

ABSTRAK

Kawasan Hutan Payau, Cilacap merupakan kawasan ekowisata ekosistem mangrove yang dimanfaatkan oleh berbagai aktivitas antropogenik sehingga dapat mempengaruhi masuknya konsentrasi total nitrat dan total fosfat pada perairan. Total nitrat dan total fosfat merupakan unsur hara yang penting bagi pertumbuhan dan kelangsungan hidup organisme sehingga digunakan sebagai salah satu parameter kesuburan perairan. Tujuan penelitian ini yaitu untuk mengetahui kandungan total nitrat dan total fosfat pada kawasan hutan payau, Cilacap yang selanjutnya dihubungkan dengan kesesuaian habitat ikan glodok pada kawasan hutan payau, Cilacap. Metode yang digunakan yaitu metode deskriptif. Data diambil pada bulan September 2023 di Kawasan Hutan Payau, Cilacap. Materi utama penelitian yaitu sampel air dan sedimen dari habitat ikan glodok. Pengukuran kualitas perairan berupa suhu, salinitas, dan DO. Hasil penelitian konsentrasi total nitrat air berkisar 2,35-3,65 mg/L dengan rata-rata 3,12 mg/L, total nitrat sedimen memiliki kisaran konsentrasi 1,02-1,85 mg/kg dengan rata-rata 1,4 mg/kg. Serta Konsentrasi total fosfat air berkisar antara 0,6-0,94 mg/L dengan rata-rata 0,81 mg/L, total fosfat sedimen berkisar antara 0,94 - 1,45 mg/kg dengan rata-rata 1,22 mg/kg. Konsentrasi total nitrat dan total fosfat kawasan hutan payau tergolong melebihi baku mutu. Rata-rata kerapatan mangrove pada kawasan hutan payau tergolong dalam kategori sangat padat. Jumlah ikan glodok pada kawasan hutan payau tergolong sedikit berkisar antara 28-62 ekor. Kesesuaian habitat ikan glodok dipengaruhi oleh ketersediaan makanan dan kondisi lingkungan.

Kata kunci : Fosfat, Ikan Glodok, Kawasan Hutan Payau Cilacap, Kerapatan, Nitrat

ABSTRACK

Hutan Payau, Cilacap is an ecotourism area for mangrove ecosystems that is utilized by various anthropogenic activities so that it can affect the entry of total nitrate and total phosphate concentrations in waters. Total nitrate and total phosphate are nutrients that are important for the growth and survival of organisms so they are used as one of the parameters of aquatic fertility. The purpose of this study is to determine the total nitrate and total phosphate content in Hutan Payau, Cilacap which is further linked to the suitability of the habitat of glodok fish in Hutan Payau, Cilacap. The method used is the descriptive method, taken in September 2023 in Hutan Payau, Cilacap. The main research material is water and sediment samples from the Mudskipper fish habitat. Measurement of water quality in the form of temperature, salinity, and DO. The results of the study showed that the total concentration of water nitrate ranged from 2,35-3,65 mg/L with an average of 3,12 mg/L, the total sediment nitrate had a concentration range of 1,02-1,85 mg/kg with an average of 1,4 mg/kg. The total phosphate concentration of water ranged from 0,6-0,94 mg/L with an average of 0,81 mg/L, total phosphate of sediment ranged from 0,94 – 1,45 mg/kg with an average of 1,22 mg/kg. Total nitrate and total phosphate concentrations of Hutan Payau are classified as exceeding the quality standards. The average density of mangroves in the Hutan Payau is classified as very dense. The number of mudskipper fish in the Hutan Payau is classified as small, ranging from 28-62 fish. The suitability of the mudskipper fish habitat is influenced by the availability of food and environmental conditions.

Keywords: Hutan Payau Cilacap, Mangrove Density, Mudskipper, Nitrate, Phosphate

