

## 福建南日群岛秋季海洋生态环境诊断与评价

罗冬莲

福建省水产研究所, 福建厦门 361012

Marine environment of Nanri Archipelago, Fujian Province in summer: Diagnosis and assessment.

LUO Dong-lian

Fisheries Research Institute of Fujian, Xiamen 361012, Fujian, China

- 摘要
- 参考文献
- 相关文章

全文: PDF (724 KB) HTML (1 KB) 输出: BibTeX | EndNote (RIS) 背景资料

## 摘要

根据2007年9月和10月福建南日岛生态调查资料,从海水水质、海水营养结构与营养水平、生物多样性等3个方面诊断与评价了南日群岛海域环境现状,利用综合质量指数法对海洋生态环境质量进行综合评价,并探讨了不同评价指数的关系及合理性.结果表明:海域的pH、溶解氧(DO)、化学需氧量(COD)、Pb、Cd、Hg、As含量均符合第二类海水水质标准.71%站位的磷酸盐、14%站位的无机氮和7%站位的石油类污染物超第二类海水水质标准.海水水质总体属于较好等级,营养结构表现为氮限制,大部分海域处于富营养化状态,依据浮游生物的多样性指数评价结果为“轻污染-清洁”水平.生态环境综合质量指数评价结果表明南日群岛海域生态环境总体处于良好水平.利用不同的评价指数对海域环境健康状况进行诊断的结果存在一定差异.在实际评价中应综合运用化学指标和生物指标,才能得到相对客观的结论.

**关键词:** 海洋生态环境 健康诊断 质量评价 南日群岛海域

## Abstract:

Based on the ecological investigation data in September and October 2007, the status of the marine ecological environment of Nanri Archipelago, Fujian Province in summer was diagnosed and assessed from the aspects of sea water quality, nutrient structure and levels, and biodiversity. The comprehensive quality index method was used for the assessment of the marine ecological environment, and the rationality of the assessment obtained from different indices was also discussed. The sea water pH, dissolved oxygen (DO), chemical oxygen demand (COD), and Pb, Cd, Hg, and As concentrations were all within the limit values of the Grade II standard of Sea Water Quality Standard (GB 3097-1997), while the phosphate concentration at 71% stations, inorganic nitrogen at 14% stations, and oil concentration at 7% stations were all above the Grade II standard of Sea Water Quality Standard. Overall, the seawater quality was of better grade, nutrient structure was characterized by N-limited, most of the sea water was at a state of eutrophication, and the diversity index of plankton was at mildly polluted or unpolluted level. The comprehensive quality index indicated that the seawater quality of the Nanri Archipelago was relatively fine. There existed definite differences in the assessment results by using different diagnosis methods, and hence, a relatively objective assessment about marine environmental quality and health status could only be made when the chemical and biological indicators were comprehensively used.

**Key words:** marine ecological environment health diagnosis quality assessment Nanri Archipelago water area

## 引用本文:

. 福建南日群岛秋季海洋生态环境诊断与评价[J]. 应用生态学报, 2011, 22(02): 495-502.

. Marine environment of Nanri Archipelago, Fujian Province in summer: Diagnosis and assessment. [J]. Chinese Journal of Applied Ecology, 2011, 22(02): 495-502.

## 链接本文:

<http://www.cjae.net/CN/> 或 <http://www.cjae.net/CN/Y2011/V22/I02/495>

没有本文参考文献

[1] 王启兰,王溪,曹广民,王长庭,龙瑞军. 青海省海北州典型高寒草甸土壤质量评价[J]. 应用生态学报, 2011, 22(06): 1416-1422.

## 服务

- ▶ 把本文推荐给朋友
- ▶ 加入我的书架
- ▶ 加入引用管理器
- ▶ E-mail Alert
- ▶ RSS

## 作者相关文章