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ABSTRACTS



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Identification of deep sea fish species using the sagittal otolith from southwest coast of India

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Otoliths are species-specific anatomical structures, useful in ichthyology and paleo-ichthyology and are commonly used in the identification of teleost prey items found in the digestive tracts of predators. The present study describes the morphological characteristics of the sagittal otoliths of 25 deep sea fish species collected from the bycatch of deep sea shrimp trawls operated off Southwest coast of India. The classification system used was based on Nelson (2006) and the species were named following the criteria of the online fish catalogue of the California Academy of Sciences. The otolith contour analysis facilitates correct identification of the specimens and can be used to distinguish between congeneric species. Such information can be effectively used in the trophodynamic study for identifying prey items in the gut as otolith will not be damaged or digested easily. The study contributes to the morphological database of the otoliths of deep sea fishes from Indian waters.

Keywords: Otolith morphology, deep sea fish, species identification, India