. Guptai* Kakaji (1969), *A. Calbasii* Gupta and Puri (1980).

Material and Methods: The host fishes were collected from river Ganga, Ponds other local fresh water bodies of Kanpur Districts. These host fish was kept in aquaria in the laboratory and then freshly killed, dissected and examined for study of trematode Parasites.

After collection the Parasites was thoroughly washed and studied alive.

Parasite was fixed in 70% alcohol containing 5% glycerin, stained in acetic alarm carmine, differentiated in acid water, dehydrated in graded series of alcohol.

Cleared in clove oil and finally mounted in Canada balsum.

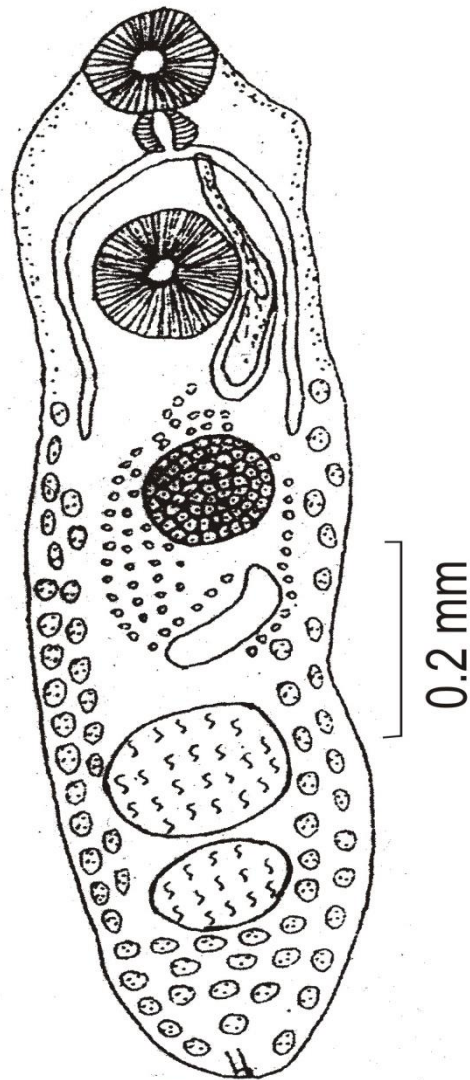


Fig. 1

from genital pore upto the region between ventral sucker and ovary, 0.58 x 0.13mm in size. Vesicula seminalis bipartite. Parsprostatica tubular, surrounded by numerous prostate gland cells.

Ovary sub oval or sub rounded, sub equatorial lying between ventral sucker and anterior testis, 0.26 x 0.28mm in size at 1.32mm from anterior extremity. Receptaculum seminalis bean shaped, posterior to ovary, pretesticular, 0.28 x 0.08mm in size. Vitallaria follicular confluent behind posterior testis, lateral in position extending from the level of middle ventral sucker up to the hind end of the body. Uterus coiled having numerous eggs. Eggs oval, operculated, 0.032-0.045 x 0.016 – 0.022mm in size.

The systematic position and description of the parasite is given below.

Observation / Description : Body elongated, aspinose, anteriorly narrow, with sub rounded at posterior extremity. A little below of anterior region a protuberance present at left side, 2.45mm long, 0.61mm maximum width in middle region of the body. Oral sucker terminal, spherical, 0.21 x 0.26mm in size. Prepharynx absent. Pharynx ovoid, muscular, 0.10 x 0.11mm in size, Oesophagus absent. Intestinal caeca simple, tubular extending up to the hind end of the body. Ventral sucker larger than oral sucker, spherical, pre-equatorial lying between intestinal caeca and ovary, 0.29 x 0.26mm in size.

Excretory bladder simple, tubular and excretory pore terminal present at posterior extremity of the body.

Genital pore sub median located at ceacal bifurcation at 0.35mm from anterior extremity.

Testes oval or sub rounded, tandem, non-overlapping and post-equatorial. Anterior testis larger than posterior testis, post ovarian, 0.29 x 0.34mm in size at 1.75mm from anterior extremity. Posterior testis, 0.18 x 0.26mm in size. Cirrus sac flasked shaped extending

Systematic Position

- Family** : Allocreadiidae Stossich, 1903
Subfamily : Allocreadiinae Looss, 1902
Genus : *Allocreadium* Looss, 1902
Species : *Allocreadium kanpurensis* (n.sp.)

Discussion : The present form has a close resemblance with *A. kosia* Pandey, 1938; *A. dollfusi* Rai, 1962; *A. guptai* Kakaji 1969; *A. calbasii* Gupta and Puri, 1980 in having similarities in oral sucker, ventral sucker, oesophagus, in absence of prepharynx and in the extension of intestinal caeca but it also shows differences from these species in having the bean shaped receptacular seminalis, in anterior testis which is larger than posterior instead smaller, in the extension of cirrus sac of *A. dollfusi*, *A. calbasii* and *A. kosia* in the position of receptacular seminalis.

Accordingly it is regarded as a new species with the specific name *Allocreadium kanpurensis* (n.sp.) which is after the name of the city Kanpur.

- Host** : *Barilius barana* (Ham.)
Location : Intestine
Locality : River Ganga in District Kanpur (U.P.)

Conclusion :. Fishes are good source for providing much needed animal protein, many medicinal and industrial oil, insulin and minerals, Vitamin A,B,C, but the present of parasites in body fishes amount damage caused and loss incurred in total production.

The research totally helpful to avoid above loss.

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