

## ABSTRAK

Kepulauan Derawan merupakan kawasan perairan dengan keanekaragaman jenis karang batu serta biodiversitas ikan karang yang sangat tinggi. Salah satu faktor yg berpengaruh terhadap kondisi terumbu karang adalah keberadaan ikan famili Chaetodontidae. Penelitian ini bertujuan untuk mengetahui kelimpahan dan keanekaragaman ikan karang kelompok corallivora, persentase tutupan karang, hubungan antara kelimpahan dan keanekaragaman ikan karang kelompok corallivora dengan kondisi tutupan karang. Penelitian menggunakan metode survai. Sampel diambil dengan metode *purposive sampling*. Untuk mengetahui kondisi ikan karang kelompok corallivora digunakan metode *Underwater Visual Census* (UVC), selanjutnya data dianalisis menggunakan *Microsoft Excell* dan Kondisi tutupan karang diamati dengan metode *Underwater Photo Transect* (UPT), kemudian dianalisis dengan menggunakan *Count Point with Excel extension* (CPCe). Hubungan Antara Ikan Corallivora Dengan Kondisi Terumbu Karang dianalisis menggunakan analisis korelasi pearson dan regresi. Hasil penelitian menunjukkan bahwa kelimpahan ikan karang 0,060 - 0,251 ind/m<sup>2</sup>; Keanekaragaman ikan karang 1,16 - 2,56 (rendah-sedang). Hubungan antara kelimpahan ikan karang kelompok corallivora dengan kondisi terumbu karang menunjukkan korelasi rendah ( $r=0,251$ ) dan hubungan antara keanekaragaman ikan karang kelompok corallivora dengan kondisi terumbu karang korelasi sedang ( $r=0,580$ ). Kajian ini dapat digunakan untuk upaya restorasi biologis ekosistem terumbu secara berkelanjutan.

Kata kunci: *Terumbu Karang, Ikan Corallivora, Kepulauan Derawan, UVC, UPT.*

## ABSTRACT

Derawan Islands are a water area with a very high diversity of coral reef species and reef fish biodiversity. One of the factors that affect the condition of coral reefs is the presence of fish from Chaetodontidae family. This study aims to determine abundance and diversity of reef fish in the corallivora group, the percentage of coral cover, the relationship between abundance and diversity of reef fish in corallivora group and condition of coral cover. The research used survey method. Samples were taken by *purposive sampling* method. To discover the condition of reef fish in corallivora group, *Underwater Visual Census* (UVC) method was used, then the data were analyzed using *Microsoft Excell* and coral cover was observed using *Underwater Photo Transect* (UPT) method, then analyzed using *Count Point with Excel extension* (CPCe). The relationship between Corallivorous Fish and Coral Reef Conditions was analyzed using Pearson correlation and regression analysis. The results showed that abundance of reef fish was 0.060 - 0.251 ind/m<sup>2</sup>; Reef fish diversity 1.16 - 2.56 (low-medium). The relationship between abundance of reef fish in the corallivora group and condition of coral reefs showed a low correlation ( $r=0,251$ ) and the relationship between diversity of reef fish in corallivora group and condition of coral reefs was moderately correlated ( $r=0,580$ ). This research can be used for sustainable ecological restoration of coral reef ecosystems management.

Key Words: *Coral Reef, Coral Fish, Derawan Island, UVC, UPT*