

ABSTRAK

Kerang hotate (*Patinopecten yessoensis*) adalah spesies kerang toleran dingin yang menjadi prioritas untuk pengembangan budidaya berkelanjutan. Penelitian ini bertujuan untuk mengetahui karakteristik morfometrik dan hubungan panjang berat benih kerang hotate (*Patinopecten yessoensis*) yang dibudidayakan di Teluk Funka, Hokkaido, Jepang. Sampel yang digunakan berjumlah 300 benih dengan tiga kali pengambilan pada umur yang berbeda. Pengambilan pertama benih kerang berumur 21 hari, pengambilan kedua benih kerang berumur 42 hari, dan pengambilan ketiga benih kerang berumur 63 hari. Metode penelitian yang dilakukan adalah observasi dan teknik pengambilan sampel dengan *random sampling*. Karakteristik morfometrik yang diukur meliputi Panjang Cangkang (PC), Lebar Cangkang (LC), Panjang Engsel (PE), Berat Total (BT) dan Berat Daging (BD). Data morfometrik ditabulasi dan dianalisis secara deskriptif, serta di uji non parametrik *Kruskal-Wallis*. Hubungan panjang berat dianalisis dengan regresi linier sederhana. Hasil pengukuran morfometrik benih kerang hotate dari setiap pengambilan menghasilkan perubahan bentuk dan ukuran dalam selisih waktu dengan umur yang berbeda. Hasil uji non parametrik *Kruskal-Wallis* menunjukkan bahwa umur berbeda nyata terhadap ukuran parameter morfometrik benih kerang hotate ($P < 0,05$). Hubungan panjang berat benih kerang hotate pada umur yang berbeda adalah allometrik negatif ($b < 3$) yang menunjukkan bahwa penambahan panjang lebih cepat dari penambahan berat.

Kata kunci: benih kerang hotate, *Patinopecten yessoensis*, karakteristik morfometrik, hubungan panjang berat

ABSTRACT

Hotate mussel (*Patinopecten yessoensis*) are cold-tolerant clam species that are a priority for the development of sustainable aquaculture. This study aimed to determine the morphometric characteristics and weight length relationship in hotate clam seeds (*Patinopecten yessoensis*) cultivated in Funka Bay, Hokkaido, Japan. The samples used 300 seeds with three picks at different ages. The first pick of 21-day-old shellfish seeds, the second pick of 42-day-old shellfish seeds, and the third pick of 63-day-old shellfish seeds. The research methods carried out are observation and sampling techniques with *random sampling*. Morphometric characteristics measured include Shell Length (PC), Shell Width (LC), Hinge Length (PE), Total Weight (BT) and Meat Weight (BD). Morphometric data were tabulated and analyzed descriptively, as well as in the *Kruskal-Wallis non-parametric* test. Weight length relationships were analyzed by simple linear regression. The results of morphometric measurements of hotate clam seeds from each take resulted in changes in shape and size in time differences with different ages. The results of the *Kruskal-Wallis non-parametric test* showed that age was significantly different from the size of the morphometric parameters of hotate clam seeds ($P < 0,05$). The relationship between the length of hotate clam seed weight at different ages is negative allometric ($b < 3$) which indicates that length gain is faster than weight gain.

Keywords: hotate clam seed, *Patinopecten yessoensis*, morphometric characteristics, relationship weight length