ABSTRAK

Penelitian ini berjudul Analisis Kelimpahan dan Keanekaragaman Moluska di Perairan Segara Anakan Bagian Barat, Cilacap. Tujuan penelitian ini untuk mengetahui kelimpahan dan keanekaragaman moluska, serta mengetahui pengaruh parameter fisika kimia air terhadap kelimpahan dan keanekaragaman moluska di Perairan Segara Anakan bagian barat. Lokasi penelitian dibagi menjadi 3 stasiun, yaitu stasiun 1 (terletak di muara Sungai Citanduy), stasiun 2 (terletak di muara Sungai Cibereum dan dekat daerah mangrove), dan stasiun 3 (terletak di dekat Kawasan Monggor Mangrove). Metode yang digunakan adalah survei, sampel diambil dengan menggunakan Ekman grab. Data dianalisis secara deskriptif untuk mengetahui kelimpahan dan keanekaragaman moluska. Untuk mengetahui pengaruh parameter fisika kimia terhadap kelimpahan dan keanekaragaman menggunakan analisis regresi berganda. Hasil penelitian menunjukkan bahwa moluska yang ditemukan meliputi *Corbula faba, Limatium sp., Melanoides tuberculata*, *Meretrix meretrix*, *Nassarius coronolus*, *Nassarius stolatus*, *Saccostrea cucullata,* dan *Tellina radiata*. Kelimpahan moluska 1–5 ind/m^2. Indeks keanekaragaman termasuk dalam kategori rendah (H' = 0) sampai sedang (H' = 1,39). Parameter fisika kimia berpengaruh terhadap kelimpahan dan keanekaragaman moluska di Perairan Segara Anakan bagian barat.

Kata Kunci : *Moluska; Kelimpahan; Keanekaragaman; Perairan Segara Anakan bagian barat*.

ABSTRACT

This research is entitled Analysis of Mollusc Abundance and Diversity in Western Segara Anakan Waters, Cilacap. The purpose of this study was to determine the abundance and diversity of mollusks, as well as to determine the effect of water chemistry physics parameters on the abundance and diversity of mollusks in the western Segara Anakan Waters. The research site was divided into 3 stations, namely station 1 (located at the mouth of the Citanduy River), station 2 (located at the mouth of the Cibereum River and near the mangrove area), and station 3 (located near the Monggor Mangrove Area). The method used was survey, samples were taken using Ekman grab. Data were analyzed descriptively to determine the abundance and diversity of mollusks. To determine the effect of chemical physical parameters on abundance and diversity using multiple regression analysis. The results showed that the mollusks found included *Corbula faba*, *Limatium* sp., *Melanoides tuberculata*, *Meretrix meretrix*, *Nassarius coronolus*, *Nassarius stolatus*, *Saccostrea cucullata*, and *Tellina radiata*. Mollusc abundance was 1-5 ind/m2. The diversity index was categorized as low (H' = 0) to medium (H' = 1.39). Physical and chemical parameters affect the abundance and diversity of molluscs in the western Segara Anakan Waters.

Keywords : *Macrozoobenthos; Abundance; Diversity; Western Waters of Segara Anakan*.