

蔡文倩,刘录三,孟伟,郑丙辉.AMBI方法评价环渤海潮间带底栖生态质量的适用性[J].环境科学学报,2012,32(4):992-1000

AMBI方法评价环渤海潮间带底栖生态质量的适用性

The suitability of AMBI to benthic quality assessment on the intertidal zones of Bohai Sea

关键词: [环渤海](#) [潮间带](#) [大型底栖生物](#) [生态质量评价](#) [AMBI](#)

基金项目: [国家重点基础研究发展规划\(973\)项目\(No.2007CB407306\)](#); [国家环保公益性行业科研专项\(No.200709020,2008467041\)](#)

作者 单位

蔡文倩 1. 中国环境科学研究院 河流与海岸带环境创新基地,北京 100012;
2. 北京师范大学 水科学研究院,北京 100875

刘录三 中国环境科学研究院 河流与海岸带环境创新基地,北京 100012

孟伟 中国环境科学研究院 河流与海岸带环境创新基地,北京 100012

郑丙辉 中国环境科学研究院 河流与海岸带环境创新基地,北京 100012

摘要: AMBI (AZTI's Marine Biotic Index)可以有效地评价河口和近岸海域软底质底栖生态质量状况.本文根据2008年9月16日至28日在环渤海潮间带采集的大型底栖动物资料,采用AMBI法并结合香农-威纳多样性指数(Shannon-Wiener index, H),对环渤海11个潮间带30个潮区的生态质量状况进行评价.结果表明,环渤海潮间带生态系统皆受到不同程度的干扰.与 H 法相比,AMBI法在评价底栖群落质量状况方面更敏感,而 H 法则对环境污染状况的指示作用更敏感.与2008年辽宁、河北及山东的《海洋环境质量公报》相比,AMBI法得出的环渤海潮间带环境污染程度,普遍比 H 法及各省海洋环境质量公报评价的程度轻微.

Abstract: The AZTI's Marine Biotic Index (AMBI) can evaluate the response of soft-bottom benthic communities to natural- and anthropogenic-induced disturbances in coastal and estuarine environment. In this paper, based on the macrobenthos collected from 30 sites in the intertidal zones of Bohai Sea from September 16 to 28, 2008, the AMBI combined with the Shannon-Wiener index (H) were carried out for ecological quality assessment. The results showed that all the intertidal zones of Bohai Sea were subject to various degrees of disturbance. Compared with the results from the AMBI and the H method, it can be concluded that the H method was more sensitive than the AMBI in indicating environmental pollution conditions; however, the AMBI was more effective in assessing quality conditions of the macrobenthos community. Additionally, compared with the results of Marine Environmental Quality Bulletin in 2008 from Liaoning, Hebei and Shandong Provinces, the environmental pollution degrees derived from AMBI in the intertidal zones of Bohai Sea were slightly lower than those derived from the H method.

Key words: [Bohai Sea](#) [intertidal zones](#) [macrobenthos](#) [ecological quality assessment](#) [AMBI](#)

摘要点击次数: 459 全文下载次数: 604