

Diversitas Ikan pada Ekosistem Terumbu Karang di Perairan Pulau Menjangan, Taman Nasional Bali Barat

Fish Diversity on Coral Reef Ecosystem in Menjangan Island Water, National Marine Park of Western Bali

Rusman Hernowo, Djumanto*, dan Namastra Probosunu

Jurusan Perikanan, Fakultas Pertanian, Universitas Gadjah Mada

Jln. Flora, Bulaksumur, Yogyakarta 55281

E-mail: lely4192@yahoo.com *Penulis untuk korespondensi

Abstract

The objective of the research was to study the diversity of reef fishes and coral reef density in Menjangan island waters, National Marine Park of Western Bali. The study was conducted from late April to early May 2012 in the waters of Menjangan Island. The number of stations for observation was determined at 8 locations based on different habitats. Fish sampling and measurement of environmental conditions was undertaken by diving at isodepth depth of 3 and 10 m. The species and number of fishes that occupied in the range of 2.5 m along the 50 m of line transect were identified and counted by Underwater Visual Census method. Reef fish species was identified directly *in situ*. Covering area and species of coral were recorded by Line Intercept Transect method. Types of coral reefs growth under transects were recorded, while the covering area of coral reef was calculated using life form report (LF program 5.1). The data was analyzed based on biological indices. The results showed that the fish diversity index (H) ranged from 0.8499 to 2.1360, uniformity (E) between 0.36 and 0.73 and dominance index (C) ranged from 0.163 to 0.647. The total of reef fish was found as many as 5753 individual comprised of 62 genera from 32 families, while fish abundance (D) ranging from 0.756 to 2.680 individual/m². The most number and dominant family were found in type of major fish which was present among stations. Covering of coral was range from 0.66 to 67.34%, which was classified into moderate to good condition.

Keywords: diversity, fish, coralreef, Menjangan Island, Bali

Abstrak

Tujuan penelitian adalah mengkaji keragaman ikan-ikan karang dan mengetahui penutupan terumbu karang di perairan Pulau Menjangan, Taman Nasional Bali Barat. Penelitian dilaksanakan dari akhir bulan April sampai awal bulan Mei 2012 di perairan Pulau Menjangan. Jumlah stasiun pengamatan ditetapkan sebanyak 8 lokasi berdasarkan perbedaan habitat. Pengukuran kondisi lingkungan dan pengambilan sampel dilakukan dengan penyelaman pada kedalaman 3 dan 10 m. Jumlah dan jenis ikan yang berada pada jangkauan 2,5 m dari transek sepanjang 50 m disensus dengan metode *Underwater Visual Census*. Jenis ikan karang diidentifikasi secara langsung insitu. Jenis dan luas penutupan karang dicatat dengan metode *Line Intercept Transect*. Pencatatan jenis terumbu karang yang dilewati transek didasarkan pada bentuk pertumbuhan (*lifeform*), sedangkan luas penutupan terumbu karang menggunakan *Lifeform Report*. Data yang diperoleh dianalisis secara kuantitatif berdasarkan indeks biologis. Hasil dari penelitian diperoleh nilai indeks keanekaragaman ikan (H') berkisar antara 0,8499–2,1360, keseragaman (E) antara 0,36–0,73 dan indeks dominansi (C) berkisar antara 0,163–0,647. Cacah individu ikan sebanyak 5753 ekor dari 62 genus yang berasal dari 32 suku, sedangkan kelimpahan ikan (D) berkisar antara 0,756–2,680 ekor/m². Jumlah individu dan suku ikan mayor dominan pada semua lokasi. Tutupan terumbu karang berada pada kisaran 0,66–67,34% yang dikategorikan pada kondisi sedang hingga baik.

Kata kunci: keragaman, ikan, terumbu karang, Pulau Menjangan, Bali