

Intisari

Eksosistem terumbu karang adalah sumber plasma nutfah karena memiliki keanekaragaman tertinggi dibandingkan ekosistem laut yang lain dan merupakan habitat penting yang dibutuhkan untuk menyangga kehidupan di laut. Penelitian ini bertujuan untuk mengetahui kondisi terumbu karang di Pulau Pandan, Taman Wisata Perairan Pulau Pieh, Kabupaten Padang Pariaman. Penelitian dilaksanakan pada 25 Januari 2018. Lokasi sampling ditetapkan sebanyak 3 stasiun pada kedalaman 5 m dan 10 m. Metode penelitian yang digunakan adalah transek foto bawah air. Pemotretan karang dilakukan pada setiap 1 m transek sepanjang 50 m. Tutupan dan jenis karang dianalisis berdasarkan foto menggunakan program CPCe (*Coral Point Count with Excel extention*). Persentase tutupan karang ditentukan berdasarkan jumlah titik sampel terhadap seluruh titik pada seluruh foto. Data yang dikumpulkan berupa persentase tutupan, indeks keanekaragaman, kemerataan, dan dominansi. Terumbu karang di Pulau Pandan secara keseluruhan berada pada kondisi sedang dengan persentase tutupan karang hidup (HC) rata-rata 45,67%. Indeks Shannon-Wiener (H') berkisar antara 0,96 - 1,65 dengan nilai rata-rata sebesar 1,27. Indeks kemerataan (E) berkisar 0,20 - 0,35 dengan rata-rata 0,27. Indeks dominansi (D) berkisar antara 0,06 - 0,18 dengan rata-rata 0,12.

Kata kunci: persentase tutupan, Pulau Pandan, terumbu karang, transek foto bawah air.

Abstract

Coral reefs ecosystem is a source of germplasm because it has the highest diversity compare to other marine ecosystem and it is an important habitat to support marine life. The goal of this research is to determine the condition of coral reefs in Pandan Island, Marine Tourism Park of Pieh Island, Padang Pariaman. The research was conducted on January 25th, 2018. There were three stations with depths of 5 m and 10 m. The method was Underwater Photo Transect (UPT). The coral photos were taken in every meter of transect with 50 m of length. The coral photos were analyzed using Coral Point Count with Excel extention (CPCe). The percentage of coral cover was determined based on the number of sample points in all photos. The data was presented as percentage cover, index diversity, evenness, and dominance species. Coral reefs in The Pandan Island as a whole were in moderate condition with an average percentage of healthy coral cover (HC) of 45.67%. The Shannon-Wiener index (H') ranges from 0.96 to 1.65 with an average of 1.27. Evenness Index (E) ranges from 0.20 to 0.35 with an average of 0.27. Dominance index (D) ranges from 0.06 - 0.18 with an average of 0.12.

Keywords: coral reefs, cover percentage, The Pandan Island, underwater photo transek.