

Intisari

Ekosistem terumbu karang adalah ekosistem laut yang memiliki keanekaragaman tertinggi serta memiliki peran sangat penting bagi beraneka ragam biota laut. Penelitian ini bertujuan untuk mengetahui kondisi terumbu karang di Perairan Mari Mabuk, Taman Nasional Wakatobi, Kabupaten Wakatobi. Pengambilan data dilaksanakan pada bulan Oktober 2018. Lokasi pengambilan data ditetapkan sebanyak 3 stasiun pada kedalaman 3 meter dan 8 meter. Pengambilan data dilakukan menggunakan metode *Underwater Photo Transect* (UPT) atau transek foto bawah air. Tutupan dan jenis terumbu karang dianalisis menggunakan program *Coral Point Count with Excel Extension* (CPCe). Data yang dikumpulkan berupa persentase tutupan beserta jenis terumbu karang dan dianalisis untuk mendapatkan indeks keanekaragaman, indeks kemerataan, dan indeks dominansi. Tutupan dasar perairan yang paling dominan adalah karang hidup, *soft coral*, *dead coral with algae*, dan *rubble*. Tutupan terumbu karang hidup di Perairan Mari Mabuk memiliki persentase sebesar 21,1-59,7%. Jenis terumbu karang yang ditemukan sebanyak 74 jenis. Jenis terumbu karang yang paling banyak ditemukan adalah *Echinopora horrida* dan *Porites stephensoni* dengan bentuk pertumbuhan *Acropora branching* dan *Coral Massive*. Indeks keanekaragaman (H') berkisar antara 1,63-2,71; Indeks Kemerataan berkisar antara 0,27-0,81; dan Indeks Dominansi berkisar antara 0,10-0,33.

Kata Kunci: Ekowisata, konservasi, terumbu karang, wakatobi

Abstract

Coral reef ecosystems are marine ecosystems that have the highest diversity and have a very important role for a variety of marine biotic. The purpose of this study was to determine the condition of coral reefs in Mari Mabuk Waters, Wakatobi National Park, Wakatobi Regency. The research was conducted on October 2018. The sampling location was decided in three stations with two depths, 3 m and 8 m. The data was taken through Underwater Photo Transect (UPT) and analyzed using Coral Point Count With Excel Extension (CPCe) program. The data obtained was shown as cover percentage, coral species, index of diversity, evenness, and dominance. The dominance of water floor base cover were live coral, soft coral, dead coral with algae, and rubble. Cover percentage coral reefs of healthy coral in Mari Mabuk Waters was between 21,1-59,7%. There was found 74 coral species. The highest coral reefs species were *Echinopora horrida* and *Porites stephensoni* in *acropora branching and coral massive lifeform*. The diversity index (H') ranges from 1.63 to 2,71. The evenness index (E) from 0,27 to 0.81. The dominance index (D) ranges from 0,10 to 0,33.

Keywords: Conservation, coral reefs, Ecowisata, Wakatobi