

## RINGKASAN

*Amphibalanus amphitrite* adalah spesies teritip intertidal yang berkembang secara hermiprodit. Populasi *A. amphitrite* di Perairan Teluk Penyul Cilacap menarik untuk diteliti karena teluk ini merupakan muara Sungai Donan sehingga salinitas perairan berfluktuasi sesuai musim. Penelitian ini bertujuan untuk mengevaluasi korelasi salinitas dengan parameter reproduksi *A. amphitrite* di Perairan Teluk Penyul Cilacap selama periode Maret-Mei 2016. Metode yang digunakan dalam penelitian ini adalah metode survei dengan teknik pengambilan sampel secara *purposive*. Sampel diambil 1 kali setiap bulan selama 3 bulan (Maret – Mei 2016), pada saat air laut mengalami surut terendah. Sampel yang diambil masing-masing sebanyak 20 individu.

Hasil penelitian menunjukkan jumlah sel telur *A. amphitrite* yang terdapat di rongga mantel yang diambil pada 9 Maret, 21 April dan 21 Mei masing-masing yaitu 913,15 + 402,34 sel; 779,76 + 505,504 sel; dan 950,6 + 572,19. Embrio yang ditemukan pada bulan Maret (692 + 154,74) dan bulan Mei (398,5 + 91,22) dan larva hanya ditemukan pada bulan Mei (10,75 + 8,48). Diameter sel telur berfluktuasi selama periode pengambilan sampel (62,25- 89,15  $\mu\text{m}$ ) dengan salinitas pada Maret yaitu 28 ppm, April yaitu 22 ppm dan Mei yaitu 30 ppm. Korelasi salinitas positif kuat dengan jumlah sel telur ( $r = 0,999$ ), korelasi positif sedang dengan jumlah embrio ( $r = 0,778$ ) dan jumlah larva ( $r = 0,693$ ).

**Kata kunci:** *Amphibalanus amphitrite*, reproduksi, salinitas, Perairan Teluk Penyul

## SUMMARY

*Amphibalanus amphitrite* is a synchronous hermaphrodite intertidal barnacle species. *A. amphitrite* population of Teluk Penyu Cilacap Central Java is an interest of research since it has a unique habitat in which the sea water mix with fresh water from Donan River lead to seasonal fluctuation of salinity. This study was conducted to evaluate correlation between salinity and reproductive parameters of *A. amphitrite*. The specimens were collected according to purposive sampling in March-May 2016. The specimens as much as 20 individual were taken monthly when the sea was at the lowes tide.

The results showed that the number of *A. amphitrite* bearing egg in their manthel cavity was 9 in March, 21 in April and 21 in May with the number of egg was  $913.15 \pm 402.34$ ;  $779.76 \pm 505.19$  and  $950.6 \pm 572.19$  respectively. The embryos were found in March ( $692 \pm 154.74$ ) and May ( $398.5 \pm 91.22$ ) and the larvae were only found in May ( $10.75 \pm 8.48$ ). The egg diameter was fluctuated ranging from 62.25 – 89.15  $\mu\text{m}$  during the study period. The sea water salinity was 28 ppm in March, 22 ppm in April and 30 ppm in May. The salinity was highly correlated with the number of egg ( $r = 0.999$ ), moderately correlated with the number of embryo ( $r = 0.778$ ) and number of larvae ( $r = 0.693$ ).

Key words: *Amphibalanus amphitrite*, reproduction, salinity, Teluk Penyu Waters.