

A STUDY OF MORPHOLOGICAL VARIATIONS IN OTOLITHS OF DIFFERENT SPECIES OF *LABEO* ON THE BASIS OF GROWTH AND GENDER

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Abstract: A study was carried out to study the sexual and ecological age growth variations in the morphology of otoliths (sagitta) among various native species of the genus *Labeo* from Meerut region viz. *Labeoangra*, *Labeocalbasu*, *Labeogonius* and *Labeorohita*. The data obtained was photographed and statistically analysed. From the studies of saggitta of the four species of *Labeo* collected, it is clearly evident that otoliths (sagitta) are species specific in shape, size and structure. Based on the results of morphometric variations the Otoliths of the four species of *Labeo*, showed no significant differences between right & left sagitta ($P < 0.05$). The lack of significant differences between right & left sagittae is consistent with the observation that the pair of Otoliths are specular images of each other. Noticeable differences were observed among the four species in otolith morphometric variables.

Keywords: *Labeo* sp., Otololith, Sagittae, Morphometry, Growth, Gender

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