

RRST-Zoology

Studies on Piscian Trematode *Orientocreadium batrachoides*^[1] from *Channa gachua*

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Article Info	Abstract
*Corresponding Author Tel : 08149407814 Email: draj_bhure@yahoo.co.in	The present investigation deals with taxonomic observation of the trematode parasites <i>Orientocreadium batrachoides</i> [1], parasite of freshwater fish <i>Channa gachua</i> from Aurangabad district of M.S. India. Present worm resembles <i>Orientocreadium batrachoides</i> [1] in having all essential morphological characters i.e. body is elongated, small, spinose, muscular Pharynx, crescent shaped cirrus pouch and follicular vitellaria, but the same differs from it in the following character Pre pharynx absent, oral sucker smaller, ventral sucker larger, Position of testes side by side and eggs elongated. Hence it is redescribed.
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Introduction

Fishes are important due to its nutritional, medicinal and economical value. Fishes are infected with helminth parasites, results less reproductivity. Hence the study of helminth parasites is therefore an urgent necessity today. The genus *Orientocreadium* is erected by Tubangui, 1931. The present worm resembles *Orientocreadium batrachoides* [1], collected from freshwater fish *Mystus seenghala* from Lucknow U.P., India.

Material and Methods

Four immature and Seven mature specimens of this form were collected from the intestine of a fresh water fish, *Channa gachua* from Aurangabad district (M.S.) India. The worms were preserved in hot 4% formalin, stained with Harris Haematoxylin, dehydrated in graded alcohols, cleared in xylol & mounted in DPX. Diagrams were made with camera lucida. All measurements are in millimeters.

Result

Description (Based On Seven Specimens, Figure A, B, C And D)

The body is madium, elongated, spinose and measuring 3.728 X 0.855 mm in size. The oral sucker is spherical, sub terminal, muscular, smaller than ventral sucker and measuring 0.168 X 0.198 mm in size. The ventral sucker is spherical, small, pre-equatorial, larger than oral sucker, muscular and measuring 0.240 X 0.239 mm in size, lying at 0.908 mm away from anterior extremity, pre-pharynx is absent, Pharynx is oval to spherical, muscular and measuring 0.121 X 0.148mm in size, Oesophagus very short, tubular and measures 0.334 X 0.092 mm long; intestinal caeca broad, slightly sinuous or

straight extending up to hind end of body. The genital pore lies on left side of body in front of ventral sucker at 0.761 mm, from anterior extremity. The excretory pore lies at posterior end of body. The excretory bladder is tubular.

The testes are anterior, oval, pre or post equatorial, lies side by side. The anterior testis is smaller than posterior one, measures 0.225 X 0.283 mm in size and lies at 1.822 mm from anterior extremity. The posterior testis measures 0.222-0.334 mm in size and lies at 2.065 mm from hind end of body. The cirrus pouch is elongated, crescent shaped lying on left side of body, measures 0.688 X 0.113 mm in size, extending from genital pore up to middle of ovary. The vesicula seminalis consists of two parts, a bean shaped vesicular seminalis externa, measuring 0.182 X 0.020 mm in size, extending up to middle of ovary and a bipartite vesicular seminalis interna, measuring 0.654 X 0.022 mm in size. The seminalis interna is followed by narrow ejaculatory duct which measures 0.536 X 0.019 mm in length. The cirrus is muscular and non -spiny. A large number of prostate gland cells fill up the entire space around the vesicular seminalis interna and pars prostatica. The ovary is oval to rounded, posterior to ventral sucker or acetabulum and smaller than anterior testes, measures 0.126 X 0.243 mm in size and lies at 1.296 mm from anterior extremity. The oviduct arises from the ovary and opens at the ootype. The Vitellaria are small, follicular, extending from ventral sucker or acetabulum up to hind end of body. The uterus is arise from ootype, runs posteriorly filling up the hind region of body. It extends anteriorly to open at the genital pore. The eggs are elongated, operculated and measures 0.072 X 0.023 mm in size.

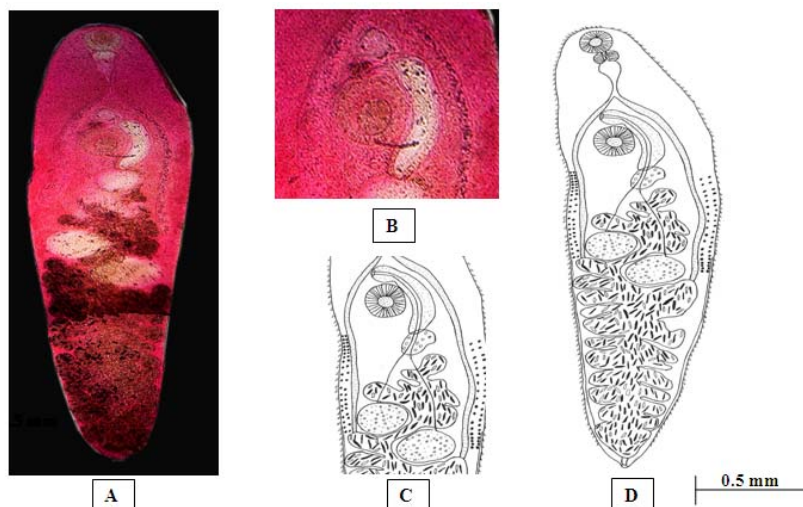


Figure –A- Microphotograph of *Orientocreadium batrachoides*, B- Middle part showing Cirrus Pouch, C- Middle part showing Cirrus Pouch and Reproductive organ and D- Camera Lucida diagram of *Orientocreadium batrachoides*

Discussion

The present form comes closer to *Orientocreadium batrachoides* [1] in having body is medium, elongated, spinose, Pharynx muscular, cirrus pouch crescent shaped and Vitellaria follicular, but the same differs due to Pre pharynx (absent vs. present), Shape of oral sucker (smaller vs. longer), Shape of ventral sucker (longer vs. smaller), Position of testes (side by side vs. overlapping to each other) and Shape of eggs (elongated vs. oval).

Conclusion

As the characters are minor, it is redescribed here as *Orientocreadium batrachoides* [1]. The present form is

collected from *Channa gachua* from Aurangabad (M.S.) where as *Orientocreadium batrachoides* [1] is collected from *Mystus seenghala* from Lucknow (U.P.).

Taxonomic Summary

Type of species - *Orientocreadium batrachoides*.

Host - *Channa gachua*

Habitat - Intestine, Stomach

Locality- Aurangabad (M.S.)

References

- [1] Tubangii, M. A. 1931. Trematodes parasites of Philippine vertebrates. *Philipp. J. Sci.* 36: 251 – 271.