浙江渔山列岛岩礁潮间带大型底栖动物次级生产力

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Secondary productivity of macrobenthos in rocky intertidal zone of Yushan Islands, Zhejiang Province.

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摘要 为揭示渔山列岛潮间带大型底栖动物现状，2009年3月至2010年1月在渔山列岛潮间带布设5条断面进行了4个季节的调查取样.利用Brey的经验公式计算了调查海区大型底栖动物栖息密度、生物量、次级生产力和P/B值.结果表明：该潮间带大型底栖动物平均栖息密度为1419.5 ind·m^{-2}，以去灰干质量(AFDM)计，平均生物量为565.53 g·m^{-2}，平均次级生产力为285.58 g·m^{-2}·a^{-1}，P/B值为0.51.潮间带次级生产力受大型软体动物和甲壳类影响明显，5个关键生物种（条纹隔贻贝、偏顶蛤、覆瓦小蛇螺、日本笠藤壶和鳞笠藤壶）对次级生产力的贡献为84.0%.研究海域P/B值低于其他海域，说明该海域大型底栖动物世代更替速度较慢，群落结构较稳定.

关键词： 大型底栖动物 次级生产力 P/B值 渔山列岛 岩礁潮间带

Abstract: In order to understand the current status of macrobenthos in intertidal zone of Yushan Islands, macrobenthos samples were collected from 5 sections in the intertidal zone in four seasons from March 2009 to January 2010, with the density, biomass, secondary productivity, and P/B value of the macrobenthos investigated by using Brey's empirical formula. The mean density of the marobenthos was 1419.5 ind·m^{-2}, mean biomass in ash free dry mass (AFDM) was 565.53 g·m^{-2}, mean annual secondary productivity was 285.58 g·m^{-2}·a^{-1}(AFDM), and mean annual P/B value was 0.51. The secondary productivity was mainly affected by mollusca and gastropda, with five critical species *Septifer virgatus, Modiolus modiolus, Serpulorbis imbricata, Tetraclita japonica*,and *T. squamosa* contributed 84.0 % of the total. The P/B value in the study area was lower than that in other sea areas, showing that the generation turnover rate of the macrobenthos in the intertidal zone of Yushan Islands was slower, and the community structure was more stable.

Key words: macrobenthos secondary productivity P/B value Yushan Island rocky intertidal zone

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[1] 辛俊宏,任一平,徐宾铎,张崇良,薛莹,纪毓鹏. **胶州湾西北部潮滩湿地大型底栖动物功能群**[J]. 应用生态学报, 2011, 22(07): 1885-1892.