

## ABSTRAK

Keberadaan bahan organik dalam ekosistem laut sangat penting, karena dapat dijadikan sebagai indikator kondisi perairan. Penelitian ini berjudul "Pengaruh Nitrogen, Fosfat Dan Bahan Organik Total (TOM) Terhadap Kelimpahan Bivalvia Di Teluk Selamat Datang Taman Nasional Ujung Kulon". Tujuan dari penelitian ini adalah mengetahui konsentrasi N, P dan TOM, kelimpahan bivalvia dan hubungan N, P dan TOM terhadap kelimpahan bivalvia. Penelitian dilaksanakan pada bulan Juni tahun 2019. Penelitian metode survey ini sampel diambil berdasarkan metode purposive sampling. Hasil penelitian diperoleh bahwa konsentrasi Nitrogen (nitrit 0,008-0,013 mg/l, nitrat 0,015-0,035mg/l, amonia 0,025-0,052mg/l), fosfat 0,008-0,021mg/l dan TOM 4,6-7,17mg/l. Bivalvia yang ditemukan berjumlah 8 spesies yaitu *anadra granosa*, *anadra gubermaculum*, *atrina pectrinata*, *mactra grandis*, *callista lilacina*, *grafarium tumidium*, *mactra maculate* dan *maretrix maretrix*. Kelimpahan bivalvia diperoleh antara 12-445 ind/100m<sup>2</sup>. Nitrat, Fosfat, Nitrit dan Amonia berpengaruh sangat kuat terhadap kelimpahan bivalvia ( $r = 0,8-0,9$ ) dan yang paling berpengaruh adalah Nitrat, sedangkan TOM berpengaruh rendah terhadap kelimpahan bivalvia ( $r = 0,2$ ).

*Kata kunci : Bivalvia; Kelimpahan; Nitrogen; Fosfat; Bahan Organik Total (TOM)*



## ABSTRACT

The existence of organic matter in the marine ecosystem is very important, as an indicator of the aquatic condition. The research aim is "Correlation of Nitrogen, Phospat and Total Organic Matter (TOM) to the Bivalves Abundance in Teluk Selamat Datang at Ujung Kulon National Park. The purpose of this research are to determine the concentration of N, P and TOM, bivalves abundance and the correlation of N, P and TOM with bivalves abundance. The research was implemented in June 2019. The survey method which sample was taken using purposive sampling method. The result showed that the Nitrogen concentration (nitrit 0.008-0.013 mg/l, nitrat 0.015-.035 mg/l, amonia 0.025-0.052 mg/l), phospat 0.008-0.021 mg/l and TOM 4.6-7.17 mg/l. Eight (8) species of Bivalve was found in the area, namely *anadra granosa*, *anadra gubernaculum*, *atrina pectrinata*, *mactra grandis*, *callista lilacina*, *grafarium tumidium*, *mactra maculate* dan *maretrix maretrix*. The Bivalve abundance was obtained 12-445 ind/100m<sup>2</sup>. The amount of Nitrat, Fosfat, Nitrit and Amonia were found strongest of correlation to the bivalves abundance ( $r = 0.8-0.9$ ) and the highest correlation of the parameter was found Nitrat and TOM was found low of correlation to the bivalves abundance ( $r = 0.2$ ).

*Key word : Bivalve; Abundance; Nitrogen; Phospat; Total Organic Matter (TOM)*

