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RESEARCH PAPER

Study on a digenetic trematode *Allocreadium clariasi n.* sp. from fresh water fish *Clarias batrachus* from the river Ganga, Nayapura at Allahabad

A.K. PAL AND A.K. MISHRA

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See end of the article for authors' affiliations

Correspondence to :

A.K. PAL
Department of Zoology,
R.S.K.D. (P.G.) College,
JAUNPUR (U.P.) INDIA

ABSTRACT

Allocreadium clariasi n. sp. is derived from the intestine of a fresh water fish *Clarias batrachus* from the river Ganga, Nayapura at Allahabad. The new form belongs to the genus *Allocreadium* Looss, 1900 in general topography. The new form seems very close to *A. Calbasui* in having elongated aspinose body, sub-spherical, terminal oral sucker, sub-spherical pharynx, pre-pharynx absent and spherical pre-equatorial intercecal ventral sucker. But new form differs from it in having, smaller than oral sucker instead of large ventral sucker, receptaculum seminis oval shape instead of sac like and extension of vitellaria.

Key words : Allocreadium, Helmenth, Clariasi, Digenetic, Trematodes

During the survey of a helminth parasites of fresh water fishes of Allahabad, large collection of digenea was obtained. The present communication deals with one of them.

MATERIALS AND METHODS

The trematodes were fixed in 70 % alcohol using light cover glass pressure, stained in Meyer's acetic-alum carmine. The sketch was made using a camera lucida. All measurements are given in millimeters and length follows width.

Five specimen were collected from the intestine of a fresh water fish *Clarias batrachus* from the River Ganga, Nayapura at Allahabad.

RESULTS AND DISCUSSION

Family: Allocreadiidae Stossich, 1903

Sub family: Allocreadiinae Looss, 1902

Genus: *Allocreadium* (Looss, 1900)

New Species: *dariasi*

Body elongate, aspinose with rounded extremity, 3.52-3.57 x 0.78-0.85 at the level of ventral sucker. Oral sucker terminal. Spherical 9f sub spherical, 0.36-0.37 x 0.41-0.37. Pharynx sub spherical, 0.11-0.12 x 0.12-0.16. Oesophagus very small, 0.02-0.03. Intestinal bifureation mid way between pharynx and genital pore at 0.46-0.48 from anterior extremity. Ceca terminating near hind body. Ventral sucker near the lower surface of the vesicula seminalis, smaller than the oral sucker, sub-spherical, 0.28-0.32 x 0.31 -0.32 at 0.70-0.90 from anterior end.

Excretory vesicle tubular, obliterated by vitallaria, excretory pore tenninal.

Genital pore, sub median, post bifurcal at 0.52-0.56 from anterior extremity.

Testes intercecal, in middle of the hind body, tandem, separated from each other. Anterior testis post equatorial, ovoid, 0.21-0.32 x 0.33-0.32 at 1.29-1.86 from anterior extremity. Posterior testis spherical or sub spherical, 0.27-0.40 x 0.23-0.27 smaller than anterior testis. Cirrus sac elongate, narrow 0.38-0.56 x 0.12-0.15 extending from genital pore to some distance of oral sucker enclosing vesicula seminalis, prostatic complex and cirrus. Vesicula seminalis tubular, undivided. Parsprostatica well developed, tubular surrounded by large number of prostate gland cells.

Ovary post acetabular, pre-testicular median, spherical, 0.21-0.24 x 0.18-0.24. Vitellaria follicular commencing immediately behind ventral sucker to posterior end confluent between gonads and in post testicular region. Receptaculum seminis present. Uterus containing preovarian eggs, opening anteriorly at genital pore. Eggs ovoid, operculated 0.04-0.06 x 0.02-0.02.

Host : *Clarias batrachus*

Location: Intestine

Locality: River Ganga, Allahabad Prevalence: 5 specimen from 3 host out of 68 examined

The new form is referred to the genus *Allocreadium* Looss, 1900 of which a large number of species have been described from India and abroad from fresh water fishes but no species of the genus has so been reported from marine fishes except Singh, 1984 *A. marini* n. sp. from a marine fish *Therapon theraps* Cuv. and Vol. from the Bay of Bengal at Puri Orissa. The specific validity. of a large number of existing species of the genus has been doubted by several authors from time to time and