ABSTRAK

Pulau Tabuhan, Banyuwangi memiliki ekosistem terumbu karang yang baik dan dimanfaatkan untuk berbagai kegiatan ekowisata, seperti *snorkeling* dan *diving*. Selain itu, wilayah ini menjadi lokasi penangkapan ikan tradisional dan pengambilan ikan hias laut. Tujuan penelitian ini adalah untuk mengetahui kondisi tutupan karang keras hidup, kelimpahan ikan karang Chaetodontidae serta hubungan kondisi tutupan karang keras hidup dengan kelimpahan ikan karang Chaetodontidae. Metode yang digunakan adalah metode survei di tiga lokasi dengan kondisi berbeda. Pengambilan data tutupan karang menggunakan metode *Underwater Photo Transect* (UPT), sedangkan pengambilan data ikan famili Chaetodontidae menggunakan metode *Underwater Visual Census* (UVC). Hubungan kondisi tutupan karang keras hidup dengan kelimpahan ikan Chaetodontidae dianalisis menggunakan korelasi Pearson. Hasil penelitian menunjukkan bahwa kondisi tutupan karang di Pulau Tabuhan, Banyuwangi termasuk kedalam kondisi sedang (49,11%). Genus karang yang paling banyak ditemukan adalah *Porites*. Kelimpahan ikan karang Chaetodontidae berkisar antara 0,080-0,216 ind/m². Spesies ikan Chaetodontidae yang paling banyak ditemukan adalah *Chaetodon klenii*. Hasil korelasi Pearson menunjukkan adanya hubungan positif yang tinggi antara kondisi tutupan karang dengan kelimpahan ikan Chaetodontidae dengan nilai r=0,999. Semakin baik kondisi tutupan karang di Pulau Tabuhan, maka semakin tinggi kelimpahan ikan Chaetodontidae. Upaya konservasi ekosistem terumbu karang harus menjadi prioritas utama supaya kelestarian ikan Chaetodontidae terjaga.

Kata kunci *: Ikan Chaetodontidae, Kelimpahan, Kondisi tutupan karang, Pulau Tabuhan.*

ABSTRACT

Tabuhan Island, Banyuwangi has a well-preserved coral reef ecosystem that is utilized for various ecotourism activities such as snorkeling and diving. In addition, the area also served as a site for traditional fishing and the collection of ornamental reef fish. The aim of this study were to determine the condition of live hard coral cover, the abundance of Chaetodontidae reef fish, and the relationship between live hard coral cover and the abundance of Chaetodontidae reef fish. The research employed a survey method at three locations with different conditions. Data on coral cover were collected using the Underwater Photo Transect (UPT) method, while data on Chaetodontidae fish were carried out using the Underwater Visual Census (UVC) method. The relationship between live hard coral cover and the abundance of Chaetodontidae were analyzed using Pearson correlation. The results showed that the coral cover condition in Tabuhan Island was categorized as moderate, with a percentage of 49.11%. Porites was the most commonly genus found in the location. The abundance of Chaetodontidae reef fish ranged from 0.080 ind/m² to 0.216 ind/m². The most frequently observed species was Chaetodon klenii. Pearson correlation analysis indicated a strong positive relationship between coral cover condition and the abundance of Chaetodontidae, with a correlation coefficient of r=0.999. The better the coral cover condition in Tabuhan Island, the higher the abundance of Chaetodontidae fish. Coral reef ecosystem conservation efforts should be a top priority to ensure the sustainability of Chaetodontidae populations.

Keywords: *Abundance, Chaetodontidae fish, Coral cover condition, Tabuhan Island.*