ABSTRAK

Penelitian ini berjudul "Status Eutrofikasi Berdasarkan Konsentrasi Klorofil-A, P Total, dan Kecerahan di Perairan Pesisir Cilacap". Eutrofikasi adalah pengkayaan perairan oleh unsur hara organik dan anorganik yang merupakan nilai kesuburan perairan, dan dapat berdampak negatif yaitu meningkatkan populasi tumbuhan air. Tujuan dari penelitian ini adalah untuk mengetahui konsentrasi klorofil-a, phospor (P) dan kecerahan perairan, dan status eutrofikasi berdasarkan konsentrasi klorofil-a, phospor (P), dan kecerahan perairan di perairan pesisir Cilacap. Metode penelitian survei ini berdasarkan "*Purposive Random Sampling*" pada 5 stasiun pengamatan yang dibedakan berdasarkan kondisi perairan yaitu perairan muara dan pantai. Analisis klorofil-a dan P total berdasarkan metode *Atomic Absorption Spectrophotometry* (AAS) dan kecerahan diukur dengan *secchi disk*. Status eutrofikasi ditentukan berdasarkan skala indeks TSI Carlson (1997). Konsentrasi klorofil-a diperoleh tertinggi di Perairan Cilacap bagian timur dan juga di perairan tersebut diperoleh konsentrasi P yang tinggi namun kecerahan rendah. Status eutrofikasi untuk setiap stasiun di perairan pantai Cilacap, Jawa Tengah diperoleh termasuk ke dalam kategori eutrofik, dan secara keseluruhan status eutrofikasi di perairan pesisir Cilacap diperoleh kategori eutrofik.

Kata kunci : *eutrofikasi; klorofil-a; pospor; kecerahan*

ABSTRACT

This study entitled "Eutrophication Status Based on Chlorophyll-a Concentration, Total P, and Brightness in the Cilacap Coastal Waters". Eutrophication is the enrichment of waters by organic and inorganic nutrients which are the value of water fertility, and can have a negative impact, namely increasing the population of aquatic plants. The purpose of this study are know the concentration of chlorophyll-a, phosphor (P) and water transparency, and the status of the eutrophication based on the concentration of chlorophyll-a, phosphor (P), and the brightness of the waters in the Cilacap coastal waters. The Purposive random sampling of survey method at 5 site stations is based on water condition, namelly estuaries and coastal. Analyze method of chlorophyll-a and phosphorus (P) is base on Atomic Absorption Spectrophotometry methods (AAS) and the waters brightness is meassured by secchi disk. The eutrofication status is determined base on index scale of TSI from Carlson (1997). The highest concentration of chlorophyll-a was obtained in the waters of eastern Cilacap and also in these waters was found high of P concentration, but low of brightness was obtained. The eutrophication status for each station in the coastal waters of Cilacap, Central Java was obtained eutrophic category and overall of Cilacap waters was obtained eutrophic category.

Keywords: *eutrophication; chlorophyll-a; phosphorus; brightness*