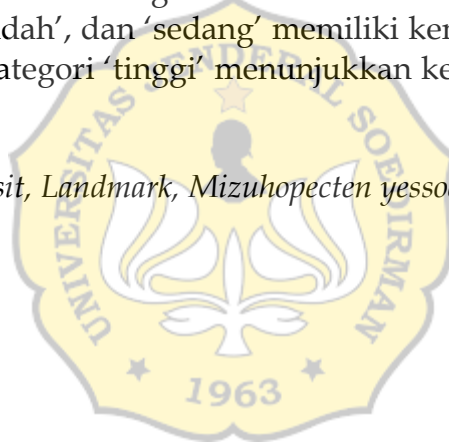


ABSTRAK

Kerang hotate (*Mizuhopecten yessoensis*) merupakan salah satu spesies kerang yang hidup di perairan bersuhu dingin dengan produksi terbesar di wilayah Jepang. Namun, keberlangsungan budidaya ini terancam oleh berbagai faktor, termasuk infeksi ektoparasit yang dapat mempengaruhi profil morfometri kerang. Penelitian ini bertujuan untuk menganalisis dampak ektoparasit terhadap morfometri kerang hotate di Teluk Funka, Hokkaido, serta menginventarisasi jenis ektoparasit yang ditemukan. Sampel sebanyak 25 individu kerang hotate diambil dengan menggunakan teknik *random sampling* dan dilakukan pengukuran morfometri menggunakan *software Image-J*. Infestasi ektoparasit dikelompokkan menjadi empat kategori: bebas, rendah, sedang dan tinggi. Analisis dilakukan menggunakan *One-Way ANOVA* dan uji lanjutan *Fisher's Pairwise Comparison* ($P < 0,05$), serta analisis kluster hirarki berdasarkan indeks kemiripan *Bray-curtis* divisualisasikan dalam dendrogram. Hasil penelitian menunjukkan bahwa terdapat dua jenis ektoparasit, yaitu *Polydora* sp. dan *Barnacles* sp., dengan dominasi *Polydora* sp. yang ditemukan pada 17 individu. Beberapa jarak morfometrik seperti AD, AE, BD, dan CE menunjukkan perbedaan signifikan antar kategori infestasi. Dendrogram menunjukkan bahwa kategori 'bebas', 'rendah', dan 'sedang' memiliki kemiripan morfometrik tinggi (0,987), sedangkan kategori 'tinggi' menunjukkan kemiripan yang lebih rendah (0,96).

Kata kunci: Ektoparasit, Landmark, *Mizuhopecten yessoensis*, Morfometri, Teluk Funka



ABSTRACT

The hotate clam (*Mizuhopecten yessoensis*) is one of the clam species that lives in cold-temperature waters with the largest production in the Japanese region. However, the sustainability of this aquaculture is threatened by various factors, including ectoparasite infections that can affect the morphometric profile of the scallop. This study aimed to analyze the impact of ectoparasites on the morphometry of hotate clams in Funka Bay, Hokkaido, and to inventory the types of ectoparasites found. Samples of 25 individual hotate mussels were taken using random sampling techniques and morphometric measurements were taken using Image-J software. Ectoparasite infestation was categorized into four categories: free, low, medium and high. Analysis was conducted using One-Way ANOVA and Fisher's Pairwise Comparison follow-up test ($P < 0.05$), as well as hierarchical cluster analysis based on the Bray-curtis similarity index visualized in a dendrogram. The results showed that there were two types of ectoparasites, namely *Polydora* sp. and *Barnacles* sp., with the dominance of *Polydora* sp. which was found in 17 individuals. Some morphometric distances such as AD, AE, BD, and CE showed significant differences between infestation categories. The dendrogram showed that the 'free', 'low', and 'medium' categories had high morphometric similarity (0.987), while the 'high' category showed lower similarity (0.96).

Key words: Ectoparasites, Landmarks, *Mizuhopecten yessoensis*, Morphometry, Funka Bay

