

TWO NEW DIGENETIC TREMATODE OF THE GENUS *LECITHOCHIRIUM* LUHE, 1901 FROM MARINE FISHES AT PURI, ODISHA (INDIA)

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ABSTRACT

Backgrounds: Genus *Lecithochirium* Luhe, 1901 (Trematoda: Hemiuridae Luhe, 1901) is one of the most important digenean trematode parasites with wide geographic distribution in the world. The purpose of the present study was to describe morphometrical characteristics of *Lecithochirium* species, currently prevalent in marine fish *Mugil cephalus* (Russell) and *Tetraodon lineatus* (Bl. and Schn.) of Puri, Odisha with Geographical Coordinates 19°48'17"N 85°49'6"E.

Methods: Gastro-intestinal organs of *Mugil cephalus* (Russell) and *Tetraodon lineatus* (Bl. and Schn.) at Puri, Odisha (India), were examined for infectivity with marine fish digenean trematode species. For examination and measurements of digenean, acetoalum carmine staining was performed, followed by camera Lucida drawings of morphological characters and measurements of morphometrical criteria with a calibrated microscope. Using valid trematode systematic keys, almost all the parasites were identified at the level of species.

Results: Total 45 marine fishes were found infected with at least two species of *Lecithochirium*. Considering morphological characteristics of *Lecithochirium*, two species were identified as new species including *Lecithochirium mugilensis* sp. nov. and *Lecithochirium deeghai* sp. nov.

Conclusion: During the survey of marine digenetic trematode parasites, collected two different species of the genus *Lecithochirium*, out of these two are new species, another are red scribed to show certain variation, the new parasites were obtained from the stomach of the marine fish *Mugil cephalus* (Russell) and *Tetraodon lineatus* (Bl. and Schn.).

KEYWORDS: Digenea, Fresh Water Fishes, *Mystus vittatus*, Parasite, India