

ABSTRAK

Tingginya pengaruh antropogenik mengakibatkan penurunan kondisi perairan di Pulau Tabuhan, Kabupaten Banyuwangi, menyebabkan stres pada karang sehingga dapat meningkatkan kerentanannya terhadap infeksi patogen penyebab penyakit karang. Penelitian ini bertujuan untuk mengetahui jenis penyakit pada karang *massive*, prevalensi penyakit pada karang *massive*, persentase tutupan karang, dan korelasi antara prevalensi penyakit pada karang *massive* dan persentase tutupan karang di Pulau Tabuhan, Kabupaten Banyuwangi. Pengambilan data penyakit karang menggunakan metode *Belt Transect*, sementara tutupan karang menggunakan metode *Underwater Photo Transect* (UPT) dilakukan di 3 stasiun penelitian. Analisis data dilakukan secara deskriptif komparatif dan statistik menggunakan metode korelasi pearson. Hasil penelitian menunjukkan Terdapat 10 jenis penyakit karang yang ditemukan, yaitu *Atramentous Necrosis*, *Ulcerative White Spots*, *White Syndromes*, *Aggressive Overgrowth*, *Bleaching*, *Drupella*, *Fish Bites*, *Pigmentation Response*, *Tube Former* dan *Trematodiasis*. Penyakit ditemukan menginfeksi 5 genus karang, yaitu *Favites*, *Montastrea*, *Oulophyllia*, *Platygyra* dan *Porites*. Prevalensi penyakit di Stasiun 1 sebesar 40%, Stasiun 2 sebesar 15,63%, dan Stasiun 3 sebesar 25,58%, dikategorikan tinggi. Persentase tutupan karang di stasiun 1 sebesar 23,28% kategori buruk, stasiun 2 sebesar 53,58% kategori bagus, dan stasiun 3 sebesar 70,47% kategori bagus. Korelasi antara prevalensi penyakit pada karang *massive* dan persentase tutupan karang memiliki nilai korelasi -0,71 menandakan korelasi negatif dengan kategori kuat. penemuan ini menunjukkan bahwa tingginya nilai prevalensi penyakit merupakan ancaman serius yang berpengaruh terhadap rendahnya tutupan karang, sehingga diperlukan upaya pengelolaan untuk mengurangi dampak penyakit pada karang *massive* di Pulau Tabuhan.

Kata Kunci : *Penyakit karang; prevalensi penyakit karang; tutupan karang; Pulau Tabuhan*

ABSTRACT

The high level of anthropogenic influence has resulted in a decline in water quality in Tabuhan Island, Banyuwangi Regency, causing stress on corals and increasing their susceptibility to infection by pathogens that cause coral disease. This study aims to determine the types of diseases in massive corals, the disease prevalence in massive corals, the percentage of coral cover, and the correlation between disease prevalence in massive corals and the percentage of coral cover on Tabuhan Island, Banyuwangi Regency. Coral disease data was collected using the Belt Transect method, while coral cover data was collected using the Underwater Photo Transect (UPT) method at three research stations. Data analysis was conducted using descriptive comparative and statistical methods, including Pearson's correlation analysis. The results of the study revealed 10 types of coral diseases, namely Atramentous Necrosis, Ulcerative White Spots, White Syndromes, Aggressive Overgrowth, Bleaching, Drupella, Fish Bites, Pigmentation Response, Tube Former, and Trematodiasis. Coral disease was found to infect five coral genera, namely *Favites*, *Montastrea*, *Oulophyllia*, *Platygyra*, and *Porites*. Coral disease prevalence was 40% at Station 1, 15.63% at Station 2, and 25.58% at Station 3, categorized as high. The percentage of coral cover was (poor category) at station 1, 53.58% (good category) at station 2, and 70.47% (good category) at station 3. The correlation between disease prevalence in massive corals and the percentage of coral cover had a correlation value of -0.71, indicating a strong negative correlation. This finding shows that the high prevalence value of disease is a serious threat that affects the low coral cover, so management efforts are needed to reduce the impact of disease on massive corals on Tabuhan Island.

Keywords : *Coral disease; coral disease prevalence; coral cover; Tabuhan Island*