

论文

鱼耳石元素研究热点及常用测试分析方法综述

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摘要:

鱼耳石是鱼类内耳中的钙质沉积体,组成和结构非常稳定,它的生长轮受其生理控制和环境条件影响有规律地昼夜生长。耳石可作为鱼类的生物学记录者并为重建其生活特征和环境参数提供依据。文中就近20年来国内外关于鱼耳石微量元素和同位素方面的研究热点、鱼耳石元素研究中常用的测试分析方法以及其在环境监测中的应用前景和存在的问题作一整理和综述,望能为广大耳石研究者提供一些思路和揭示其在环境科学中的广阔应用前景。

关键词: [鱼耳石](#); [环境](#); [微量元素](#); [同位素](#); [分析测试方法](#)

An overview of focuses of research on otolith element characteristics and general testing methods

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Abstract:

Otolith is calcareous concretions in fish inner ears. Its composition and structure are very stable. Its accretional growth follows a circadian rhythm that is physiologically controlled and influenced by environmental conditions. Otolith acts as biological archives providing the basis for the reconstruction of individual life traits and environmental parameters. The paper focuses on fish otolith trace elements and their isotopes, general testing methods and the prospect and problems of its application in environmental detection in recent 20 years, hoping that it could provide researchers with some thoughts and could expand its potential application in environmental science.

Keywords:

[Key words: otolith; environment; trace element; isotope; analytical test method](#)

收稿日期 null 修回日期 null 网络版发布日期 null

DOI:

基金项目:

国家重点基础研究发展计划“973”项目(2007CB815604);国家自然科学基金项目(50772052)

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